

**13<sup>th</sup> CHRIS MEETING**  
**17-19 September 2001, Athens, Greece**

**DRAFT TERMS OF REFERENCE**  
**for**  
**IHO-IEC Harmonisation Group on Marine Information Objects (HGMIO)**  
(Revised June 2001)

## 1. Objective

To establish a Harmonisation Group between the International Electrotechnical Commission (IEC) and International Hydrographic Organisation (IHO) to deal with Marine Information Objects (MIO). MIOs include both chart-related and navigation related information to be used with an Electronic Chart Display and Information Systems (ECDIS) that conforms to the International Maritime Organisation (IMO) Performance Standards for ECDIS.

## 2. Authority

The IMO Performance Standards for ECDIS specify for:

a) Chart-related information:

- (i) the Electronic Navigational Chart (ENC) contains “*all the chart information necessary for safe navigation, and may contain supplementary information in addition to that contained in the paper chart (e.g., sailing directions) which may be considered necessary for safe navigation*” (Section 2.2).
- (ii) The chart information to be used in ECDIS conforms to IHO S-57 standards (Section 4.1).
- (iii) *IHO recommended colours and symbols (S-52) should be used to represent System ENC information* (Section 8.1).

b) Navigation-related information:

- (i) *Radar information or other navigational information may be added to the ECDIS display. However, it should not degrade the SENC information, and should be clearly distinguishable from the SENC information* (Section 6.1).
- (ii) *The colours and symbols other than those mentioned in 8.1 should be used to describe the navigational elements and parameters listed in Appendix 3 and published by IEC Publication 61174* (Section 8.2)

c) This technical liaison Working Group is a subsidiary of two Committees:

- (i) IHO Committee on Hydrographic Requirements for Information Systems (CHRIS).
- (ii) IEC Technical Committee No. 80 - Maritime Navigation and Radiocommunications Equipment and Systems (TC80)

## 3. Procedures

The HGMIO should:

- a) Harmonize the activities of IHO and IEC related to the provision and display of supplemental chart- and navigation- related information on ECDIS.
- b) Conduct technical exchange on MIOs with type-approval authorities, ECDIS manufacturers and ECDIS user community.

- c) Liaise with other organizations or Working Groups involved in ECDIS-related matters. This may include:
  - IMO-IHO Harmonization Group on ECDIS (HGE)
  - IHO CHRIS:
    - Transfer Standard Maintenance and Applications Development Working Group (TSMAD)
    - Colours and Symbols Maintenance WG (C&SMWG)
  - IEC TC80:
    - Working Group 7 (ECDIS)
    - Working Group 13 (Display)
  - International Association of Lighthouse Authorities (IALA)
  - World Meteorological Organization (WMO)
  - North Atlantic Treat Organization (NATO)
- d) When instructed by IHO CHRIS, draft new editions of S-52 Appendix 2.
- e) When instructed by IEC TC80, recommended new navigation-related symbols to be incorporated into IEC 61174, Annex E.

#### **4. Composition and chairmanship**

- a) The HGMIO should be comprised of individuals who are participating members of standing IHO and IEC committees or working groups.
- b) The HGMIO should be chaired by an individual who is an active participant in both IHO CHRIS and IEC TC80.

#### **5. Guiding Principles**

- a) The primary focus of developing specifications related to the use Marine Information Objects (MIOs) on ECDIS should be to supplement the minimum chart- and navigation-related information required for safety of navigation.
  - b) The HGMIO should consider other ECDIS-related developments and performance standards that may involve the display of additional navigation-related information. This would include IMO Performance Standards for Automatic Identification Systems (AIS) and VTS-related information proposed by IALA.
  - c) The HGMIO should monitor what is occurring related to ECDIS type-approval. This should include such matters as current exceptions granted and future regulations (e.g., carriage requirements).
  - d) New standards for MIOs should not be finalized without first conducting comprehensive testing and evaluation, validation by ECDIS manufacturers, and at-sea trials with mariners.
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