

## LOCAL VESSELS ADVISORY COMMITTEE

### **Amendments to CoP to Introduce a 5-Year Survey Cycle for Class I Local Vessels Classed with Classification Societies (Authorized Organization) and the Relevant Certification Arrangements**

#### **Purpose**

In order to optimize survey work of local vessels, the Marine Department (MD) proposes to Introduce a 5-Year Survey Cycle for Class I Local Vessels Classed with Classification Societies (Authorized Organization - AO <sup>Note 1</sup>) and the Relevant Certification Arrangements, so that these vessels can be surveyed in accordance with the survey procedure and items as required and stated by their classification societies to align with relevant statutory requirements.

#### **Background**

2. Except for certain vessels, the MD currently authorizes competent surveyors to conduct surveys for local vessels in accordance with the survey procedure and items set out in the Codes of Practice – Safety Standards for Vessels (CoPs). In view of the increasing number of Class I vessels engaging AOs to construct vessels and conduct surveys in accordance with the classification requirements in recent years, the MD is considering further introducing AOs' 5-year survey cycle for the survey of these vessels and encouraging ship owners to put their vessels under class. This would not only introduce internationally recognized standards and codes of practice in areas such as the application of shipbuilding technology, new energy and hybrid energy, but would also continuously enhance the safety standard for local vessels and enable ship owners to arrange surveys for vessels more flexibly to cater for their operation needs. Summarizing the views of the trade, the MD now proposes to amend the survey and certification arrangements for vessels classed with AOs as detailed in the following paragraphs.

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<sup>Note 1</sup> As at 10 May 2021, authorized AOs included American Bureau of Shipping (ABS), Bureau Veritas (BV), China Classification Society (CCS), DNV AS, Lloyd's Register (LR) Asia and Registro Italiano Navale (RINA) Services S.p.A.

## **Revision of the Survey Cycle for Vessels Classed with AOs**

3. The MD plans to adopt an arrangement that all Class I vessels classed with AOs can be surveyed in accordance with the survey procedure and items as required and stated by their AOs to which they are classed, including the arrangement of continuous survey of hull and machinery. Given the actual working conditions and existing survey requirements of local vessels, some of the existing survey items will be maintained at this stage. For details of survey proposed to be revised, please refer to Table 7-2.1 “Periodical Survey – Vessels Classed with Authorized Organizations” (Class I vessels) at **Annex 1**.

## **Issue of Certificate of Survey for Vessels Classed with AOs**

4. After completion of the survey mentioned in paragraph 3 above, surveyor of an AO should submit such documents as the Declaration of Survey and survey records to the MD as stipulated by law. If satisfied with the contents therein, the MD will issue a Certificate of Survey accordingly. The validity of the Certificate of Survey corresponds with the annual survey cycle (normally 12 months) of the AO. In any case, the validity of the certificate will not exceed the survey window period, i.e. 15 months at most, before the next scheduled annual survey to be conducted by the AO. As regards the Certificate of Survey in the 5th year, it will be effective until the expiry date of the classification certificate. MD will issue a Marine Department Notice to provide the details.

5. As for vessels not classed and vessels once classed with AOs but no longer maintain such status, the survey requirements concerned should continue to be met by ensuring their compliance with the procedures set out in Table 7-2.2 at **Annex 1**.

## **Consultation**

6. The amendments to the CoPs proposed in this paper have been endorsed by the Sub-committee on Class I and Class II Vessels at its meeting held on 31 May 2021. It was also agreed at the meeting that such amendments would be submitted to the Local Vessels Advisory Committee for discussion.

## **Way Forward**

7. Members are invited to comment on the above proposal. If it is

supported by members, the MD will publish the implementation date of the amended CoP in the Gazette. Meanwhile, depending on the outcome of the implementation, MD will also extend the similar arrangement to Class II Local Vessels Classed with Classification Societies when appropriate.

Marine Department  
Local Vessels Safety Section  
June 2021

## CHAPTER II

### SURVEY / INSPECTION, ISSUANCE OF CERTIFICATE AND PLAN APPROVAL

#### 1 Survey / Inspection for Issue or Endorsement of Certificate

- 1.1 Any local vessel to which sections 7(1) and (3) of Survey Regulation apply when applying for an initial licence is subject to the approval of plans per items (appropriate according to category and type of vessel) indicated in Table 5-1.
- 1.2 Any local vessel to which Part 4 of Survey Regulation applies when applying for an initial licence is subject to the initial survey per items (appropriate according to category and type of vessel) indicated in Tables 7-1 and 7-3; and after licencing the periodical survey per items indicated in Tables 7-2.1 or 7-2.2 (where applicable) and 7-3.
- 1.3 Any licensed vessel of the above sections 1.1 or 1.2 intended for alteration shall be subject to the approval of plans (if section 1.1 is applicable) and survey relating to the alteration under section 76(5) of the Survey Regulation.
- 1.4 A replacement primitive vessel (kaito) carrying more than 60 passengers is required to comply with the standard of plan approval and survey as that for Class I vessel of type “Launch” carrying the same number of passengers.
- 1.5 Any vessel intended for change of the vessel’s name is subject to a survey relating to the change of name and the relevant fees.
- 1.6 A laid-up vessel (which is granted with a permission for laid-up) shall be subject to survey when returning to service if the Certificate of Survey previously issued has expired. If the expiry is not exceeding 2 years, the survey shall cover items due in the past 2 years as the vessel was not laid up.
- 1.7 Any vessel having its Certificate of Survey expired for more than 2 year but less than 8 years, for vessels not classed with an Authorized Organization (AO)(see definition in Ch. I/3.1) the surveys shall follow the quadrennial survey programme prescribed in Table 7-2.2; for vessels classed with an AO the surveys shall follow the survey programme of AO.
- 1.8 Any vessel having its Certificate of Survey expired for more than 8 years, it shall be subject to thorough inspection according to items of Table 7-1. If alterations had been carried out onboard vessel plans relating to the alterations shall be submitted for approval. The survey and plan approval are to comply with standards applicable to existing vessels, and the amended (if any).
- 1.9 When deemed necessary or at his discretion, the attending surveyor/inspector may request any other item to be presented for inspection

#### 2 Statutory Surveys and Application

- 2.1 Subject to the below section 2.2 officers delegated by the Director are responsible for the statutory plan approval and survey of vessel.
- 2.2 The Director may delegate the statutory plan approval and surveys (items other than that

marked with ‘MD’) to authorized surveyor employed by AOAs indicated in the authorization/recognition document. List of AOs will be promulgated in the Marine Department Notice issued from time to time. Vessel owner or agent, when required, may also apply to Marine Department for plan approval and surveys. (Amended G.N. 6256 of 2020)

- 2.3 Upon satisfactory completion of surveys or assessment, the following relevant statutory certificates or record document would be issued by Marine Department as specified in the following table. Annex V-4 also lists the other certificates and documents that a local vessel might require, as appropriate:

No.	CERTIFICATES / RECORDS
(1)	Certificate of Survey
(2)	Exemption Certificate / Permit for alternative material, fitting or equipment (when applicable)

- 2.4 The Certificate of Survey and relevant remarks must be displayed in a conspicuous location onboard under section 30 of the Survey Regulation.
- 2.5 If the owner or agent wishes his vessel to be surveyed by an authorized organization he shall provide the Department an “Engagement Form”:
- (a) prior to the survey - the name of the authorized organization, the place and date of the intended survey; and
  - (b) on completion of survey - a survey report and a declaration duly signed and issued by the authorized organization. (Amended G.N. 6256 of 2020)

### 3 Validity of Certificate and Endorsement

For the expiry date of the certificate or endorsement, refer to Marine Department Notice No. xx of 2021.

### 4 Submission of Plans and Data

- 4.1 Plans and data shall be submitted according to Table 5-1 (as marked with "✓"). Additional plans and data will be required when deemed necessary. The required plans and data may be consolidated into one plan (or plans) according to the size of vessel and complexities of the plan.
- 4.2 Except for any vessel classed with a classification society; and otherwise indicated in the table (items marked with ‘MD’), the plans and data may be submitted to any of the AO for approval at the discretion of the owner. For any vessel classed with a classification society, plans and data shall be submitted to the relevant classification society for approval.
- 4.3 For plans and data to be submitted for Marine Department’s approval, 3 copies of each shall be submitted for the 1<sup>st</sup> vessel of a series and 2 copies for the subsequent vessels.
- 4.4 One copy of such plans and data approved by AO shall be submitted to Marine Department for record. Supplementary plans and data may be required should any survey be undertaken by Marine Department.

4.5 Plans of General Arrangement, vessel construction and relevant plans shall be drawn in appropriate scale of legibly quality.

**5 Plans and Data required to be submitted** [Survey Regulation, section 9 refers]

5.1 For new primitive vessel (kaito) carrying not more than 60 passengers (Category B vessel), plans and data stipulated in Annex Q shall be submitted for approval.

5.2 For vessels other than 5.1, plans and data shall be submitted according to Table 5-1 below.

**Table 5-1 Plans and Data**

Table 5-1 No.	PLANS AND DATA
<b>(A)</b>	<b>GENERAL ARRANGEMENTS, ACCOMMODATION LAYOUTS, PASSENGER SPACE, SEATING ARRANGEMENTS, NUMBER OF PASSENGERS AND ESCAPE ROUTES</b>
(1)	General Arrangement <sup>(*1)</sup>
(2)	Passenger Space (shelter)/Seating Arrangement (Ch. V refers)
(3)	Passengers and Crew Accommodation Requirements (incl. handrail, seat belt, staircase, lighting and etc.) (Ch. V refers)
<b>(B)</b>	<b>SAFETY EQUIPMENT INCLUDING LIFE-SAVING APPLIANCES, FIRE-FIGHTING APPARATUS, LIGHTS, SHAPES AND SOUND SIGNALS ; EMERGENCY CONTROLS, STRUCTURAL FIRE PROTECTION</b>
(1)	Safety Plan showing arrangement of - (a) life saving appliances (b) fire fighting apparatus and structural fire protection arrangement (c) light and sound signals (d) means of escape, escape installation and arrangement, etc.
(2)	Structural Fire Protection Arrangement
(3)	A muster list specifying the duties of every member of crew in the events of emergency including collision, grounding, fire and abandonment of ship (only applicable to ferries and launches carrying more than 100 passengers)
<b>(C)</b>	<b>STABILITY, FREEBOARD CALCULATIONS; ARRANGEMENTS RELATING TO WATERTIGHTNESS, WEATHERTIGHTNESS, BULKHEADS, HATCHWAYS, COAMINGS, SIDE SCUTTLES, AIR VENTS, FREEING PORTS, SCUPPERS, INLETS AND DISCHARGES</b>
(1)	Lines Plan and Offsets Table (for record)
(2)	Hydrostatic Curves
(3)	Cross Curves of Stability
(4)	Preliminary Intact Stability Information
(5)	Estimated Damage Stability Information (Ch. IV/2 refers)
(6)	Inclining Experiment Report/Rolling Period Test Report/Lightweight Survey Report (Ch. IV/4 refers)

Table 5-1 No.	PLANS AND DATA
(7)	Stability Information Booklet (after inclining experiment)
(7a)	Permanent Ballast Weights Arrangement (if designed) <sup>(*2)</sup> (Added G.N. 6489 of 2018)
(8)	Damage Stability Calculation (after inclining experiment) (Ch. IV/2 refers)
(9)	Draft Marks
(10)	Arrangements relating to Watertightness, Weathertightness, Bulkheads, Hatchways, Coamings, Side Scuttles, Air Vents, Freeing Ports, Scuppers, Inlets and Discharges, etc.
<b>(D)</b>	<b>STRUCTURES AND SCANTLINGS</b>
(1)	Midship Sections
(2)	Scantling Calculation
(3)	Profile, Decks and Bulkheads (incl. hull and superstructure decks)
(4)	Shell Expansion
(5)	Rudder/Kort Nozzle, Rudder Stock, Skeg and Sole Piece
(6)	Materials and Paints Specifications (for floating restaurant)
<b>(E)</b>	<b>FUEL, MACHINERY, SHAFTING</b>
(1)	Engine Room Arrangement
(2)	Propeller Shafting, Stern Tube and Coupling
(3)	Main engine and Gear Box Certificates <sup>(*3)</sup>
(4)	Aux. diesel engine Certificates <sup>(*3)</sup>
(5)	Fuel Oil System (incl. tanks, piping)
(6)	Fire-fighting Piping Arrangement (incl. fire main, fixed fire extinguishing system, etc)
(7)	Bilge Pumping Arrangement
(8)	Compressed Air Piping System (for pressure $\geq 10$ bar)
(9)	Air Receiver (Ch. IIIA/15 refers)
(10)	Filling, Sounding and Air Vent System
<b>(F)</b>	<b>ELECTRICAL SYSTEMS (including Emergency Power System)</b>
(1)	Electrical System Line diagram
(2)	Wiring Diagram of Main Switchboard
(3)	Layout of Main Switchboard
(4)	Electrical Arrangement
(5)	Wiring Diagram of Distribution Boxes

Table 5-1 <b>No.</b>	<b>PLANS AND DATA</b>
<b>(G)</b>	<b>PREVENTION AND CONTROL OF POLLUTION</b>
(1)	Prevention of Oil Pollution Installation (Ch. IIIA/19.2 refers)
(2)	Prevention of Air Pollution Installation (refer to Annex I-10, etc)
<b>(H)</b>	<b>NAVIGATIONAL AND COMMUNICATION EQUIPMENT</b>
(1)	Radio Communication equipment and arrangement

#### Remarks in Table 5-1

- \*1 Amended plan to be submitted should there be any change from the arrangement of vessel shown on the original General Arrangement Plan.
- \*2 Applicable to new vessels <sup>Note 1</sup> after the enforcement of this Code. The plan shall include information on the positions, quantity, materials, unit weights and serial number markings (which can be colour painted) as well as relevant photos (12 megapixels or above and hard copy prints in 1200 x 1200 dpi or above) of the permanent ballast weights.
- \*3 For diesel engine of new vessels, engine maker or classification societies approved certificates/information and document as appropriate required in Ch. IIIA or IIIB and Annex I-10 of this Code or MARPOL Annex VI.

## 6 Plans to be retained onboard

- <6.1 Every vessel shall be provided onboard one copy of the plan(s) approved by Marine Department:
- (a) general arrangement of vessel with seating arrangement and escape routes;
  - (b) types and dispositions of life saving appliance, fire-fighting appliance, light, shape, sound signals and radiocommunications equipment (if fitted).
- 6.2 For every vessel which has been modified or altered in a way that would change the seating arrangement, escape routes or dispositions of life saving appliance or fire-fighting appliance, all plans and documentation carried or displayed on board shall be modified to reflect those changes and approved by Marine Department.
- 6.3 For every Class I vessel carrying more than 100 passengers, safety plan showing arrangement of life saving appliances, fire-fighting apparatus, light and sound signals and means of escape, escape installation and arrangement shall be exhibited in conspicuous places throughout the vessel.>
- 6.4 All ferries and launches carrying more than 100 passengers should have on board the muster list as stated in item (B)(3) of Table 5-1.
- 6.5 An emergency drill shall be practised by crewmembers at least once every two months. Records of emergency drills are to be kept onboard for at least one year for inspections by a MD officer.

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<sup>Note1</sup> Applicable to a vessel which is a new vessel under section 2 of the Survey Regulation when the reference to “the commencement date” in the definition of “new vessel” is substituted by “31.8.2018”



## 7 Survey / Inspection Items and Survey / Inspection Programmes

**Table 7-1 Initial Survey**

“√” means applicable

Table 7-1 No.	Survey Item	Category of Vessel A	B
<b>(A)</b>	<b>CONSTRUCTION – GENERAL, SHIP STABILITY</b>		
(1)	Draft Marks – verification	✓	✓
(2)	Measurement of Principal Dimensions	✓ <sup>(*9)</sup>	✓ <sup>(*9)</sup>
(3)	Inclining Experiment <sup>(*1)</sup>	✓	
(4)	Lightship Verification <sup>(*2)</sup>	✓	
(5)	Simple Inclining Test (for Kaito with $C_{np} \geq 0.35$ )		✓
<b>(B)</b>	<b>FIRE-FIGHTING APPARATUS, STRUCTURAL FIRE PROTECTION, APPLIANCES FOR PREVENTION OF COLLISION</b>		
(1)	CO <sub>2</sub> Pipe - inspection, hydraulic test and blowing test	✓	✓ <sup>(*8)</sup>
(2)	Fire Main - inspection and hydraulic test	✓	✓ <sup>(*8)</sup>
(3)	Structural Fire Protection (Ch. VI/13 refers) - inspection	✓	
(4)	Position of Navigational Light and its Foundation – verification	✓	✓
<b>(C)</b>	<b>CARRIAGE OF PASSENGERS</b>		
(1)	Measurement of Noise Level in Passenger Space	✓	--
(2)	Measurement of Passenger Space / Seating	✓	✓
(3)	Minimum headroom in Accommodation Space - confirmation	✓	✓
(4)	Means of Escape in Accommodation Space and Machinery Spaces - inspection	✓	✓
<b>(D)</b>	<b>CONSTRUCTION – HULL; CONDITIONS OF ASSIGNMENT</b>		
(1)	Material test - Steel Plate <sup>(*3)</sup> /Aluminium Plate <sup>(*3)</sup> /GRP Polyester Resin	✓	
(2)	- Propeller Shaft, Coupling, Rudder Stock <sup>(*4)</sup>	✓	✓ <sup>(*8)</sup>
(3)	Hull Scantlings - verification	✓	
(4)	Welding / GRP Lamination and Finishing - inspection	✓	
(5)	Below Main Deck W.T. bulkhead and W.T. door fitted thereon - Hose test <sup>(*5)</sup>	✓	
(6)	Structural Tanks - internal inspection	✓	
(7)	- hydraulic test/air test <sup>(*5)</sup>	✓	
(8)	Watertight / Weathertight Appliances - inspection	✓	

Table 7-1		Category of Vessel	
No.	Survey Item	A	B
(9)	- hose test <sup>(*5)</sup>	✓	
(10)	Permanent Ballast Weights - inspection <sup>(*10)</sup> (Added G.N. 6489 of 2018)	✓	✓
<b>(E)</b>	<b>CONSTRUCTION - FUEL, MACHINERY, SHAFTING</b>		
(1)	Main Engine <sup>(*6)(*7)</sup> , Gear Box - Type Approval Certificate /inspection	✓	✓ <sup>(*8)</sup>
(2)	Generator Diesel Engine - Certificate <sup>(*6)</sup> / inspection	✓	✓ <sup>(*8)</sup>
(3)	Tail Shafts and Coupling - verification of dimensions	✓	✓ <sup>(*8)</sup>
(4)	- taper bedding test	✓	✓ <sup>(*8)</sup>
(5)	Stern Tube - verification of dimension and hydraulic test	✓	✓ <sup>(*8)</sup>
(6)	Independent Fuel Oil Tanks - internal inspection and hydraulic test	✓	✓ <sup>(*8)</sup>
(7)	Verification of No. and Volume of Structural and Independent Fuel Oil Tanks	✓	✓ <sup>(*8)</sup>
(8)	Bilge Line - inspection and hydraulic test	✓	✓ <sup>(*8)</sup>
(9)	Sea Suction valve – inspection and hydraulic test	✓	✓ <sup>(*8)</sup>
(10)	Steering System Hydraulic Line - inspection and hydraulic test	✓	✓ <sup>(*8)</sup>
(11)	Fuel Oil Line - inspection and hydraulic test	✓	✓ <sup>(*8)</sup>
(12)	Compressed Air Pipe - hydraulic test (for P > 17.2 bar)	✓	✓
(13)	Air Receiver - verification of wall thickness/ dimensions	✓	✓
(14)	- hydraulic test	✓	✓
(15)	Main Engine Alarm System and FMEA items - function test (Applicable to vessels of the type stated in Ch. I/4.2)	MD	MD
<b>(F)</b>	<b>CONSTRUCTION - ELECTRICAL SYSTEMS</b>		
(1)	Electrical Wiring/installation - inspection	✓	✓
(2)	Generator circuit breaker load test (vessels with GenSet power > 50 kW )	✓	--
<b>(G)</b>	<b>PREVENTION AND CONTROL OF POLLUTION</b>		
(1)	Prevention of Oil Pollution Installation (MD/AO) - Inspection	MD/AO	MD/AO
(2)	- hydraulic test of independent bilge water / sludge holding tank	✓	✓

#### Remarks in Table 7-1

- \*1 Applicable to the 1st vessel of a series of four vessels.
- \*2 Applicable to the 2nd, 3rd and 4th of a series of four vessels.
- \*3 In lieu of the material test, mill sheet issued/endorsed by a classification society is acceptable.
- \*4 Ch. IIIA/9 and IIIA/17.4 refer.

- \*5 Annex M/3, 4 refer. Hose test for door fitted on watertight bulkhead may be replaced by a chalk test if a prototype test (with pressure corresponding at least to the head required for the intended location) has been carried out and certificated.
- \*6 Ch. IIIA/7.1 refers. For engine of new vessel, engine maker or classification societies approved certificates/information and document as appropriate required in Ch. IIIA or IIIB and Annex I-10 of this Code or MARPOL Annex VI.
- \*7 With effect from 1 March 2016, each brand new main engine to be fitted on board newbuilding and existing locally licensed Class I vessels shall be engraved with an unique official mark.
- \*8 For visual inspection and operational test at either initial or final inspection only.
- \*9 The measurement record shall be submitted to Marine Department for verification.
- \*10 Applicable to new vessels<sup>Note 2</sup> after the enforcement of this Code. The inspection shall be carried out in the vessel's initial survey; or when alterations or repairs resulting in the removal/modification of permanent ballast weights (PBWs) have been made. The inspection shall be carried out in accordance with the requirements set out in the table below:

Tasks Shipowner/Shipyard Responsible for		Tasks Inspecting Personnel Responsible for
Documents Submission	Inspection Arrangement	
<p>(1) Declaration (refer to Annex Y of this Code) - which shall include the PBWs information (positions, quantity, materials, unit weights, serial number markings, etc.) designated in the stability booklet of the vessel.</p> <p>(2) Photo records (12 megapixels or above and hard copy prints in 1200 x 1200 dpi or above)- which shall clearly show the following conditions of PBWs stowage:</p> <p>(a) ship structure prior to PBWs being stowed;</p> <p>(b) 50% of PBWs stowed;</p> <p>(c) 100% of PBWs stowed; and</p> <p>(d) fittings used for securing the PBWs.</p>	<p>Stow PBWs according to the information given in item (1) in the left-hand column and carry out the inspection described in the right-hand column in coordination with attending inspecting personnel.</p>	<p>(1) Inspect vessel's structure with regard to PBWs stowage;</p> <p>(2) verify all PBWs; and</p> <p>(3) randomly select at least 10% of PBWs (but no less than one PBW) for inspection. The inspection shall include the PBWs' appearance, markings, weight confirmation, etc.</p>

<sup>Note2</sup> Applicable to a vessel which is a new vessel under section 2 of the Survey Regulation when the reference to "the commencement date" in the definition of "new vessel" is substituted by "31.8.2018"

**Table 7-2.1 Periodical Survey - Vessels Classed with AO**

Table 7-2.1 No.	Survey Item	Survey Intervals (year) <sup>(*1)</sup>		Survey Requirement	
		No. of Passengers (Pax)	> 60		≤ 60
<b>(A) LIFE-SAVING APPLIANCES, FIRE-FIGHTING APPARATUS</b>					
(1)	Fixed Fire Ext. Installation CO <sub>2</sub> system - blowing test Sprinkler System - spraying test		2.5	2.5	Aerosol installation – in accordance with manufacturer requirements. Other types of installations - in accordance with AO requirements
(2)	- hydraulic test		10	10	in accordance with AO requirements
(3)	Fire Extinguisher, CO <sub>2</sub> Bottle - refill and hydraulic test		10	10	in accordance with AO requirements
(4)	Buoyant Apparatus - submerging test				in accordance with this Code
<b>(B) CONSTRUCTION – HULL; CONDITIONS OF ASSIGNMENT</b>					
(1)	Hull - external (incl. ship bottom) inspection		A	2.5 <sup>▲</sup>	Pax > 60: in accordance with this Code Pax ≤ 60: in accordance with AO requirements <b>▲</b> Hull external inspection: the intervals are not to exceed 36 months (survey window is not applicable); and to be performed within 15 months prior to the expiry date of the classification certificate
(2)	- internal (excl. oil, water tanks and void spaces) visual inspection		5	5	in accordance with AO requirements
(3)	- internal (incl. oil, water tanks and void spaces) inspection		5	5	in accordance with AO requirements
(4)	- gauging thickness of deck, shell and bulkhead plating		5 <sup>▲</sup>	5 <sup>▲</sup>	in accordance with AO requirements <b>▲</b> Start from the 10 <sup>th</sup> year after first licensing. Gauging of shell plating shall be performed along with item (B)(1)
(5)	Sea Suctions, Discharging Valves - stripped down inspection		2.5 <sup>▲</sup>	5 <sup>▲</sup>	in accordance with AO requirements <b>▲</b> be performed along with item (B)(1)
(6)	Anchors, Cables, Wire Ropes - ranged out for inspection		2.5 <sup>▲</sup>	2.5 <sup>▲</sup>	in accordance with AO requirements <b>▲</b> be performed along with item (B)(1)
(7)	Permanent Ballast Weights - inspection <sup>(*16)</sup> (Added G.N. 6489 of 2018)		A	A	in accordance with this Code
<b>(C) CONSTRUCTION - FUEL, MACHINERY, SHAFTING, ELECTRICAL SYSTEMS</b>					
(1)	Main Engine hydraulic test of coolers (incl. air, lub. oil, cooling water), cylinder head and water jacket		2.5	5	Inspection intervals in accordance with engine manufacturer requirements. Engine running hour report shall be furnished to AO annually.

Table 7-2.1 No.	Survey Item	No. of Passengers (Pax)	Survey Intervals (year) <sup>(*1)</sup>		Survey Requirement
			> 60	≤ 60	
(2)	overhaul of fuel oil pump, fuel nozzles		2.5	5	Inspection intervals in accordance with engine manufacturer requirements. Engine running hour report shall be furnished to AO annually.
(3)	Main Engine and Gear Box - stripped down for inspection		2.5 <sup>▲</sup>	2.5 <sup>▲</sup>	Engine running hour report shall be furnished to AO annually.
(4)	Generator engine, auxiliary machinery engine - stripped down for inspection		2.5 <sup>▲</sup>	2.5 <sup>▲</sup>	▲ May be extended once within a 5-yearly cycle determined by AO surveyor according to the engine's inspection interval, running hours or condition of maintenance
(5)	Main fire pump, emergency fire pump, bilge pump, windlass - stripped down for inspection		5	5	in accordance with AO requirements
(6)	Air Receiver (P<17.2 bar) - internal inspection		5	5	in accordance with AO requirements
(7)	- hydraulic test <sup>(*6)</sup>				hydraulic test to be carried out if rust/wear is found during inspection
(8)	Air Receiver (P≥17.2 bar) - internal inspection		5	5	in accordance with AO requirements
(9)	- hydraulic test <sup>(*6)</sup>				hydraulic test to be carried out if rust/wear is found during inspection
(10)	Tail Shaft, Propeller, Rudder, Rudder Stock - drawn out for inspection		5	5	in accordance with AO requirements
(11)	Independent Fuel Oil Tank – internal inspection & hydraulic test		5	5	in accordance with AO requirements
(12)	AC electrical circuit – main circuit breaker load test		5	5	in accordance with AO requirements
<b>(D)</b>	<b>PREVENTION AND CONTROL OF POLLUTION</b>				
(1)	Oil Pollution Prevention Installation - vessel with HKOPP certificate		5	5	in accordance with prevention of oil pollution regulation
(2)	- vessel without HKOPP certificate: hydraulic test of independent bilge water/sludge holding tank		5	5	in accordance with prevention of oil pollution regulation

**Table 7-2.2 Periodical Survey - Vessels Not Classed with AO**

Table 7-2.2 No.	Survey Item	Class/Category/Type of Vessel	Class IA >60 Passengers Vessel			Class IA ≤60 Passengers Vessel			Class I B Vessel		
			1	2	4 (full survey)	1	2	4 (full survey)	1	2	4 (full survey)
<b>(A)</b>	<b>LIFE-SAVING APPLIANCES, FIRE-FIGHTING APPARATUS</b>										

Table 7-2.2 No.	Survey Item	Class/Category/Type of Vessel	Class IA >60 Passengers Vessel			Class IA ≤60 Passengers Vessel			Class I B Vessel		
			1	2	4 (full survey)	1	2	4 (full survey)	1	2	4 (full survey)
(1)	Fixed Fire Ext. Installation CO <sub>2</sub> system - blowing test Sprinkler System - spraying test			✓			✓				
(2)	- hydraulic test		(*2)								
(3)	Fire Extinguisher, CO <sub>2</sub> Bottle - refill and hydraulic test		✓ (*3)			✓ (*3)					
(4)	Buoyant Apparatus - submerging test (*4)				✓			✓			
<b>(B)</b>	<b>CONSTRUCTION – HULL; CONDITIONS OF ASSIGNMENT</b>										
(1)	Hull - external (incl. ship bottom) inspection		✓				✓				✓ (*5)
(2)	- internal (excl. oil, water tanks and void spaces) visual inspection						✓				
(3)	- internal (incl. oil, water tanks and void spaces) inspection (*6)			✓				✓			✓ (*5)
(4)	- gauging thickness of deck, shell and bulkhead plating (*6)(*7)				✓			✓			✓ (*5)
(5)	Sea Suctions, Discharging Valves - stripped down inspection			✓			✓ (*14)	✓			✓ (*5)
(6)	Anchors, Cables, Wire Ropes - ranged out for inspection (*6)(*15)			✓				✓			
(7)	Permanent Ballast Weights - inspection(*16) (Added G.N. 6489 of 2018)		✓				✓			✓	
<b>(C)</b>	<b>CONSTRUCTION - FUEL, MACHINERY, SHAFTING, ELECTRICAL SYSTEMS</b>										
(1)	Main Engine - hydraulic test of coolers (incl. air, lub. oil, cooling water), cylinder head and water jacket			✓				✓			
							(by engine workshop) (*8)				
(2)	- overhaul of fuel oil pump, fuel nozzles			✓				✓			
							(by engine workshop) (*8)				
(3)	Main Engine and Gear Box - stripped down for inspection (*9)(*10)			✓ (*11)				✓			
							(by engine workshop) (*8)				
(4)	Generator engine, auxiliary machinery engine - stripped down for inspection				✓			✓			
							(by engine workshop) (*8)				
(5)	Main fire pump, emergency fire pump, bilge pump, windlass - stripped down for inspection			✓				✓			
(6)	Air Receiver (P<17.2 bar) - internal inspection				✓			✓			✓
(7)	- hydraulic test (*6)				✓			✓			✓

Table 7-2.2 No.	Survey Item	Class/Category/Type of Vessel	Class IA >60 Passengers Vessel			Class IA ≤60 Passengers Vessel			Class I B Vessel		
			1	2	4 (full survey)	1	2	4 (full survey)	1	2	4 (full survey)
(8)	Air Receiver (P≥17.2 bar)			✓			✓			✓	
	- internal inspection										
(9)	- hydraulic test (*6)			✓			✓			✓	
(10)	Tail Shaft, Propeller, Rudder, Rudder Stock (*6) - drawn out for inspection			✓ (*11)				✓			
(11)	Independent Fuel Oil Tank – internal inspection & hydraulic test							✓			
(12)	AC electrical circuit – main circuit breaker load test										
(D)	<b>PREVENTION AND CONTROL OF POLLUTION</b>										
(1)	Oil Pollution Prevention Installation - vessel with HKOPP certificate										
(2)	- vessel without HKOPP certificate: hydraulic test of independent bilge water/sludge holding tank							✓			✓

#### Remarks in Table 7-2.1 and 7-2.2

- \*1 Survey Intervals: “A” means such item to be subjected to survey annually; “2” biennially, “4” quadrennially (“full survey”), etc. The periodical survey shall be carried out in subsequent order; i.e. a 1st year survey shall be followed by a 2-yearly survey, a 3rd year survey shall be followed by a 4-yearly survey, etc. With the exception of hull external inspection (item ((B)(1)) and associated inspections, “2.5” means the intermediate survey, which may be carried out during the 2<sup>nd</sup> or 3<sup>rd</sup> annual survey; or the period between (i.e. the 18 months period from the start of the 2<sup>nd</sup> survey window to the end of 3<sup>rd</sup> survey window).
- \*2 Hydraulic test for CO<sub>2</sub> and sprinkler systems shall begin from the 10th anniversary the system is in service, and thereafter at intervals of 10 years. The hydraulic testing pressure for the CO<sub>2</sub> system high pressure manifold shall not be less than 125 bar.
- \*3 Inspection for portable and non-portable type fire extinguishers and CO<sub>2</sub> bottles shall be in accordance with the following table. The inspection record shall be retained on board for examination; or each fire extinguisher to be marked by paint or attached with a tag indicating the date and type of test.

ITEM	Water/Foam/Dry Powder Fire Extinguisher		CO <sub>2</sub> Fire Extinguisher, CO <sub>2</sub> Fixed Installation Bottle		
	Refill / Weighting (*a)	Hydraulic (*b)	Weighting	Refill	Hydraulic (*b)
INSPECTION BODY	Owner (*c) /FSIC	FSIC/MD	FSIC/MD	DG Reg. 62	DG Reg. 66

#### Abbreviation

- FSIC: Fire Service Installation Contractors registered in the Fire Service Department or institutions acceptable to the Director
- DG Reg. 62: A person holding a Dangerous Goods Licence issued under Reg. 62, Dangerous Goods (General) Regulation

DG Reg. 66: A person approved by Fire Service Department under Reg. 66, Dangerous Goods (General) Regulation

MD : Marine Department officer

**Note**

(\*a) The need for refilling shall be in accordance with the instruction of manufacturer of fire extinguisher.

(\*b) Intervals of hydraulic test:

Portable Fire Extinguishers - 5 years

CO<sub>2</sub> bottles/propellant cartridges - 10 years

(\*c) MD officers may examine the owner's competence on carrying out the servicing and conduct random checks including function test of the portable fire extinguishers.

- \*4 Air case not filled with buoyant materials shall be tested for air tightness by submerging in water.
- \*5 Applicable to ceremonial boat only.
- \*6 For guidance on machinery and hull wear down or corrosion tolerance limits and other inspection items, Annex M refers.
- \*7 Applicable to vessels of age exceeding 8 years.
- \*8 Inspection record issued by engine workshop shall be submitted for reference.
- \*9 For a brand new gear box, the strip down inspection shall begin from the fourth anniversary the gear box is in service.
- \*10 The survey schedule for medium speed engines (of 300~1400 rpm), Annex K-1 refers.
- \*11 Vessels carrying more than 60 passengers may apply for extension of subject items' survey interval from 2 years to 3 years if meeting the conditions set out in Annex K-2.
- \*12 For the renewal of HKOPP certificates, oil pollution prevention installation shall be stripped down for inspection. Independent bilge water holding/sludge tank shall be hydraulic tested.
- \*13 Applicable to Class I Category A vessels fitted with generator of each capacity exceeding 50kW.
- \*14 Applicable to sea water suction valves only.
- \*15 The length required to be ranged out for inspection: for anchor chains (or classification society accepted alternatives fitting) – whole length; for steel wire ropes – the whole length or a minimum length of 50m, whichever is the less. More or the whole length to be ranged out for inspection should there be major defect is found.
- \*16 Applicable to the first full survey of vessels one year after the enforcement of this Code (i.e. on or after 31.8.2019). The PBWs inspection may be carried out during the final inspection (Table 7-3 items). The inspection shall be carried out in accordance with the requirements set out in the table below:

Item	Survey Year	Tasks Shipowner Responsible for		Tasks Inspecting Personnel Responsible for
		Documents Submission	Inspection/Maintenance Arrangement	
(A)	Full Survey <sup>Note</sup>	Note: The PBWs inspections described below shall be carried out in the quadrennial full survey when a vessel has reached 8 years of age, and in every quadrennial full survey thereafter (for a classed vessel, in the special survey when the vessel has reached 10 years of age, and in every special survey thereafter), commencing one year after the enforcement of this code (i.e. on or after 31.8.2019). The first one will be a Grade A inspection, followed by a Grade B		



Item	Survey Year	Tasks Shipowner Responsible for		Tasks Inspecting Personnel Responsible for
		Documents Submission	Inspection/Maintenance Arrangement	
		inspection, alternating at 4-year intervals (for classed vessels, 5-year intervals, i.e. the special survey). If it is found during a Grade B inspection that the vessel's bottom and internal structural members with regard to PBWs stowage show no excessive corrosion (not exceeding 1/2 or more of the limit set down in Annex M of this Code) and the coating is in good condition with no significant deterioration, MD may consider the shipowner's application for having a Grade B inspection in the subsequent full survey, followed by a Grade A inspection in the next quadrennial full survey (for classed vessels, the next 5-yearly special survey).		
	Grade A Inspection	Submit the same declaration and photo records required for the PBWs inspection in the initial survey (remark *10 of Table 7-1).	<p>(1) Clear the whole area (100%) of vessel bottom used for PBWs stowage.</p> <p>(2) Assist inspecting personnel and provide necessary ventilation, lighting, etc. to facilitate the inspection described in the right-hand column.</p> <p>(3) Carry out repairs when directed by inspecting personnel.</p>	<p>(1) Confirm the area at vessel bottom used for PBWs stowage is clear, and carry out PBWs inspection items (1)~(3) of remark *10 of Table 7-1 of the initial survey.</p> <p>(2) Confirm the following during hull inspection:</p> <p>(i) steel vessel – no large area of damage or heavy rusting of hull material, no abnormal accumulation of water, etc.; protective coating (if any) in good condition.</p> <p>(ii) Aluminium, GRP and wooden vessel - no large area of damage or abnormalities of hull material, no abnormal accumulation of water, etc.; protective coating (if any) in good condition.</p> <p>(iii) gauge plating thickness (if applicable) and submit to MD a copy of the record.</p> <p>(3) If the results of the abovementioned inspection items (2)(i)~(iii) fall short of requirements, the owner shall be instructed to carry out repairs, and re-inspection shall be carried out until satisfactory results are obtained.</p> <p>(4) If the wastage of hull material has reached 3/4 or more of the corrosion limit set down in Annex M of this Code, the owner shall be instructed to renew the hull material concerned. If it cannot be done, the hull of the part concerned shall be subject to inspection annually thereafter.</p>

Item	Survey Year	Tasks Shipowner Responsible for		Tasks Inspecting Personnel Responsible for
		Documents Submission	Inspection/Maintenance Arrangement	
				(5) If heavy wastage of hull material is found, the adjoining cement PBWs (if any) shall be removed to facilitate the hull inspection.
	Grade B Inspection	<p>(1) Declaration</p> <p>(2) Upon the completion of inspection and repair (if applicable), submit to MD a copy of the photo records which shall include:</p> <ul style="list-style-type: none"> <li>(i) photos showing the condition of the hull structure with PBWs removed to expose at least 25% of the total area of the hull structure covered by PBWs; and</li> <li>(ii) the condition of the PBWs after they are restored to their original positions.</li> </ul> <p>(3) If all the PBWs have to be removed, the records required in items (1) and (2) of remark *10 of Table 7-1 for the initial survey shall be re-submitted.</p>	<p>(1) Follow inspecting personnel's instruction (as described in the right-hand column) and remove PBWs to expose at least 25% of the total area of the hull structure covered by PBWs to facilitate inspection.</p> <p>(2) carry out task items (2) and (3) of Grade A inspection.</p>	<p>(1) Instruct the owner to remove PBWs for hull structure inspection. At least 25% <sup>Notes (i), (ii)</sup> of the total area of hull structure covered by PBWs in each compartment shall be inspected.</p> <p>Note:</p> <ul style="list-style-type: none"> <li>(i) The quantity of the randomly checked PBWs shall be based on the number of PBWs removed for inspection.</li> <li>(ii) The positions subject to inspection are normally the parts of the hull that are more vulnerable to corrosion (such as the bottom of the aft part of the vessel for the stowage of PBWs). If individual PBWs cannot be removed for safety reason, the owner shall be instructed to remove all the PBWs to facilitate hull inspection. In such case, the inspection items (1)-(3) of remark *10 of Table 7-1 of the initial survey shall be carried out.</li> </ul> <p>(2) Carry out task items (2)~(5) of Grade A inspection.</p> <p>(3) Randomly select at least 10% of PBWs (but no less than one PBWs) for inspection. The inspection shall include the PBWs' appearance, markings, weight confirmation, etc.</p>
(B)	Years other than the full survey year	Declaration required in item (1) of Grade B inspection in (A), or a copy of an endorsed declaration.	Carry out task items (2) and (3) of Grade A inspection in (A) upon receipt of special instructions.	Conduct a visual inspection of the PBWs according to the documents submitted by the owner as mentioned in the left-hand column as and when necessary.

**Table 7-3 Final Inspection** <sup>(\*1)</sup>

Table 7-3 No.	Survey Item <sup>(*2)</sup>
<b>(A)</b>	<b>LIFE-SAVING APPLIANCES, FIRE-FIGHTING APPARATUS, APPLIANCES FOR PREVENTION OF COLLISION</b>
(1)	Life Saving Appliances - inspection and function test <sup>(*3)</sup>
(2)	Fire Fighting apparatus (incl. CO <sub>2</sub> fixed fire extinguishing installation, emergency fire pump, etc) - inspection and function test
(3)	Navigation Lights and Sound Signals - inspection and function test
(4)	Fire Drill, Abandon Ship Drill <sup>(*10)</sup>
<b>(B)</b>	<b>CARRIAGE OF PASSENGERS</b>
(1)	Passenger Space, Crew Space, Cabin Escape Arrangement, Bulwarks and Rails - general inspection
(2)	Passenger seats and their attachment - inspection <sup>(*4)</sup>
(3)	Signage within Passenger Space, incl. Exits Signage, Lifejacket Donning Instructions, Plan on Escape Arrangement and Fire-fighting Plan - general inspection
<b>(C)</b>	<b>CONSTRUCTION – HULL, CONDITIONS OF ASSIGNMENT</b>
(1)	Watertight / Weathertight Closing Appliances (incl. Door, Ventilator, Air Pipe, etc.) - inspection
(2)	Permanent ballast - confirmation of amount and position <sup>(*9)</sup>
(3)	General condition in Machinery Space (including fuel oil installation)
	(a) protection from injury of personnel
	(b) prevention of fire hazard
	(c) prevention of oil pollution hazard
(4)	Principal Dimensions, Engine and major machinery particulars - verification
<b>(D)</b>	<b>CONSTRUCTION - FUEL, MACHINERY, SHAFTING, ELECTRICAL SYSTEMS</b>
(1)	Main Engines, Generator Engines, Steering Gears - running test
(2)	Unattended Machinery Space Installation (Ch. IIIA/18 and Ch. IIIB/13 refer) - function test
(3)	Air Receiver Safety Valves - function test
(4)	Bilge and Oily Water Pumping System - function test
(5)	Electrical Circuit - earthing test
(6)	- insulation resistance test <sup>(*6)</sup>
(7)	- Main circuit breaker function test <sup>(*7)</sup>
(8)	Location of emergency source of electrical power shall be outside machinery space and above waterline – verification <sup>(*8)</sup>
(9)	Meters on Switchboard - function test

Table 7-3 No.	Survey Item <sup>(*2)</sup>
<b>(E)</b>	<b>PREVENTION AND CONTROL OF POLLUTION</b>
(1)	Air Emission Assessment <sup>(*5)</sup>
(2)	Prevention of Oil Pollution Installation - function test
<b>(F)</b>	<b>NAVIGATIONAL, COMMUNICATION EQUIPMENT AND OTHERS</b>
(1)	Radio Communication Equipment
(2)	Navigational Equipment
(3)	Certificates of Competency of Master and Engineer (if manoeuvring trial required) - verification
(4)	Ship Manoeuvring Trial <sup>(*11)</sup>
(5)	Operational and Safety Trial (FMEA items) <sup>(*12) (*13)</sup>
(6)	Plans and data required to be retained onboard (section 6.1 refers) - confirmation of numbers and contents
(7)	Survey report issued by MD/AS/AO/RA - verification
(8)	Inspection of remedial deficiency items in Initial / Periodical Survey
(9)	Supplementary information/data and list of inspection, testing & trial requirements relating to the type of vessel
(10)	Domestic L.P.G. Installation - inspection

**Remarks in Table 7-3**

- \*1 The final inspection shall be carried out annually for every vessel.  
(Amended G.N. 6256 of 2020)
- \*2 Where practicable the listed items may be presented for inspection prior to the final inspection.
- \*3 Random check on the condition of lifejackets is to be according to the following proportions:

Statutorily Required No. of Adult Lifejackets	Random Check	Statutorily Required No. of Children Lifejackets	Random Check
1-10	100%	1-10	100%
11-100	10 pieces	11-50	10 pieces
		51-100	20 pieces
101-1 000	10%	> 100	20%
> 1 000	100 pieces		

The counting of the number is to be 100%.

- \*4 Strength test to be carried out when necessary.
- \*5 Air emission requirements to be conducted as per Annex I-10.
- \*6 Applicable to all vessels other than Cat. B primitive vessels (kaito). For vessels other than ferries and floating restaurants, a valid EMSD registered electrical contractor (REC) issued electrical system insulation test report (with the test being conducted by an EMSD registered electrical worker (REW) within 2 weeks prior to the final inspection) is acceptable in lieu of the insulation resistance test inspection responsible by MD officer or authorized inspection personnels. A valid electrical system insulation test report shall include the relevant

necessary information. A valid electrical system insulation test report issued by an authorized inspection personnel is acceptable.

- \*7 Applicable to any vessel fitted with generator of each capacity exceeding 50 kW.
- \*8 Applicable to only a vessel which is still a new vessel when the reference to “the commencement date of the Survey Regulation” in the definition of “new vessel” under Ch. I/3.1 is substituted by “29 November 2014”.
- \*9 Refer to the requirements of remark \*10 of Table 7-1 or remark \*16 of Table 7-2.1 or 7-2.2.

(Amended G.N. 6489 of 2018)

- \*10 Applicable to launches, ferries and floating restaurants. The exact crew number indicated on the muster list shall participate in the drill.
- \*11 Applicable to ferry vessels only. The trial shall include crash ahead and astern running, turning and windlass operation test.
- \*12 Applicable to vessels of the type stated in Ch. I/4.2.
- \*13 For vessels of the type stated in Ch. I/4.2, the certificate of competence or an eyesight certificate (issued by a registered medical practitioner or registered optometrist) of the designated look-out (Ch. XII/11.1 refers) also to be verified.