

Prevention of Collision of Ships in Ports and at High Seas

M.S. Notice 17 of 2010

No:70-NT(1)/2008-pt

Dated: 08.11.2010

Subject: Prevention of Collision of Ships in Ports and at High Seas.

1. One of the effective measures to ensure safe navigation at sea or in port waters is adherence to and observance of the International Regulations for Preventing Collision by the mariners. This regulation is simply called COLREG 1972 or Rules of the Road. This Regulations and not only aims at the prevention of the collision between ships and also contributes to the prevention of grounding, stranding and collision with structures.
2. The Government of India keeping this in mind ratified the COLREG 1972 (Regulation for Preventing Collision at Sea) on 30th May, 1973. This convention entered into force Internationally and for India on 15.07.1977.
3. The provisions of the convention have been incorporated in the Merchant Shipping Act 1958, whereas, the detailed technical rules have been framed under the provision of Merchant Shipping Act 1958. The annex to this Convention has been amended by IMO several times. The Merchant Shipping (Prevention of Collision at Sea) Regulations have been correspondingly amended by the Central Government from time to time. A few of the amendments have not been so far incorporated in the domestic laws.

PART II

Compliance with COLREG 1972 as amended

Existing National Regulations:

4. The section 285 and 286 of the Merchant Shipping Act, 1958 requires Indian ships, sailing vessels registered in India wherever they are and foreign ships and sailing vessels within Indian jurisdiction to observe and obey Collision Regulations. Section 287 of the Merchant Shipping Act, 1958 empowers Director General of shipping to appoint persons to inspect in any ports ships or sailing vessels to which the collisions regulations apply. The purpose of this inspection is to ensure that such ships or sailing vessels are properly provided with lights and shapes and means of making fog and distress signals, in pursuance of such Regulations. The Central Government has framed the following rules under the Merchant Shipping Act, 1958 that includes some the amendments adopted by the IMO till date:-
 - i. Merchant Shipping (Prevention of Collision at Sea) Regulations 1975 conform COLREG 1972;
 - ii. Merchant Shipping (Prevention of Collision at Sea) Regulations 1975 CORRIGENDA;
 - iii. Merchant Shipping (Prevention of Collision at Sea) Amendment Regulations, 1986 conforming to the 1981 amendments;
 - iv. Merchant Shipping (Prevention of Collision at Sea) Amendment Regulations, 1990 conforming to the 1987 amendments;
 - v. Merchant Shipping (Prevention of Collision at Sea) Amendment Regulations, 1990-corrigendum; and
 - vi. [Merchant Shipping Notice No. 9 of 1998](#) on the Contravention of International Regulations for Preventing Collision at Sea (IRPCs) 1972.

The existing Prevention of Collisions Regulations are under revision to cover the gaps stipulated in the 1989, 1993, 2001 and 2007 amendments adopted by International Maritime Organization (IMO) and entered into force on 19.04.1991, 4.11.1995, 29.11.2003 and 1.12.2009 respectively. Under these circumstances, the mariners including ship owners and others concerned shall

continue to comply with the relevant provisions of the act and the existing Regulations, the notices stated above and new Regulations enumerated below.

New Regulations of COLREG 1972 as amended:

5. The new provisions of COLREG 1972 adopted by IMO are as follows:

The 1989 amendments adopted on 19-10-1989 came into force on 19-04-1991

The existing text is replaced by the following:

Rule 10 (d) (i) A vessel shall not use an inshore traffic zone when she can safely use the appropriate traffic lane within the adjacent traffic separation scheme. However, vessels of less than 20m in length, sailing vessels and vessels engaged in fishing may use the inshore traffic zone.

(ii) Notwithstanding subparagraph (d) (i), a vessel may use an inshore traffic zone when en route to or from a port, offshore installation or structure, pilot station or any other place situated within the inshore traffic zone, or to avoid immediate danger.

The 1993 amendments adopted on 04-11-1993 came into force on 04-11-1995. The amended provisions are:-

Rule 26. (b) A vessel when engaged in trawling, by which is meant the dragging through the water of a dredge net or other apparatus used as a fishing appliance, shall exhibit:

two all-round lights in a vertical line, the upper being green and the lower white, or a shape consisting of two cones with their apexes together in a vertical line one above the other;

Rule 26. (c) A vessel engaged in fishing, other than trawling, shall exhibit:

two all-round lights in a vertical line, the upper being red and the lower white, or a shape consisting of two cones with apexes together in a vertical line one above the other;

Rule 26. (d) A vessel engaged in fishing in close proximity to other vessels may exhibit the additional signals described in Annex II to these Regulations.

Annex I Section 3, Section 9 and Section 13 as follows:

Section 3 (d) When only one masthead light is prescribed for a power-driven vessel, this light shall be exhibited forward of amidships; except that a vessel of less than 20m in length need not exhibit this light forward of amidships but shall exhibit it as far forward as is practicable.

Section 9 (b) (ii) If it is impracticable to comply with paragraph (b) (i) of this section by exhibiting only one all-round light, two all-round lights shall be used suitably positioned or screened so that they appear, as far as practicable, as one light at a distance of one mile.

Annex II Section 2

Section 2 (a) Vessels of 20 meters or more in length when engaged in trawling, whether using demersal or pelagic gear, may exhibit:

Section 2 (b) Each vessel of 20 meters or more in length engaged in pair trawling may exhibit:

Section 2 (c) A vessel of less than 20m in length engaged in trawling, whether using demersal or pelagic gear or engaged in pair trawling, may exhibit the lights prescribed in paragraphs (a) or (b) of this section, as appropriate.

Annex IV

Subparagraph 1.(o) Approved signals transmitted by radio communications systems, including survival craft radar transponders.

The 2001 amendments adopted on 29-11-2001 came into force on 29-11-2003-

Rule (3) (a) The word "vessel" includes every description of water craft, including non-displacement craft, WIG (Wing-In-Ground) craft and seaplanes, used or capable of being used as a means of transportation on water.

Rule (8) (a) Any action to avoid collision shall be taken in accordance with the Rules of this Part and shall, if the circumstances of the case admit, be positive, made in ample time and with due regard to the observance of good seamanship.

Rule 18 (f) (i) A WIG craft, when taking off, landing and in flight near the surface, shall keep well clear of all other vessels and avoid impeding their navigation;

A WIG craft operating on the water surface shall comply with the Rules of this Part as a power-driven vessel.

Rule 23 (c) A WIG craft only when taking off, landing and in flight near the surface shall, in addition to the lights prescribed in paragraph (a) of this Rule, exhibit a high-intensity all-round flashing red light.

Rule 31 Where it is impracticable for a seaplane or a WIG craft to exhibit lights and shapes of the characteristics or in the positions prescribed in the Rules of this Part she shall exhibit lights and shapes as closely similar in characteristics and position as is possible.

Rule 33 (a) A vessel of 12 m or more in length shall be provided with a whistle and a bell, and a vessel of 100 m or more in length shall, in addition, be provided with a gong, the tone and sound of which cannot be confused with that of the bell. The whistle, bell and gong shall comply with the specifications in Annex-III to these Regulations. The bell or gong or both may be replaced by other equipment having the same respective sound characteristics, provided that manual sounding of the prescribed signals shall always be possible.

Rule 35 (i) A vessel of 12 m or more but less than 20 m in length shall not be obliged to give the bell signals prescribed in paragraphs (g) and (h) of this Rule. However, if she does not, she shall make some other efficient sound signal at intervals of not more than 2 minutes. Annex I to read as follows:- Section 13.

High-speed craft

The masthead light of high-speed craft may be placed at a height related to the breadth of the craft lower than that prescribed in paragraph 2 (a)(i) of this annex, provided that the base angle of the isosceles triangles formed by the sidelights and masthead light, when seen in end elevation, is not less than 27 degrees.

On high-speed craft of 50 m or more in length, the vertical separation between foremast and mainmast light of 4.5 meters required by paragraph 2 (a) (ii) of this annex may be modified provided that such distance shall not be less than the value determined by the following formula:

$$Y = (a + 17\Psi) C + 2 / 1000$$

Where: y is the height of the mainmast light above the foremast light in meters;

a is the height of the foremast light above the water surface in service condition in meters;

Ψ is the trim in service condition in degrees;

C is the horizontal separation of masthead lights in meters.

Refer to the International Code of Safety for High-Speed Craft, 1994 and the international code of safety for High-Speed Craft, 2000.

Annex II to read as follows

Section 1:- Whistles

Frequencies and range of audibility

The fundamental frequency of the signal shall lie within the range 70-700 Hz. The range of audibility of the signal from a whistle shall be determined by those frequencies, which may include the fundamental and/or one or more higher frequencies, which lie within the range 180-700 Hz (+ 1%) for a vessel of 20 m or more in length, or 180-2100 Hz (+ 1%) for a vessel of less than 20 m in length and which provide the sound pressure levels specified in paragraph 1(c) below.

Sound signal intensity and range of audibility

A whistle fitted in a vessel shall provide, in the direction of maximum intensity of the whistle and at a distance of 1 meter from it, a sound pressure level in at least one 1/3 - octave band within the range of frequencies 180-700 Hz (+ 1%) for a vessel of 20 m or more in length, or 180-2100 Hz (+ 1%) for a vessel of less than 20 meters in length, of not less than the appropriate figure given in the table below:

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Length of vessel in meters	1/3 -octave band level at 1 meter in dB referred to $2 \times 10^{-5} \text{ N/m}^2$	Audibility range in nautical miles
200 or more	143	2
75 but less than 200	138	1.5
20 but less than 75	130	1
	120	0.5
Less than 20	115	
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When the measured frequencies lie within the range 180-450 Hz

When the measured frequencies lie within the range 450-800 Hz

When the measured frequencies lie within the range 800-2100 Hz

Annex II - Section 2 - Bell or Gong Paragraph (b) amended as below -

Construction

Bells and gongs shall be made of corrosion-resistant material and designed to give a clear tone. The diameter of the mouth of the bell shall be not less than 300 mm for vessels of 20 meters or more in length. Where practicable, a power-driven bell striker is recommended to ensure constant force but manual operation shall be possible. The mass of the striker shall be not less than 3% of the mass of the bell.

The 2007 amendments adopted on 29-11-2007 came into force on 01-12-2009 replaces earlier Annex IV:-

New Annex IV is as follows -

Distress signals

The following signals, used or exhibited either together or separately, indicate distress and need of assistance:

- a gun or other explosive signal fired at intervals of about a minute;
- a continuous sounding with any fog-signalling apparatus;
- rockets or shells, throwing red stars fired one at a time at short intervals;
- a signal made by radiotelegraphy or by any other signaling method consisting of the group --- . . . (SOS) in the Morse code;
- a signal sent by radiotelephony consisting of the spoken word "May-day";
- the International Code signal of distress indicated by N.C;
- a signal consisting of a square flag having above or below it a ball of anything resembling a ball;
- flames on the vessel (as from a burning tar barrel, oil barrel, etc);
- a rocket parachute flare or a hand flare showing a red light;
- a smoke signal giving off orange-colored smoke;
- slowly and repeatedly raising and lowering arms outstretched to each side;
- a distress alert by means of digital selective calling (DSC) transmitted on: i) VHF channel 70, or ii) MF/HF on the frequencies 2187.5 kHz, 4207.5 kHz, 6312 kHz, 12577 kHz or 16804.5 kHz;
- a ship-to-shore distress alert transmitted by the ship's Inmarsat or other mobile satellite service provider ship earth station;
- Signals transmitted by emergency position- indicating radio beacons;
- Approved signals transmitted by radio communications systems, including survival craft radar transponders.

The use or exhibition of any of the foregoing signals, except for the purpose of indicating distress and need of assistance and the use of other signals which may be confused with any of the above signals, is prohibited.

Attention is drawn to the relevant sections of the International Code of Signals, the International Aeronautical and Maritime Search and Rescue Manual, Volume III and the following signals:

a piece of orange-colored canvas with either a black square and circle or other appropriate symbol (for identification from the air);

a dye marker.

A copy of latest edition of Collision Regulations, 1972 highlighting these amendments along with the Indian Regulations and M.S. Notices as stated above shall be maintained on board Indian ships as well as ashore in the shipping company's office for reference purpose.

The type approval of Lights, Shapes and Sound Signaling Appliances (L & SS) for newly installed equipments shall be given by Indian Register of Shipping (IRS). The L&SS plans shall be approved by the IRS for existing and new Indian ships. The approvals granted by IRS to the vendors on behalf of Govt. of India shall be made available to the user by them. However, the Director General of Shipping is the Competent Authority for the purpose of granting exemption(s) to the Indian ships from compliance under the provision of Merchant Shipping Act, 1958.

The Director General of shipping authorizes the Principal Officer, Mercantile Marine Department District or his Authorized Official to conduct the inspection prescribed under Section 287 of the Merchant Shipping Act, 1958 and who shall detain the ship and sailing vessel if found not complying with the provisions of the relevant provisions of the act, existing and new regulations and all related notices issued by the Directorate. He shall conduct the inspection in accordance with procedure laid down in IMO resolution 787 (19) as amended by 882 (21).

The Owner, Manager, Master, Crew, Agent, and any other Person affected by the decision of Principal Officer, Mercantile Marine Department District or his Authorized Official or the Recognized Organization i.e. Indian Registrar of Shipping (IRS) or other by the Central Government has right to appeal against such decision. The appeal shall be made to the Director General of Shipping within a period of 15 days.

The Director General of Shipping notes that by far the most important contributing causes of collision is the failure to make Proper Use of Radar, Echo Sounder, Look Out, Excessive Speed and Take an Avoiding Action. Against this background, Directorate General of Shipping now issues the above the directives under the provision of Section 285 and 286 of the Merchant Shipping Act, 1958.

The Ship Owner, Ship Mangers, Mariner, Harbour Master, Pilots and other concerned in the operation of ships and sailing vessels shall comply with the existing, new regulations and other provision stated above. The Director General of Shipping upon receipt of any report from the Principal Officer, Mercantile Marine Department district or his authorized official that the provisions of this notice are infringed, may in addition to the detention of the ship initiate legal action prescribed under the act against the mariner or owner of the ship if deemed appropriate.

Co-operation of all concerned is solicited for the purpose of protecting sea borne Trade, Promoting Safety of Life, Property and Preservation of Marine Environment.

This issues with approval of Director General of Shipping.

Sd/-

(Capt. Deepak Kapoor)

Nautical Surveyor-cum-

Dy. Director General of Shipping [Tech]