

DECC 04/11

STANDARD MARKING SCHEDULE FOR OFFSHORE INSTALLATIONS

SECTION A – STRUCTURE (OR VESSEL)

1. GENERAL

- (a) Operators are required, as a condition of the consent of the Secretary of State to which this Schedule is attached, to have an auditable system to ensure that the Aids to Navigation (AtN) requirements specified in this Schedule and/or as required in the consent are fully complied with at all times. A written record shall be kept of the date and time of the inspections, and of any faults found and repairs made, and made available for inspection by any person authorised by the Environmental Management Team, Department of Energy & Climate Change (DECC) at any reasonable time.
- (b) Any deficiency needs to be corrected quickly, even when the installation is protected by operating the secondary systems. If the intensity and interval of lights and/or the volume of fog horns is discovered by any means to be significantly less than specified in this Schedule, the UK Hydrographic Office must be advised so that a decision on the issue of warnings can be taken. Such reports should be copied to the Department at the office which issued the consent to which this Schedule is attached.
- (c) Nothing in this Schedule shall affect the requirement for a vessel to comply with the relevant rules of the International Regulations for the Prevention of Collisions at Sea.

2. RADIO AND RADAR BEACONS

No radio beacon or radar beacon operating in the Marine Radio or Radar frequency bands shall be installed or used on the structure without the prior approval of the Secretary of State.

3. LIGHTS

To determine the effective <u>intensity</u> of lights, the reduction in stationary intensity arising from the rhythmic exhibition of the light shall be computed in accordance with the current IALA Recommendation on determination of effective intensity of marine aid to navigation signal lights.

3.1 MAIN LIGHT(S)

- (a) The main light(s) shall be a flashing white light (or lights operated in unison) to exhibit Morse letter "U" every 15 seconds composed to conform to the following:-
 - (i) The duration of each dot shall be equivalent to the duration of darkness between the dots and of that between the dot and the dash.
 - (ii) The duration of the dash shall be three times the duration of one dot.

- (iii) The eclipse between successive Morse letters shall be not less than 8 seconds and not more than 12 seconds.
- (b) The light(s) shall normally be mounted at not less than 12 metres and not more than 30 metres above MHWS (sea level in the case of floating rigs or vessels) and shall be arranged so that an unobstructed flashing white light is visible in any direction.
- (c) The effective intensity of each light after all losses including lantern glazing etc., have been taken into account is to be not less than 12,000 candela. The beam axis shall be directed so that it is not elevated above the horizontal or depressed below the horizon. The total beam width in the vertical plane shall be not less than 2.5° at the points on the curve of intensity distribution where the intensity is 10% of the maximum.
- (d) In exceptional cases where the height of the platform of a permanent structure is such that the main light(s) cannot be mounted below 30 metres, they may be mounted at a height above MHWS of not more than 35 metres. In such cases the beam axis shall be directed at the horizon.
- (e) The light(s) shall be exhibited from 15 minutes before sunset until sunrise and at all times when the meteorological visibility in any direction is 2 miles or less.
- (f) The structure (or vessel) shall be equipped with a secondary lighting system to come into operation automatically on failure of the main white light(s). The secondary lighting system shall be capable of continuous operation at full power for at least four calendar days (96 hours) from a power source independent of that by which the main light(s) is (are) operated. The secondary light(s) shall exhibit Morse letter 'U' every 15 seconds as detailed in paragraph 3.1(a) above and shall be mounted as required by 3.1(b) above and so arranged that an unobstructed flashing white light is visible in any direction. The effective intensity of each light after all losses including lantern glazing etc., have been taken into account is to be not less than 1,200 candela.

3.2 SUBSIDIARY LIGHTS

- (a) Flashing red lights shall also be provided and should exhibit the same characteristics as the main light(s) as described in paragraph 3.1(a) of this section; the red lights should operate in unison with each other but not necessarily in unison with the main light(s).
- (b) The subsidiary lights are to be so positioned as to clearly indicate the horizontal extent of the structure or vessel except those extremities which may have already been marked by main flashing white lights as provided by paragraph 3 above. Each subsidiary light is to provide the maximum arc of illumination possible when viewed from approaching vessels.
- (c) The effective intensity of each light after all losses including lantern glazing and red filter etc., have been taken into account is not to be less than 15 candela. The beam axis shall be directed so that it is not elevated above the horizontal or depressed below the horizon. The total beam width in the vertical plane shall be not less than 2.5° at the points on the curve of intensity distribution where the intensity is 10% of the maximum.
- (d) The lights shall be exhibited from 15 minutes before sunset until sunrise.

4. FOG SIGNALS

- (a) The <u>usual range</u> of the fog signal is to be computed in accordance with the IALA Report "The Definition and Method of Calculation of the Nominal Range and Usual Range of a Fog Signal", dated February 1968.
- (b) The fog signal(s) shall be sounded whenever the meteorological visibility in any direction is 2 sea miles or less.
- (c) The fog signal (or signals operated in unison) shall sound the Morse letter 'U' viz:-

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Blast 0.75 secs)
Silent 1.00 " )
Blast 0.75 " ) 6 secs
Silent 1.00 sec )
Blast 2.50 secs )

Silent 24.00 secs

Total period 30.00 secs
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- (d) The fog signal emitter(s) shall be mounted at not less than 12 metres and not more than 35 metres above Mean High Water Springs (sea level in the case of floating rigs or vessels) and shall be so arranged that the fog signal shall have a usual range* of at least 2 sea miles in any direction.
- (e) All structures (vessels) shall be equipped with a secondary fog signal system, with a usual range of at least ½ sea mile in any direction. The secondary fog signal, which shall be independent of the main signal is to come into operation automatically in the event of total failure of the main signal, or if partial failure of the main signal results in the usual range falling below ½ sea mile in any direction.
- (f) The main and secondary fog signals shall each be capable of operating continuously at full power for at least 96 hours from a power source independent of the main supply.
- (g) Whenever more than one electromagnetic sound emitter is fitted to a structure (vessel) no pair or emitters shall have frequencies differing by less than 10 Hz. This restriction does not apply to vertically grouped emitters or "stacks" which are designed to depress the angle of vertical sound distribution.

5. IDENTIFICATION PANELS

- (a) Identification panels shall be displayed showing the registered name or other designation of the structure (vessel) in black letters/figures at least 1 metre high on a yellow background and shall be so arranged that at least one panel is visible from any direction.
- (b) The panels must be illuminated, unless the letters/figures are on a retro-reflective background.
- (c) Retro-reflective material used for identification panels shall be of an equivalent standard to British Standard 873 covering requirements for the manufacture of road signs.

SECTION B - MOORINGS & BUOYS

- (a) Any unlighted buoys attached to the moorings of a structure shall be coloured retroreflective yellow. The buoys shall carry on their sides identification markings indicating the ownership of the installation or the name of the operating company. The characters used shall be as large as the size of the buoy allows.
- (b) The characteristics of any Cardinal buoys shall be in accordance with the IALA Maritime Buoyage system.