RULES FOR HIGH SPEED CRAFT

GUIDANCE FOR HIGH SPEED CRAFT

Rules for High Speed Craft Guidance for High Speed Craft 2017 AMENDMENT NO.1 2017 AMENDMENT NO.1

Rule No.33 / Notice No.301st June 2017Resolved by Technical Committee on 30th January 2017Approved by Board of Directors on 20th February 2017



An asterisk (*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

RULES FOR HIGH SPEED CRAFT

2017 AMENDMENT NO.1

Rule No.331st June 2017Resolved by Technical Committee on 30th January 2017Approved by Board of Directors on 20th February 2017

An asterisk (*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

Rule No.331st June 2017AMENDMENT TO THE RULES FOR HIGH SPEED CRAFT

"Rules for high speed craft" has been partly amended as follows:

Amendment 1-1

Part 2 CLASS SURVEYS

Chapter 1 GENERAL

1.1 Surveys

Paragraph 1.1.5 has been added as follows.

1.1.5 Machinery Verification Runs

1 At the time of a special survey, a dock trial in the presence of the attending surveyor is to be carried out to confirm the satisfactory operation of main and auxiliary machinery. If significant repairs have been carried out to main or auxiliary machinery or steering gear, the Surveyor may deem a sea trial necessary.

2 At the time of extended drydocking, a dock trial may be required at the discretion of the attending surveyor to confirm the satisfactory operation of main and auxiliary machinery. If significant repairs have been carried out to main or auxiliary machinery or steering gear, the Surveyor may deem a sea trial necessary.

Chapter 3 PERIODICAL SURVEYS AND PLANNED MACHINERY SURVEYS

3.8 Special Surveys for Machinery

3.8.1 General Examinations

Sub-paragraph -3 has been added as follows.

1 At each Special Surveys for Machinery, general examinations specified in **3.7.1** are to be carried out.

2 In addition to -1, general examinations for the following items in (1) to (3) are to be carried out.

- (1) Main propulsion machinery
 - Diesel engines are to be examined in accordance with the following requirements in (a) to (c);
 - (a) The essential part of the crankcase and cylinder jacket, the foundation bolts, the chock liners and the tie rod bolts are to be generally examined.
 - (b) The doors of the crankcase and the explosion relief devices of the crankcase and scavenge space are to be generally examined.
 - (c) The anti-vibration dampers, detuners, balancers, etc. are to be generally examined.

(2) Electrical installations

Insulation resistance of the generators and switchboards (the both including those for emergency use), the motors and the cables are to be tested to ensure that they are placed in good order, and to be adjusted if it is found not to comply with the requirements **2.18.1**, **Part H of the Rules for the Survey and Construction of Steel Ships**. However, where a proper record of measurement is maintained and deemed appropriate by the Surveyor, consideration may be given to accepting recent readings.

- (3) Spare parts and associated fittings
- Spare parts and associated fittings for Machinery are to be examined.

<u>3 At each Special Surveys for Machinery, the verification runs specified in 1.1.5-1 are to be carried out.</u>

EFFECTIVE DATE AND APPLICATION (Amendment 1-1)

- **1.** The effective date of the amendments is 1 June 2017.
- 2. Notwithstanding the amendments to the Rules, the current requirements apply to the surveys for which the application is submitted to the Society before the effective date.

Chapter 2 CLASSIFICATION SURVEYS

2.1 Classification Survey during Construction

2.1.2 Submission of Plans and Documents for Approval*

Sub-paragraph -1(2) has been amended as follows.

1 When it is intended to build a craft to the classification with the Society, the following plans and documents are to be submitted for the approval by the Society before the work is commenced. Plans and documents may be subjected to examination by the Society prior to the submission of the application for the classification of the craft in accordance with the provision specified otherwise by the Society:

((1) is omitted.)

- (2) Machinery
 - ((a) to (g) are omitted.)
 - (h) Automatic and remote controls:
 - i) Drawings and data concerning automation (1) to 5) are omitted)
 - ii) Following drawings and data for the automatic control devices and remote control devices for main propulsion machinery or controllable pitch propellers
 (1) to 3) are omitted)
 - iii) Following drawings and data for the automatic control devices and remote control devices for boilers

(1) and 2) are omitted)

- iv) Diagrams and operating instructions for automatic control devices for electric generating sets (automatic load sharing devices, preference tripping devices, automatic starting devices, automatic synchronous making devices, sequential starting devices, etc.)
- v) Panel arrangements of monitoring panels, alarming panels and control stands at respective control stations
- vi) Drawings and data related to computer based systems subject to 12.1.1-3, Part 9 of this Rules.

((i) and (j) are omitted.)

((3) and (4) are omitted.)

Part 9 MACHINERY INSTALLATIONS

Chapter 12 AUTOMATIC AND REMOTE CONTROL

12.1 General

12.1.1 Scope*

Sub-paragraph -3 has been added as follows.

1 The requirements in this Chapter apply to the systems of automatic or remote control which are used to control the following machinery and equipment.

- (1) Main propulsion machinery (in this Chapter, propulsion generating set in electric propulsion ships are excluded),
- (2) Controllable pitch propeller
- (3) Steam generating set
- (4) Electric generating set (in this Chapter, propulsion generating set in electric propulsion ships are included)
- (5) Auxiliary machinery associated with machinery and equipment listed in (1) to (4)
- (6) Fuel oil systems
- (7) Bilge systems
- (8) Deck machinery

2 Where considered necessary by the Society, the requirements in this Chapter are correspondingly applied to the systems of automatic or remote control which are used for controlling machinery and equipment not listed in -1(1) to (8).

<u>3</u> In cases where machinery and equipment which are deemed necessary by the Society use computer based systems for the proper achievement of their functions, the design, construction, commissioning and maintenance of such computer based systems are to be in accordance with requirements specified otherwise by the Society in addition to those specified in -1 and -2 above and throughout the rest of this chapter.

EFFECTIVE DATE AND APPLICATION (Amendment 1-2)

- **1.** The effective date of the amendments is 1 July 2017.
- 2. Notwithstanding the amendments to the Rules, the current requirements apply to ships for which the date of contract for construction* is before the effective date.
 - * "contract for construction" is defined in the latest version of IACS Procedural Requirement (PR) No.29.

IACS PR No.29 (Rev.0, July 2009)

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 owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding.

2. The date of "contract for construction" of a series of vessels, 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 owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a "series of vessels" if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided:

- (1) such alterations do not affect matters related to classification, or
- (2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval.

The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.

- **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 owner and the shipbuilder. The amendment to the contract is to be considered as a "new contract" to which **1**. and **2**. above apply.
- 4. If a contract for construction is amended to change the ship type, the date of "contract for construction" of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder.

Note:

This Procedural Requirement applies from 1 July 2009.

Amendment 1-3

Part 2 CLASS SURVEYS

Chapter 2 CLASSIFICATION SURVEYS

2.1 Classification Survey during Construction

2.1.2 Submission of Plans and Documents for Approval*

Sub-paragraph -1(2) has been amended as follows.

1 When it is intended to build a craft to the classification with the Society, the following plans and documents are to be submitted for the approval by the Society before the work is commenced. Plans and documents may be subjected to examination by the Society prior to the submission of the application for the classification of the craft in accordance with the provision specified otherwise by the Society:

((1) is omitted.)

(2) Machinery

- ((a) to (i) are omitted.)
- (j) Electrical installations
 - (i) is omitted.)
 - ii) Data
 - 1) Explanation of electric propulsion system
 - 2) Investigation table of electrical power
 - 3) List of particulars of high voltage electrical equipment (including test voltage for dielectric strength)
 - 4) The following data in cases where the electrical distribution system on board a ship includes harmonic filters, except in cases where the filters are installed for single application frequency devices such as pump motors.
 - i) Total Harmonic Distortion (THD) calculation report
 - ii) Harmonic filter operation guide

((3) and (4) are omitted.)

2.1.6 Documents to be Maintained On Board*

Sub-paragraph -1(2) has been amended as follows.

1 At the completion of a classification survey, the Surveyor confirms that the following drawings, plans, manuals, lists, etc., as applicable, of finished version are on board. ((1) is omitted.)

- (1) is officied.) (2) Other manuals
 - Other manuals, etc.
 - (a) Fire Control Plans (3.5.1, Part 11)
 - (b) A copy of the *IGF* Code or national regulations incorporating the provisions of the *IGF* Code (**17.2.2-1, Part GF of the Rules for the Survey and Construction of Steel Ships**)
 - (c) Total Harmonic Distortion (THD) calculation report (**1.1.6, Part H of the Rules for the** Survey and Construction of Steel Ships)
 - (d) Harmonic filter operation guide (1.1.6, Part H of the Rules for the Survey and

<u>Construction of Steel Ships</u>)

((3) is omitted.)

2.3 Sea Trials and Stability Experiments

2.3.1 Sea Trials*

Sub-paragraph -1 has been amended as follows.

1 In the Classification Survey of all craft, sea trials specified in following (1) to ($\frac{1011}{1000}$) are to be carried out in a full load condition, at the calmest possible sea and weather conditions and in deep unrestricted water. However, where sea trials cannot be carried out in a full load condition, sea trials may be carried out in an appropriate loaded condition.

((1) to (9) are omitted.)

(10) Verification of Total Harmonic Distortion (THD) calculation report and harmonic filter operation guide

(10<u>11</u>) Other tests where deemed necessary by the Society

Part 10 ELECTRICAL INSTALLATIONS

ELECTRICAL INSTALLATIONS AND SYSTEM DESIGN Chapter 2

Section 2.12 has been added as follows.

Semiconductor Converters for Power 2.12

Semiconductor converters for power is to be in accordance with requirements in 2.12, Part H of Rules for the Survey and Construction of Steel Ships.

EFFECTIVE DATE AND APPLICATION (Amendment 1-3)

- 1. The effective date of the amendments is 1 July 2017.
- 2. Notwithstanding the amendments to the Rules, the current requirements apply to ships for which the date of contract for construction^{*} is before the effective date and that are not newly fitted with harmonic filters on or after the effective date.
 - "contract for construction" is defined in the latest version of IACS Procedural Requirement (PR) No.29.

IACS PR No.29 (Rev.0, July 2009)

- 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 owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding. The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised,
- 2. is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a "series of vessels" if
 - they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided:
 - (1) such alterations do not affect matters related to classification, or
 - (2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval.

The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.

- 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 owner and the shipbuilder. The amendment to the contract is to be considered as a "new contract" to which 1. and 2. above apply.
 - If a contract for construction is amended to change the ship type, the date of "contract for construction" of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder.

Note:

4.

This Procedural Requirement applies from 1 July 2009.

Chapter 3 PERIODICAL SURVEYS AND PLANNED MACHINERY SURVEYS

3.7 Intermediate Surveys for Machinery

3.7.3 Open-up Examinations

Sub-paragraph (2) has been amended as follows.

At each Intermediate Survey for Machinery, open-up examinations for the following items in (1) and (2) are to be carried out;

- ((1) is omitted.)
- (2) Boilers and thermal oil heaters

Boilers and thermal oil heaters are to be examined as follows;

- (a) Pressure parts of boilers are to be internally examined with the manholes, cleaning holes and inspection holes dismantled. Where considered to be necessary for external examination by the Surveyor, the parts are to be examined to the Surveyor's satisfaction with the insulation around the parts removed.
- (b) Superheaters, economizers and exhaust gas economizers are to be examined internally and externally.
- (c) Combustion parts of boilers and thermal oil heaters are to be internally examined with the doors of the furnaces and combustion chambers opened.
- (d) Valves and cocks mounted on boilers and their fastening bolts or studs are to be opened up and examined.
- (e) Thickness of plates and tubes and size of stays is to be measured where deemed necessary by the Surveyor.
- (f) The safety valves are to be adjusted under steam to a pressure not more than 103 % the approved working pressure after examination. The pressure gauge used for adjustment of safety valves is to be calibrated properly. The general conditions of relief pipes for thermal oil heaters are to be examined. The popping pressure of safety valves fitted on thermal oil heaters is to be ascertained.
- (g) Steam generators and other pressure vessels with steam accumulated in them are to be handled in accordance with the requirements for boilers.
- (h) The safety devices, alarm devices and automatic combustion control devices are to be tested in accordance with the requirements in Chapter 9, Part D of the Rules for the Survey and Construction of Steel Ships in order to ascertain that they are to in good working conditions after the examinations specified in (a) to (g) above.
- (i) When direct visual internal inspection at the examinations specified in (a) to (c) above is not feasible due to the limited size of the internal spaces, such as for small boilers and/or narrow internal spaces, this may be replaced by a hydrostatic pressure test or by alternative verifications as deemed appropriate by the Society.

EFFECTIVE DATE AND APPLICATION (Amendment 1-4)

- **1.** The effective date of the amendments is 1 July 2017.
- 2. Notwithstanding the amendments to the Rules, the current requirements apply to the surveys for which the application is submitted to the Society before the effective date.

Part 10 ELECTRICAL INSTALLATIONS

Chapter 2 ELECTRICAL INSTALLATIONS AND SYSTEM DESIGN

2.7 Cables

Paragraph 2.7.1 has been amended as follows.

2.7.1 General*

Cables are to comply with *IEC* 60092 or equivalent thereto. <u>However, cables such as flexible</u> cables, fibre-optic cables, etc. used for special purposes may be accepted provided they comply with relevant standards deemed appropriate by the Society or any equivalent thereto. Installation of cables is to comply with the requirements in this **2.7**.

EFFECTIVE DATE AND APPLICATION (Amendment 1-5)

1. The effective date of the amendments is 1 July 2017.

GUIDANCE

GUIDANCE FOR HIGH SPEED CRAFT

2017 AMENDMENT NO.1

Notice No.301st June 2017Resolved by Technical Committee on 30th January 2017

Notice No.30 1st June 2017 AMENDMENT TO THE GUIDANCE FOR HIGH SPEED CRAFT

"Guidance for high speed craft" has been partly amended as follows:

Amendment 1-1

Part 2 CLASS SURVEYS

Chapter 2 CLASSIFICATION SURVEYS

2.3 Sea Trials and Stability Experiments

Paragraph 2.3.2 has been amended as follows.

2.3.2 Stability Experiments

Where the stability experiment is dispensed with due to the requirement in In applying 2.3.2-3, **Part 2 of the Rules**, in cases where the following (1) is satisfied and the Administration specially approves the dispensation of inclining tests, such tests may be dispensed with

- (1) a lightweight measurement is to be carried out, and it is to be confirmed that the deviation of lightweight between the following (**1**<u>a</u>) and (**2**<u>b</u>) does not exceed 2% of the expected value of (**2**<u>b</u>), and the deviation of lightship longitudinal centre of gravity between (**1**<u>a</u>) and (**2**<u>b</u>) does not exceed 1% of length of the ship between perpendiculars.
 - (<u>+a</u>) Lightweight and lightship longitudinal centre of gravity determined by a lightweight check of the ship.
 - (<u>2</u><u>b</u>)Lightweight and lightship longitudinal centre of gravity of a lead sister ship, or=, those values which are determined by detailed calculation regarding differences, where the ship is modified from a lead sister ship_{₹.}

EFFECTIVE DATE AND APPLICATION (Amendment 1-1)

1. The effective date of the amendments is 1 June 2017.

Chapter 2 CLASSIFICATION SURVEYS

2.1 Classification Survey during Construction

Paragraph 2.1.2 has been amended as follows.

2.1.2 Submission of Plans and Documents for Approval

<u>1</u> The wordings "deemed appropriate by the Society" in **2.1.2-6**, **Part 2 of the Rules** means as follows;

((1) to (3) are omitted.)

2 "Total Harmonic Distortion (THD) calculation report" specified in **2.1.2-1(2)(j)ii)4)i)**, Part 2 of the Rules is to be include the following information:

(1) Results of the calculation of the Total Harmonic Distortion (THD) value experienced when a failure of a harmonic filter occurs.

(2) With respect to **2.1.2-4**, **Part 10 of the Rules**, the acceptable limit of the Total Harmonic Distortion (THD) value.

<u>3</u> The "harmonic filter operation guide" specified in **2.1.2-1(2)(j)ii)4)ii)**, Part 2 of the Rules is to include the following information:

- (1) The permitted operating mode of the electrical distribution system while maintaining the Total Harmonic Distortion (THD) values within acceptable limits during normal operation.
- (2) The permitted operating mode of the electrical distribution system in the case of failure of any combination of harmonic filters.

<u>4</u> Data specified in -2 and -3 are to be submitted by the system integrator of the distribution system.

2.3 Sea Trials and Stability Experiments

2.3.1 Sea Trials

Sub-paragraph (10) has been renumbered to Sub-paragraph (11), and Sub-paragraph (10) has been added as follows.

Details of each test to be carried out during sea trials are to be in accordance with the following requirements.

((1) to (9) are omitted.)

(10) "Verification of Total Harmonic Distortion (THD) calculation report" stipulated in 2.3.1-1(10), Part 2 of the Rules refers to the measuring of the Total Harmonic Distortion (THD) value of the main busbar so as to confirm that said value does not exceed the acceptable limit given in the report.

(1011) Other tests where deemed necessary by the Society At least following tests (a) to (c) are to be included in this test ((a) to (c) are omitted.)

Part 10 ELECTRICAL INSTALLATIONS

Chapter 2 ELECTRICAL INSTALLATION AND SYSTEM DESIGN

2.1 General

2.1.2 Voltage and Frequency

Sub-paragraph -3 has been amended as follows.

3 The wording "specially approved by Society" given in **2.1.2-4**, **Part 10 of the Rules** means to satisfy any of the following:

- (1) In <u>supplydistribution</u> systems connected with semiconductor converters where the safe operation of other electric devices connected to such <u>supply</u> <u>distribution</u> systems is maintained by the adoption of suitable methods for decreasing harmonic content effects <u>such</u> <u>as harmonic filters</u>, and the Total Harmonic Distortion (*THD*) values do not exceed 8%.
- (2) In electric propulsion ships, where the supply <u>distribution</u> systems connected with propulsion semiconductor converters are closed circuits independent from other internal supply <u>distribution</u> systems, and the Total Harmonic Distortion (*THD*) values do not exceed 10%.

EFFECTIVE DATE AND APPLICATION (Amendment 1-2)

- **1.** The effective date of the amendments is 1 July 2017.
- 2. Notwithstanding the amendments to the Guidance, the current requirements apply to ships for which the date of contract for construction* is before the effective date and that are not newly fitted with harmonic filters on or after the effective date.
 - * "contract for construction" is defined in the latest version of IACS Procedural Requirement (PR) No.29.

IACS PR No.29 (Rev.0, July 2009)

- 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 owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding.
- 2. The date of "contract for construction" of a series of vessels, 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 owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a "series of vessels" if

they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided:

- (1) such alterations do not affect matters related to classification, or
- (2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval.

The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.

- **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 owner and the shipbuilder. The amendment to the contract is to be considered as a "new contract" to which **1**. and **2**. above apply.
- 4. If a contract for construction is amended to change the ship type, the date of "contract for construction" of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder.

Note:

This Procedural Requirement applies from 1 July 2009.

Chapter 2 CLASSIFICATION SURVEYS

2.1 Classification Survey during Construction

Paragraph 2.1.2 has been amended as follows.

2.1.2 Submission of Plans and Documents for Approval

<u>1</u> The wordings "deemed appropriate by the Society" in **2.1.2-6**, **Part 2 of the Rules** means as follows;

((1) to (3) are omitted.)

2 The drawings and data stipulated in 2.1.2-1(2)(h)vi), Part 2 of the Rules refer to items specified in Annex D18.1.1 "COMPUTER BASED SYSTEMS", Part D of the Guidance for the Survey and Construction of Steel Ships as a standard. With respect to those automatic devices and equipment which have been already approved by the Society, only data on parts that differ from ship to ship need to be submitted.

Part 9 MACHINERY INSTALLATIONS

Chapter 12 has been added as follows.

Chapter 12 AUTOMATIC AND REMOTE CONTROL

12.1 General

12.1.1 Scope

<u>1</u> In cases where dynamic positioning systems (DPS), which are regarded as part of the automatic and remote control systems of main propulsion machinery, are installed, the requirements of Chapter 12, Part 9 of the Rules are to apply.

2 The "machinery and equipment which are deemed necessary by the Society" referred to in 12.1.1-3, Part 9 of the Rules means machinery and equipment used for the purposes specified in

(1) to (4) given below and includes programmable controllers such as sequencers.

(1) Control systems for the machinery and equipment specified in **12.1.1-1**, **Part 9 of the Rules**.

(2) Alarm systems specified in 18.2.5, Part D of the Rules for the Survey and Construction of Steel Ships.

(3) Safety systems for the machinery and equipment specified in 12.1.1-1, Part 9 of the Rules.

(4) Control, alarm, and safety systems related to Table 2.1 of Annex D18.1.1 "COMPUTER BASED SYSTEMS", Part D of the Guidance for the Survey and Construction of Steel Ships.

<u>3</u> Notwithstanding the requirements in -2 above, the "machinery and equipment which are deemed necessary by the Society" referred to in 12.1.1-3, Part 9 of the Rules is not to include the machinery and equipment specified in the following (1) to (4):

(1) navigating equipment specified in the Rules for Safety Equipment,

(2) radio installations specified in the Rules for Radio Installations,

(3) stability instruments, and

(4) loading computers.

4 The "requirements specified otherwise by the Society" referred to in 12.1.1-3, Part 9 of the Rules means Annex D18.1.1 "COMPUTER BASED SYSTEMS", Part D of the Guidance for the Survey and Construction of Steel Ships.

EFFECTIVE DATE AND APPLICATION (Amendment 1-3)

- **1.** The effective date of the amendments is 1 July 2017.
- 2. Notwithstanding the amendments to the Guidance, the current requirements apply to ships for which the date of contract for construction* is before the effective date.
 - * "contract for construction" is defined in the latest version of IACS Procedural Requirement (PR) No.29.

IACS PR No.29 (Rev.0, July 2009)

- 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 owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding.
- 2. The date of "contract for construction" of a series of vessels, 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 owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a "series of vessels" if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided:
 - (1) such alterations do not affect matters related to classification, or
 - (2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval.

The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.

- **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 owner and the shipbuilder. The amendment to the contract is to be considered as a "new contract" to which **1**. and **2**. above apply.
- 4. If a contract for construction is amended to change the ship type, the date of "contract for construction" of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder.

Note:

This Procedural Requirement applies from 1 July 2009.

Chapter 3 PERIODICAL SURVEYS AND PLANNED MACHINERY SURVEYS

Section 3.6 has been added as follows.

3.6 Annual Surveys for Machinery

3.6.1 Requirements for Annual Surveys

In general examinations specified in 3.6.1, Part 2 of the Rules, for ships equipped with electrical distribution systems which include harmonic filters, it is to be ascertained that the filters are placed in good order and either of the following (1) or (2) is to be verified, except in cases where the filters are installed for single application frequency drives such as pump motors.

- (1) For harmonic filters included in the electrical distribution systems described in either the following (a) or (b), the records of the Total Harmonic Distortion (*THD*) value specified in 2.12.4-1, Part H of the Rules are to be verified.
 - (a) Electrical distribution systems on board ships for which the date of contract for construction is on or after 1 July 2017.
 - (b) Electrical distribution systems on board ships for which the date of contract for construction is before 1 July 2017, but which are newly fitted with harmonic filters on or after 1 July 2017.
- (2) For harmonic filters other than (1)(a) or (b), correct operation is to be confirmed by verifying that the maximum Total Harmonic Distortion (*THD*) value of the main busbar on board the ship is measured under typical seagoing conditions as close as possible to the date of the Annual Survey and the value does not exceed the acceptable limit.

EFFECTIVE DATE AND APPLICATION (Amendment 1-4)

1. The effective date of the amendments is 1 July 2017.