VI Additional Rules and Guidelines

11 Other Operations and Systems

5 Guidelines for Extended Dry-Dock Interval
The following Guidelines come into force on 1 April 2013.

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

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"General Terms and Conditions" of the respective latest edition will be applicable (see Rules for Classification and Construction, I - Ship Technology, Part 0 - Classification and Surveys).

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Introduction

The “Extended dry-dock interval” presents the possibility for a vessel to be dry-docked every 7.5 years. This arrangement can only be applied to Container ships, General Cargo and Multi-Purpose Dry Cargo ships excluding single-skin construction up until the age of 15 years that fulfil the following requirements.

A General

A.1 Application and basic requirements

A.1.1 These Guidelines shall apply to Container, General Cargo and Multi-Purpose Dry Cargo (excluding single-skin construction) ship types.

A.1.2 Class Notation CM-PS applies to all new building vessels and vessels with signed EDD contract on or after 2013.12.01. Vessels with signed EDD contract before 2013.12.01 not assigned with the notation CM-PS shall be equipped with a shaft bearing and sealing system whereby regular monitoring procedures/devices are implemented.

A.1.3 Class Notation IW (In-Water Survey) applies to all new building vessels and vessels with signed EDD contract on or after 2013.12.01. Vessels with signed EDD contract before 2013.12.01 and already in service do not require the Class Notation IW; however, they have to fulfil the requirements/scope for In-Water Surveys.

A.1.4 A Planned Maintenance Scheme for Hull and Machinery shall be implemented before implementation of the "Extended dry-dock interval".

A.1.5 As criteria for the implementation of the "Extended dry-dock interval", at the time of new building, the corrosion prevention system for the bottom shell has to fulfil the following requirements:
- Dry film thickness of coating for 7.5 years has to be an average of 300 μm
- Anodes (alu/zinc) prepared for 7.5 years

Alternatively:
- Impressed current system is to be installed and maintained

A.1.6 As criteria for the implementation of the "Extended dry-dock interval", for ships in service, the corrosion prevention system for the bottom shell has to fulfil the following requirements:
- Dry film thickness of coating for ships in service has to be a minimum of 250 μm
- Anodes (alu/zinc) prepared for 7.5 years

Alternatively:
- If installed, an impressed current system is to be maintained and documented in the Planned Maintenance Scheme

A.1.7 Ballast water tanks shall have a corrosion prevention system with "Good" coating condition.

A.1.8 The vessel’s Flag State authority has to approve the 7.5 year dry-dock interval.
A.2 Time frame

A.2.1 An "Extended dry-dock interval" for 7.5 years is limited from the delivery of the vessel up until the age of 15 years.

A.2.2 Starting from delivery of the vessel, the first dry-docking shall be after 7.5 years and the second after 15 years.

A.2.3 For vessels already in service, the “Extended dry-dock interval” may be implemented at any time up until a vessel reaches 10 years of age.

As an example:

If an owner intends to change the dry-dock interval at the first Special Survey (5 years) to 7.5 years, an IW Survey can be performed in lieu of the dry-docking at the first Special Survey. The dry-docking will then be performed at the Intermediate Survey at 7.5 years. The next two bottom surveys at 10 and 12.5 years may also be performed by IW Surveys, then at 15 years the second dry-docking follows.

A.2.4 When the dry-docking interval is extended, the bottom surveys required during periodical surveys will be performed in the scope of In-Water Surveys. At the 7.5 year interval it is possible to perform the first two bottom surveys in the scope of In-Water Surveys. The third bottom survey at 7.5 years has to be performed in dry-dock. The interval is independent of whether the bottom survey will be performed at an Intermediate or Class renewal survey.

A.2.5 If a vessel is either sold, changes manager or Flag, then a new request for the 7.5 year dry-docking intervals is to be submitted to GL Head Office. A review of documentation from new owner/manager has to be performed and verified.

A.2.6 If a vessel is sold and the new owner/manager does not wish to continue the "Extended dry-dock interval", then the normal 5 year interval may be implemented. It may be that the vessel requires immediate dry-docking due to the change in interval.

B Documentation

B.1 Ship specific particulars

To identify the vessel, the following particulars shall be stated:

- Ship's name
- Ship type
- IMO number
- Classification society and registration number
- Call sign
- Flag
- Port of registry
- Owner
- Manager
- Main dimensions
- Other ship specific information

B.2 Documents

For implementation of the "Extended dry-dock interval" a complete documentation shall be presented as follows:
• Class Notation CM-PS - Condition monitoring of propeller shaft at the stern tube, including stern tube bearing with oil analysis - as described in the GL Rules for Classification and Surveys (I-0), Section 2, C.3.4.2 and the GL Rules for Machinery Installations (I-1-2), Section 4, D.5.6

• Class Notation IW - In-Water Survey - as described in the GL Rules for Classification and Surveys (I-0), Section 2, Table 2.11, Section 3, C.1.7 and the GL Rules for Hull Structures (I-1-1), Section 34

• Planned maintenance scheme for machinery according to the GL Rules for Classification and Surveys (I-0), Section 3, B.1.3.7 and further Instructions for Planned Maintenance System available upon request from GL Head Office

• Planned maintenance scheme for hull according to Section 2

• Planning document for In-Water Survey and Hull Inspection (Form F012HE)

C Approval Procedure

C.1 Ships in Service

C.1.1 The owner/manager has to obtain an approval for the "Extended dry-dock interval" system which is to be implemented on-board a vessel; therefore, a formal request for approval is to be submitted to GL Head Office. Upon receipt, GL Head Office will provide a letter of further information for the approval process with following content:

• Documentation on items/systems listed under B.2.
• Flag State authority approval and additional requirements if applicable
• The vessel must be free of condition of class/deficiencies in concern to underwater part of hull/machinery.
• At time of In-Water Survey criteria of A.1.5 to A.1.8 to be fulfilled
• Class Renewal Survey planning afloat
• Extended Dry-Docking (EDD) Self-Check Questionnaire (Form F012FE)

Before submitting all documentation for EDD approval the owner/manager has to request approval from the vessel’s Flag State authority to perform a 7.5 year dry-dock interval. Confirmation of Flag State authority and signed Planning document has to be added to documentation matter for approval.

C.1.2 GL Head Office will review the submitted documentation including the Planning document and approve the system when all necessary documentation is available. The approved documentation including the Planning document will be issued to the owner/manager, who is required to place it on-board the vessel.

At time of dry-docking window owner/manager will request In-Water Survey where the attending surveyor will perform bottom survey and spot checks for verification of EDD at all systems and documentation including the Planning document.

If the vessel complies with all EDD regulations final approval will be given by GL Head Office to owner/manager and Flag State authority. The final approval letter will contain:

• Confirmation with EDD procedure
• Terms of deletion for EDD due to damage at bottom plating or change of class, flag, manager etc.
• Verification/implementation of planned maintenance scheme for hull/machinery (PMS H/M) prior completion of class renewal
• Dry-Docking period of 7.5 years to be strictly followed

After final acceptance for EDD by flag state authority the remaining class renewal survey items can be performed afloat.
C.2 New building

C.2.1 For vessels in the stage of new building the ship yard can request a “Statement of compliance (EDD)” (Form F012BE) to GL Head Office. This statement will confirm the technical requirements (CM-PS and IW see item B.2, underwater hull/machinery preparation see items A.1.5 to A1.8) necessary to fulfil the EDD procedure.

GL Head Office will submit a “Extended Dry-Dock Questionnaire (EDD)” (Form F012AE) to the ship yard to document the above mentioned technical requirements for EDD. The ship yard will send back the filled in document to GL HO for approval.

With the “Statement of compliance (EDD)” the technical part of the EDD requirements for the owner/manager is completed.

The owner/manager has to obtain an approval for the "Extended dry-dock interval" system which is to be implemented on-board a vessel; therefore, a formal request for approval is to be submitted to GL Head Office.

Before submitting all documentation for EDD approval the owner/manager has to request approval from the vessel’s Flag State authority to perform a 7.5 year dry-dock interval. Confirmation of Flag State authority and signed Planning document has to be added to documentation matter for approval.

Additional to the Flag State authority approval the owner/manager has to provide the planned maintenance scheme for hull/machinery (PMS H/M) to fulfil the full EDD requirements.

C.2.2 For procedure from review of documentation to final approval for EDD please see item C.1.2.

D Surveys

Technical surveys for the "Extended dry-dock interval" are covered by the standard class surveys as In-Water Surveys (IW), Condition monitoring of shaft bearing and sealing system (CM-PS) at Intermediate and Class Renewal Surveys or Planned Maintenance Machinery and Hull during Annual Class Audits (with a time window of +/- three months).
Section 2 Planned Maintenance Scheme for Hull

A General

The Planned Maintenance Scheme for Hull is supporting the owner and GL with information regarding the status of the hull structure and coating prevention system. This scheme will not substitute the periodical Class Surveys.

A.1 Planned maintenance scheme for hull

A.1.1 Application

These requirements apply to an approved Planned Maintenance Scheme for Hull (PMS-H).

It considers surveys to be carried out on the basis of intervals between regular periodical surveys as recommended by GL.

This scheme is limited to structural steel elements, the corrosion prevention system and the outfitting of the vessel on decks, in tanks and other spaces.

A.1.2 Maintenance intervals

In general, the intervals for PMS-H depend upon the dimensions, sizes and quantities of tanks or other spaces which are part of the PMS-H. GL will decide upon intervals by ship type and the above mentioned items.

However, if an approved hull monitoring system is in effect, the hull survey intervals for dry-docking may be extended.

A.1.3 On-board responsibility

The Master shall be the responsible person on-board for the PMS-H.

Documentation on inspections of tanks or other spaces covered by the PMS-H shall be reported and signed by the Master or another authorized person.

Access to computerized systems for updating of maintenance documentation and maintenance program shall be only permitted by the Master or another authorized person.

Authorized persons for PMS-H shall be trained and certified by the managing company to the degree required to fulfill the tasks. The personnel in charge of performing the hull inspection and maintenance shall be properly qualified and hold the necessary qualification certificates.

B Procedures and Conditions for Approval of a PMS-H

B.1 Procedures and conditions for approval

B.1.1 System requirements

The PMS-H shall be supported and maintained by a computerized system.

The system shall be approved in accordance with procedures of GL.

Computerized systems shall include back-up devices, such as disks/tapes, CDs, which are to be updated at regular intervals.
B.1.2 Documentation and information

B.1.2.1 The following documentation shall be submitted for approval of the scheme:

1. organization chart identifying areas of responsibility
2. organization chart identifying areas of interest for PMS-H such as ballast, cargo, marine diesel oil, lubricating oil and fuel oil tanks, cargo holds, void spaces, cofferdams, chain locker, pump room, bow thruster room and other necessary spaces
3. documentation filing procedures
4. indication of intervals for inspection/maintenance for each tank or other space
5. listing of equipment to be considered by GL in the PMS-H
6. preventive maintenance sheet(s) for each tank or other space
7. listing and schedule of preventive maintenance procedures
8. listing and specifications of condition monitoring equipment (as described in IACS Recommendation No. 72)

B.1.2.2 Content of documentation for inspection:

(i) findings of deformations on steel structure like buckling, indents, cracks in steel structure or welding
(ii) a description of the corrosion prevention system with information about the coating condition such as "Good", "Fair", "Poor" and other details like blistering, rusting, cracking or flaking density (as described in IACS Recommendation No. 87)
(iii) findings on the corrosion prevention system in addition to point (ii), items such as edge corrosion, grooving, total breakdown, hard scale rust or pitting corrosion
(iv) description of additional corrosion prevention systems like anodes
(v) heavily corroded structural elements detected by visual inspection without thickness measurements
(vi) findings on tank internals like ladders, piping, pumps and supporting foundations
(vii) description of repairs, maintenance of coating or modification (as described in IACS Recommendation No. 84 Container Ships or No. 55 General Cargo Ships)

B.1.2.3 In addition to the above documentation, the following information shall be available on board:

(i) all clauses in B.1.2.1 in an up-to-date version
(ii) maintenance instructions (manufacturer's and shipyard's)
(iii) hull condition monitoring data including all data since the last opening of the tank or space
(iv) records of maintenance including repairs and renewals carried out
(v) summary sheet with all tanks and spaces which are part of PMS-H, including due dates, date of survey and status of the tank/space with regard to the findings

B.2 Approval validity

B.2.1 When the PMS-H is approved, a "Certificate of Approval for Planned Maintenance Scheme PMS-H" is issued. The certification is to be kept on-board.

B.2.2 An "Implementation Survey" shall be carried out to confirm the validity of the certificate (see B.3.1).

B.2.3 An annual report covering the year's service, including the following information, shall be reviewed by GL:

(i) clauses iv, v and vi as well as changes to other clauses in B.1.2.1
(ii) clause iii of B.1.2.3.

B.2.4 An Annual Audit shall be carried out to maintain the validity of PMS-H (see B.3.2).
The survey arrangement for hull under PMS-H can be cancelled by GL if the PMS-H is not being satisfactorily carried out; this may be concluded from the maintenance records, the general condition of the hull structure, and/or when the agreed intervals between monitoring are exceeded. This means that the dry-docking period will be set back from seven and a half years to five years, or if the docking interval exceeds the five year period, the vessel has to immediately perform a docking to maintain the class.

If a vessel is either sold, changes management, transfers class, or changes Flag, the approval shall be reconsidered/audited.

The owner/manager may, at any time, cancel the survey arrangement for hull under the PMS-H by informing GL in writing. In this case all relevant certification will be withdrawn and the vessel’s dry-docking period will be set back from seven and a half years to five years, or if the docking interval exceeds the five year period, the vessel has to immediately perform a docking to maintain the class.

Implementing survey

The Implementation Survey is to be carried out by a GL Surveyor when the system has been used for at least 6 months.

During the implementation survey the attending surveyor shall ensure that:

(i) the PMS-H is implemented according to the approval documentation and is adapted to the type and complexity of the steel structure and the corrosion prevention system on-board
(ii) the PMS-H is producing the documentation required for the Annual Audit and that the requirements of surveys and testing for retention of class are complied with
(iii) the relevant on-board personnel are familiar with the PMS-H

When this survey is carried out and the implementation is found satisfactory, a report shall be submitted to GL and the system may be put into service.

When the PMS-H is set into service as described under point B.3.1.3, it is possible to exceed the docking period for the vessel.

Annual audit

An annual audit of the PMS-H shall be carried out by a GL surveyor. It is preferential that the audit is performed concurrent with any periodical surveys of the hull.

The surveyor shall review the annual report or verify that it has been reviewed by GL.

The purpose of this survey shall be to verify that the scheme is being correctly operated and that the hull has been monitored satisfactorily since the previous survey. A general examination of the items concerned shall be carried out.

The performance and maintenance records shall be examined to verify that the hull has been seen in an acceptable condition since the previous survey, or that action has been taken in response to hull maintenance procedures and necessary steel repairs or coating upgrades.

Written details of structural steel deformations or coating breakdown shall be made available.

Any description of repairs carried out shall be examined. Any hull structure forming part of the PMS-H that has been replaced, or temporary repaired due to damage, is to be documented on-board.

At the discretion of the surveyor, confirmatory surveys and random checks of the steel structure, as well of corrosion prevention system where hull monitoring is in use, shall be carried out as far as practicable and reasonable.

Upon satisfactory completion of the above mentioned requirements, GL shall retain the PMS-H.
B.3.3 Damage and repairs

B.3.3.1 The damages of structural elements of the hull structure shall be reported to GL. The repairs of such damaged structural elements shall be carried out under the supervision and to the satisfaction of GL surveyor.

B.3.3.2 Any repairs and corrective actions/maintenance of relevant items under the PMS-H system shall be recorded in the PMS-H reporting system and the repairs verified by a GL surveyor during the Annual Audit.