Appendix 5 - Specifications for Navigational Safety

Introduction

These specifications detail the 'base case' navigational markings and safety equipment to be installed on a MEC seeking a berth at FaBTest. Where for reasons of operation or otherwise these measures cannot be implemented, it will be necessary to achieve the required 'visibility' to other vessels via special marks positioned around the MEC. These additional measures will be specified and implemented by FHC but all costs will be charged to the MEC device developer.

Colour

The MEC will be treated as an oversized special navigation mark and as such should be painted yellow according to IALA Recommendation E-108 edition 2, May 2004. Some appendages to the device can be of other colours but the dominant colour above the waterline should be yellow.

Top-mark

The device should be fitted with a yellow 'X' shaped top-mark. This should appear as an 'X' when viewed from any direction. The size should give a diagonal width of approximately 700 mm or greater. This mark should be 3 m above deck level or higher.

Light

The device should display a flashing yellow light. The precise character (flash routine) of this light will be specified during the permitting process. This light should be mounted at a height of 4 m above deck level or higher. It is important that this light is not obscured by other mast structures that are close enough to cause significant obstruction. The light should be rated for a range of 4 nm or greater. For large or long MECs it may be necessary to show multiple lights to give visibility to the entire structure in which case the lights must be GPS synchronized.

Radar Reflector

The device should be fitted with a passive radar reflector to guarantee radar visibility in the event of an active radar transponder failure. This is recommended to be of the tri-Luneberg lens type to maintain maximum performance whilst pitching and rolling. The radar reflector should be mounted at a height of 3.5 m above deck level or higher.

Active Radar Transponder

An active radar transponder should be provided to maximize the radar visibility of the MEC. This should be mounted at a height of 3.5 m above deck level or higher.