



IHB File No. S3/ S3/4405

CIRCULAR LETTER 11/2011
03 February 2011

CHART SPECIFICATIONS OF THE IHO (S-4)
Approval of New and Revised Specifications and Symbols for
Virtual Aids to Navigation

References: a) IHO Publication S-4 Part B: Chart Specifications of the IHO
b) IHB CL67/2010 dated 20 October - *New and Revised Specifications and Symbols for Virtual Aids to Navigation*

Dear Hydrographer,

1 The Directing Committee would like to thank the following 38 Member States who replied to CL 67/2010 that proposed the adoption of new and revised chart specifications and symbols for virtual aids to navigation: Argentina, Australia, Bahrain, Bangladesh, Canada, Chile, China, Croatia, Denmark, Finland, France, Germany, Greece, Iceland, India, Ireland, Italy, Japan, Latvia, Malaysia, Morocco, Netherlands, New Zealand, Norway, Papua New Guinea, Peru, Poland, Portugal, Republic of Korea, Singapore, Slovenia, South Africa, Spain, Sweden, Ukraine, UK, USA and Venezuela.

2 All responses supported the proposed new specifications and symbols. Australia and China suggested some changes. These suggestions, together with explanatory responses, are provided in Annex A.

3. The new and revised specifications and symbols will therefore be included in the next revision of S-4.

On behalf of the Directing Committee
Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Robert Ward', is written over a light blue horizontal line.

Robert WARD
Director

Annex A: Member States' comments

MEMBER STATES' COMMENTS

AUSTRALIA

'Virtual' aids to navigation have been included on charts for many years, e.g. traffic separation schemes. The use of the term 'virtual aids to navigation' in the context of this clause may therefore be misleading to compilers. Suggest that a tem such as 'broadcast virtual aids to navigation' or 'virtual AIS as aid to navigation' be used to replace 'virtual aids to navigation'.

CSPCWG Chairman's comments



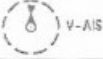
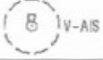
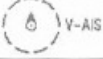

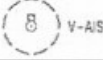


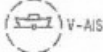
The term 'virtual aid to navigation' is well-established in hydrographic circles, IMO and IALA. IALA guideline 1081 defines a virtual aid to navigation as 'a digital information object promulgated by an authorised service provider [which might not be AIS] that can be presented on navigational systems'. We have never heard of traffic separation schemes being referred to as virtual aids to navigation although we recognise that 'virtual' objects (usually charted in magenta) have been a constituent part of nautical charts for many years.

CHINA

In principle, China agrees with the new symbols for Virtual Aids to Navigation proposed in CL 67/2010. Based on that, we suggest that:

- a) The 3mm radius radio circle is plotted in dashed or broken line, in order to identify Virtual AIS AtoN from Physical AIS AtoN distinctly.
- b) The virtual AIS AtoN of light vessel should be included. Please find the completed list proposed by China as follows:

New symbols for Virtual AIS Aids to Navigation

Category	Symbols
North cardinal mark	
East cardinal mark	
South cardinal mark	
West cardinal mark	
Port hand lateral mark	
Starboard hand lateral mark	
Isolated danger mark	
Safe water mark	
Special mark	
Emergency wreck mark	
Light vessel	

Note: The above symbols have already been used on Chinese paper charts.

CSPCWG Chairman's comments

a) A dashed radio circle had already been considered by the CSPCWG; it was rejected for various reasons including:

- *The radio circle refers to the radio transmission, which itself is not virtual;*
- *Radio circles are often broken for text or other detail, so a dashed line may reduce the prominence of the remainder of the circle;*
- *A dashed circle may not display well on digital displays. (Draft proposals for ENC include using a standard radio circle as part of the symbol to be used in ECDIS displays; currently under discussion in TSMAD and DIPWG);*
- *The 'virtual' character of the aid is clearly identified by the lack of a buoy or beacon symbol, the magenta (instead of black) topmarks and the letter 'V' adjacent to it. The use of a 'V' to denote 'virtual' is also well established in AIS systems; to quote IALA guideline 1081 again:
'Navigational displays compliant with IEC 62288, which came into force in 2008, will show Virtual AtoN as an overlay of a diamond with a V inside'.*

b) A virtual light vessel was not envisaged by CSPCWG. To be a light vessel (ie carrying a real light), it cannot be 'virtual'. If the virtual aid to navigation is solely an identification of a position (as in a landfall mark, rather than having an IALA-defined navigational purpose), then it is sufficient to show a magenta position circle surrounded by a radio circle, the V-AIS legend and an appropriate designator (name or number) if useful. A light vessel symbol in the position would be inappropriate and possibly misleading.