The following Rules come into force on 1 January 2017.

Alterations to the preceding Edition are marked by beams at the text margin.

DNV GL SE
(Germanischer Lloyd SE has on 29 January 2014 changed its name to DNV GL SE. Any references in this document to Germanischer Lloyd or GL shall therefore also be a reference to DNV GL SE.)

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“General Terms and Conditions” of the respective latest edition will be applicable.

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Published by: DNV GL SE, Hamburg
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1 Definitions and General

“Affiliate” – shall mean any subsidiary, parent, ultimate holding company or a subsidiary of such parent or ultimate holding company. For the purpose of this definition, “subsidiary” and “holding company” shall have the meaning assigned to them under the Companies Act relevant to the applicable law set out in Clause 17 herein;

“Contract” – shall mean the contract entered into between the Customer and DNV GL including these General Terms and Conditions and the DNV GL Rules. The above listed documents shall be interpreted as one agreement and in case of any ambiguities or contradictions between the various documents, the documents shall take precedence in the order they are listed above;

“Claim” or “Claims” - shall mean any and all claims, losses (including pure economical losses), demands, taxes, liens, liabilities, judgments, awards, provisional injunctions, remedies, debts, damages, injuries, costs, legal and other expenses, or causes of action of whatsoever nature, and in whatever jurisdiction the foregoing may arise;

“Consequential Loss” - shall mean loss and/or deferral of production, lost productivity (disruptions), loss of product, loss of use, loss of time to any vessel or loss of hire, loss of business opportunities and contracts, loss of goodwill, loss of data, loss of revenue, profit or anticipated profit (if any), losses arising from liabilities or indemnities under other contracts, recall or rectification costs, in each case whether direct or indirect and whether or not foreseeable at the commencement of the Work;

“Customer” – shall mean the person and/or company which has requested DNV GL’s service and has entered into a contract/agreement for services;

“Customer Group” – shall mean (i) the Customer and its Affiliates; (ii) the Customer’s other contractors (other than DNV GL), suppliers and subcontractors (of any tier) and their respective Affiliates; and (iii) the respective directors, officers, managers, agents, employees (including agency personnel) and repre-
sentatives of the persons and entities mentioned under (i) and (ii) above as well as any other person or entity acting on its/their behalf;

“Deliverable” – the deliverable(s) which is(are) to be provided to the Customer by DNV GL according to the Contract;

“DNV GL” – shall mean for the purposes of these General Terms and Conditions, the company with which the Customer has entered into the Contract being DNV GL AS or any of its branches and subsidiaries (as the case may be);

“DNV GL Group” – shall mean (i) DNV GL, all its direct and indirect owners and its Affiliates; (ii) DNV GL’s sub-contractors (of any tier) and their Affiliates; and (iii) the respective directors, officers, managers, agents, employees (including agency personnel) and representatives of the persons and entities mentioned under (i) and (ii) above as well as any other person or entity acting on its/their behalf;

“DNV GL Rules” – shall mean all provisions and/or requirements adopted by DNV GL as the basis for Classification at any point in time;

“Variation” – additional work to the Work originally agreed in the Contract;

“Work” – the services provided to Customer by DNV GL which are expressly set out in the Contract including any Variation and any Deliverable.

These General Terms and Conditions shall be incorporated in the Contract and shall override and exclude any terms and conditions sought to be imposed by the Customer. No amendment and/or variation to these General Terms and Conditions and no additional terms put forward by the Customer shall be considered binding or valid unless set out in writing and duly signed by the authorised representatives of both parties.

The respective latest version of the General Terms and Conditions as well as the applicable DNV GL Rules, as made available on www.dnvgl.com shall apply to all work rendered by DNV GL, including those rendered within the scope of DNV GL’s statutory functions as recognised organisation or similar, even if no written Contract was concluded.

2 The Work and execution of Work

2.1 The Work shall be carried out in accordance with the Contract, the provisions of these General Terms and Conditions, the DNV GL Rules, the international conventions and/or EU regulations applicable to the relevant Work and/or flag administration requirements. The same shall apply in the absence of a written agreement between the parties. The Work performed by DNV GL is performed under the basic assumption that other parties involved, including but not limited to the Customer’s other contractors and suppliers, fulfill their individual obligations and provide correct and complete information. DNV GL shall, upon completion of the relevant certification process and the Work, but subject to any relevant findings from its assessment or inspections, issue the Deliverable, provided always that DNV GL in its sole professional discretion finds that the applicable requirements are fulfilled.

2.2 When providing services DNV GL does not assess compliance with any standard other than the applicable DNV GL Rules, international conventions, EU Regulations and/or flag administration requirements and other standards, to the extent agreed in writing.

2.3 Any terms, conditions, duties or warranties otherwise incorporated or implied by law are hereby expressly excluded in full or to the fullest extent permitted by the applicable law. The remedies set forth in Clause 6 shall therefore be the sole remedies for any discrepancies, errors or omissions whatsoever regarding the Work.

2.4 DNV GL will provide suitably qualified personnel to carry out the Work. Unless otherwise agreed, DNV GL may at any time substitute personnel assigned to the Work, provided that any replacement personnel are suitably qualified.
2.5 A confirmation given or certificate issued by DNV GL shall not substitute the role of and/or release the Customer Group or any other parties involved from its contractual or legal obligations towards any third parties and/or the Customer (as the case may be). Maintenance of the validity of such confirmation or certificate, for example through the process of regular surveys in the case of ship classification, is the responsibility of the Customer.

2.6 DNV GL may, without prejudice to any other rights available to DNV GL, at any time recall, suspend, withhold, withdraw and/or reissue any Deliverable with immediate effect, suspend or withdraw any vessel from class and/or suspend further performance of any services if in DNV GL’s sole and unfeathered opinion: (i) Customer fails to provide any necessary information or documentation for the purpose of maintaining the Deliverable and/or class; or (ii) Customer fails to comply in due time with conditions or instructions issued by DNV GL; or (iii) Customer fails to pay any fees or other sums due to DNV GL; or (iv) any relevant discrepancies, errors or omissions in the basis for the Deliverable is detected; or (v) Customer misrepresents DNV GL’s business name, trademark or Deliverable on which such name or trademark is used.

2.7 DNV GL may retain or withhold any service, certificate or other deliverable to the Customer in respect of all outstanding payments (whether related or not) arising out of the entire business relationship with the Customer, regardless of whether one or more vessels owned or managed by the Customer are affected.

3 General Obligations

3.1 Customer agrees that DNV GL’s performance of the Work requires DNV GL to be granted access to and the right to inspect all relevant sites, equipment, machinery and facilities and all relevant, correct and complete documents and information. For this purpose, Customer shall in a timely manner, without conditions, make all necessary arrangements and provide DNV GL with all reasonably necessary access to the above mentioned information and sites. Unless it is explicitly agreed as part of the Work to identify discrepancies, errors, inconsistencies or omissions in the information provided by the Customer Group, Customer shall be responsible for the correctness of the information it provides and DNV GL is entitled to rely on the accuracy and completeness of such information for the performance of the Work.

All Deliverables provided by DNV GL are based on the information, documentation and/or physical items made available by Customer to DNV GL up to the date of issuance of the Deliverable, and Customer acknowledges and agrees that any statement made by DNV GL in the Deliverable is a statement reflecting the situation at the time of issuance only.

3.2 Should the Customer fail to provide DNV GL with the required access or information at the agreed times, DNV GL may suspend the performance of the Work pending receipt of the Customer’s instructions for access and/or necessary information. DNV GL shall have no liability as a consequence of any such suspension and the Customer will be responsible for DNV GL’s fees and other wasted costs and expenses incurred by DNV GL.

3.3 Customer acknowledges and agrees that it has read and understood the requirements in the applicable DNV GL Rules, international conventions, EU Regulations and/or flag administration requirements and other standards applicable to the Contract and agrees to abide by them.

3.4 Any failure by Customer in fulfilling the obligations set out in this Section 3 is to be considered a material breach of this Contract.

4 Health, Safety and Environment (HSE)

4.1 Both DNV GL and the Customer shall employ reasonable standards for promoting safety, health and environmental protection and for ensuring safe working environments for their personnel.
4.2 Customer shall inform DNV GL without undue delay of: (i) any actual or potential HSE risk which Customer is aware of and which is reasonably relevant to the performance of the Work; and (ii) any of Customer’s implemented or planned measures against such risks that Customer requires DNV GL’s personnel to adhere to.

4.3 Whenever DNV GL’s performance of the Work involves visits to or work on Customer controlled facilities or sites, Customer is responsible for the adequacy, stability, safety and legal compliance of the working environment, including reasonable measures to mitigate or control relevant risks. DNV GL or its personnel is entitled to refuse to carry out any activity, or visit any area or site, if DNV GL or its personnel in their sole discretion consider that relevant risks are unacceptable or not adequately addressed, contained or otherwise mitigated. Any such decision shall suspend both parties’ obligations under the Contract without any liability or penalties until the parties have agreed on how to proceed.

5 Variations to the Work
Customer may in writing request DNV GL to perform a Variation. DNV GL shall not be obliged to execute any Variations until a written agreement with the Customer regarding the remuneration and the potential schedule impact of the Variation has been signed, which shall be an integral part of this Contract.

6 Re-performance
Any documented error or defect in the Work will be rectified by DNV GL within a reasonable period of time at DNV GL’s sole cost, provided said error or defect is not attributable to Customer or Customer Group and DNV GL is duly notified of said errors or defects within twelve (12) months after delivery or completion of the Work, whichever occurs first.

7 Taxes and Remuneration
7.1 Each party is solely responsible for paying any and all taxes, duties or similar government charges to the competent public authority wherever such charges are levied and/or imposed on the activities of the party.

Any and all prices, fees, rates or remuneration are agreed as stated exclusive of any form of sales taxes, value added tax, goods and services tax and/or any other similar taxes including any surcharges levied thereon which may be applicable.

7.2 Customer shall effect payment as agreed in the Contract to DNV GL, or another legal entity within the DNV GL Group if specified as payee on the invoice, for the Work, including any Variations, to the bank account stated on the invoice within thirty (30) days of the date of the invoice.

Work performed by DNV GL shall be invoiced in accordance with the tariffs of DNV GL or on the basis of the price quoted in the offer or in the Contract. In addition thereto, DNV GL will charge any extra expenses incurred in connection with the services rendered (e.g. travelling or other expenses and, where applicable, any value added/turnover tax).

Customer accepts invoices sent by electronic means.

Additional expenses which are incurred by DNV GL in connection with the performance of the Work, and for which DNV GL is not responsible, for instance, as a result of poor organisation on the part of the Customer or of repetition of tests and extra time spent, will be charged separately at the respective current cost rates.

7.3 In case of late payments, DNV GL is, in addition to the remedies set forth in Clause 2.6, entitled to charge a late payment interest according to the applicable law of this Contract, or 8% per annum pro rata, whichever is the higher.
7.4 All payments shall, subject to Clause 7.5, be made in cleared funds, without any deduction or set-off and free and clear of and without deduction for or on account of any taxes, levies, imports, duties, charges, fees and withholdings of any nature now or hereafter imposed by any governmental, fiscal or other authority save as required by law.

7.5 If and to the extent Customer has to withhold taxes or other government charges according to mandatory laws, Customer shall withhold and deduct such amounts from payments to DNV GL and pay the amount to the competent tax authority or any other relevant governmental body, as the case may be, within the time allowed and in the minimum amount required by law. Customer shall indemnify and hold DNV GL harmless from any and all financial responsibility or sums found to be due arising out of the non-payment, late-payment or payment to the non-competent tax authority or any relevant governmental body.

Customer shall inform DNV GL about such withholding, any change in the rate or the basis of the withholding and the availability of any formal procedure resulting in an authorisation to make a payment without a withholding prior to making the payment. Customer and DNV GL shall co-operate in completing any procedural formalities necessary for the Customer to obtain authorisation to make payment without a withholding.

Within ten days of making either the withholding or any payment required in connection with that withholding, the Customer shall deliver to DNV GL a withholding tax certificate, official receipt or evidence reasonably satisfactory to DNV GL that payment has been made to the competent tax authority or any other competent governmental body. Customer shall cooperate with DNV GL and shall use reasonable efforts, at no cost to DNV GL, in seeking any double tax treaty relief, other exemptions and refunds available following from such withholdings.

7.6 Section 7.1 to 7.5 shall apply accordingly in case an Affiliate provides the Work.

7.7 No disputes arising between DNV GL and the Customer shall interfere with prompt payment of invoices by the Customer. Any rights of lien or retention in favour of the Customer, statutory or otherwise, are hereby excluded. The Customer shall have no right to set-off any sums including sums in respect of counter-claims, unless such counter-claim is undisputed or has been finally adjudicated upon by the courts.

8 Confidentiality

8.1 Each party as recipient agrees to keep confidential any information it receives from the other party as disclosing party in the course of the Contract which, by denotation or reasonable circumstances, is considered confidential to the disclosing party. The recipient shall treat such received information with reasonable care and diligence, not disseminating or disclosing it to third parties without the disclosing party’s prior written consent, provided however that each party may share such information with its officers, employees, affiliates, subsidiaries, subcontractors, suppliers or professional advisors who are subject to confidentiality obligations reflecting the principles herein.

8.2 The obligations set forth in Clause 8.1 shall not apply to any information which: (i) is or becomes known to the recipient from a third party without any confidentiality obligation to the disclosing party; (ii) is or becomes generally available in the public domain through no act or failure to act on the part of the recipient; (iii) has demonstrably been developed by the recipient independently from this Contract; (iv) is requested to be disclosed by any competent court, governmental agency, flag state administration, other relevant public authority in accordance with applicable law, court order or other public regulation; (v) is disclosed to the registered owner and/or ultimate owning company of a vessel without changing the general nature of confidentiality of such information if such information is vessel-related or (vi) is required to be disclosed by the applicable stipulations of the International Association of Classification Societies (IACS).
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8.3 Customer acknowledges that DNV GL is bound by an obligation to give the EU Commission or anyone acting on its behalf, access to information in accordance with applicable EU requirements, and that Customer shall give the EU Commission unrestricted access to ships for the purpose of inspection.

8.4 DNV GL Group shall have the right to use for statistical, analytical and internal training purposes, any material, information or know-how generated in the course of the Work.

8.5 The obligations in this section shall survive the completion of the Work or termination of this Contract and shall continue for as long as the relevant information remains confidential.

9 Assignment and Subcontracting

9.1 This Contract, including any Deliverable issued as a result hereof, is specifically related to the Customer and no rights, obligations, interest, claim, benefit or Deliverable deriving here from shall extend to any other (third) party without the prior written consent of DNV GL. Customer is not entitled to grant to any third party any right of use in respect of any Deliverable without the prior written consent of DNV GL. The Contracts (Rights of Third Parties) Act 1999 shall not apply to this Contract.

9.2 DNV GL may at its discretion subcontract parts of or the whole of the Work to any other company within the DNV GL Group. The DNV GL Group shall have the benefit of, and shall be entitled to enforce against the Customer the rights, exclusions, limitations of liability and indemnities set out in the Contract.

9.3 DNV GL is only responsible for the Work it has performed directly or through its subcontractors.

10 Intellectual Property Rights

10.1 For the purpose of this Contract, each party shall remain the sole owner of any of its intellectual property and rights thereto existing prior to the date of this Contract and, except as explicitly set out in this Contract, nothing herein shall imply any transfer or grant of rights to any such intellectual property or rights thereto.

10.2 Customer shall hold a restricted, global and royalty free license to use the Deliverables or the results of the Work for their agreed or ordinary purpose, including the right to use any valid certificates or similar documents in accordance with the applicable requirements.

10.3 Subject to the confidentiality obligations set out in Clause 8 above, all intellectual property rights in the information and data created in connection with this Contract shall vest in DNV GL. In particular, DNV GL shall hold the copyright to all certificates and similar documents issued under this Contract. Nothing herein shall be deemed to limit DNV GL Group rights according to Clause 8.4.

10.4 The Customer warrants that it holds all necessary rights to material and information submitted for the purpose of the Work. The Customer shall indemnify and hold harmless DNV GL from any Claim DNV GL might suffer or receive as a consequence of any infringement of third party rights.

10.5 DNV GL is continuously improving its services to the industry to safeguard life, property and the environment. The customer acknowledges that DNV GL shall hold a right to use and process any information, data or databases generated or collected throughout the Work in an anonymized form, for its own competence building, research or business purposes.
11 **Force Majeure**

11.1 Neither party shall be in breach of this Contract, nor liable for any failure or delay in performance hereunder if the cause of such failure or delay is attributable to events beyond the reasonable control of the affected party, including but not limited to armed conflict, terrorist attack, civil war, riots, toxic hazards, epidemics, natural disasters, extreme weather, fire, explosion, failure of utility service, labour disputes, breakdown of infrastructure, transport delays, or any public restrictions following any of the incidents above, or any other force majeure occurrence.

11.2 In the event of a force majeure occurrence, the affected party shall notify the other party without undue delay of the particulars of the situation and the estimated duration. Either party shall be entitled to terminate the Contract with immediate effect should the force majeure occurrence endure for more than thirty (30) days.

12 **Indemnifications**

12.1 Each party shall indemnify and hold harmless the other party from and against all Claims arising while carrying out the Work in respect of: (i) bodily injury, sickness, disease, or death of any of its employees or other representatives; and (ii) loss of or damage to the party’s property. This provision shall apply whether or not the Claim is caused or contributed to by the negligence of the other party. Both parties shall maintain insurances for such liabilities, cf. Clause 14, to make this knock-for-knock provision effective.

12.2 The Work including any advice and information provided by DNV GL to the Customer as a part of the Work, shall be for the Customer only. The Customer shall ensure that any other member of the Customer Group and/or any third party is aware that the Work is intended for the Customer only and it is understood and agreed that nothing expressed herein is intended or shall be construed to give any person, firm or corporation, other than the signatories hereto any right, remedy or claim hereunder or under any provisions herein contained. The Customer shall indemnify and hold harmless the DNV GL Group from and against Claims brought by the Customer Group (other than the Customer) in connection with the Work or any advice and information, in whatever form it may be given, which has been provided by DNV GL to the Customer.

12.3 The Customer shall be responsible for and shall save, indemnify, defend and hold harmless the DNV GL Group from and against all Claims in respect of pollution or contamination emanating from the assets, equipment, facilities or property of Customer Group whether owned, hired, leased or otherwise provided by the Customer Group and arising from, relating to or in connection with the performance or non-performance of the Work, irrespective of cause and whether or not resulting from or contributed to by any negligence, breach of duty (statutory or otherwise), breach of contract, breach of warranty and/or strict liability of any member of the DNV GL Group.

12.4 Customer shall indemnify and hold harmless DNV GL from and against any Claims in respect of: (i) Customer's breach of Section 3 (General Obligations); (ii) any abuse of the Deliverable issued under this Contract.

12.5 The Customer’s obligations to indemnify DNV GL Group set out above in Clause 12.2, 12.3 and 12.4, shall apply in respect of any Claims regardless whether such Claims against DNV GL Group are based on breach of contract, direct action, breach of duty (statutory or otherwise), tort (including negligence), "information liability", strict liability or otherwise, except if and to the extent such Claims are caused by DNV GL’s (i) act or omission with the intent to cause damage or injury; (ii) act or omission in gross disregard of a known or obvious risk which made it highly probable that harm would follow.

12.6 Each party shall notify the other party without undue delay upon becoming aware of any incident likely to give rise to a Claim against the other party in relation to this Contract.
12.7 The Customer agrees that any Claim with respect to the Work shall be brought solely against DNV GL, and the Customer shall indemnify and hold harmless DNV GL Group from any Claim brought against DNV GL Group by any other party as a consequence of the Customer’s breach of this Clause 12.7.

13 Limitation of Liability

13.1 Except for the re-performance of the Work as provided in Clause 6 and DNV GL’s indemnification obligations set out in Clause 12.1 above, DNV GL shall not be liable for any Claim incurred by Customer and/or Customer Group arising from, relating to or in connection with the performance or non-performance of the Work by DNV GL, whether or not resulting from or contributed to by any negligence (in whatever form on whatever organisation level), breach of duty (statutory or otherwise), breach of contract, breach of warranty and/or strict liability of any member of the DNV GL Group, except to the extent set out below.

DNV GL’s liability for all Claims arising out of or in connection with this Contract shall be limited to an aggregate total of 10 (ten) times the net fees (excluding any expenses and disbursements) payable to DNV GL for the Work, never exceeding a maximum aggregate sum of USD 4 (four) million.

In case the Customer pays the fees periodically, e.g. under a Periodical Service Agreement or similar fee arrangement, DNV GL’s liability for all Claims arising out of or in connection with this Contract shall be limited to an aggregate total of 10 (ten) times the annual net fee (excluding any expenses or disbursements), never exceeding a maximum aggregate sum of USD 4 (four) million.

13.2 Any limitations and exclusions of DNV GL’s liability shall extend to:

(i) the other members of the DNV GL Group; and

(ii) the relevant maritime administration of a vessel’s country of registry (the “Flag Administration”) for any services provided hereunder on behalf of such Flag Administration, and the Customer accepts that the other members of the DNV GL Group and the Flag Administration shall be entitled to invoke such limitations and exclusions of liability directly towards any Claim from the Customer Group.

13.3 Notwithstanding any provision to the contrary elsewhere in these General Terms and Conditions and irrespective of cause and whether or not resulting from or contributed to by any negligence (whateoever degree and whatsoever organisation level), breach of duty (statutory or otherwise), breach of contract, breach of warranty and/or strict liability, the Customer shall be responsible for and shall save, indemnify, defend and hold harmless the DNV GL Group from the Customer Group’s own Consequential Loss and DNV GL shall be responsible for and shall save, indemnify, defend and hold harmless the Customer Group from the DNV GL Group’s own Consequential Loss.

13.4 Neither party excludes or limits any liability which cannot be excluded or limited by the applicable mandatory law.

13.5 Any Claim against DNV GL Group by the Customer shall be deemed to be irrevocably waived and time barred upon the expiry of twelve (12) months from the date of completion of the relevant Work.

A later issuance of class certificate or confirmation of vessel being in class shall not result in the commencement of a new 12 (twelve) months’ time bar period, except for services provided in addition to the initial Work.

14 Insurance

14.1 Both parties shall maintain adequate insurance coverage covering their respective business activities and their relevant personnel under the Contract, for such amounts and on such terms as are
standard in their respective industries and with underwriters who are in good standing. Such insurances shall contain a waiver of subrogation.

15  Fair Business Practice, Anti-bribery and Compliance

15.1 The parties shall conduct their respective business activities in a fair, ethical, and lawful manner in accordance with all applicable laws and generally accepted codes of conduct (including but not limited to the DNV GL code of conduct), avoiding any unacceptable activities, including but not limited to acceptance of or acquiescence in extortion, bribery, use of child labour, breach of human rights, or the imposition of unreasonable work conditions.

15.2 Customer shall indemnify and hold harmless DNV GL from any breach of Clause 15.1.

15.3 Both parties may terminate this Contract with immediate effect, without any liability or penalties, if a member of DNV GL Group or Customer Group are or become subject to sanctions or penalties imposed by a national government, the United Nations, the European Union or similar organisations related to the Work which is provided hereunder, or if the Work could be considered to be illegal or in conflict with applicable law for the respective party, its subcontractors and/or its subcontractor’s’ parent companies.

16  Term and Termination

16.1 This Contract shall remain in full force and effect until all Deliverables are delivered, or the Work is otherwise completed and paid for in full unless terminated earlier by mutual agreement or in accordance with Clause 15.3 or Clause 16.2 below.

16.2 Each party may terminate this Contract by written notice to the other party under the following circumstances:

(i) if the other party commits a material breach of this Contract and fails to rectify such breach within 10 (ten) working days after receipt of the other party’s written notice;

(ii) if the other party becomes insolvent, is unable to pay its debts as they fall due, or is subject to bankruptcy proceedings, administration, receivership, dissolution, liquidation, winding-up or otherwise discontinues its business; or

(iii) for convenience after serving the other party a written notice 30 (thirty) days prior to termination.

16.3 In the event the Contract is terminated by the Customer in accordance with 16.2 (iii) prior to completion of the Work, irrespective of cause, DNV GL shall be entitled to: (i) the agreed remuneration for the Work rendered up to the date of termination; (ii) all costs incurred by DNV GL up to and including the termination date; and (iii) 10% of the remuneration agreed in respect of Work which has not been provided. In the event of termination, DNV GL shall be entitled to retain any payment, deposit or advance of any fees made by the Customer prior to the date of termination up to the amount to which DNV GL is entitled.

16.4 In the event of termination of the Contract, the rights and obligations of DNV GL and the Customer included in Clauses 1, 2, 3, 6, 7, 8, 10, 11, 12, 13, 17 and 18 shall remain in full force and effect.
17 Law and Jurisdiction

17.1 This Contract shall be governed by and construed exclusively in accordance with the laws of Norway, without regard to principles of conflicts of law.

17.2 The parties shall use their reasonable efforts to resolve any claim or dispute arising in relation to this Contract by negotiations within a reasonable time. Should the parties fail to resolve any claim or dispute by negotiations, the dispute shall be exclusively subject to the jurisdiction of the courts of Oslo, Norway.

18 Severability

Should any provision of these General Terms and Conditions be held to be invalid or unenforceable, such shall not affect the validity or enforceability of any other part or provision of these General Terms and Conditions. Such provision shall be amended to the extent necessary to make the provision valid and enforceable, while keeping as strictly and closely as possible to the original wording and purpose of the provision.
Section 2   Classification

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A  General

A.1  Rules and Guidelines

A.1.1  Underlying GL Rules and Guidelines

A.1.1.1  The Classification of ships, of other floating units and of any pertinent equipment is based on:
  • the respective latest edition of the Rules for Classification and Surveys of Germanischer Lloyd (GL)
  • the Construction Rules and Guidelines relating to the respective ship type or installation, as applicable on the date of conclusion of the contract between shipyard (builder) and prospective ship owner (buyer), see also D.1.

A.1.1.2  The Construction Rules cover Rules for materials and welding and any other special Rules published by GL that may be applicable from case to case 1.

A.1.1.3  In case of multi-lingual editions, the English text shall be authoritative in the event of doubts as to the interpretation of the GL Construction Rules and Guidelines.

A.1.2  The following shall apply unless otherwise specified:

A.1.2.1  The date of "contract for construction" of a vessel is the date on which the contract to build the vessel is signed between the prospective ship owner and the shipyard. This date is normally to be declared to GL by the ordering client (a client being the person/entity concluding the respective contract with GL) applying for the assignment of Class to a newbuilding, see also D.1.

A.1.2.2  The date of "contract for construction" of a series of sister vessels 2, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective ship owner and the shipyard.

Sister vessels are vessels built to the same approved plans for Classification purposes. The optional vessels will be considered part of the same series of sister vessels if the option is exercised not later than one year after the contract to build the series was signed.

A.1.2.3  If a contract for construction is later amended to include additional vessels or additional options, the date of "contract for construction" for such vessels is the date on which the amendment to the contract is signed between the prospective ship owner and the shipyard. The amendment to the contract is to be considered as a "new contract" to which A.1.2.1 and A.1.2.2 apply.

A.1.2.4  In any case Section 1, C. is to be observed.

---

1 For Classification and Construction of mobile and fixed offshore installations the Rules for Offshore Technology (IV-6) are applicable. For diving systems, submersibles and underwater equipment the Rules for Underwater Technology (I-5) are applicable.

2 Sister vessels may have minor design alterations provided such alterations do not affect matters related to Classification (see also IACS Proc. Req. No. 29, Rev. 0 July 2009).
A.1.3 Statutory regulations

A.1.3.1 National regulations as, for instance, adopted by the respective flag state will as a matter of principle not be affected by the Rules for Classification and Construction. However, various requirements stipulated by international conventions are taken into account in the GL Rules.

A.1.3.2 Disclaimer

Statutory requirements are continuously being processed and updated by the IMO and the entry into force date may not coincide with the annual release of GL Rules. GL makes an effort to keep GL Rules up to date with mandatory requirements; however, GL cannot accept any liability for damages incurred in this context.

A.1.4 Port state control

In case of a ship's detention by port state control the operators (being the ship owner, charterer, manager or other person responsible for the operation of the ship, as the case may be) are obliged to call in a GL surveyor without delay. This requirement has to be met in any case, where the deficiencies are related to statutory certificates issued by Germanischer Lloyd on behalf of a flag state. In case of deficiencies related to the Cargo Ship Safety Construction Certificate, however, it is also essential to call in the GL surveyor, regardless of the issuing flag state or organization.

A.2 Scope

A.2.1 Classification covers the ship's hull and machinery, including electrical installations. For sailing ships, the rigging is also included.

A.2.2 On request, certain installations - e.g. refrigerating installations - may be classed separately, see A.2.5.

A.2.3 GL reserves the right to extend the scope of Classification to all equipment and machinery used in the operation of the ship, which by their character and/or arrangement may impair the safety of human life, of the ship and her cargo or of the environment.

A.2.4 Structural systems and equipment determining the ship type are subject to examination within the scope of Classification, if the ship type is specified in the form of a Notation affixed to the Character of Classification (see C.3.3).

A.2.5 Refrigerating installations

A.2.5.1 For the purpose of the present rules the following are considered to be refrigerating installations:

- cargo refrigerating installations for the refrigeration of insulated cargo holds
- container refrigerating installations for the refrigeration of insulated containers,

provided that the refrigerating installations are permanently installed and form an integral part of the ship. The refrigerating installation includes the technical installations required for power supply.

A.2.5.2 Reefer units which can be connected to a container and transported in combination therewith, and containers with or without a reefer unit, are subject to the GL Guidelines for the Construction, Repair and Testing of Freight Containers (VI-1-1).

A.3 Class Certificate, Characters of Classification

A.3.1 Assignment of Class, issuance of the Class Certificate, and assignment of the corresponding Character of Classification and Notations thereto are conditional upon proof being furnished of compliance with the GL Construction Rules in force on the date of conclusion of the contract for construction, see A.1.1.

A.3.2 GL reserves the right to add special remarks in the Class Certificates, as well as information regarding operation of the ship which is of relevance for the vessel's Class.
Section 2 Classification

A.4 Register

A.4.1 General

The Classification data of each ship classified will be included in the GL data file. An extract of these ship data will be entered in the Register published by GL. During the period of Class GL will update these details on the basis of relevant reports submitted by the Surveyors.

A.4.2 Refrigerating installations

The refrigerating installations classed by GL are recorded in the Register, with indication of the Character of Classification, and are entered in the list of ships holding refrigerating installation certificates.

A.5 Request to Head Office

In case a client does not agree on a technical decision made by or on behalf of GL, he may, as the case may be, send a written complaint either to the responsible Customer Service Team or to the Chief Surveyor.

B Validity of Class

B.1 Period of Class

The hull, the machinery and any special equipment classed have the same period of Class (duration of one Class period). The class continues to be valid, provided that the hull and the machinery are subjected to all surveys stipulated and that any repairs required are carried out to the satisfaction of GL, see Sections 3 and 4.

B.2 Prerequisites for validity of Class

B.2.1 The Class assigned by GL is valid only subject to the conditions stated in the Class Certificate (e.g. range of service, freeboard, main engine output). Class assignment is conditional upon the ship, including her machinery, being loaded and operated such as to comply with the design concept, and with the applicable rules.

This also applies to the distribution of cargo and ballast, if necessary to the securing of cargo, as well as to the operation of the ship in heavy weather.

B.2.2 If the hull and/or machinery are not subjected to the prescribed surveys on their due dates, vessel's Class will be suspended for both hull and machinery.

If special shipboard equipment classed is not subjected to the prescribed surveys on their due dates, only the Class of the special equipment will be suspended.

A ship's class may also be suspended if a client fails to comply with any other class or safety relevant conditions or instructions. A ship's class is suspended with effect of the respective date mentioned by GL or otherwise at the moment the technical status leading to the suspension of class occurs.

B.2.3 GL Head Office or one of the Society's representations are to be immediately informed about any average or deficiencies and damages to hull and machinery or other equipment classed, where these may be of relevance to the vessel's Class. A survey will have to be arranged for a date not later than that of vessel's arrival at the next port. If the survey reveals that vessel's Class has been affected, the vessel's Class will be maintained only on condition that the repairs or modifications demanded by GL will be carried out within the period specified by the Surveyor. Until full settlement of these conditions, Class will be restricted, see also B.4.1

B.2.4 Any damage or excessive wastage beyond allowable limits to side shell frames, their end attachments and/or adjacent shell plating, the deck structure and deck plating, the bottom structure and bottom plating, the watertight or oiltight bulkheads and the hatch covers or hatch coamings that affect a vessel's Class, is to be permanently repaired immediately after the survey.
Section 2 Classification

For locations where adequate repair facilities are not available, consideration may be given to allow a vessel to proceed directly to a repair yard. This may require discharging of the cargo and/or temporary repairs for the intended voyage.

Damages or excessive wastage at the areas noted above and not immediately affecting the vessel's structural or watertight/weathertight integrity may be temporarily repaired for a period to be defined.

B.2.5 In exceptional cases, following inspection of hull and machinery, performance of the repairs required for maintenance of the original Class may be dispensed with, if owners agree to the Class and/or the range of service being restricted, or possibly a higher freeboard being assigned.

B.2.6 Apart from the Class Certificates any other documentation of significance for Classification is to be kept on board and made available to the Surveyor on request, such as:

- reports on surveys previously performed
- approved drawings and other documentation handed out to owners together with the class certificates and containing particulars or instructions of significance in respect of the Classification requirements (e.g. use of higher strength hull structural steel)

B.3 Repairs, conversions

B.3.1 Where parts are damaged or worn to such an extent that they no longer comply with the requirements of GL, they are to be repaired or replaced.

B.3.2 Maintenance work, repairs and conversions of classed ships and special equipment have to be carried out under the supervision of GL to ensure maintenance or reassignment of Class.

B.3.3 The areas affected by the repair and conversion are to be treated in the same way as new-buildings, irrespective of whether the hull, the machinery including the electrical installation, the inert gas system, automated systems or other classed equipment are concerned, see also D.3.1.2.

B.3.4 If following major conversions a new Character of Classification and/or new Notations are assigned so that new Certificates have to be issued, commencement of a new period of Class may be agreed about.

B.3.5 Assistance for planning of conversion projects is given in GL’s Guidance for Conversion available via website.

B.4 Class expiry

B.4.1 Where hull and machinery are found to no longer comply with the requirements on which Class assignment had been based, or where owners refuse to have repairs or modifications required by GL carried out within a period to be determined from case to case, vessel's Class will cease to be valid. The same applies to the Class of special equipment.

B.4.2 If owners are not interested in maintenance of, or re-admission to Class of the vessel or any of its classed equipment, GL will have to be informed accordingly. The Class Certificates will have to be returned to GL.

B.4.3 If for some reason the Class has expired or has been withdrawn or suspended by GL, this will be indicated in the Register.

B.4.4 Where following withdrawal of vessel's Class the repairs required by GL have been carried out and the ship has been subjected to a survey for re-admission to Class, the original Class may be reassigned with a new period of Class. Such surveys are to be carried out in accordance with the requirements for a Class Renewal Survey.
B.5 Laid-up ships

B.5.1 The period of Class of hull and machinery will not be interrupted throughout the laying-up period. This means that periodical surveys will have to be carried out as before; surveys due, for which dry-docking is required, may be postponed until recommissioning. Apart from this, the requirements of the preceding paragraphs are to be applied.

B.5.2 Upon expiry of the Class, a survey substituting the Class Renewal Survey will have to be performed. An entry on the Class Renewal will be made in the Class Certificate, with the Notation LAID-UP SHIP, and indicated in the Register.

B.5.3 At the time of recommissioning a thorough survey of the entire machinery will have to be performed in addition to the outstanding periodical surveys. Depending on the duration of the laying-up period, a sea trial and/or recommissioning trials of specific installations and/or components will have to be carried out.

C Characters of Classification and Notations

C.1 General

C.1.1 Within the scope of Classification, the characteristic features of hull, machinery and equipment are reflected in the Character of Classification, see C.2 and Notations affixed to the Character of Classification, see C.3.

C.1.2 The following applies from the date of transfer of ships to the common DNV GL production system:
Class notations may be given one or more qualifiers which are supplementary symbols used to identify variants of the class notation or a design parameter. Qualifiers typically denote differences in levels of complexity and/or special requirements or limitations, and may be assigned additional requirements.

C.1.3 The presentation of class notations in certificates and documents issued by the Society, in the Register of Vessels and in electronic customer portals and user interfaces may differ from the presentation in the Rules. Reference is made to DNV GL rules for classification DNVGL-RU-0050 Sec 3[1.5].

C.1.4 Class designation
The following example shows a Class designation for hull and machinery:

<table>
<thead>
<tr>
<th>Characters of Classification</th>
<th>Notations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hull</td>
<td>100A5</td>
</tr>
<tr>
<td></td>
<td>MC</td>
</tr>
<tr>
<td>Machinery</td>
<td>E1 CONTAINER SHIP</td>
</tr>
<tr>
<td></td>
<td>E1 AUT</td>
</tr>
</tbody>
</table>

C.2 Characters of Classification, definitions
The Characters of Classification have the following meaning:

Table 2.1 Characters of Classification

<table>
<thead>
<tr>
<th>Application</th>
<th>Character of Classification</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hull</td>
<td>100A5</td>
<td>The ship’s hull fully complies with the requirements of the Construction Rules of GL or other rules considered to be equivalent.</td>
</tr>
</tbody>
</table>
### Section 2  Classification

**Machinery**

<table>
<thead>
<tr>
<th>Character</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC</td>
<td>The machinery including electrical installations complies with the requirements of the Construction Rules of GL or other rules considered to be equivalent.</td>
</tr>
<tr>
<td>A-MC</td>
<td>The machinery including electrical installations of non-self-propelled vessels and floating units complies with the requirements of the Construction Rules of GL or other rules considered to be equivalent.</td>
</tr>
<tr>
<td>MC, A-MC</td>
<td>The machinery including electrical installations does not fully comply with the requirements of the Construction Rules of GL, but functional safety and general fitness for purpose are ensured for the envisaged service.</td>
</tr>
</tbody>
</table>

**Survey, Supervision of Construction**

<table>
<thead>
<tr>
<th>Character</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hull, machinery and/or special equipment (e.g. refrigerating installation) have been constructed:</td>
</tr>
<tr>
<td></td>
<td>- under the supervision and in accordance with the Rules of GL at the shipyard and/or at subcontractors supplying construction components / hull sections</td>
</tr>
<tr>
<td></td>
<td>- with certification by GL of components and materials requiring inspection, subject to the GL Construction Rules</td>
</tr>
<tr>
<td>(        )</td>
<td>Hull, machinery and/or special equipment (e.g. refrigerating installation) have been constructed:</td>
</tr>
<tr>
<td></td>
<td>- under the supervision of GL at the shipyard and/or at subcontractors supplying construction components / hull sections</td>
</tr>
<tr>
<td></td>
<td>- without certification by GL of components and materials requiring inspection, subject to the GL Construction Rules</td>
</tr>
<tr>
<td>Note:</td>
<td>For hull, this Character of Classification can only be assigned, if proof of damage stability is not required and/or dispensed with.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Character</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hull, machinery installation or special equipment have been constructed under the supervision of and in accordance with the rules of another recognized Classification Society and have later on been classed with GL. Deviations from the GL Rules may be accepted.</td>
</tr>
</tbody>
</table>

**Subdivision, Damage Stability**

<table>
<thead>
<tr>
<th>Character</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For the hull, proof of subdivision and damage stability has been furnished.</td>
</tr>
<tr>
<td>,</td>
<td>Hulls which have been constructed under supervision, and for which proof of subdivision and damage stability has been furnished.</td>
</tr>
</tbody>
</table>

**Diving Systems**

<table>
<thead>
<tr>
<th>Character</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAZ</td>
<td>The diving system complies with the requirements of the GL Rules for Diving Systems and Diving Simulators (I-5-1).</td>
</tr>
</tbody>
</table>
Note
In the event of admission to Class (change of Class) from a Society which is not recognized, prior exam- ination of drawings of the hull structure, the machinery and electrical installations is conditional.

Table 2.2 Notations for restricted service area

<table>
<thead>
<tr>
<th>Notation</th>
<th>Service area restriction</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSA (200)</td>
<td>This area of service is restricted, in general, to trade along the coast, provided that the distance to the nearest port of refuge as well as the offshore distance do not exceed 200 nautical miles. This applies also to trade in the North Sea and within enclosed seas, such as the Mediterranean, the Black Sea and waters with similar seaway conditions. Trade to Iceland, Spitsbergen and the Azores is exempted.</td>
</tr>
<tr>
<td>RSA (50)</td>
<td>This area of service is restricted, in general, to trade along the coast, provided that the distance to the nearest port of refuge as well as the offshore distance do not exceed 50 nautical miles. This applies also to trade within enclosed seas, such as the Baltic Sea and gulfs with similar seaway conditions. Where a permissible distance of less than 50 nautical miles has been fixed for a ship, the relevant distance will be indicated in the Class Certificate, e.g. RSA (20).</td>
</tr>
<tr>
<td>RSA (SW) (Sheltered water)</td>
<td>This area of service is restricted to trade in shoals, bays, huffs and fiths or similar waters, where heavy seas do not occur. GL Rules for Hull Structures (I-1-1), Section 30</td>
</tr>
</tbody>
</table>

The Notations may possibly be assigned on the basis of the seaway conditions prevailing in the respective service area (e.g. official seaway statistics).

Observance of the range of service boundaries is a prerequisite for validity of the Class.

GL may, on request, agree to the range of service being extended for a limited period and/or with certain reservations. This will have to be documented.

Ships, which due to their overall design are only suitable for trade in defined waterways (e.g. RSA (SW)) may in no case be assigned an extended navigation notation to the Character of Classification, even if the strength of the hull is sufficient for a wider range of service (e.g. RSA (50)). In that event, this may be expressed in the Certificate by adding the following note: "The strength of the hull structural elements complies with the service range ...".

C.3 Notations affixed to the Character of Classification

C.3.1 Restricted service area for seagoing ships

Ships complying with the Construction Rule requirements for a restricted service area only will have the Notations specified in Table 2.2 affixed to their Character of Classification.

C.3.2 Ice strengthening

Ships, which comply with the requirements of the Construction Rules relating to strengthening for navigation in ice, will have one of the "Ice Class" Notations specified below affixed to the Character of Classification. Except for Class Notation E, which on request may be assigned to the hull or the machinery installation only, hull and machinery shall always be assigned the same ice class. If the hull is constructed such as to comply with a higher ice class, this will be indicated in the Technical File.

E, E1, E2, E3, E4

Hull and machinery have been designed such as to comply with the requirements for navigation in ice, with index 4 representing the highest notation. Notations E1 to E4 correspond to ice classes IC to IA Super of the Finnish-Swedish Ice Class Rules 2010 (23.11.2010 TRAFI / 31298 / 03.04.01.00 / 2010).

PC7, PC6, PC5, PC4, PC3, PC2, PC1
Hull and machinery have been designed such as to comply with the requirements for navigation in ice, with index 1 representing the highest notation. Reference is made to the GL Guidelines for the Construction of Polar Class Ships (I-1-22).

Note

For navigation in the arctic waters of Canada reference is made to the requirements of the Canadian "Arctic Shipping Pollution Prevention Regulations". GL is authorised to issue the relevant "Arctic Pollution Prevention Certificate".

Note

For tankers and gas carriers reference is made to the OCIMF regulations for ship inspections (OCIMF SIRE 2011, Ch. 13)

C.3.3 Notations for hull and equipment

Ships of a special type, design or construction, or designed to carry defined cargoes, will have a relevant descriptive Notation affixed to their Characters of Classification, as given in the following Tables.

C.3.3.1 Dry cargo ships

Class Notations for dry cargo ships, see Table 2.3 and 2.4.

Table 2.3 Ship type Notations for dry cargo ships

<table>
<thead>
<tr>
<th>Notation</th>
<th>Characterization</th>
<th>Underlying Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTAINER SHIP 1</td>
<td>A container ship is characterised by fixed stowage appliances in the form of cell guides at the bulkheads as well as fixed container foundations on the inner bottom. In addition fixed appliances for stowage and lashing are provided on the upper deck and/or hatch covers. The transport of break bulk on the inner bottom may be accepted in special cases; the transport of bulk cargo is excluded.</td>
<td>GL Rules for Seagoing Ships (I-1) GL Rules for Hull Structures (I-1-1) for ships with $L &lt; 150$ m and for ships with $L \geq 150$ m and restricted service area (see C.3.1) GL Structural Rules for Container Ships (I-1-5) for ships with $L \geq 150$ m and unrestricted service area GL Rules for Stowage and Lashing of Containers (I-1-20) GL Guidelines for Global Strength Analysis of Container Ships (V-1-1) DNV CN 30.12, Fatigue and ultimate strength assessment of container ships including whipping and springing. GL Guidelines for the Carriage of Refrigerated Containers on Board Ships (I-1-19)</td>
</tr>
<tr>
<td>MULTI-PURPOSE DRY CARGO SHIP 2</td>
<td>Ships constructed for the carriage of general and bulk cargo</td>
<td>GL Rules for Seagoing Ships (I-1) GL Guidelines for Global Strength Analysis of Multipurpose Vessels (V-1-4)</td>
</tr>
<tr>
<td>GENERAL CARGO SHIP</td>
<td>Ships constructed for the carriage of general cargo</td>
<td>GL Rules for Seagoing Ships (I-1)</td>
</tr>
<tr>
<td>RO-RO SHIP</td>
<td>Ships for the carriage of vehicles, which are loaded via integral or external ramps and strengthened in accordance with the GL Rules</td>
<td>GL Rules for Seagoing Ships (I-1)</td>
</tr>
</tbody>
</table>
### Notation Characterization Underlying Rules

<table>
<thead>
<tr>
<th>Notation</th>
<th>Characterization</th>
<th>GL Rules for Seagoing Ships (I-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR CARRIER</td>
<td>Ships intended for the carriage of cars</td>
<td>GL Rules for Seagoing Ships (I-1)</td>
</tr>
<tr>
<td></td>
<td>including all requirements related to the notation RO-RO SHIP</td>
<td></td>
</tr>
<tr>
<td>BULK CARRIER</td>
<td>Bulk carriers with $L &lt; 90,\text{m}$ and bulk carriers not subject to the IACS Common Structural Rules for Bulk Carriers and Oil Tankers. Entries will be made into the Certificate as to whether specified cargo holds may be empty in case of alternating loading. Additional indications of the types of cargo for which the ship is strengthened may be entered into the Certificate. For bulk carriers with $L \geq 90,\text{m}$ according to the Common Structural Rules for Bulk Carriers and Oil Tankers, please see DNV GL Rules for Classification: Ships (RU-SHIP).</td>
<td>GL Rules for Seagoing Ships (I-1) GL Rules for Hull Structures (I-1-1), Section 23</td>
</tr>
<tr>
<td>ORE CARRIER</td>
<td>Ships specially designed for the carriage of bulk cargo and ore respectively and strengthened in accordance with the GL Construction Rules. See also Table 2.10. Entries will be made into the Certificate as to whether specified cargo holds may be empty in case of alternating loading. Additional indications of the types of cargo for which the ship is strengthened may be entered into the Certificate.</td>
<td>GL Rules for Seagoing Ships (I-1)</td>
</tr>
<tr>
<td>CEMENT CARRIER</td>
<td>Ships exclusively designed for the carriage of cement and fitted with corresponding cargo loading/discharging equipment</td>
<td>GL Rules for Seagoing Ships (I-1)</td>
</tr>
</tbody>
</table>

1. The validity of the Notation depends on the exclusive use of container stowage and lashing elements approved by GL and/or tested in accordance with GL's Rules, as well as on the approval of the container stowage and lashing plan with parts lists.

2. The provisions of IMO resolution MSC.277(85) apply to ships, which occasionally carry dry cargoes in bulk, the keels of which are laid or which are at similar stage of construction on or after 1st July 2010.

The resolution is non-mandatory in general. If a flag state considers the regulation as mandatory, all provisions are to be applied regardless of the length of the ship.

The following application has to be used if flag state considers the regulation as non-mandatory:

- **Multi Purpose Dry Cargo Ships with ship length less than 150 m**
  
  Generally, all provisions given for MPVs with $L < 150\,\text{m}$ shall be applied. A ship owner may refuse applying resolution MSC.277(85).

- **Multi Purpose Dry Cargo Ships with ship length of 150 m and upwards**
  
  It is recommended to apply all provisions given for MPVs with $L \geq 150\,\text{m}$.

Further guidance can be given on request.
Table 2.4 Type related Notations for dry cargo ships

<table>
<thead>
<tr>
<th>Notation</th>
<th>Characterization</th>
<th>Underlying Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC</td>
<td>Mandatory for ships having Class Notations CONTAINER SHIP or EQUIPPED FOR CARRIAGE OF CONTAINERS. Use of a container lashing computer onboard approved by GL is required. Ships, the contract for which was made between the shipyard and the ordering party before entry into force of these Rules, will be assigned the Notation LC upon request. Consequently, the use of design accelerations according to current Rules for Stowage and Lashing of Containers (I-1-20) will be permitted for these ships.</td>
<td>GL Rules for Stowage and Lashing of Containers (I-1-20)</td>
</tr>
<tr>
<td>RSCS</td>
<td>Notation for Route Specific Container Stowage for ships intended to carry containers on a specified sea route. Assignment of Class Notation LC and GL approval for route specific container securing arrangement plan are required.</td>
<td></td>
</tr>
<tr>
<td>HATCHCOVERLESS 1</td>
<td>For Hatchcoverless Container Ships and Multi-purpose Vessels equipped with the appropriate facilities</td>
<td>See Table 2.3</td>
</tr>
<tr>
<td>EQUIPPED FOR CARRIAGE OF CONTAINERS 1</td>
<td>For ships carrying containers occasionally or as part cargo only, and equipped with the appropriate facilities</td>
<td></td>
</tr>
<tr>
<td>EQUIPPED FOR CARRIAGE OF RO-RO-CARGO</td>
<td>For ships which are also equipped for the transport of trailers and motor vehicles without fuel in the tanks and which are for this purpose fitted with ramps and if applicable shell doors and strengthened according to the Rules</td>
<td></td>
</tr>
<tr>
<td>BC</td>
<td>Notation for Multi Purpose Dry Cargo Ships which occasionally carry dry cargo in bulk. These ships have to fulfil the requirements of IMO Resolution MSC.277(85) if agreed between owner and GL.</td>
<td>GL Rules for Hull Structures (I-1-1), Section 23</td>
</tr>
<tr>
<td>BC-XII</td>
<td>Notation for Bulk Carriers in accordance with the definition in SOLAS, Ch. XII, but not in accordance with the definition in SOLAS, Ch. IX.</td>
<td>GL Rules for Hull Structures (I-1-1), Section 23</td>
</tr>
<tr>
<td>BC-C 2</td>
<td>For Bulk Carriers designed to carry dry bulk cargoes of cargo density less than 1.0 t/m³</td>
<td>GL Rules for Seagoing Ships (I-1)</td>
</tr>
<tr>
<td>BC-B 2</td>
<td>For Bulk Carriers designed to carry dry bulk cargoes of cargo density of 1.0 t/m³ and above with all cargo holds loaded in addition to BC-C conditions.</td>
<td>GL Rules for Hull Structures (I-1-1), Section 23</td>
</tr>
<tr>
<td>BC-A 2</td>
<td>For Bulk Carriers designed to carry dry bulk cargoes of cargo density of 1.0 t/m³ and above with specified holds empty at maximum draught in addition to BC-B conditions.</td>
<td>GL Rules for Hull Structures (I-1-1), Section 23</td>
</tr>
<tr>
<td>{no MP}</td>
<td>For Bulk Carrier Notations BC-A, BC-B and BC-C, when the vessel has not been designed for loading and unloading in multiple ports in accordance with the conditions specified in the GL Rules for Hull Structures (I-1-1), Section 23.</td>
<td>GL Rules for Hull Structures (I-1-1), Section 23</td>
</tr>
</tbody>
</table>
### Section 2 Classification

| **{maximum cargo density** | For Bulk Carrier Notations BC-A and BC-B if the maximum cargo density is less than 3.0 tonnes/m³ |
| **... t/m³}** | |
| **{holds a, b, ... may be empty}** | For Bulk Carrier Notations BC-A |

1. The validity of the Notation depends on the exclusive use of container stowage and lashing elements approved by GL and/or tested in accordance with GL’s Rules, as well as on the approval of the container stowage and lashing plan with parts lists.

2. Notation for bulk carriers contracted for new construction on or after 1 July 2003, having a length of 150 m or above.

#### C.3.3.2 Tankers for liquid cargo, special cargoes and for alternative carriage of oil and dry cargo

Ships constructed for the carriage of liquid cargo and complying with the respective GL Construction Rules may have Notations according to Table 2.5 and 2.6.

**Table 2.5 Type Notations for ships carrying liquid and special cargoes as well as combined carriage of liquid and dry cargo**

<table>
<thead>
<tr>
<th>Notation</th>
<th>Application / Underlying Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIL TANKER</td>
<td>Oil Tankers are ships engaged in the trade of carrying oil and Product Tankers are ships engaged in the trade of carrying oil other than crude oil.</td>
</tr>
<tr>
<td>PRODUCT TANKER</td>
<td>For the definition of oil and crude oil see GL Rules for Hull Structures (I-1-1), Section 24, A.3. For oil tanker with ( L \geq 150 ) m according to the Common Structural Rules for Bulk Carriers and Oil Tankers, see DNV GL Rules for Classification: Ships (RU-SHIP). GL Rules for Seagoing Ships (I-1) Rules for Hull Structures (I-1-1), Section 24</td>
</tr>
<tr>
<td>OIL / PRODUCT TANKER</td>
<td>CHEMICAL TANKER TYPE 1, 2 or 3 GL Rules for Seagoing Ships (I-1) Rules for Chemical Tankers (I-1-7)</td>
</tr>
<tr>
<td>LIQUEFIED GAS CARRIER</td>
<td>GL Rules for Seagoing Ships (I-1) DNV GL rules SHIP Pt.5 Ch.7</td>
</tr>
<tr>
<td>ASPHALT TANKER</td>
<td>Tankers intended to carry liquids other than oil tankers and product tankers.</td>
</tr>
<tr>
<td>SPECIAL TANKER</td>
<td>GL Rules for Seagoing Ships (I-1)</td>
</tr>
<tr>
<td>EDIBLE OIL TANKER</td>
<td>GL Rules for Hull Structures (I-1-1), Section 24</td>
</tr>
<tr>
<td>WINE TANKER</td>
<td></td>
</tr>
<tr>
<td>FRUIT JUICE CARRIER</td>
<td></td>
</tr>
<tr>
<td>BC / OIL TANKER</td>
<td>Ships intended to alternatively carry dry cargo or liquids in bulk having a flashpoint (closed cup test) not exceeding 60 °C.</td>
</tr>
<tr>
<td>ORE CARRIER / OIL TANKER</td>
<td>GL Rules for Seagoing Ships (I-1)</td>
</tr>
<tr>
<td>ORE CARRIER / PRODUCT TANKER</td>
<td>GL Rules for Hull Structures (I-1-1), Section 24</td>
</tr>
</tbody>
</table>

**Table 2.6 Type related Notations for ships carrying liquid and special cargoes**

<table>
<thead>
<tr>
<th>Notation</th>
<th>Application / Underlying Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTCOAT</td>
<td>For Oil Tankers, the cargo tanks of which comply with the GL Rules for Corrosion Protection of Crude Oil Cargo Tanks (VI-10-3)</td>
</tr>
</tbody>
</table>
Section 2  Classification

<table>
<thead>
<tr>
<th>Notation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPM, SPM 1, SPM 2, SPM 3</td>
<td>For tankers in shuttle service and of one of 4 different single point mooring designs meeting the requirements of GL Rules for Hull Structures (I-1-1), Section 24.</td>
</tr>
<tr>
<td>STL</td>
<td>For tankers in shuttle service and designed with a submerged turret loading arrangement meeting the requirements of GL Rules for Hull Structures (I-1-1), Section 24.</td>
</tr>
</tbody>
</table>
| VEC | This Notation may be assigned to tankers equipped with vapour return installations for the return of volatile organic compounds to shore during loading operations complying either with:  
- USCG Regulations for foreign flag vessels Title 46 CFR, Part 39 Vapour Control Systems, or  
- IMO MSC/ Circ. 585, Standards for vapour emission control systems. |
| NLS | Notation for Oil Tankers and Gas Carriers complying with MARPOL Annex II requirements for NLS Certificate (Noxious Liquid Substances) |
| NOT SUITABLE FOR CARGO WITH FLASHPOINT \( \leq 60 \, ^\circ\)C | For tankers which are intended to carry liquids having a flashpoint (closed cup test) above \( 60 \, ^\circ\)C only. |
| SUITABLE FOR CARRIAGE OF VARIOUS OIL PRODUCTS | For tankers with special structural measures (separation of piping, tank coating etc.) permit simultaneous carriage of various oils and oil products. |

C.3.3.3  Passenger ships

Class Notations for passenger ships, see Table 2.7.

Table 2.7  Notations assigned for passenger ships

<table>
<thead>
<tr>
<th>Notation</th>
<th>Application / Underlying Rules</th>
</tr>
</thead>
</table>
| PASSENGER SHIP       | Ships which carry more than twelve passengers and engaged on international voyages.  
GL Rules for Seagoing Ships (I-1)  
GL Rules for Hull Structures (I-1-1), Section 26  
Chapters II-1 and II-2 of the SOLAS Convention  
Exemptions from these requirements may be granted only within the framework of options given therein and are subject of approval by the competent Administration. |
| PASSENGER SHIP EU    | Ships which carry more than twelve passengers and engaged on domestic voyages in member states of the EU.  
GL Rules for Seagoing Ships (I-1)  
GL Rules for Hull Structures (I-1-1), Section 26  
EU Directive for passenger ships |
| PASSENGER SHIP N     | Ships which carry more than twelve passengers and engaged on national trade.  
GL Rules for Seagoing Ships (I-1)  
GL Rules for Hull Structures (I-1-1), Section 26  
National regulations |

Passenger ships may be assigned the additional notations:
- OPEN RO-RO CARGO SPACE
- CLOSED RO-RO CARGO SPACE
C.3.3.4 Offshore Service Vessels

The Notation **OFFSHORE SERVICE VESSEL** is to be assigned to ships designed for support service to offshore installations and built to the requirements of the GL Rules for Hull Structures (I-6-1). At the request of the owner, ships having functional equipment as required below may be assigned an additional notation according to Table 2.8.

<table>
<thead>
<tr>
<th>Additional Notation</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>HNLS</td>
<td>Carrying hazardous and noxious liquid substances</td>
</tr>
<tr>
<td>AH</td>
<td>Anchor handling</td>
</tr>
<tr>
<td>TOW</td>
<td>Towing</td>
</tr>
<tr>
<td>TVS-ST, TVS-U, TVS-C, TVS-R1</td>
<td>Towing vessel approvability scheme (^1)</td>
</tr>
<tr>
<td>WSV</td>
<td>Well stimulation</td>
</tr>
<tr>
<td>FF(x)</td>
<td>Fire fighting</td>
</tr>
<tr>
<td>STANDBY</td>
<td>Standby and rescue</td>
</tr>
<tr>
<td>OR</td>
<td>Oil recovery and transportation</td>
</tr>
<tr>
<td>CR</td>
<td>Chemical recovery and transportation</td>
</tr>
<tr>
<td>SPS</td>
<td>Special purpose</td>
</tr>
<tr>
<td>WTIS</td>
<td>Wind turbine installation and maintenance support</td>
</tr>
</tbody>
</table>

\(^1\) Requirements for each of the categories according to the Guidelines for the Approval of Towing Vessels of GL Noble Denton

C.3.3.4.1 Crew Boats and Offshore Wind Farm Service Craft

Reference is made to DNV GL Rules for Classification – High Speed & Light Craft (DNV GL-RU-HSLC).

C.3.3.5 High Speed Craft

Reference is made to DNV GL Rules for Classification – High Speed & Light Craft (DNV GL-RU-HSLC).

C.3.3.6 Yachts \(\geq 24\) m

Reference is made to DNV GL Rules for Classification – Yacht (DNV GL-RU-YACHT).

C.3.3.7 Special vessels

Other types of ships and/or craft which have been specially designed dimensioned and/or equipped for their intended purpose will have a relevant descriptive Notation affixed to their Character of Classification, see Table 2.9. Combination with other purposes is possible and will be noted accordingly in the Class Certificate.

For ship types not listed in Table 2.9 which are covered by existing Class Notations and related approval criteria, but for which a special designation shall be stated in the Class Certificate due to client-specific reasons, the special designation may be added in quotation marks behind the Class Notations.

<table>
<thead>
<tr>
<th>Notation</th>
<th>Application / Underlying Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAILING SHIP</td>
<td>For ships according to the GL Rules for Seagoing Ships (I-1) with sailing set as main propulsion system in accordance with the GL Rules for Rigging Technology (I-4)</td>
</tr>
<tr>
<td>SPECIAL PURPOSE SHIP</td>
<td>A special purpose ship is a ship as defined in the Code of Safety</td>
</tr>
<tr>
<td>Class</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>ICEBREAKER</strong></td>
<td>For ships having an operational profile that includes escort or ice management functions and having powering and dimensions that allow it to undertake aggressive operations in ice-covered waters.</td>
</tr>
<tr>
<td><strong>ACTIVE ESCORT TUG</strong></td>
<td>Vessel specially intended for active escort towing. This includes steering, braking and otherwise controlling a vessel in restricted waters during speeds of up to 10 knots by means of a permanent towline connection with the stern of the escorted vessel.</td>
</tr>
<tr>
<td><strong>TUG</strong></td>
<td>Ships primarily designed for towing and/or pushing operations or assisting other vessels or floating objects in manoeuvring. Where towing services are to be combined with other duties such as offshore supply or ice breaking, corresponding additional class notations may be assigned if the relevant requirements are met.</td>
</tr>
<tr>
<td><strong>FISHING VESSEL</strong></td>
<td>For ships according to the GL Rules for Fishing Vessels (I-1-8), possibly with supplementary Notations for specification of type.</td>
</tr>
<tr>
<td><strong>SUPPLY VESSEL</strong></td>
<td>Supply vessels are ships intended for supply/replenishment of islands and ships of similar use and work ships are e.g. buoy tender, etc.</td>
</tr>
<tr>
<td><strong>WORK SHIP</strong></td>
<td>GL Rules for Hull Structures (I-1-1), Section 29</td>
</tr>
<tr>
<td><strong>CHEMICAL RECOVERY VESSEL</strong></td>
<td>For ships according to the GL Rules for Chemical Recovery Vessels (I-1-12)</td>
</tr>
<tr>
<td><strong>OIL RECOVERY VESSEL</strong></td>
<td>For ships according to the GL Rules for Oil Recovery Vessels (I-1-9)</td>
</tr>
<tr>
<td><strong>RESEARCH VESSEL</strong></td>
<td></td>
</tr>
<tr>
<td><strong>RESCUE VESSEL</strong></td>
<td></td>
</tr>
<tr>
<td><strong>PILOT BOAT</strong></td>
<td></td>
</tr>
<tr>
<td><strong>PATROL</strong></td>
<td>For patrol boats, patrol vessels or ships according to the Preliminary Rules for Patrol Boats (I-3-6)</td>
</tr>
<tr>
<td><strong>BARGE</strong></td>
<td>For ships according to the GL Rules for Hull Structures (I-1-1), Section 31 Barges built for the carriage of special cargo (e.g. liquid or ore cargo) will have the respective Notations affixed to the Characters of Classification.</td>
</tr>
<tr>
<td><strong>HOPPER BARGE</strong></td>
<td>For ships according to the GL Rules for Hull Structures (I-1-1), Section 32</td>
</tr>
<tr>
<td><strong>PONTOON</strong></td>
<td>For ships according to the GL Rules for Hull Structures (I-1-1), Section 31</td>
</tr>
<tr>
<td><strong>DREDGER</strong></td>
<td>For ships according to the GL Rules for Hull Structures (I-1-1), Section 32</td>
</tr>
</tbody>
</table>
SUCTION DREDGER

FLOATING CRANE

SEMI-SUBMERSIBLE

SHIP LIFT  With indication of the lifting capacity [t]

SUBMERSIBLE  Reference is made to DNV GL Rules for Classification – Underwater Technology (DNV GL-RU-UWT).

ROV  Reference is made to DNV GL Rules for Classification – Underwater Technology (DNV GL-RU-UWT).

AUV  Reference is made to DNV GL Rules for Classification – Underwater Technology (DNV GL-RU-UWT).

1 Tugs may be assigned the additional notation: EQUIPPED FOR SALVAGE SERVICES

C.3.3.8 Carriage of dangerous goods

DG

Notation for ships equipped for the carriage of dangerous goods in accordance with the GL Rules for Machinery Installations (I-1-2), Section 12, P./Q. and SOLAS II-2, Reg. 19 or in accordance with the GL Rules for High Speed Craft (I-3-1), Section 7, D. and the HSC Code 7.17.

DBC

Notation for ships equipped for the carriage of solid bulk cargoes in accordance with the GL Rules for Machinery Installations (I-1-2), Section 12, Q. and the IMSBC Code.

C.3.3.9 Material

If ships are constructed of mild steel, this will not be specially indicated. If other materials are employed for the entire hull, this will be indicated in the Register and in the Class Certificate, e. g.:

HIGHER STRENGTH HULL STRUCTURAL STEEL

ALUMINIUM

FRP (Fibre Reinforced Plastics)

Other materials used for structure parts of the hull will be indicated into the Register.

C.3.3.10 Novel designs

EXP

Ships, machinery installations or essential parts have been constructed in accordance with a design, for which sufficient experience is not available. GL will decide at what intervals the required periodical surveys will have to be carried out. Where experience over a prolonged period of time has proved the efficiency of the design, the Notation EXP may be cancelled.

C.3.3.11 Special hull structural analysis and survey procedures

The notations in Table 2.10 may be assigned for special hull structural analysis or strengthenings. Notations assigned for special surveys or procedures are specified in Table 2.11.
## Table 2.10 Notations assigned for special hull structural analysis or strengthenings

<table>
<thead>
<tr>
<th>Notation</th>
<th>Application / Underlying Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSD</td>
<td>Cargo hold analysis carried out by the designer and examined by GL.</td>
</tr>
<tr>
<td>RSD (F25)</td>
<td>Fatigue assessment based on $6.25 \cdot 10^7$ load cycles of North Atlantic Spectrum carried out by GL.</td>
</tr>
<tr>
<td>RSD (F30)</td>
<td>Fatigue assessment based on $7.5 \cdot 10^7$ load cycles of North Atlantic Spectrum carried out by GL.</td>
</tr>
<tr>
<td>RSD (ACM)</td>
<td>Additional corrosion margin according to detailed listings in the technical file. Analysis carried out by GL.</td>
</tr>
<tr>
<td>RSD (gFE)</td>
<td>Global finite element analysis carried out in accordance with the GL Guidelines for Global Strength Analysis of Container Ships (V-1-1)</td>
</tr>
<tr>
<td>RSD (WIV)</td>
<td>Explicit consideration of Wave-induced Vibrations (Whipping and Springing) carried out in accordance with DNV CN 30.12, Fatigue and ultimate strength assessment of container ships including whipping and springing.</td>
</tr>
</tbody>
</table>

**STRENGTHENED FOR HEAVY CARGO**

For ships provided with strengthening recommended by GL in accordance with the GL Construction Rules and not complying with the requirements of the Notations BULK CARRIER or ORE CARRIER, see Table 2.3.

| G            | For ships with strengthening within the working range of grabs in accordance with the GL Rules for Hull Structures (I-1-1), Section 23, J.                     |
| COLL         | The hull side structures are specially strengthened to resist collision impacts as stipulated in the GL Construction Rules. The index added to the Notation (e. g. COLL2) reflects the degree of strengthening provided. |

1 Fatigue assessment will be carried out for all hatch opening corners on all deck levels, longitudinal frames and butt welds of deck plating and side shell plating (where applicable).

## Table 2.11 Notations assigned for special surveys or procedures

<table>
<thead>
<tr>
<th>Notation</th>
<th>Application / Underlying Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>IW</td>
<td>The ship's hull is specially equipped for in-water surveys acc. to the GL Rules for Hull Structures (I-1-1), Section 34.</td>
</tr>
<tr>
<td>ESP (Enhanced Survey Programme)</td>
<td>The ship's hull and piping in way of cargo area will be surveyed according to an enhanced survey programme. Notation for all Oil Tankers, Product Tankers and Chemical Tankers of 500 GRT/GT and above. Bulk carriers of 500 GRT/GT are affected therefrom only if these ships are constructed generally with single deck, double bottom, hopper side tanks, topside tanks and with single or double side skin construction in cargo length area and intended primarily to carry dry cargoes in bulk.</td>
</tr>
<tr>
<td>ERS (Emergency Response Service)</td>
<td>For ships, the geometry and structural data of which are made available in a database to provide the assistance necessary for limiting damages in case of average with the aid of special computer programs.</td>
</tr>
<tr>
<td>HLP (Hull Lifecycle Programme)</td>
<td>For ships, where the hull structural data necessary for the performance of thickness measurements with the GL Pegasus programme are available in a database in order to determine the allowable corrosion tolerances of all structural elements of the ship's hull. The results of the surveys will be entered into the database for further analysis and evaluation based on the results of the calculation.</td>
</tr>
</tbody>
</table>
Section 2  Classification

<table>
<thead>
<tr>
<th>Notation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BWM (D1)</td>
<td>Assigned for ships complying with the IMO D-1 exchange standard and with requirements in GL Guidelines on Ballast Water Management (VI-11-10), Section 3.</td>
</tr>
<tr>
<td>BWM (D2)</td>
<td>Assigned for ships complying with the IMO D-2 performance standard and with requirements in GL Guidelines on Ballast Water Management (VI-11-10), Section 4.</td>
</tr>
<tr>
<td>BWM (Tr)</td>
<td>Assigned for ships complying with the IMO D-2 performance standard and with requirements in GL Guidelines on Ballast Water Management (VI-11-10), Section 4 as well as having obtained a GL BWMS Approval.</td>
</tr>
</tbody>
</table>

Table 2.12  Harmony Class Notations

<table>
<thead>
<tr>
<th>Notation</th>
<th>Harmony categories</th>
<th>Application / Underlying Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>HC (hc&lt;sub&gt;pass&lt;/sub&gt;/hc&lt;sub&gt;crew&lt;/sub&gt;)&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hc = E</td>
<td>***** excellent comfort</td>
<td>For cruise ships either with ( v \leq 25 \text{ kn} ) or ( v &gt; 25 \text{ kn} ) complying with the respective GL Rules on Rating Noise and Vibration for Comfort</td>
</tr>
<tr>
<td>hc = 1</td>
<td>**** very high comfort</td>
<td></td>
</tr>
<tr>
<td>hc = 2</td>
<td>*** high comfort</td>
<td></td>
</tr>
<tr>
<td>hc = 3</td>
<td>** moderate comfort</td>
<td></td>
</tr>
<tr>
<td>hc = 4</td>
<td>* acceptable comfort</td>
<td></td>
</tr>
<tr>
<td>HC (hc)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hc = 1</td>
<td>*** high comfort</td>
<td>For cargo ships complying with the respective GL Rules on Rating Noise and Vibration for Comfort</td>
</tr>
<tr>
<td>hc = 2</td>
<td>** moderate comfort</td>
<td></td>
</tr>
<tr>
<td>hc = 3</td>
<td>* acceptable comfort</td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup>  Two separate categories, hc<sub>pass</sub> and hc<sub>crew</sub>, reflect the level attained for passenger and crew spaces, respectively. For instance, HC (2/3) corresponds to a high comfort for passengers and a moderate comfort for crew.

Table 2.13  Notations for hull response monitoring systems

<table>
<thead>
<tr>
<th>Notation</th>
<th>Characterization</th>
<th>Underlying Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM</td>
<td>Assigned to ships provided with a hull response monitoring system that can display, in real time, and record the motion information from one or more accelerometer or pressure transducer</td>
<td>GL Structural Rules for Container Ships (I-1-5), Annex C</td>
</tr>
<tr>
<td>HRS</td>
<td>Assigned to ships provided with a hull response monitoring system that can display, in real time, and record the hull stress information from at least two strain gages</td>
<td></td>
</tr>
<tr>
<td>HRSRA</td>
<td>Assigned to ships provided with a shipboard routing assistance (SRA) system for the continuous monitoring of the ship with the aim to recognize situations potentially dangerous to the ship and its cargo</td>
<td></td>
</tr>
<tr>
<td>HRW</td>
<td>Assigned to ships provided with a shipboard wave sensor for the continuous shipboard measurement of the seaway surrounding the ship</td>
<td></td>
</tr>
<tr>
<td>+D</td>
<td>At the request of the owners or shipyard, a hull response monitoring system receiving any of the above notations and has the provisions for recording data for later analysis and evaluation will be distinguished in the record by the additional symbol +D, e.g. HRS+D</td>
<td></td>
</tr>
</tbody>
</table>
C.3.3.12 Bridge arrangement and equipment on seagoing ships

The bridge is designed in compliance with the GL Rules for Bridge Arrangement and Equipment on Seagoing Ships (I-1-11).

NAV

Technical requirements for an ergonomic bridge design which fulfils the principles and aims of SOLAS V/15, MSC/Circ. 982 and IACS REC. 95.

NAV-INS

In addition to NAV, special focus is laid on increased availability and consistency of the bridge equipment.

C.3.3.13 Special equipment and systems

Special systems (e.g. propulsion systems) or equipment covered by Classification may be referred to by a Notation affixed to the Character of Classification, such as:

EQUIPPED WITH BOW RUDDER

C.3.4 Notations for machinery and systems

C.3.4.1 Ice strengthening

E, E1, E2, E3, E4

as Notation affixed to the Character of Classification for the machinery installation see C.3.2.

C.3.4.2 Condition monitoring of propeller shaft at stern tube

CM-PS

Where the propeller shaft runs within the stern tube in oil, the possibility exists, to prolong the intervals between shaft withdrawals, if the requirement according to the GL Rules for Machinery Installations (I-1-2), Section 4, D.5.6 are fulfilled.

C.3.4.3 Automation

Machinery installations which comply with the Rules of GL for automated and/or remote-controlled systems, will have the Notations specified in Table 2.14 affixed to the Character of Classification (not applicable if Class Notations for high-speed craft have been assigned). Other Notations for a detailed description are possible.

C.3.4.4 Redundant Propulsion and Steering Systems

Ships with propulsion and steering systems which meet the redundancy requirements of GL for these systems obtain one of the Notations specified in Table 2.15 affixed to the Character of Classification.

Table 2.14 Notations for machinery with automated and/or remote-controlled systems

<table>
<thead>
<tr>
<th>Notation</th>
<th>Characterization</th>
<th>Underlying Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUT</td>
<td>The machinery installation is fitted with equipment for unattended machinery spaces, so that it does not require to be operated and/or maintained for periods of at least 24 hours.</td>
<td>GL Rules for Automation (I-1-4)</td>
</tr>
<tr>
<td>AUT-nh</td>
<td>The period during which attendance to and maintenance of equipment is not required, is less than 24 hours, with nh indicating that the machinery space may remain unattended for n hours.</td>
<td></td>
</tr>
<tr>
<td>AUT-Z</td>
<td>The machinery installation is operated with the engine control room permanently attended (centralized control) and is equipped with a system for remote control of the main propulsion plant from the bridge or arrangements for manoeuvring from the engine control room.</td>
<td></td>
</tr>
<tr>
<td>RC</td>
<td>Fishing vessels: The installation is provided with a system for remote control of the main propulsion plant from the bridge.</td>
<td>GL Rules for Fishing Vessels (I-1-8)</td>
</tr>
</tbody>
</table>
Table 2.15 Notations for redundant propulsion and steering systems

<table>
<thead>
<tr>
<th>Notation</th>
<th>Characterization</th>
<th>Underlying Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>RP1$x%$</td>
<td>The ship has at least two propulsion machines, which are independent or can be disconnected from each other. This also applies to the auxiliary systems which are needed to operate the propulsion machines. No redundancy of propeller, shaft line, gearbox and steering system is required.</td>
<td>GL Rules for Redundant Propulsion and Steering Systems (I-1-14)</td>
</tr>
<tr>
<td>RP2$x%$</td>
<td>The ship has at least two propulsion systems and two steering systems, each of which is independent or can be disconnected from each other. This also applies to each of the auxiliary systems which is needed to operate the propulsion and/or steering systems.</td>
<td>GL Rules for Redundant Propulsion and Steering Systems (I-1-14)</td>
</tr>
<tr>
<td>RP3$x%$</td>
<td>The ship has at least two propulsion systems and two steering systems, each of which is independent or can be disconnected from each other and is installed in separate compartments. This also applies to each of the auxiliary systems which is needed to operate the propulsion and/or steering systems.</td>
<td></td>
</tr>
</tbody>
</table>

The additional index $x\%$ denotes what percentage of the main propulsion power of the ship is provided by the redundant ship's propulsion system.

C.3.4.5 Dynamic Positioning Systems

Notation for ships complying with the GL Rules for Dynamic Positioning Systems (I-1-15). The Class Notation required for a particular operation should be agreed between the owner of the ship and the client/charterer based on the intended operating conditions and an analysis of the consequence of a loss of position, see Table 2.16.

Table 2.16 Notations for dynamic positioning systems

<table>
<thead>
<tr>
<th>Notation</th>
<th>Characterization</th>
<th>Underlying Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP 0</td>
<td>Loss of position may occur (only functionality)</td>
<td>GL Rules for Dynamic Positioning Systems (I-1-15)</td>
</tr>
<tr>
<td>DP 1</td>
<td>Loss of position may occur, meets IMO Equipment Class 1 (non-redundant)</td>
<td></td>
</tr>
<tr>
<td>DP 2</td>
<td>No loss of position in the event of a single fault in an active component, meets IMO Equipment Class 2 (redundant)</td>
<td></td>
</tr>
<tr>
<td>DP 2 (ICE)</td>
<td>Additional requirements for dynamic positioning systems in managed ice conditions are complied with, see GL Rules for Dynamic Positioning Systems (I-1-15), Section 4</td>
<td></td>
</tr>
<tr>
<td>DP 3</td>
<td>No loss of position in the event of a single fault in an active or stat-</td>
<td></td>
</tr>
</tbody>
</table>

C.3.4.6 Reliquefaction plants (liquefied gas carriers)

RI

Class Notation for the machinery installation of ships carrying liquefied gases and equipped with systems for cooling (reliquefaction) of their cargo in accordance with the GL Construction Rules.

C.3.4.7 Refrigerated cargoes

Notations for ships equipped with systems and installations for the carriage of refrigerated cargoes are specified in Table 2.17.

C.3.4.8 Inert gas systems

INERT

The ship is equipped with an inert gas system in accordance with the GL Construction Rules, or with a system recognized as being equivalent in design.
DP 3 (ICE)
ic component, meets IMO Equipment Class 3 (redundant installation in separate compartments)
Additional requirements for dynamic positioning systems in managed ice conditions are complied with, see GL Rules for Dynamic Positioning Systems (I-1-15), Section 4

Note For DP 2 and DP 3 a redundancy concept document (FMEA of basic design) with worst case failure design intent is to be submitted in due time.

Table 2.17 Notations assigned for cargo refrigerating systems and installations

<table>
<thead>
<tr>
<th>Notation</th>
<th>Characterization</th>
<th>Underlying Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRS 1</td>
<td>Both in respect of hull and machinery, the cargo refrigerating system fully complies with the requirements of the Construction Rules of GL or other rules considered to be equivalent.</td>
<td>GL Rules for Refrigerating Installations (I-1-10)</td>
</tr>
<tr>
<td>RIC 1</td>
<td>Both in respect of hull and machinery, the cargo refrigerating installation fully complies with the requirements of the GL Construction Rules for Fishing Vessels or other rules considered to be equivalent.</td>
<td>GL Rules for Fishing Vessels (I-1-8)</td>
</tr>
<tr>
<td>CA</td>
<td>Refrigerated cargo installations with cargo areas intended for the carriage of refrigerated cargo in controlled atmosphere. It is taken for granted that the gas generating systems are permanently installed.</td>
<td>GL Rules for Refrigerating Installations (I-1-10)</td>
</tr>
<tr>
<td>CA mob</td>
<td>Refrigerated cargo installations with cargo areas intended for the carriage of refrigerated cargo in controlled atmosphere, using mobile gas generating systems, which are taken on board, when required.</td>
<td>GL Guidelines for the Carriage of Refrigerated Containers on Board Ships (I-1-19)</td>
</tr>
<tr>
<td>RCP x/y</td>
<td>(Refrigerated Container Stowage Positions)&lt;br&gt;Class Notation for ships for which the suitability of the carriage of refrigerated containers is proved. The Class Notation RCP is supplemented by two figures. The first figure x stands for the total number of certified refrigerated container stowage positions on deck and in container holds and is related to FEU (forty foot equivalent units). The second figure y indicates the percentage of containers carrying fruit/chilled cargoes for which the ship is certified.</td>
<td>GL Guidelines for the Carriage of Refrigerated Containers on Board Ships (I-1-19)</td>
</tr>
</tbody>
</table>

1 The Notations CRS or RIC may be assigned if the cargo refrigerating system or installation does not in all respects comply with the requirements of the GL Rules, but functional safety and general fitness for purpose are ensured for the envisaged service.

C.3.4.9 Fire fighting

Ships fitted with equipment complying with the GL Guidelines for Equipment on Fire Fighting Ships (VI-3-4) will, depending on the size and purpose of the equipment provided, have one of the Notations specified in Table 2.18 affixed to the Character of Classification for the machinery installation.

Table 2.18 Notations assigned for fire fighting equipment

<table>
<thead>
<tr>
<th>Notation</th>
<th>Characterization</th>
<th>Underlying Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>FF1</td>
<td>Equipment for fighting fires in the initial stage and performing rescue operations in the immediate vicinity of the installation on fire.</td>
<td>GL Guidelines for Equipment on Fire Fighting Ships (VI-3-4)</td>
</tr>
</tbody>
</table>
### C.3.4.10 Fuel cell systems

**FC-xxx**
Notation for watercraft with fuel cell systems the nominal power of which is equal or exceeds 10% of the total nominal power of the machinery installation (excluding the emergency supply power) complying with the GL Guidelines for the Use of Fuel Cell Systems on Board of Ships and Boats (VI-3-11). "xxx" means the percentage of the fuel cell system related to the nominal power of the machinery installation.

**with FC**
Notation for fuel cell systems the nominal power of which is below 10% of the nominal power of the machinery installation.

### C.3.4.11 Gas as fuel for ships

**GF**
Notation for ships fitted with engine installations suitable for operation with natural gas as fuel and complying with the GL Guidelines for the Use of Gas as Fuel for Ships (VI-3-1).

### C.3.4.12 Environmental standards

**EP-D**
Notation for ships environmental design properties, particularly regarding emissions into the sea and the air and fulfilling the requirements of the GL Guidelines for the Environmental Service System (VI-12-1), Section 2. These requirements go beyond relevant mandatory regulations and take into account expected future regulatory requirements.

**EP-O**
Notation for ships environmental operational performance, particularly regarding emissions into the sea and the air and fulfilling the requirements of the GL Guidelines for the Environmental Service System (VI-12-1), Section 3. These requirements go beyond relevant mandatory regulations and take into account expected future regulatory requirements.

### C.3.4.13 Offshore Service Vessels

For ships with the ship type notation OFFSHORE SERVICE VESSEL (see C.3.3.4), the requirements of the GL Rules for Machinery and Systems (I-6-2), Sections 1 to 4, apply. Where hull notations for additional services of Offshore Service Vessels are assigned (see Table 2.8), the corresponding requirements for these additional notations laid down in the GL Rules for Machinery and Systems (I-6-2), Sections 5 to 21, apply, as far as they are assigned.

For Offshore Service Vessels with additional functional capabilities further notations according to Table 2.19 may be assigned:

Table 2.19 Additional Notations for machinery and systems of Offshore Service Vessels

<table>
<thead>
<tr>
<th>Additional Notation</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRANE</td>
<td>Equipped with classified lifting appliances</td>
</tr>
<tr>
<td>POSMOOR</td>
<td>Positional mooring</td>
</tr>
<tr>
<td>DSV 1</td>
<td>Diving support with a fixed installed diver pressure chamber</td>
</tr>
<tr>
<td>DSV 2</td>
<td>Diving support with diving bell</td>
</tr>
<tr>
<td>UES 1</td>
<td>Support for underwater equipment with a weight of up to 5 to</td>
</tr>
</tbody>
</table>
Section 2  Classification

<table>
<thead>
<tr>
<th>Additional Notation</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>UES 2</td>
<td>Support for underwater equipment with a weight of up to 20 to</td>
</tr>
<tr>
<td>UES 3</td>
<td>Support for underwater equipment with a weight of up to 80 to</td>
</tr>
<tr>
<td>UES 4</td>
<td>Support for underwater equipment with a weight of more than 80 to</td>
</tr>
<tr>
<td>HELIW</td>
<td>Equipped for helicopter winching operations</td>
</tr>
<tr>
<td>HELIL</td>
<td>Equipped with helicopter landing deck</td>
</tr>
<tr>
<td>HELILF</td>
<td>Equipped with helicopter landing deck and refuelling capabilities</td>
</tr>
<tr>
<td>ICEOPS</td>
<td>Equipped with machinery and systems suitable for operations at very low temperatures</td>
</tr>
</tbody>
</table>

C.3.4.14  Novel designs

EXP
see C.3.3.10

D  Classification of Newbuildings

D.1  Order for Classification

D.1.1  The written order for Classification is to be submitted to GL by the shipyard. The order has to be given by the client, who on the basis of the building contract has the duty to observe the Rules of GL.

D.1.2  Where orders for the production of components are placed with subcontractors, GL should be advised about it, also indicating the scope of production. The client will be responsible for observance of the GL Rules by the subcontractors.

D.1.3  Where the order considers particulars already having been approved by GL (for previous new buildings) to be used for the Classification, this will have to be specifically stated in the order. Amendments to the Construction Rules having been introduced meanwhile shall be taken into account, see A.1.1.

D.2  Examination of construction particulars

D.2.1  A list of particulars for examination - such as construction plans, proofs by computation, details on materials, etc. - is generated by GL. The particulars to be submitted in English or German language have to contain all details required for examination and are to be submitted in due time prior to commencement of construction. GL reserves the right to request additional information and particulars to be submitted.

To facilitate a smooth and efficient approval process they shall be submitted electronically via GLOBE 3. In specific cases and following prior agreement with GL they can also be submitted in paper form in triplicate.

D.2.2  The particulars and drawings to be submitted, of components subject to approval, will be examined by GL. Where applicable, they will be provided with a mark of approval and returned in one copy. If not otherwise agreed, a drawing approval comprises of the approval of submitted drawings and/or documents plus one review in which alterations or comments will be incorporated.

D.2.3  Any deviations from approved drawings require to be approved by GL prior to being realized.

3 Detailed information about the secured GL system GLOBE can be found on GL's website www.gl-group.com/globe.
D.3 Supervision of construction and trials

D.3.1 General

D.3.1.1 GL will assess the production facilities and procedures of the shipyard and other manufacturers as to whether they meet the requirements of the Construction Rules. In general, approvals based on such assessments are conditional for acceptance of products subject to testing.

D.3.1.2 Materials, components, appliances and installations subject to inspection are to comply with the relevant rule requirements and be presented for inspection and/or construction supervision by GL Surveyors, unless otherwise provided as a result of special approvals granted by GL.

New installation of materials which contain asbestos, e.g. materials used for hull structure, machinery, electrical installations and equipment, is not permitted for all new and existing ships.

D.3.1.3 For each inspection, an appointment is to be arranged in time with the local GL representation.

D.3.1.4 In order to enable the Surveyor to fulfill his duties, he is to be given free access to the ship and the workshop, where parts requiring approval are manufactured, assembled or tested. For performance of the tests required, the shipyard or manufacturers are to give the Surveyor assistance by providing the staff and equipment necessary for such tests.

D.3.2 Supervision of construction

During the phase of construction of a vessel or installation, GL will satisfy themselves by surveys and inspections that:

- parts for hull and machinery and/or special equipment requiring approval have been constructed in compliance with the approved drawings and particulars
- all tests and trials stipulated by the Construction Rules are performed satisfactorily
- workmanship is in compliance with current engineering standards and/or GL rule requirements
- welded parts are produced by qualified welders having undergone tests
- test certificates have been presented for components requiring approval (the shipyard will have to ensure that any parts and materials requiring approval will only be delivered and installed, if the appropriate test certificates have been issued, see D.4.1.
- where no individual certificates are required, type-tested appliances and equipment are employed in accordance with rule requirements

D.3.3 Tests at the manufacturers’

As far as practicable, machinery and equipment will be subjected to operational trials on the manufacturers’ test bed to the scope specified in the Construction Rules. This applies also to engines produced in large series. Where the machinery, equipment or electrical installations are novel in design or have not yet sufficiently proved their efficiency under actual service conditions on board ship, GL may require performance of a trial under particularly severe conditions.

For refrigerating installations, see D.3.5.

D.3.4 Shipboard trials

Upon completion of the ship and/or the system/equipment to be classed, all hull, machinery and electrical installations will be subjected to operational trials in the presence of the GL Surveyor, prior to and during the sea trial. This will comprise e.g.:

- tightness, operational and load tests of tanks, hatch covers, shell ports, ramps, etc.
- operational and/or load tests of the machinery and installations (propulsion plant, electrical installations, steering gear, anchor equipment, etc.) of importance for safe operation

During a final survey, checks will be made to ensure that any deficiencies found, for instance during the sea trial, have been eliminated.

For yachts/small watercraft, see F.
D.3.5 Refrigerating installations

D.3.5.1 Refrigerating machines are to be subjected to operational tests at the manufacturers’.

D.3.5.2 Fitting of the refrigerating installation will be supervised by the Surveyor, who will examine the workmanship and perform the prescribed tightness and operational tests.

D.3.5.3 Upon completion the entire installation will be subjected to operational trials in accordance with the requirements of the Construction Rules.

D.3.5.4 For refrigerating installations deviating in design from installations in common use, GL reserves the right to require additional tests to be performed, schedule special survey dates and make special entries in the refrigerating installation certificate and in the Register.

D.3.6 Gas trials on liquefied gas carriers

D.3.6.1 Before delivery of a liquefied gas carrier and in addition to the initial surveys and sea trials, a gas trial has to be carried out.

D.3.6.2 The purpose of the gas trial is, to demonstrate the compliance of the overall performance of the cargo containment system with the design parameters during initial cool-down, loading and discharging of the cargo. All components of the gas plant shall be function tested under the lowest or close to the lowest design temperature conditions. 4

D.4 Reports, certificates

D.4.1 Testing of materials, components, machinery, etc. at subcontractor’s works will be certified by the Surveyor and/or the local GL representation.

D.4.2 Upon completion of the ship or installation the Surveyors will prepare construction reports, on the basis of which GL will issue the Class Certificate, see A.3.

D.5 Workmanship

D.5.1 General

D.5.1.1 Requirements to be complied with by the manufacturer

D.5.1.1.1 The manufacturing plant shall be provided with suitable equipment and facilities to enable proper handling of the materials, manufacturing processes, structural components, etc. GL reserve the right to inspect the plant accordingly or to restrict the scope of manufacture to the potential available at the plant.

D.5.1.1.2 The manufacturing plant shall have at its disposal sufficiently qualified personnel. GL is to be advised of the names and areas of responsibility of all supervisory and control personnel. GL reserve the right to require proof of qualification.

D.5.1.2 Quality control

D.5.1.2.1 As far as required and expedient, the manufacturer’s personnel has to examine all structural components both during manufacture and on completion, to ensure that they are complete, that the dimensions are correct and that workmanship is satisfactory and meets the standard of good shipbuilding practice.

D.5.1.2.2 Upon inspection and corrections by the manufacturing plant, the structural components are to be shown to the GL Surveyor for inspection, in suitable sections, normally in unpainted condition and enabling proper access for inspection.

D.5.1.2.3 The Surveyor may reject components that have not been adequately checked by the plant and may demand their re-submission upon successful completion of such checks and corrections by the plant.

D.5.2 Structural details

D.5.2.1 Details in manufacturing documents

D.5.2.1.1 All significant details concerning quality and functional ability of the component concerned shall be entered in the manufacturing documents (workshop drawings, etc.). This includes not only scantlings but - where relevant - such items as surface conditions (e.g. finishing of flame cut edges and weld seams), and special methods of manufacture involved as well as inspection and acceptance requirements and where relevant permissible tolerances. So far as for this aim a standard shall be used (works or national standard etc.) it shall be harmonized with GL. This standard shall be based on the IACS Recommendation 47 Shipbuilding and Repair Quality Standard for New Construction. For weld joints details, see GL Rules for Design, Fabrication and Inspection of Welded Joints (II-3-2).

D.5.2.1.2 If, due to missing or insufficient details in the manufacturing documents, the quality or functional ability of the component cannot be guaranteed or is doubtful, GL may require appropriate improvements. This includes the provision of supplementary or additional parts (for example reinforcements) even if these were not required at the time of plan approval or if - as a result of insufficient detailing - such requirement was not obvious.

D.5.2.2 Cut-outs, plate edges

D.5.2.2.1 The free edges (cut surfaces) of cut-outs, hatch corners, etc. are to be properly prepared and are to be free from notches. As a general rule, cutting drag lines, etc. shall not be welded out, but are to be smoothly ground. All edges should be broken or in cases of highly stressed parts, should be rounded off.

D.5.2.2.2 Free edges on flame or machine cut plates or flanges are not to be sharp cornered and are to be finished off as laid down in D.5.2.2.1. This also applies to cutting drag lines, etc., in particular to the upper edge of sheer strake and analogously to weld joints, changes in sectional areas or similar discontinuities.

D.5.2.3 Cold forming

D.5.2.3.1 For cold forming (bending, flanging, beading) of plates the minimum average bending radius should not fall short of $3t$ ($t =$ plate thickness) and shall be at least $2t$. Regarding the welding of cold formed areas, see GL Rules for Welding in the Various Fields of Application (II-3-3).

D.5.2.3.2 In order to prevent cracking, flame cutting flash or sheering burrs shall be removed before cold forming. After cold forming all structural components and, in particular, the ends of bends (plate edges) are to be examined for cracks. Except in cases where edge cracks are negligible, all cracked components are to be rejected. Repair welding is not permissible.

D.5.2.4 Assembly, alignment

D.5.2.4.1 The use of excessive force is to be avoided during the assembly of individual structural components or during the erection of sections. As far as possible major distortions of individual structural components should be corrected before further assembly.

D.5.2.4.2 Girders, beams, stiffeners, frames, etc. that are interrupted by bulkheads, decks, etc. shall be accurately aligned. In the case of critical components, control drillings are to be made where necessary, which are then to be welded up again on completion.

D.5.2.4.3 After completion of welding, straightening and aligning shall be carried out in such a manner that the material properties will not be influenced significantly. In case of doubt, GL may require a procedure test or a working test to be carried out.
E Admission to Class

E.1 Order, particulars

E.1.1 Order

E.1.1.1 Orders for the Classification of ships or special equipment not constructed under the supervision of GL are to be addressed to GL in writing, in triplicate. The order for Classification is to be accompanied at least by the particulars specified in E.1.2 and E.1.3., respectively.

For yachts/small watercraft, see F.

E.1.1.2 GL is to be informed about the previous Class status and period, as well as about any Conditions of Class (recommendations) imposed by the previous Classification Society.

E.1.2 Particulars for hull and machinery

The following particulars and/or drawings are to be submitted:

- particulars of the type and main dimensions of the ship, building year, building yard, freeboard, stability documentation and details of the anchor equipment
- particulars of the type, output and main data, building year and manufacturer of the main engine(s) and of the auxiliary machinery essential for operational safety, the electrical installations, the inert gas system, the automatic/remote-control system, the safety arrangements, the steering gear and the windlasses
- general arrangement, capacity plan, hydrostatic and cross curves, loading manual, where required, midship section, longitudinal and transverse sections, transverse bulkheads, decks, shell expansion, engine and boiler foundations, stem and stern frame, rudder and rudder stock, hatch covers
- machinery arrangement, intermediate, thrust- and screw shafts, propeller, main engines, propulsion gears and clutch systems, starting-air receivers, main and/or auxiliary boilers and oil fuel burning systems, turbines, superheaters and economisers (or manufacturer make, model and rating information)
- steam and feed-water systems, cooling water and lubricating oil systems, bilge and ballast systems, fuel oil and starting-air systems, air and sounding pipes systems, electrical arrangements and wiring diagram
- steering gear arrangements and piping system and steering gear manufacturer, make and model information
- torsional vibration calculations of the main shafting system including its branches for vessels less than two years old
- for vessels with ice class notation: drawings for flexible couplings and/or torque limiting shafting devices in the propulsion line shafting (or manufacturer make, model and rating information)
- for tankers: tank bulkheads, loading and unloading facilities, cargo tank venting system and safety devices, pumping arrangements at the forward and after ends of the vessel, drainage of cofferdams and pump rooms
- for unattended machinery spaces, Notation AUT: instrument and alarm list, fire alarm system, list of automatic safety functions (e.g. slowdowns, shutdowns, etc.), function testing plan
- for ships with built-in tanks, the walls of which do not form part of the shell plating: drawings of these tanks, their safety arrangement, as well as their loading and unloading systems
- for ship type related equipment and installations the documentation is to be determined from case to case

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GL reserves the right to request additional information depending of ship's type and/or according to Flag State requirements.
E.1.3  Particulars for special equipment (refrigeration installations, diving systems)\(^5\)

The application for Classification for special equipment (refrigerating installations, diving systems) is to be accompanied by particulars in the extent as indicated in the Construction Rules. Results of the trials under working conditions are to be submitted; if an operational trial has not as yet been performed, it will have to be carried out.

E.2  Performance of Admission to Class

E.2.1  The drawings and other particulars of relevance to Classification are checked for compliance with the applicable GL Construction Rules and/or equivalent other rules.

E.2.2  For Admission to Class the extent of the Classification survey for the hull and machinery installation respectively the special equipment will be especially determined by GL depending on the vessel's age and type. If the result of the survey is satisfactory, the class of GL will be effective as of the date of conclusion of the admission to class survey.

E.2.3  If the ship and/or her special equipment hold the valid Class of another recognized Classification Society (i.e. an IACS member) and if sufficient proof has been furnished regarding the Class status, GL may dispense with the examination of drawings and computations.\(^6\)

In such cases, the period of Class will remain as assigned by the previous Classification Society.

E.2.4  A ship will not be admitted to Class if the relevant drawings and computations are not submitted.

E.2.5  If the ship complies with the requirements of GL, a Class Certificate will be issued in accordance with the Surveyor’s report on the condition of the ship. Once a ship and/or her equipment have been classed with GL, the Rules in force as well as procedures applicable to ships and/or special equipment constructed under supervision by GL will apply.

E.2.6  If a sufficient proof of the loosing Classification Society regarding the ship’s previous Class status is not as yet available the survey status information provided by the Owner may be used. An “Interim Class Certificate” may be issued after completion of the surveys requested for Admission to Class with a statement that Conditions of Class (recommendations) which are overdue, if received after issuance of the Interim Class Certificate are to be dealt with at the next port of call.

F  Classification of Yachts and Small Watercraft from 6 to 24 m in Length

F.1  General requirements

F.1.1  Watercraft built and equipped in accordance with the GL Rules for Yachts and Boats up to 24 m (I-3-3) will be assigned GL Class upon request.

F.1.2  The general requirements as per A. to E are to be applied, as far as applicable to this type of craft, and unless stated otherwise in the following.

F.1.3  Classification covers the hull, the machinery, including the electrical installation, the hull equipment, the closures, and if needed the rigging, as defined in the Rules.

Components and equipment not dealt with in the Rules are not subject to examination within the scope of Classification. Responsibility for compliance with any existing flag state regulations rests with the owner.

\(^{6}\) See IACS PR 1 A on Transfer of Class for further details.
Section 2 Classification

F.1.4 GL reserves the right to also classify craft made of materials, for which no special GL Rules exist, provided that proof of suitability of these materials has been furnished.

F.1.5 Sporting craft and comparable craft, partly or predominantly serving commercial purposes, may additionally be subject to rules having to be observed beyond the GL Construction Rules.

F.1.6 Watercraft built under GL construction supervision of a current series may be classed, if the application for Classification is made prior to commencement of construction, provided the relevant surveys and trials do not give cause for objections, see the GL Rules for Yachts and Boats up to 24 m (I-3-3), Annex A.

F.2 Characters of Classification and Notations

F.2.1 Characters of Classification

F.2.1.1 Hull
The Character of Classification for the hull is

\[ \text{100A5} \]

if the hull was constructed under supervision by GL, with additional Notations as per F.2.2. Apart from this, C.2. is to be applied.

F.2.1.2 Machinery
For water craft with a total propulsion machinery output of more than 300 kW the Character of Classification for the machinery is

\[ \text{MC Y} \]

if the machinery was manufactured under supervision by GL.

For water craft with a propulsion machinery output of up to 300 kW, any comments on surveys of the machinery installation will be entered into the hull Certificate.

F.2.2 Notations affixed to the Character of Classification

F.2.2.1 Ranges of service
The scantlings of the hull structural elements conform to the unrestricted range of service I.

Water craft meeting the requirements of the Construction Rules for a restricted range of service only will be assigned the following Notations affixed to the Character of Classification characterizing the range of service (II, III, IV, V).

The Notations may possibly be assigned on the basis of the seaway conditions prevailing in the respective service area (e. g. official seaway statistics).

I
Unrestricted voyages far away from coastlines, during which a vessel entirely left to its own devices has to be in a position to cope with emergency situations for prolonged periods, without relying on outside assistance.

II
Voyages along the coastline, but restricted to a sea area located at a distance not exceeding 200 nautical miles, measured from the main land and/or from off-shore islands situated at a distance not exceeding 400 nautical miles from the main land \(^7\) and/or from another island.

\(^7\) Coastline measured at mean high water
III
Voyages along the coastline confined to a sea area located at a distance of 20 nautical miles, measured from the main land and/or from offshore islands situated at a distance not exceeding 40 nautical miles from the main land and/or from another island.

IV
Day trips between close ports along the coastline within a relatively protected area. However, voyages are restricted to a sea area located at a distance not exceeding 3 nautical miles, measuring from the main land and/or from offshore islands situated at a distance not exceeding 6 nautical miles from the main land and/or from another island.

V
Trips on inland waterways and lakes. Also included are day trips off the coastline, confined to shallows and/or sea areas located at a distance not exceeding 0.75 nautical miles, measured from the shore and/or the main land.

F.2.2.2 Designation of types and use

F.2.2.2.1 In addition to the Character of Classification, water craft will be characterized by Notations affixed, describing their type and envisaged use, as shown in the following.

F.2.2.2.2 Sporting craft

SAILING YACHT
MOTOR SAILER
MOTOR YACHT
SPECIAL SAILING YACHT
SPECIAL MOTOR YACHT
RACING YACHT

Note
The term "special" applies to yachts of unusual shape/dimensions and with special technical equipment, if any. GL reserves the right of determining whether the Society's Rules are applicable and how they are to be interpreted.

F.2.2.2.3 Yachts for commercial purposes

TRAINING SAILING / MOTOR YACHT
CHARTER SAILING / MOTOR YACHT

These Notations are applicable, where the main structural elements comply with the Construction Rules for the type of craft listed under F.2.2.2.4.

F.2.2.2.4 Craft used for commercial purposes or by authorities

Craft complying with the GL Rules for Yachts and Boats up to 24 m (I-3-3) may be assigned the following Notations affixed to the Character of Classification:

FISHING VESSEL
see also Table 2.9
PATROL BOAT
WORK BOAT
YDE

Notation for craft which have been constructed by using elements of the GL Rules for Yachts and Boats up to 24 m (I-3-3). Details regarding rule application are specified in the Class Certificate.
Section 2  Classification

F.3  Approval and survey of new buildings

F.3.1  Regarding the order for Classification and the particulars to be submitted, the provisions in D. apply analogously. The documents to be submitted for approval shall include drawings and calculations of the rigging.

F.3.2  Qualification of the workshop

F.3.2.1  Regarding the processing of metallic materials and the manufacture of machinery installations and components, the GL Rules for Materials and Welding apply, see also D.3.1.1.

F.3.2.2  Regarding facilities, quality control, production procedures and skills of the personnel, workshops producing sporting craft of fibre-reinforced reaction resins and other non-metallic special materials have to be suited for the work carried out by them. This suitability will be certified by a relevant workshop approval. In general the GL Rules for Non-Metallic Materials apply.

F.3.3  Construction supervision, see D.3.2.

F.3.4  Trials
The craft having been completed, all equipment of the hull, the machinery and electrical installation and the sailing equipment will be tested in operation during a sea trial, in the GL Surveyor's presence.

F.3.5  Marking
Water craft constructed in accordance with the GL Construction Rules will be marked with a label which will continue to be valid as long as the structural conditions remain unchanged. The label is valid only in connection with the pertinent Class Certificate.
Validity of Class see B.

F.4  Admission to Class

F.4.1  The general provisions in E. are, as far as applicable, to be applied analogously, with the following additions to be observed.

F.4.2  Vessels constructed under supervision by a recognized Classification Society are to be presented for survey in dry-dock. The machinery and electrical installations are to be subjected to an operational trial. GL will fix the scope of surveys, depending on the vessel's age, maintenance condition, intended use and on the informative value of the documents received.

F.4.3  Vessels not constructed under the supervision of a recognized Classification Society are excluded from Classification, if their hulls consist of fibre-reinforced plastic materials or ferro-cement.

For other vessels previously not classified, within the scope of Classification a complete examination of drawings is required to the extent stipulated for new buildings. Beyond this, surveys are to be conducted onshore for assessment of compliance with the drawings and documentation, as well as trials/function tests to be determined from case to case.
Section 3  Intentionally left blank

For survey requirements, see DNV GL rules for Classification of Ships, Pt.7.
Section 4     Intentionally left blank

For survey requirements, see DNV GL rules for Classification of Ships, Pt.7.