





नावहन महानिदशालय, मुबइ DIRECTORATE GENERAL OF SHIPPING, MUMBAI

Merchant Shipping Notice No. 15 of 2023

File No. 13-20011/3/2020-ENGG-DGS (C-3205) Date: 09.11.2023

Subject: Guidance on "To the Satisfaction of Administration" in IMO Conventions – reg.

- 1. Paragraph 16.5 of IMO III Code [Resolution A1070(28): IMO Instruments Implementation Code] states that a Flag State while administering a safety and environmental protection programme provide guidance concerning those requirements found in the relevant international instruments that are to the satisfaction of the Administration.
- 2. The Directorate has addressed the stated requirement of guidance on "to the satisfaction of the Administration" in the Agreement with Recognized Organization, through addition of the following paragraph:
 - "While interpretations of the applicable instruments, as well as the determination of Equivalents or the acceptance of substitutes to the requirements of the applicable Instruments or to determine "the satisfaction of the Administration" as required under applicable instruments are the prerogative of the Administration. The RO shall cooperate with the Administration in their establishment as necessary and may apply the IMO interpretations and Circulars, as well as the available IACS Unified Interpretations as the case may be unless provided with written instruction to apply a different interpretation by the Administration. The interpretation of the Administration, however, shall be final and binding."
- 3. Whilst the purpose of this MSN is to further provide Regulation wise guidance on the arrangements that are to be 'to the satisfaction of the Administration' it is recognized that this is not appropriate to provide prescriptive guidance or instruction for all requirements due to the number of factors that have to be taken into consideration. In such cases the technical justification for acceptance will be considered by Competent Authority in the Directorate on a 'case by case' basis; for delegated items these should be supported by the Recognized Organization in the first instance.

- 4. The following Annexures to this MSN details the guidance on implementation of requirements that contain references "to the satisfaction of the Administration" or "to be specified by the Administration:
 - i. SOLAS 1974, as amended. (Annexure I)
 - ii. International Convention on Load Lines, 1966, as amended. (Annexure II)
 - iii. MARPOL 1973/78, as amended. (Annexure III)

This is issued with the approval of the Director General of Shipping & Additional Secretary to the Govt. of India.

Jumble Chali

(Aniruddha Chaki) E&SS-cum-DDG(Tech.)

Encl. As above

To,

- 1. The Principal Officer/ Mercantile Marine Department, Mumbai/Kolkata/ Chennai/ Kandla/Kochi.
- 2. The Surveyor-in-charge, Mercantile Marine Department, Goa/Jamnagar/Port Blair /Visakhapatnam /Tuticorin /Noida /Haldia/ Paradip /Mangalore.
- 3. All Recognised Organizations.
- 4. Indian National Ship-owners' Association (INSA), Mumbai.
- 5. CS/NA/Dy.CSS
- 6. Hindi Cell with request to provide Hindi translation.
- 7. Computer Cell with request to upload on DGS website

SOLAS 1974, as amended

Guidance on implementation of requirements which contain references "to the satisfaction of the Administration" or "to be specified by the Administration"

Sr.no.	Regulation reference	Requirement	Guidance by the Administration		
Chapte	apter II-1 Construction - Structure, subdivision and stability, machinery and electrical installations				
1	II-1/3-6.2.3	The construction and materials of all means of access and their attachment to the ship's structure shall be to the satisfaction of the Administration. The means of access shall be subject to survey prior to, or in conjunction with, its use in carrying out surveys in accordance with regulation I/10.	The relevant Class societies Rules who are RO to the Administration shall be followed. Additionally, following interpretation provided in IACS UI shall also be followed: • IACS Unified Interpretation SC190 • IACS Unified Interpretation SC191		
2	II-1/3-6.5.3	For oil tankers of less than 5,000 tonnes deadweight, the Administration may approve, in special circumstances, smaller dimensions for the openings referred to in paragraphs 5.1 and 5.2 above, if the ability to traverse such openings or to remove an injured person can be proved to the satisfaction of the Administration.	The proposal substantiating the ability to traverse or to remove an injured person shall be reviewed by RO to the Administration followed by practically demonstrating the compliance shall be considered.		
3	II-1/4.5	Where it is proposed to fit decks, inner skins or longitudinal bulkheads of sufficient tightness to seriously restrict the flow of water, the Administration shall be satisfied that proper consideration is given to beneficial or adverse effects of such structures in the calculations.	The arrangement shall be considered on case-by-case basis taking into consideration of beneficial or adverse effects such structures in the stability calculations.		
4	II-1/5.2.2	The Administration may allow the inclining test of an individual cargo ship to be dispensed with provided basic stability data are available from the inclining test of a sister ship and it is shown to the satisfaction of the Administration that reliable stability information for the exempted ship can be obtained from such basic data, as required by regulation 5-1. A lightweight survey shall be carried out upon completion and the ship shall be inclined whenever in comparison with the data derived from the sister ship, a deviation from the lightship displacement exceeding 1% for ships of 160 m or more in length and 2% for ships of 50 m or less in length and as determined by linear interpolation for	The guidance contained in the explanatory notes (RESOLUTION MSC.429(98)) to Reg. 5 shall be followed.		

		intermediate lengths or a deviation from the lightship longitudinal centre of gravity exceeding 0.5% of L is found.	
5	II-1/5-1.1	The master shall be supplied with such information to the satisfaction of the Administration as is necessary to enable him by rapid and simple processes to obtain accurate guidance as to the stability of the ship under varying conditions of service. A copy of the stability information shall be furnished to the Administration.	The stability Information shall be developed on basis of the following IMO requirements: MCS 267(85) -ADOPTION OF THE INTERNATIONAL CODE ON INTACT STABILITY, 2008 MSC/Circ.920 - Model Loading and Stability Manual MSC/Circ.456 - Guidelines for the preparation of intact stability information; MSC/Circ.706 - Guidance on intact stability of existing tankers during transfer operations; MSC.1/Circ.1228 - Revised guidance to the master for avoiding dangerous situations in following and quartering seas.
6	II-1/7-2.5	Unsymmetrical flooding is to be kept to a minimum consistent with the efficient arrangements. Where it is necessary to correct large angles of heel, the means adopted shall, where practicable, be self-acting, but in any case, where controls to equalization devices are provided, they shall be operable from above the bulkhead deck of passenger ships and the freeboard deck of cargo ships. These fittings together with their controls shall be acceptable to the Administration. Suitable information concerning the use of equalization devices shall be supplied to the master of the ship.	The relevant Class societies Rules who are RO to the Administration shall be followed.
7	II-1/9.3.2	Other wells (e.g. for lubricating oil under main engines) may be permitted by the Administration if satisfied that the arrangements give protection equivalent to that afforded by a double bottom complying with this regulation. 3.2.2 For cargo ships of less than 80 m in length the arrangements shall provide a level of safety to the satisfaction of the Administration.	For cargo ships of less than 80 m in length refer guidance contained in the explanatory notes (RESOLUTION MSC.429(98)) to Regulations 9.3.2.2, 9.6 and 9.7.
8	II-1/9.5	In the case of passenger ships to which the provisions of regulation 1.5 apply and which are engaged on regular service within the limits of a short international voyage as defined in regulation III/3.22, the Administration may permit a double bottom to be dispensed with if satisfied that	Proposals for non-fitment of a double bottom shall be considered on a case-by-case basis in the context of the overall safety of the ship and taking into account the area of operation.

		the fitting of a double bottom in that part would not be compatible with the design and proper working of the ship.	
9	II-1/9.6	Any part of a cargo ship of 80 m in length and upwards or of a passenger ship that is not fitted with a double bottom in accordance with paragraphs 1, 4 or 5, as specified in paragraph 2, shall be capable of withstanding bottom damages, as specified in paragraph 8, in that part of the ship. For cargo ships of less than 80 m in length the alternative arrangements shall provide a level of safety to the satisfaction of the Administration.	For cargo ships of less than 80 m in length refer guidance contained in the explanatory notes (RESOLUTION MSC.429(98)) to Regulations 9.3.2.2, 9.6 and 9.7.
10	II-1/10.7	In the case of unusual bottom arrangements in a cargo ship of 80 m in length and upwards or a passenger ship, it shall be demonstrated that the ship is capable of withstanding bottom damages as specified in paragraph 8. For cargo ships of less than 80 m in length the alternative arrangements shall provide a level of safety to the satisfaction of the Administration.	For cargo ships of less than 80 m in length refer guidance contained in the explanatory notes (RESOLUTION MSC.429(98)) to Regulations 9.3.2.2, 9.6 and 9.7.
11	II-1/12.6.3	If the forepeak is divided to hold two different kinds of liquids the Administration may allow the collision bulkhead to be pierced below the bulkhead deck of passenger ships and the freeboard deck of cargo ships by two pipes, each of which is fitted as required by paragraph 6.1, provided the Administration is satisfied that there is no practical alternative to the fitting of such a second pipe and that, having regard to the additional subdivision provided in the forepeak, the safety of the ship is maintained.	The arrangement shall be considered on case-by-case basis taking into account proposal demonstrating that there is no practical alternative to the fitting of such a second pipe and ensuring that the safety of the ship is maintained.
12	II-1/13.6.1	Each power-operated sliding watertight door: 3. shall be fitted with the necessary equipment to open and close the door using electric power, hydraulic power or any other form of power that is acceptable to the Administration.	The use of power other than electric and hydraulic shall be considered on case-by-case basis.
13	II-1/13-1.4	Watertight doors or ramps of satisfactory construction may be fitted to internally subdivide large cargo spaces, provided that the Administration is satisfied that such doors or ramps are essential. These doors or ramps may be hinged, rolling or sliding doors or ramps, but shall not be remotely controlled. Should any of the doors or ramps be accessible during the voyage, they shall be fitted with a device which prevents unauthorized opening.	The arrangement shall be considered on case-by-case basis

14	II-1/15.2	The arrangement and efficiency of the means for closing any opening in the shell plating shall be consistent with its intended purpose and the position in which it is fitted and generally to the satisfaction of the Administration.	The interpretation provided in IACS UR S8 & S9 for Side shell door, bow door and stern door shall be followed.
15	II-1/15.8.4	Moving parts penetrating the shell plating below the deepest subdivision draught shall be fitted with a watertight sealing arrangement acceptable to the Administration. The inboard gland shall be located within a watertight space of such volume that, if flooded, the bulkhead deck of passenger ships and the freeboard deck of cargo ships will not be submerged. The Administration may require that if such compartment is flooded, essential or emergency power and lighting, internal communication, signals or other emergency devices must remain available in other parts of the ship.	The watertight sealing arrangements acceptable to Administration or RO to Administration. Ensuring that the bulkhead/freeboard deck is not submerged as a result of flooding the watertight space surrounding the inboard gland during approval process.
16	II-1/15.8.5	All shell fittings and valves required by this regulation shall be of steel, bronze or other approved ductile material. Valves of ordinary cast iron or similar material are not acceptable. All pipes to which this regulation refers shall be of steel or other equivalent material to the satisfaction of the Administration.	The requirement provided in IACS UR P2 shall be followed.
17	II-1/16.1.1	The design, materials and construction of all watertight closures such as doors, hatches, sidescuttles, gangway and cargo ports, valves and pipes referred to in these regulations shall be to the satisfaction of the Administration.	 Pipes and valves shall compliance with requirement IACS UR P2 and recognized national / international standard Gangway and cargo ports shall comply with relent rules classification society who are RO to Administration Watertight doors, side scuttles, ash-chutes and rubbish chutes shall comply with recognized national / international standard
18	II-1/16-1	Watertight decks, trunks, tunnels, duct keels and ventilators shall be of the same strength as watertight bulkheads at corresponding levels. The means used for making them watertight, and the arrangements adopted for closing openings in them, shall be to the satisfaction of the Administration. Watertight ventilators and trunks shall be carried at least up to the bulkhead deck in passenger ships and up to the freeboard deck in cargo ships.	The arrangement shall be in compliance to relevant classification society rules who are RO to the Administration.
19	II-1/20	Water ballast should not in general be carried in tanks intended for oil fuel. In ships in which it is not practicable to avoid putting water in oil fuel tanks, oily-water separating equipment to the satisfaction of the Administration shall be fitted, or other alternative means, such as discharge to shore	The provisions of MARPOL Annex I/Reg.16.2 shall be complied

		facilities, acceptable to the Administration shall be provided for disposing of the oily-water ballast.	
20	II-1/26.2	The Administration shall give special consideration to the reliability of single essential propulsion components and may require a separate source of propulsion power sufficient to give the ship a navigable speed, especially in the case of unconventional arrangements.	The arrangement shall be in compliance to relevant classification society rules who are RO to the Administration. In case of unconventional arrangements proposal shall be considered on case-by-case basis.
21	II-1/26.6	Main propulsion machinery and all auxiliary machinery essential to the propulsion and the safety of the ship shall, as fitted in the ship, be designed to operate when the ship is upright and when inclined at any angle of list up to and including 15° either way under static conditions and 22.5° under dynamic conditions (rolling) either way and simultaneously inclined dynamically (pitching) 7.5° by bow or stern. The Administration may permit deviation from these angles, taking into consideration the type, size and service conditions of the ship	The proposal substantiating angles other than specified in this regulation taking into consideration the type, size and service condition of the ship shall be submitted for the consideration.
22	II-1/27.5	Main turbine propulsion machinery and, where applicable, main internal combustion propulsion machinery and auxiliary machinery shall be provided with automatic shutoff arrangements in the case of failures such as lubricating oil supply failure which could lead rapidly to complete breakdown, serious damage or explosion. The Administration may permit provisions for overriding automatic shutoff devices.	The following interpretation provided in MSC.1/Circ.1345 shall be followed: The consequences of overriding automatic shut-off arrangements should be established and documented.
23	II-1/29.1	Unless expressly provided otherwise, every ship shall be provided with a main steering gear and an auxiliary steering gear to the satisfaction of the Administration. The main steering gear and the auxiliary steering gear shall be so arranged that the failure of one of them will not render the other one inoperative.	The main steering gear and axillary steering gear shall comply with requirements of SOLAS Ch. II-1/Reg.29.3 and 29.4, respectively. For steering system other than traditional arrangement the following interpretation provided in MSC.1/Circ.1416 & IACS UI SC.242 shall be followed.
			For a ship fitted with multiple steering-propulsion units, such as, but not limited to, azimuthing propulsors or water jet propulsion systems, each of the steering-propulsion units should be provided with a main steering gear and an auxiliary steering gear or with two or more identical steering actuating systems in compliance with interpretation of SOLAS regulation II-1/29.6.1. The main steering gear and the auxiliary steering gear should be so arranged that the failure of one of them will not render the other one inoperative.

			For a ship fitted with a single steering-propulsion unit, the requirement in SOLAS regulation II-1/29.1 is considered satisfied if the steering gear is provided with two or more steering actuating systems and is in compliance with interpretation of SOLAS regulation II-1/29.6.1. A detailed risk assessment should be submitted in order to demonstrate that in the case of any single failure
24	II-1/29.2.1	All the steering gear components and the rudder stock shall be of sound and reliable construction to the satisfaction of the Administration. Special consideration shall be given to the suitability of any essential component which is not duplicated. Any such essential component shall, where appropriate, utilize antifriction bearings such as ball-bearings, roller bearings or sleeve-bearings which shall be permanently lubricated or provided with lubrication fittings.	The following interpretation provided in MSC.1/Circ.1416 & IACS UI SC.242 shall be followed All components used in steering arrangements for ship directional control should be of sound reliable construction to the satisfaction of the Administration or recognized organizations acting on its behalf. Special consideration should be given to the suitability of any essential component which is not duplicated. Any such essential component should, where appropriate, utilize anti-friction bearings such as ball bearings, roller bearings or sleeve bearings which should be permanently lubricated or provided with lubrication fittings
25	II-1/29.2.2	The design pressure for calculations to determine the scantlings of piping and other steering gear components subjected to internal hydraulic pressure shall be at least 1.25 times the maximum working pressure to be expected under the operational conditions specified in paragraph 3.2, taking into account any pressure which may exist in the low-pressure side of the system. At the discretion of the Administration, fatigue criteria shall be applied for the design of piping and components, taking into account pulsating pressures due to dynamic loads.	The requirements specified in IACS UR M42 shall be followed
26	II-1/29.6.3	Steering gears, other than of the hydraulic type, shall achieve standards equivalent to the requirements of this paragraph to the satisfaction of the Administration.	The proposal shall be considered on case-by-case basis taking into account interpretation provided in MSC.1/Circ.1416 and IACS UI SC.242
27	II-1/32.1	Every steam boiler and every unfired steam generator shall be provided with not less than two safety valves of adequate	The following interpretation provided in MSC.1/Circ.1286 shall be followed

		capacity. However, having regard to the output or any other features of any boiler or unfired steam generator, the Administration may permit only one safety valve to be fitted if it is satisfied that adequate protection against overpressure is thereby provided.	With respect to the application of SOLAS regulation II-1/32.1, for redundant requirement of safety valves for steam boilers and unfired steam generators, the satisfaction of the Administration that adequate protection against overpressure is provided should be confirmed by carrying out a satisfactory technical risk assessment.
28	II-1/35- 1.3.1	The bilge pumping system required by paragraph 2.1 shall be capable of operation under all practicable conditions after a casualty whether the ship is upright or listed. For this purpose wing suctions shall generally be fitted except in narrow compartments at the end of the ship where one suction may be sufficient. In compartments of unusual form, additional suctions may be required. Arrangements shall be made whereby water in the compartment may find its way to the suction pipes. Where, for particular compartments, the Administration is satisfied that the provision of drainage may be undesirable, it may allow such provision to be dispensed with if calculations made in accordance with the conditions laid down in regulations 7 and 8 show that the survival capability of the ship will not be impaired	The arrangement shall be considered on case-by-case basis taking into account damage stability calculations to ensure that the survival capability of the ship is not impaired.
29	II-1/35-1/ 3.6	Each power bilge pump shall be capable of pumping water through the required main bilge pipe at a speed of not less than 2 m/s. Independent power bilge pumps situated in machinery spaces shall have direct suctions from these spaces, except that not more than two such suctions shall be required in any one space. Where two or more such suctions are provided, there shall be at least one on each side of the ship. The Administration may require independent power bilge pumps situated in other spaces to have separate direct suctions. Direct suctions shall be suitably arranged and those in a machinery space shall be of a diameter not less than that required for the bilge main.	Every power bilge pump shall have a direct suction from the space in which it is situated provided that not more than two direct suctions shall be required in any one space, where two or more direct suctions are provided there shall be at least one on the port side and one on the starboard side.
30	II-1/35- 1.3.7.2	Where in the opinion of the Administration the main circulating pump is not suitable for this purpose, a direct emergency bilge suction shall be led from the largest available independent power-driven pump to the drainage level of the machinery space; the suction shall be of the same diameter as the main inlet of the pump used. The capacity of the pump so connected shall exceed that of a required bilge	The capacity of the pump shall be at least equal to bilge pump.

		pump by an amount deemed satisfactory by the Administration.	
31	II-1/35-1.4	At least two power pumps connected to the main bilge system shall be provided, one of which may be driven by the propulsion machinery. If the Administration is satisfied that the safety of the ship is not impaired, bilge pumping arrangements may be dispensed with in particular compartments.	The dispensation from the need to fit bilge pumping arrangement for particular compartment will be considered on case-by-case basis taking into account damage stability calculations to ensure that the survival capability of the ship is not impaired
32	II-1/41.4	Where the total installed electrical power of the main generating sets is in excess of 3 MW, the main busbars shall be subdivided into at least two parts which shall normally be connected by removable links or other approved means; so far as is practicable, the connection of generating sets and any other duplicated equipment shall be equally divided between the parts. Equivalent arrangements may be permitted to the satisfaction of the Administration.	The interpretation provided in IACS UI SC 136 shall be followed. The other approved means can be achieved by: • .1 circuit breaker without tripping mechanism; or • .2 disconnecting link or switch by which busbars can be split easily and safely. Bolted links, for example bolted busbar sections, shall not be acceptable.
33	II-1/42.1.3	The location of the emergency source of electrical power and associated transforming equipment, if any, the transitional source of emergency power, the emergency switchboard and the emergency electric lighting switchboards in relation to the main source of electrical power, associated transforming equipment, if any, and the main switchboard shall be such as to ensure to the satisfaction of the Administration that a fire or other casualty in spaces containing the main source of electrical power, associated transforming equipment, if any, and the main switchboard or in any machinery space of category A will not interfere with the supply, control and distribution of emergency electrical power. As far as practicable, the space containing the emergency source of electrical power, associated transforming equipment, if any, the transitional source of emergency electrical power and the emergency switchboard shall not be contiguous to the boundaries of machinery spaces of category A or those spaces containing the main source of electrical power, associated transforming equipment, if any, or the main switchboard.	 a) Ensuring that emergency generator room and/or emergency battery and switchboard room shall not be contiguous to the boundaries of machinery spaces of category A or spaces containing the main source of electrical power, main switchboard and associated equipment. b) Attention shall also to be paid to location and operation of any control equipment which is necessary for supply, distribution of emergency power c). Cables for emergency services shall be laid clear of galleys, laundries, machinery spaces of category A and other high fire risk areas Where they pass through such areas then such cables arrangement and type is to meet UR E 15.
34	II-1/43.1.3	The location of the emergency source of electrical power, associated transforming equipment, if any, the transitional	a) Ensuring that emergency generator room and/or emergency battery and switchboard room shall not be contiguous to the

		source of emergency power, the emergency switchboard and the emergency lighting switchboard in relation to the main source of electrical power, associated transforming equipment, if any, and the main switchboard shall be such as to ensure to the satisfaction of the Administration that a fire or other casualty in the space containing the main source of electrical power, associated transforming equipment, if any, and the main switchboard, or in any machinery space of category A will not interfere with the supply, control and distribution of emergency electrical power. As far as practicable the space containing the emergency source of electrical power, associated transforming equipment, if any, the transitional source of emergency electrical power and the emergency switchboard shall not be contiguous to the boundaries of machinery spaces of category A or those spaces containing the main source of electrical power, associated transforming equipment, if any, and the main switchboard.	boundaries of machinery spaces of category A or spaces containing the main source of electrical power, main switchboard and associated equipment. b) Attention shall also to be paid to location and operation of any control equipment which is necessary for supply, distribution of emergency power c). Cables for emergency services shall be laid clear of galleys, laundries, machinery spaces of category A and other high fire risk areas Where they pass through such areas then such cables arrangement and type is to meet UR E 15.
35	II-1/44.1	Emergency generating sets shall be capable of being readily started in their cold condition at a temperature of 0° C. If this is impracticable, or if lower temperatures are likely to be encountered, provision acceptable to the Administration shall be made for the maintenance of heating arrangements, to ensure ready starting of the generating sets.	The provision for the maintenance of heating arrangements, to ensure ready starting of the generating sets shall be considered on case-by-case basis
36	II-1/45.3.3	Where the hull return system is used, all final subcircuits, i.e. all circuits fitted after the last protective device, shall be two-wire and special precautions shall be taken to the satisfaction of the Administration.	All final sub-circuits shall consist of two insulated wires, the hull return being achieved by connecting to the hull one of the busbars of the distribution board from which they originate. Earth wires shall be in accessible locations to permit their ready examination and to enable their disconnection for testing of insulation (Refer IACS UI SC 8).
37	II-1/45.5.4	Where cables which are installed in hazardous areas introduce the risk of fire or explosion in the event of an electrical fault in such areas, special precautions against such risks shall be taken to the satisfaction of the Administration.	The interpretation provided by IACS UI SC 12 shall be followed. Special precautions shall be as follows: 1. Cables to be appropriately sheathed according to intended environment. 2. Cables to be suitably protected against mechanical damage. 3. Electrical and mechanical segregation of intrinsically safe circuits from other circuits. 4. Effective earthing of metal coverings of cables.

38	II-1/45.9.3	Accumulator batteries shall not be located in sleeping quarters except where hermetically sealed to the satisfaction of the Administration.	Accumulator batteries shall not be installed in sleeping accommodation spaces. An exception could be battery systems using gastight cells, where charging does not result in the development of harmful gases. Examples: hermetically sealed batteries/.Self-contained battery
39	II-1/45.11	In tankers, electrical equipment, cables and wiring shall not be installed in hazardous locations unless it conforms with standards not inferior to those acceptable to the Organization. However, for locations not covered by such standards, electrical equipment, cables and wiring which do not conform to the standards may be installed in hazardous locations based on a risk assessment to the satisfaction of the Administration, to ensure that an equivalent level of safety is assured.	operated lights The compliance with Classification rules, who are R0 to the Administration and any relevant IEC standards (i.e. IEC 60092-502:1999: Electrical installations in ships – Tankers) (Reference: UI SC274 IACS Int. 2015/Rev.1 2021) Further, following interpretation provided by IACS UI SC 274 shall be followed: Where the prescriptive requirements within SOLAS and related Codes (IBC, IGC) and the standards published by the International Electrotechnical Commission, such as but not limited to IEC 60092-502:1999, are not aligned, the prescriptive requirements in SOLAS and Codes take precedence and are to be applied. The differences revealed
39	II-1/46.2	Measures shall be taken to the satisfaction of the Administration to ensure that the equipment is functioning in a reliable manner and that satisfactory arrangements are made for regular inspections and routine tests to ensure continuous reliable operation.	 between the abovementioned documents are listed in Annex of SC 274 The following measures shall be considered: Survey by classification society who is RO to the administration Follow regular engine watchkeeping checks and routines. Frequency of inspection and test shall be guided by OEM or standard vessel practice. Elements relating to UMS operation (including stand-by systems) shall be specifically part of PMS / ISM.
40	II-1/46.3	Every ship shall be provided with documentary evidence, to the satisfaction of the Administration, of its fitness to operate with periodically unattended machinery spaces.	The vessel shall be in possession class certificate indicating specific notations to operate with periodically unattended machinery spaces.
41	II-2/53	The special requirements for the machinery, boiler and electrical installations shall be to the satisfaction of the Administration and shall include at least the requirements of this Regulation.	The requirement contained in Regulation II-1/53 shall be followed as minimum. Further, IACS UI SC 14 shall be referred for guidance on applicability, which states that this regulation is applicable to stand-by machines required by the Rules of the individual Societies for:

			 oil engines for propulsion purposes, steam turbines for propulsion purposes, gas turbines for propulsion purposes,
			4. controllable pitch propellers.
Chapt	er II-2 Constru	ction - Fire Protection, Fire Detection and Fire Extinction	
42	II-2/1.6.2.1	A liquid cargo with a flashpoint of less than 60°C for which a regular foam firefighting system complying with the Fire Safety Systems Code is not effective, is considered to be a cargo introducing additional fire hazards in this context. The following additional measures are required: .2 the type of foam concentrates for use in chemical tankers shall be to the satisfaction of the Administration taking into account the guidelines developed by the Organization	The guidelines provided in MSC.1/Circ.1312 and Corr.1 shall be followed.
43	II-2/1.6.6	Chemical tankers and gas carriers shall comply with the requirements for tankers, except where alternative and supplementary arrangements are provided to the satisfaction of the Administration, having due regard to the provisions of the International Bulk Chemical Code and the International Gas Carrier Code, as appropriate.	Alternative and supplementary requirements specified in IBC Code and IGC Code shall be considered for Chemical tankers and gas carriers, respectively. Any other alternative arrangement shall be considered case-by-case basis.
44	II- 2/4.2.2.5.1	Oil fuel pipes and their valves and fittings shall be of steel or other approved material, except that restricted use of flexible pipes shall be permissible in positions where the Administration is satisfied that they are necessary. Such flexible pipes and end attachments shall be of approved fireresisting materials of adequate strength and shall be constructed to the satisfaction of the Administration. For valves, fitted to oil fuel tanks and under static pressure, steel or spheroidal-graphite cast iron may be accepted. However, ordinary cast iron valves may be used in piping systems where the design pressure is lower than 7 bar and the design temperature is below 60°C.	The use flexible hose shall be permitted where it is necessary to accommodate relative movement between the machinery and the fixed piping. Flexible pipes and end attachments shall be of approved fire-resisting materials in accordance with ISO15540:1999, Fire resistance of hose assemblies - test methods and ISO15541:1999, Fire resistance of hose assemblies.
45	II-2/4.5.1.4	In combination carriers only: 4. Where cargo wing tanks are provided, cargo oil lines below deck shall be installed inside these tanks. However, the Administration may permit cargo oil lines to be placed in special ducts provided these are capable of being adequately cleaned and ventilated to the satisfaction of the Administration. Where cargo wing tanks are not provided, cargo oil lines below deck shall be placed in special ducts.	The arrangement shall be considered on case-by-case basis taking in to account following requirements of IACS UR F26 Pipe ducts in the double bottom shall comply with the following requirements: (i) They should not communicate with the engine room.

			(ii) Provision shall be made for at least two exits to the open deck arranged at a maximum distance from each other. One of these exits fitted with a watertight closure may lead to the cargo pumproom. (iii) In the duct, provision shall be made for adequate mechanical ventilation.
46	II-2/4.5.3.3	The venting system shall be provided with devices to prevent the passage of flame into the cargo tanks. The design, testing and locating of these devices shall comply with the requirements established by the Administration based on the guidelines developed by the Organization. Ullage openings shall not be used for pressure equalization. They shall be provided with self-closing and tightly sealing covers. Flame arresters and screens are not permitted in these openings.	The Revised standards for the design, testing and locating of devices to prevent the passage of flame into cargo tanks in tankers (MSC/Circ.677), as amended by MSC/Circ. 1009, and to the Revised factors to be taken into consideration when designing cargo tank venting and gas-freeing arrangements (MSC/Circ.731) shall be referred
47	II- 2/4.5.5.2.1	The requirements for inert gas systems contained in the Fire Safety Systems Code need not be applied to chemical tankers constructed before 1 January 2016, including those constructed before 1 July 2012, and all gas carriers: .1 when carrying cargoes described in regulation 1.6.1, provided that they comply with the requirements for inert gas systems on chemical tankers established by the Administration, based on the guidelines developed by the Organization.	The regulation for inert gas system on chemical tankers adopted by IMO by resolution A.567(14) and Corr.1 shall be followed.
48	II-2/4.5.6.3	The arrangements for inerting, purging or gas-freeing of empty tanks as required in paragraph 5.5.3.1 shall be to the satisfaction of the Administration and shall be such that the accumulation of hydrocarbon vapours in pockets formed by the internal structural members in a tank is minimized and that: .1 on individual cargo tanks, the gas outlet pipe, if fitted, shall be positioned as far as practicable from the inert gas/air inlet and in accordance with paragraph 5.3 and regulation 11.6. The inlet of such outlet pipes may be located either at deck level or at not more than 1 m above the bottom of the tank; .2 the cross-sectional area of such gas outlet pipe referred to in paragraph 5.6.3.1 shall be such that an exit velocity of at least 20 m/s can be maintained when any three tanks are being simultaneously supplied with inert gas. Their outlets shall extend not less than 2 m above deck level; and	 The following interpretation provided in MSC/Circ.1120 shall be followed The outlets mentioned in regulation 4.5.6.1 should be located in compliance with regulation 4.5.3.4.1.3 as far as the horizontal distance is concerned. Refer to MSC/Circ.677, as amended by MSC/Circ.1009 - Revised standards for the design, testing and locating of devices to prevent the passage of flame into cargo tanks in oil tankers, and to MSC/Circ.731 - Revised factors to be taken into consideration when designing cargo tank venting and gasfreeing arrangements.

		.3 each gas outlet referred to in paragraph 5.6.3.2 shall be fitted with suitable blanking arrangements.	
49	II-2/5.2.2.5	In passenger ships, the controls required in paragraphs 2.2.1 to 2.2.4 and in regulations 8.3.3 and 9.5.2.3 and the controls for any required fire-extinguishing system shall be situated at one control position or grouped in as few positions as possible to the satisfaction of the Administration. Such positions shall have a safe access from the open deck.	The proposal shall be considered on case-by-case basis taking into consideration of safe access from the open deck.
50	II-2/7.3.2	The function of fixed fire detection and fire alarm systems shall be periodically tested to the satisfaction of the Administration by means of equipment producing hot air at the appropriate temperature, or smoke or aerosol particles having the appropriate range of density or particle size, or other phenomena associated with incipient fires to which the detector is designed to respond.	Testing equipment shall be in accordance with the manufacturer's recommendations / instructions. The function of fixed fire detection and fire alarm systems required by the relevant regulations of this chapter shall be tested under varying conditions of ventilation after installation.
51	II-2/7.6	A fixed fire detection and fire alarm system or a sample extraction smoke detection system shall be provided in any cargo space which, in the opinion of the Administration, is not accessible, except where it is shown to the satisfaction of the Administration that the ship is engaged on voyages of such short duration that it would be unreasonable to apply this requirement.	The proposal shall be considered on case-by-case basis taking into account size and service condition of the ship.
52	II-2/8.3.4	3.4 In passenger ships, the controls required by paragraph 3.3 shall be situated at one control position or grouped in as few positions as possible to the satisfaction of the Administration. Such positions shall have a safe access from the open deck.	The proposal shall be considered on case-by-case basis taking into consideration of safe access from the open deck.
53	II- 2/9.22.3.1	In addition to complying with the specific provisions for fire integrity of bulkheads and decks of passenger ships, the minimum fire integrity of all bulkheads and decks shall be as prescribed in tables 9.1 and 9.2. Where, due to any particular structural arrangements in the ship, difficulty is experienced in determining from the tables the minimum fire integrity value of any divisions, such values shall be determined to the satisfaction of the Administration.	The proposal shall be considered on case-by-case basis
54	II-2/9. 2.2.4.4	External boundaries which are required in regulation 11.2 to be of steel or other equivalent material may be pierced for	

		the fitting of windows and sidescuttles provided that there is no requirement for such boundaries of passenger ships to have "A" class integrity. Similarly, in such boundaries which are not required to have "A" class integrity, doors may be constructed of materials which are to the satisfaction of the Administration.	Doors shall be constructed with Steel or other equivalent material. The other equivalent material means any non-combustible material, which, by itself or due to insulation provided, has structural and integrity properties equivalent to steel at the end of the applicable fire exposure to the standard fire test.
55	II-2/9. 2.3.3.4	External boundaries which are required in regulation 11.2 to be of steel or other equivalent material may be pierced for the fitting of windows and sidescuttles provided that there is no requirement for such boundaries of cargo ships to have "A" class integrity. Similarly, in such boundaries which are not required to have "A" class integrity, doors may be constructed of materials which are to the satisfaction of the Administration.	Doors shall be constructed with Steel or other equivalent material. The other equivalent material means any non-combustible material, which, by itself or due to insulation provided, has structural and integrity properties equivalent to steel at the end of the applicable fire exposure to the standard fire test.
56	II-2/9. 2.4.2.4	External boundaries which are required in regulation 11.2 to be of steel or other equivalent material may be pierced for the fitting of windows and sidescuttles provided that there is no requirement for such boundaries of tankers to have "A" class integrity. Similarly, in such boundaries which are not required to have "A" class integrity, doors may be constructed of materials which are to the satisfaction of the Administration.	Doors shall be constructed with Steel or other equivalent material. The other equivalent material means any non-combustible material, which, by itself or due to insulation provided, has structural and integrity properties equivalent to steel at the end of the applicable fire exposure to the standard fire test.
57	II-2/9. 5.2.4		The arrangement shall be considered on case-by-case basis taking into consideration of safe access from the open deck.
58	II-2/10. 2.1.2	Ready availability of water supply The arrangements for the ready availability of water supply shall be: .2 in cargo ships: .2.1 to the satisfaction of the Administration; and	The arrangement of fire pump is to be such that the at least one of the fire pumps shall be readily available for fire duty.
59	II-2/10. 2.3.2.1	Ships shall be provided with fire hoses the number and diameter of which shall be to the satisfaction of the Administration.	The hose diameter shall be maximum of 64 mm and minimum of 38 mm and they shall be lined.
60	II-2/10. 3.2.1	Accommodation spaces, service spaces and control stations shall be provided with portable fire extinguishers of appropriate types and in sufficient number to the satisfaction of the Administration. Ships of 1,000 gross	The interpretation provided in IMO MSC.1Circ.1275 shall be followed.

		tonnage and upwards shall carry at least five portable fire extinguishers.	
61	II-2/10. 7.1.2	Where it is shown to the satisfaction of the Administration that a passenger ship is engaged on voyages of such short duration that it would be unreasonable to apply the requirements of paragraph 7.1.1 and also in ships of less than 1,000 gross tonnage, the arrangements in cargo spaces shall be to the satisfaction of the Administration, provided that the ship is fitted with steel hatch covers and effective means of closing all ventilators and other openings leading to the cargo spaces	The proposal may be considered on case-by-case basis taking into account size and service condition of the vessel.
62	II-2/10. 7.3.2.4	The operational performance of each mobile water monitor shall be tested during initial survey on board the ship to the satisfaction of the Administration.	The test shall verify that: .1 the mobile water monitor can be securely fixed to the ship structure ensuring safe and effective operation; and .2 the mobile water monitor jet reaches the top tier of containers with all required monitors and water jets from fire hoses operated simultaneously.
63	II-2/13. 3.1.4	If a radiotelegraph station has no direct access to the open deck, two means of escape from or access to, the station shall be provided, one of which may be a porthole or window of sufficient size or other means to the satisfaction of the Administration.	The clear opening size shall be of 600mm X 600 mm
64	II-2/13. 3.2.6.2	Escape doors from public spaces that are normally latched shall be fitted with a means of quick release. Such means shall consist of a door-latching mechanism incorporating a device that releases the latch upon the application of a force in the direction of escape flow. Quick release mechanisms shall be designed and installed to the satisfaction of the Administration.	The design and installation shall in compliance with classification society rules who is R0 to the Administration and shall take in account following requirement of SOLAS II-2/13.3.2.6.2: Quick release mechanisms shall be designed and installed to the satisfaction of the Administration and, in particular: .1 consist of bars or panels, the actuating portion of which extends across at least one half of the width of the door leaf, at least 760 mm and not more than 1120 mm above the deck; .2 cause the latch to release when a force not exceeding 67 N is applied; and .3 not be equipped with any locking device, set screw or other arrangement that prevents the release of the latch when pressure is applied to the releasing device

65	II-2/13. 5.1	In special category and open ro-ro spaces to which any passengers carried can have access, the number and locations of the means of escape both below and above the bulkhead deck shall be to the satisfaction of the Administration and, in general, the safety of access to the embarkation deck shall be at least equivalent to that provided for under paragraphs 3.2.1.1, 3.2.2, 3.2.4.1 and 3.2.4.2. Such spaces shall be provided with designated walkways to the means of escape with a breadth of at least 600 mm. The parking arrangements for the vehicles shall maintain the walkways clear at all times.	The arrangement shall be considered on case-by-case basis taking into account requirements under paragraphs 3.2.1.1, 3.2.2, 3.2.4.1 and 3.2.4.2 of SOLAS II-2/13.
66	II-2/19. 3.1.2	The quantity of water delivered shall be capable of supplying four nozzles of a size and at pressures as specified in regulation 10.2, capable of being trained on any part of the cargo space when empty. This amount of water may be applied by equivalent means to the satisfaction of the Administration.	The following interpretation provided in IMO MSC/Circ.1120 shall be followed: The number and position of hydrants should be such that at least two of the required four jets of water, when supplied by single lengths of hose, may reach any part of the cargo space when empty; and all four jets of water, each supplied by single lengths of hose may reach any part of ro-ro cargo spaces.
67	II-2/20. 4.1	Except as provided in paragraph 4.3.1, there shall be provided a fixed fire detection and fire alarm system complying with the requirements of the Fire Safety Systems Code. The fixed fire detection system shall be capable of rapidly detecting the onset of fire. The type of detectors and their spacing and location shall be to the satisfaction of the Administration taking into account the effects of ventilation and other relevant factors. After being installed the system shall be tested under normal ventilation conditions and shall give an overall response time to the satisfaction of the Administration.	A fixed fire detection and fire alarm system shall comply with the requirements of the Fire Safety Systems Code. Additionally, the requirements contained in para.2 of MSC.1/Circ.1615 shall be referred.
	e <mark>r III – Life Sav</mark>	ring Appliances and Equipments	
68	III/4.3	Before giving approval to life-saving appliances and arrangements, the Administration shall ensure that such life-saving appliances and arrangements: 1 2 have successfully undergone, to the satisfaction of the Administration, tests which are substantially equivalent to those specified in those recommendations.	The proposal for testing standard equivalent to "Recommendation on Testing of Life-Saving Appliances adopted by the Organization by resolution A.689(17). For life-saving appliances installed on board on or after 1 July 1999, refer to the Revised Recommendations on testing of life-saving appliances adopted by the Maritime Safety Committee of the Organization by resolution MSC. 81(70)" shall be considered on case-by-case basis.

69	III/4.6	Life-saving appliances required by this chapter for which detailed specifications are not included in the Code shall be to the satisfaction of the Administration.	Life-saving appliances meeting specifications of national or international standard shall be followed.
70	III/7. 2.2	Lifejackets shall be so placed as to be readily accessible and their position shall be plainly indicated. Where, due to the particular arrangements of the ship, the lifejackets provided in compliance with the requirements of paragraph 2.1 may become inaccessible, alternative provisions shall be made to the satisfaction of the Administration which may include an increase in the number of Lifejackets to be carried.	The proposal shall be considered on case-by-case basis.
	er IV - Radio	Communication	
71	IV/16.1	Every ship shall carry personnel qualified for distress, urgency and safety communications purposes to the satisfaction of the Administration. The personnel shall be holders of the appropriate certificates specified in the Radio Regulations; one of the personnel shall be designated as having primary responsibility for communications during distress incidents.	Personnel qualified for distress, urgency and safety communications purposes to hold valid GMDSS G.O.C with STCW endorsement.
72	IV/17	A record shall be kept on board, to the satisfaction of the Administration and as required by the Radio Regulations, of all incidents connected with the radiocommunication services which appear to be of importance to safety of life at sea	The GMDSS log book shall be maintained and entries could include following: a) records of communications relating to distress, urgency and safety traffic, records of important incidents connected with the radio service, regular positions of the ship, b) results of tests (daily, weekly and monthly) carried out on the radio equipment c) Retention period of such GMDSS log book can be of 3 years
Chapte	er V – Safety o	of Navigation	
73	V/23.3.3	Safe and convenient access to, and egress from, the ship shall be provided by either: .1 a pilot ladder requiring a climb of not less than 1.5 m and not more than 9 m above the surface of the water so positioned and secured that:	The requirement specified in para.6 of IMO Resolution A.1045(27) shall be followed "Where rubbing bands or other constructional features might prevent the safe approach of a pilot boat, these should be cut back to provide at
		.1.3 each step rests firmly against the ship's side;	least 6 metres of unobstructed ship's side. Specialized offshore ships
		where constructional features, such as rubbing bands, would	less than 90 m or other similar ships less than 90 m for which a 6 m gap
		prevent the implementation of this provision, special	in the rubbing bands would not be practicable, as determined by the
		arrangements shall, to the satisfaction of the Administration,	Administration, do not have to comply with this requirement. In this
		be made to ensure that persons are able to embark and disembark safely.	case, other appropriate measures should be taken to ensure that persons are able to embark and disembark safely."
Chapte	er VI – Safety		persons are use to empara and algerisative surely.
Shapt	or tr builty	or employ	

74	VI/3.1	When transporting a solid bulk cargo which is liable to emit a toxic or flammable gas, or cause oxygen depletion in the cargo space, an appropriate instrument for measuring the concentration of gas or oxygen in the air shall be provided together with detailed instructions for its use. Such an instrument shall be to the satisfaction of the Administration.	The instrument for measuring the concentration of gas or oxygen in the air shall be in compliance with recognized national / international standard (e.g., ISO 19891-1:2017, IEC 62990-1:2019)
75	VI/6.1	Prior to loading a solid bulk cargo, the master shall be in possession of comprehensive information on the ship's stability and on the distribution of cargo for the standard loading conditions. The method of providing such information shall be to the satisfaction of the Administration.	The requirement of SOLAS - II-1/5-1 shall be referred. Further, the following provisions of regulation 7 of IMSBC Code Part B -Special provisions for solid bulk cargoes (Loading, unloading and stowage of solid bulk cargoes) shall be followed 2. To enable the master to prevent excessive stresses in the ship's structure, the ship shall be provided with a booklet, which shall be written in a language with which the ship's officers responsible for cargo operations are familiar. If this language is not English, the ship shall be provided with a booklet written also in the English language. The booklet shall, as a minimum, include: 1.1 stability data, as required by solas regulation II-1/5-1; 2.2 ballasting and de-ballasting rates and capacities; 3.3 maximum allowable load per unit surface area of the tank top plating; 4.4 maximum allowable load per hold; 5. ship's structure including any limitations on the most adverse operating conditions during loading, unloading, ballasting operations and the voyage; 6. any special restrictions such as limitations on the most adverse operating conditions imposed by the Administration or organization recognized by it, if applicable; and 7. Where strength calculations are required, maximum permissible forces and moments on the ship's hull during loading, unloading and the voyage.

			Additionally, the Code of Practice for the Safe Loading and Unloading of Bulk Carriers (BLU Code) adopted by the Organization by resolution A.862(20), as amended shall be referred.
76	VI/9.2	A ship without such a document shall not load grain until the master satisfies the Administration, or the Contracting Government of the port of loading on behalf of the Administration, that the ship will comply with the requirements of the International Grain Code in its proposed loaded condition.	The International Grain Code shall be followed.

International Convention on Load Lines, 1966, as amended

Guidance on implementation of requirements which contain references "to the satisfaction of the Administration" or "to be specified by the Administration"

Sr. No.	Regulation Reference	Requirement	Guidance by the Administration
1	Regulation 1.1	The Administration shall satisfy itself that the general structural strength of the ship is adequate for the draught corresponding to the freeboard assigned.	The relevant rules of Assigning Authority shall be followed.
2	Regulation 1.2	A ship which is designed, constructed and maintained in compliance with the appropriate requirements of an organization, including a classification society, which is recognized by the Administration or with applicable national standards of the Administration in accordance with the provisions of regulation 2-1, may be considered to provide an acceptable level of strength. The above provisions shall apply to all structures, equipment and fittings covered by this annex for which standards for strength and construction are not expressly provided.	The relevant rules of Assigning Authority shall be followed.
3	Regulation 1.3 (a)	Ships constructed before 1 July 2010 shall comply with an intact stability standard acceptable to the Administration.	Refer IMO Resolution A 749 (18), as amended by MSC Resolution 75 (69) for Ships constructed before 1 July 2010.
4	Regulation 2.3	Ships designed to carry sail, whether as the sole means of propulsion or as a supplementary means, and tugs, shall be assigned freeboards in accordance with the provisions of regulations 1 to 40, inclusive. Additional freeboard may be required as determined by the Administration.	This will be decided on a case-by-case basis by the Flag Administration.
5	Regulation 2.4	Ships of wood or of composite construction, or of other materials the use of which the Administration has approved, or ships whose constructional features are such as to render the application of the provisions of this Annex unreasonable or impracticable, shall be assigned freeboards as determined by the Administration.	This will be decided on a case-by-case basis by the Flag Administration.
6	Regulation 2.5	Regulations 10 to 26, inclusive, shall apply to every ship to which a minimum freeboard is assigned. Relaxations from these requirements may be granted to a ship to which a greater than minimum freeboard is assigned, on condition that the Administration is satisfied with the safety conditions provided.	The interpretation provided in IACS UI LL.51 Rev 2 shall be followed.

7	Regulation 8	The ring, lines and letters shall be painted in white or yellow on a dark ground or in black on a light ground. They shall also be permanently marked on the sides of the ships to the satisfaction of the Administration. The marks shall be plainly visible and, if necessary, special arrangements shall be made for this purpose.	The interpretation provided in IACS UI LL4 shall be followed. Also follow Rule 21 of MS (Load Line) Rules.
8	Regulation 10.1	The master of every new ship shall be supplied with information to arrange for the loading and ballasting of his ship in such a way as to avoid the creation of any unacceptable stresses in the ship's structure, provided that this requirement need not apply to any particular length, design or class of ship where the Administration considers it to be unnecessary.	The requirements provided IACS UR S1 shall be followed. Also follow the relevant rules & requirements of Assigning Authority.
9	Regulation 10.2	Information shall be provided to the master in a form that is approved by the Administration or a recognized organization. Stability information, and loading information also related to ship strength when required under paragraph (1), shall be carried on board at all times together with evidence that the information has been approved by the Administration.	For ships built on or after 1 July 2010, requirements provided in 2008 Intact Stability (IS) Code shall be followed. For ships built before 1 July 2010, requirements provided in IMO Resolution A 749 (18), as amended by MSC Resolution 75 (69) shall be followed.
10	Regulation 11	Bulkheads at exposed ends of enclosed superstructures shall be of an acceptable level of strength.	The relevant rules of Assigning Authority shall be followed.
11	Regulation 12(2)	Unless otherwise permitted by the administration, doors shall open outwards to provide additional security against the impact of the sea.	The Flag Administration will only permit deviation from this standard in specific circumstances of practical need, determined on a case-by-case basis by the Assigning Authority, and only if satisfied that an equivalent level of safety to an outward-opening door is achieved. Where, in exceptional circumstances, the doors are permitted to open inwards, the framing of the door panel and the securing arrangements of the door will be specifically considered. Based on the above, the Assigning Authority has to forward the details to the Flag Administration for the final acceptance.
12	Regulation 14.1	The construction and means for securing the weathertightness of cargo and other hatchways in position 1 and 2 shall be at least equivalent to the	This will be decided on a case-by-case basis by the Administration.

		requirements of regulation 16, unless the application of regulation 15 to such hatchways is granted by the Administration.	
13	Regulation 14.2	Coamings and hatchway cover to exposed hatchways on decks above the superstructure deck shall comply with the requirements of the Administration.	The Flag Administration requirement in this context is that such coamings and hatchway covers shall comply with the requirements of the Assigning Authority, taking into account their position as defined in Annex I regulation 13 (in association with its Unified Interpretation (ref. IMO MSC.1/Circ.1535)).
14	Regulation 14- 1.2	In the case of hatchways which comply with regulation 16(2) through (5), the height of these coamings may be reduced, or the coamings omitted entirely, on condition that the Administration is satisfied that the safety of the ship is not thereby impaired in any sea conditions.	Refer Note in IMO MSC.1/Circ.1535 "Note: Flush bolted access covers, which are of substantial construction and are secured by gaskets and closely spaced bolts to maintain water tightness, are not subject to the minimum sill height requirements." Coamings of reduced height may be accepted provided that they can withstand the wave loadings in regulations 16(2) through (4) and not exceed the stress levels in 16(5); in other words, they should be at least as strong and seaworthy as the hatch covers, they support. Coamings may be omitted entirely provided that the hatch covers and securing arrangements are tested for weathertightness in any sea condition and additionally the following Notice to be fixed on the hatch: "NOT TO BE OPENED AT SEA". For escape hatches coamings may be reduced based on specific circumstances of practical need, determined on a case-by-case basis. Based on the above, the Assigning Authority has to forward the details to the Flag Administration for the final acceptance.
15	Regulation 15.7	The strength and stiffness of covers made of materials other than mild steel shall be equivalent to those of mild steel to the satisfaction of the Administration	The relevant rules of Assigning Authority shall be followed.

16	Regulation 16.1	All hatchways in position 1 and 2 shall be fitted with hatch covers of steel or other equivalent material. Except as provided in regulation 14(2), such covers shall be weathertight and fitted with gaskets and clamping devices. The means for securing and maintaining weathertightness shall be to the satisfaction of the Administration. The arrangements shall ensure that the tightness can be maintained in any sea conditions, and for this purpose tests for tightness shall be required at the initial survey, and may be required at renewal and annual surveys or at more frequent intervals.	This will be decided on a case-by-case basis by the Assigning Authority following IACS Recommendation 14. A test of weathertightness should be carried out in accordance with Recommendation 14 at the installation of the hatch and at the subsequent periodical surveys or after substantial repairs.
17	Regulation 16.6	The means for securing and maintaining weathertightness by other means than gaskets and clamping shall be to the satisfaction of the Administration.	This will be decided on a case-by-case basis by the Assigning Authority following IACS Recommendation 14. A test of weathertightness should be carried out in accordance with Recommendation 14 at the installation of the hatch and at the subsequent periodical surveys or after substantial repairs.
18	Regulation 17.4	Where due to ship size and arrangement this is not practicable, lesser heights for machinery space and emergency generator room ventilator coamings, fitted with weathertight closing appliances in accordance with regulation 19(4), may be permitted by the Administration in combination with other suitable arrangements to ensure an uninterrupted, adequate supply of ventilation to these spaces.	This will be decided on a case-by-case basis. A lower height may be accepted subject to provision of weathertight closing appliances along with suitable arrangements to ensure an uninterrupted, adequate supply of ventilation to these spaces and other relevant circumstance justify it. Also refer MSC.1/Circ.1537/Rev.1, sec 2.3. Based on the above, the Assigning Authority has to forward the details to the Flag Administration for the final acceptance.
19	Regulation 19.3	Ventilators in position 1 the coamings of which extend to more than 4.5 m above the deck, and in position 2 the coamings of which extend to more than 2.3 m above the deck, need not be fitted with closing arrangements unless specifically required by the Administration.	This will be decided on a case-by-case basis by the Assigning Authority. Closing appliances need not be fitted unless the fitting of such an appliance is considered necessary by the Assigning Authority in order to provide adequate protection. See also SOLAS Chapter II-2 Regulation 5 regarding closing appliances for ventilation systems

20	Regulation 19.5	In exposed positions, the height of coamings may be required to be increased to the satisfaction of the Administration.	Where the coaming for any ventilator referred to in regulation 19(1) is situated in a position in which it will be specially exposed to weather and sea, the height of the coaming should be increased by such an amount as is necessary to provide adequate protection having regard to its position. This will be decided on a case-by-case basis by the Assigning Authority.
21	Regulation 20.2	Where these heights may interfere with the working of the ship, a lower height may be approved, provided that the Administration is satisfied that the closing arrangements and other circumstances justify a lower height.	The heights may be reduced if: a) the working of the ship would be unreasonably impaired if those heights were adhered to; b) the closing arrangements will ensure that the lower height is adequately compensated. Based on the above, the Assigning Authority has to forward the details to the Flag Administration for the final acceptance.
22	Regulation 21.1	Cargo ports and other similar openings in the sides of ships below the freeboard deck shall be fitted with doors so designed as to ensure the same watertightness and structural integrity as the surrounding shell plating. Unless otherwise granted by the Administration, these opening shall open outwards. The number of such openings shall be the minimum compatible with the design and proper working of the ship.	This will be decided on a case-by-case basis by the Flag Administration, but variation will only be permitted in exceptional circumstances.
23	Regulation 21.2	Unless otherwise permitted by the Administration, the lower edge of openings referred to in paragraph (1) shall not be below a line drawn parallel to the freeboard deck at side, which is at its lowest point at least 230 mm above the upper edge of the uppermost load line.	This will be decided on a case-by-case basis by the Flag Administration, but variation will only be permitted in exceptional circumstances.
24	Regulation 21.5	Arrangements for bow doors and their inner doors, side doors and stern doors and their securing shall be in compliance with the requirements of a recognized	The requirements provided in IACS SC 220 shall be followed.

		organization, or with the applicable national standards of the Administration	
		which provide an equivalent level of safety.	
25	Regulation 22.6	All valves and shell fittings required by this Regulation shall be of steel, bronze or other approved ductile material. Valves of ordinary cast iron or similar material are not acceptable. All pipes to which this Regulation refers shall be of steel or other equivalent material to the satisfaction of the Administration.	The requirements provided in IACS UR P2 and IACS UI LL11 shall be followed.
26	Regulation 25.2	Guard rails or bulwarks shall be fitted around all exposed decks. The height of the bulwarks or guard rails shall be at least 1 m from the deck, provided that where this height would interfere with the normal operation of the ship, a lesser height may be approved, if the Administration is satisfied that adequate protection is provided.	Requests for fitting bulwarks or guard rails of lesser height will be dealt with on a case-by-case basis by the Flag Administration.
27	Regulation 27(13)(f)	The Administration is satisfied that the stability is sufficient during intermediate stages of flooding.	This will be assessed by the Assigning Authority. Also refer MSC.1/Circ.1461.
28	Regulation 28.1	Freeboards at intermediate lengths of ship shall be obtained by linear interpolation. Ships above 365 meters in length shall be dealt with by the Administration.	The interpretation provided in IACS UI LL 18 shall be followed.
29	Regulation 39.3	Ships which, to suit exceptional operational requirements, cannot meet the requirements of paragraphs (1) and (2) of this Regulation may be given special consideration by the Administration.	This will be decided on a case-by-case basis by the flag Administration.
30	Regulation 44(6)	Timber deck cargo shall be effectively secured throughout its length by a lashing system acceptable to the Administration for the character of the timber carried.	Requirements of Resolution A.715(17), as amended shall be followed.
31	Regulation 44(9)	Where the requirements prescribed in paragraph (8) are impracticable, alternative arrangements satisfactory to the Administration shall be used.	This will be decided on a case-by-case basis by the flag Administration.

MARPOL 1973/78, as amended

Guidance on implementation of requirements which contain references "to the satisfaction of the Administration" or "to be specified by the Administration"

Sr.No.	Regulation reference	Requirement	Guidance by the Administration	
Annex I	- Regulations	Regulations for the Prevention of Pollution by Oil		
1	Ch.3/14.3	Ships, such as hotel ships, storage vessels, etc., which are stationary except for non cargo-carrying relocation voyages need not be provided with oil filtering equipment. Such ships shall be provided with a holding tank having a volume adequate, to the satisfaction of the Administration, for the total retention on board of the oily bilge water. All oily bilge water shall be retained on board for subsequent discharge to reception	The following guidance provided in paragraph 8.2 of MEPC.1/CIRC.642 [2008 Revised guidelines for systems for handling oily wastes in machinery spaces of ships incorporating guidance notes for an integrated bilge water treatment system (IBTS)], for the capacity of bilge holding tank, shall be followed Main engine rating (kW) Capacity (m³)	
		facilities.	up to 1,000 4	
			Above 1,000 up to 20,000 P/250	
			Above 20,000 40+P/500	
			Where: P = main engine rating in kW.	
	0.0445		The lesser capacity may be accepted on case-by-case basis depending on the operating profile of the vessel.	
2	Ch. 3/14.5	The Administration may waive the requirements of paragraphs 1 and 2 of this regulation for: .3 with regard to the provision of subparagraphs .1 and .2 above, the following conditions shall be complied with: .1 the ship is fitted with a holding tank having a volume adequate,	The following guidance provided in paragraph 8.2 of MEPC.1/CIRC.642 [2008 Revised guidelines for systems for handling oily wastes in machinery spaces of ships incorporating guidance notes for an integrated bilge water treatment system (IBTS)], for the capacity of bilge holding tank, shall be followed	
		to the satisfaction of the Administration, for the total retention on board	Main engine rating (kW) capacity (m³)	
		of the oily bilge water	up to 1,000 4	
			Above 1,000 up to 20,000 P/250	
			Above 20,000 40+P/500	
			Where: P = main engine rating in kW.	
			The lesser capacity may be accepted on case-by-case basis depending on the operating profile of the vessel.	
3	Ch.4/18.5	Notwithstanding the provisions of paragraph 2 of this regulation the segregated ballast conditions for oil tankers less than 150 meters in length shall be to the satisfaction of the Administration.	The unified interpretations of Annex I of MARPOL 73/78 for the Regulation 18.5, shall be followed:	
			Segregated ballast conditions for oil tankers less than 150 metres in length:	

4	Ch.4/18.8.2	The arrangements and operational procedures for dedicated clean	 In determining the minimum draught and trim of oil tankers less than 150 metres in length to be qualified as SBT oil tankers, the Administration should follow the guidance set out in appendix 1. The formulae set out in appendix 1 replace those set out in regulation 18.2, and these oil tankers should also comply with the conditions laid down in regulations 18.3 and 18.4 in order to be qualified as SBT oil tankers. The arrangements and operational procedures for dedicated clean ballast tanks should
4	·	ballast tanks shall comply with the requirements established by the Administration. Such requirements shall contain at least all the provisions of the revised Specifications for Oil Tankers with Dedicated Clean Ballast Tanks adopted by the Organization by resolution A.495(XII)	comply with all the provisions of the revised Specifications for Oil Tankers with Dedicated Clean Ballast Tanks adopted by the Organization by resolution A.495(XII)
5	Ch.4/18.8.4	Every product carrier operating with dedicated clean ballast tanks shall be provided with a Dedicated Clean Ballast Tank Operation Manual detailing the system and specifying operational procedures. Such a Manual shall be to the satisfaction of the Administration and shall contain all the information set out in the Specifications referred to in subparagraph 8.2 of this regulation. If an alteration affecting the dedicated clean ballast tank system is made, the Operation Manual shall be revised accordingly.	The dedicated clean ballast tank operation manual should contain all information set out in resolution A.495(XII).
6	Ch.4/23.3	To provide adequate protection against oil pollution in the event of collision or stranding the following shall be complied with: .1 for oil tankers of 5,000 tonnes deadweight (DWT) and above, the mean oil outflow parameter shall be as follows: $OM \leq 0.015 \text{ for } C \leq 200,000 \text{ m3}$ $OM \leq 0.012 + (0.003/200,000) (400,000\text{-C}) \text{for } 200,000 \text{ m3} < C < 400,000 \text{ m3}$ $OM \leq 0.012 \text{ for } C \geq 400,000 \text{ m3}$ for combination carriers between 5,000 tonnes deadweight (DWT) and 200,000 m3 capacity, the mean oil outflow parameter may be applied, provided calculations are submitted to the satisfaction of the Administration, demonstrating that after accounting for its increased structural strength, the combination carrier has at least equivalent oil out flow performance to a standard double hull tanker of the same size having a $OM \leq 0.015$. $OM \leq 0.021 \text{ for } C \leq 100,000 \text{ m3}$ $OM \leq 0.015 + (0.006/100,000) (200,000\text{-C}) \text{ for } 100,000 \text{ m3} < C \leq 200,000 \text{ m3}$ where: $OM = \text{mean oil outflow parameter}$.	For combination carriers between 5,000 tonnes deadweight (DWT) and 200,000 m3 capacity, the mean oil outflow parameter may be applied, provided calculations demonstrating that, after accounting for its increased structural strength, the combination carrier has at least equivalent oil outflow performance to a standard double hull tanker of the same size having an $OM \leq 0.015$ shall be submitted for approval of Administration or RO to Administration. The calculations shall take into account provisions of MEPC.122(52).

		C = total volume of cargo oil, in m3, at 98% tank filling.	
7	Ch.4/28.3	Oil tankers shall be regarded as complying with the damage stability criteria if the following requirements are met: .4 The Administration shall be satisfied that the stability is sufficient during intermediate stages of flooding.	The MSC.1/Circ.1461 shall be followed.
8	Ch.4/28.6	All oil tankers shall be fitted with a stability instrument, capable of verifying compliance with intact and damage stability requirements approved by the Administration having regard to the performance standards recommended by the Organization: 2 notwithstanding the requirements of subparagraph .1 a stability instrument fitted on an oil tanker constructed before 1 January 2016 need not be replaced provided it is capable of verifying compliance with intact and damage stability, to the satisfaction of the Administration.	The stability instrument shall comply with following requirements: • MSC.1/Circ.1229. • MSC.1/Circ.1461 • IACS UR L5
9	Ch.4/30.6.5	On oil tankers delivered on or before 31 December 1979, as defined in regulation 1.28.1, at sea dirty ballast water or oil contaminated water from cargo tank areas may be discharged below the waterline, subsequent to or in lieu of the discharge by the method referred to in subparagraph 6.4 of this paragraph, provided that: 2 such part flow arrangements comply with the requirements established by the Administration, which shall contain at least all the provisions of the Specifications for the Design, Installation and Operation of a Part Flow System for Control of Overboard Discharges adopted by the Organization.	The Appendix 4 to Unified Interpretations of MARPOL Annex I (Specifications for the design, installation and operation of a part flow system for control of overboard discharges) shall be followed.
10	Ch.4/30.7	Every oil tanker of 150 gross tonnage and above delivered on or after 1 January 2010, as defined in regulation 1.28.8, which has installed a sea chest that is permanently connected to the cargo pipeline system, shall be equipped with both a sea chest valve and an inboard isolation valve. In addition to these valves, the sea chest shall be capable of isolation from the cargo piping system whilst the tanker is loading, transporting, or discharging cargo by use of a positive means that is to the satisfaction of the Administration. Such a positive means is a facility that is installed in the pipeline system in order to prevent, under all circumstances, the section of pipeline between the sea chest valve and the inboard valve being filled with cargo.	The following Unified Interpretation of MARPOL Annex I to regulation 30.7 shall be followed Examples of positive means may take the form of blanks, spectacle blanks, pipeline blinds, evacuation or vacuum systems, or air or water pressure systems. In the event that the evacuation or vacuum systems, or air or water pressure systems are used, then these systems are to be equipped with both a pressure gauge and alarm system to enable the continuous monitoring of the status of the pipeline section, and thereby the valve integrity, between the sea chest and inboard valves.
12	Ch.4/33.2	Crude oil washing installation and associated equipment and arrangements shall comply with the requirements established by the Administration. Such requirements shall contain at least all the provisions of the Specifications for the Design, Operation and Control of Crude Oil Washing Systems adopted by the Organization. When a ship is	Crude oil washing installation and associated equipment and arrangements shall comply in accordance with the requirements of the Revised specifications for the design, operation and control of crude oil washing systems, Resolution A.446 (XI), amended by A.497 (XII) and A.897 (21).

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		not required, in accordance with paragraph 1 of this regulation to be, but is equipped with crude oil washing equipment, it shall comply with the safety aspects of the above-mentioned Specifications		
13	Ch.4/35.1	Every oil tanker operating with crude oil washing systems shall be provided with an Operations and Equipment Manual detailing the system and equipment and specifying operational procedures. Such a Manual shall be to the satisfaction of the Administration and shall contain all the information set out in the specifications referred to in paragraph 2 of regulation 33 of this Annex. If an alteration affecting the crude oil washing system is made, the Operations and Equipment Manual shall be revised accordingly.	Every oil tanker operating with crude oil washing system shall be provided with an Operations and Equipment Manual in accordance with the requirements of MEPC.3 (XII) amended by MEPC.81 (43).	
14	Ch.4/36.9	For oil tankers of less than 150 gross tonnage operating in accordance with regulation 34.6 of this Annex, an appropriate Oil Record Book should be developed by the Administration.	The provisions as applicable for oil tanker of 150 gross tonnage and above will be followed.	
Annex	Annex II - Regulation for the Control of Pollution by Noxious Liquid Substance in Bulk			
15	Ch.1/5.3.4	Notwithstanding the provisions of paragraphs 1 and 2 of this regulation, the construction and equipment of liquefied gas carriers certified to carry Noxious Liquid Substances listed in the applicable Gas Carrier Code, shall be deemed to be equivalent to the construction and equipment requirements contained in regulations 11 and 12 of this Annex, provided that the gas carrier meets all following conditions: .4 be provided with pumping and piping arrangements, which, to the satisfaction of the Administration, ensure that the quantity of cargo residue remaining in the tank and its associated piping after unloading does not exceed the applicable quantity of residue as required by regulation 12.1, 12.2 or 12.3	The piping system shall meet the performance test requirement of appendix V of MARPOL Annex II.	
16	Ch.4/11.2	In respect of ships other than chemical tankers or liquefied gas carriers certified to carry Noxious Liquid Substances in bulk identified in chapter 17 of the International Bulk Chemical Code, the Administration shall establish appropriate measures based on the Guidelines developed by the Organization in order to ensure that the provisions shall be such as to minimize the uncontrolled discharge into the sea of such substances.	The following instructions provided in Engineering Circular No.03 of 2018 shall be followed OSV Chemical Code applies to – a) OSV's, the keel of which are laid, on or after 1st July 2018, or which are at the stage where: i. construction identifiable with the vessel begins; and ii. assembly has commenced comprising at least 50 tones or 1% of the estimated mass of all structural material, whichever is less; b) Existing OSV's the keel of which were laid or which were at a similar stage of construction on or after 19th April 1990 but before 1st July 2018 are permitted to carry	

A			products as assigned for carriage on a type 2 ship in the IBC Code, provided that these OSV's comply with the OSV chemical Code, except for the amended stability provisions in chapter 2 of the OSV chemical Code. For vessels constructed before 1 July 2018, the LHNS Guidelines [Resolutions A.673(16), as amended by resolution MEPC.158(55) and MEPC.148(54)] shall be applied
17	Ch.3/9.2	n for the Prevention of Pollution by Sewage from Ship 1. Every ship which, in accordance with regulation 2, is required to comply	The sewage comminuting and disinfecting system shall be submitted for approval of
		with the provisions of this Annex shall be equipped with one of the following sewage systems: 2. a sewage comminuting and disinfecting system approved by the Administration. Such system shall be fitted with facilities to the satisfaction of the Administration, for the temporary storage of sewage when the ship is less than 3 nautical miles from the nearest land	the Administration or RO to the Administration taking into account following standards i. Faecal Coliform Standard: Faecal coliform bacteria in the effluent should not exceed 1000/100 cm³ Most Probable Number (M.P.N.); ii. Chlorine residual level to be no more than 0.5mg/l, (by test) post maceration; iii. Comminuting Standard: A sample of one litre is passed through a US Sieve No. 12 (with openings of 1.68 mm). The weight of the material retained on the screen after it has been dried to a constant weight in an oven at 103°C must not exceed 10% of the total suspended solids and shall not be more than 50mg.
18	Ch.3/9.3	1. Every ship which, in accordance with regulation 2, is required to comply with the provisions of this Annex shall be equipped with one of the following sewage systems: 3. a holding tank of the capacity to the satisfaction of the Administration for the retention of all sewage, having regard to the operation of the ship, the number of persons on board and other relevant factors. The holding tank shall be constructed to the satisfaction of the Administration and shall have a means to indicate visually the amount of its contents.	The capacity of sewage holding tank shall be determined taking into account operation of ship and number of persons carried onboard. The minimum capacity of holding tank shall be obtained from following formula Minimum capacity of the holding tank = 60 Ltrs x No. of persons x 1 day [DGS circular is being preprepared]
Annex V	/I – Regulation	n for the Prevention of Air Pollution from Ships	
19	Ch.3/13.1.1 .2	1.1 This regulation shall apply to: 2. each marine diesel engine with a power output of more than 130 kW that undergoes a major conversion on or after 1 January 2000 except when demonstrated to the satisfaction of the Administration that such	The IACS Unified interpretation MPC 103 shall be followed

		engine is an identical replacement to the engine that it is replacing and	
20	Ch.3/13.5.2 .2	is otherwise not covered under paragraph 1.1.1 of this regulation. 5.2 The standards set forth in paragraph 5.1.1 of this regulation shall not apply to: 2. a marine diesel engine installed on a ship with a combined nameplate diesel engine propulsion power of less than 750 kW if it is demonstrated, to the satisfaction of the Administration, that the ship cannot comply with the standards set forth in paragraph 5.1.1 of this regulation because of design or construction limitations of the ship	The proposal shall be considered on case-by-case basis taking into consideration of the design or construction limitations of ships for inability to meet the standards set forth in paragraph 5.1.1 of this regulation.
21	Ch.3/13.7.2	Paragraph 7.1 shall apply no later than the first renewal survey that occurs 12 months or more after deposit of the notification in paragraph 7.1. If a shipowner of a ship on which an approved method is to be installed can demonstrate to the satisfaction of the Administration that the approved method was not commercially available despite best efforts to obtain it, then that approved method shall be installed on the ship no later than the next annual survey of that ship which falls after the approved method is commercially available.	The proposal shall be considered on case-by-case basis taking into account list of approved methods and associated engines to which the approved method is applicable available on IMO GISIS portal and proposal from a shipowner demonstrating that the approved method is not commercially available despite best efforts to obtain it.
22	Ch.3/14.6	The volume of low sulphur fuel oils in each tank as well as the date, time, and position of the ship when any fuel-oil-change-over operation is completed prior to the entry into an Emission Control Area or commenced after exit from such an area, shall be recorded in such log-book or electronic record book as prescribed by the Administration.	Entry made in ships official log book shall be considered acceptable.
23	Ch.4/22	The attained EEDI shall be calculated for: .1 each new ship; .2 each new ship which has undergone a major conversion; and .3 each new or existing ship which has undergone a major conversion that is so extensive that the ship is regarded by the Administration as a newly constructed ship	Latest revision of MEPC.1/Circ.795 shall be followed for interpretation of major conversion. Extensive major conversion regarded a newly constructed ship, will be considered on a case-by-case basis