



S3/8151/CHRIS

**CIRCULAR LETTER 83/2004**  
**7 December 2004**

**S-57, EDITION 4.0**

- References: 1) IHB Circular Letter 60/2002, dated 4 December 2002.  
2) IHB Circular Letter 42/2003, dated 24 June 2003

Dear Hydrographer,

Circular Letter 42/2003 reported on the ongoing development of S-57, Edition 4.0, aiming at enabling S-57 to support all types of hydrographic data, and announced that the best estimate for the completion of the work was 2006.

In order to inform all potential users of S-57 of the direction that Edition 4.0 will take and the implications for producers and users of ENCs, the 16<sup>th</sup> CHRIS meeting (Ottawa, Canada, 28-31 May 2004) tasked the Chairman of TSMAD (Mr Michael Brown, USA) to coordinate the preparation of a 'white paper' to explain what was being done on S-57. This paper should be clear and understandable for the widest possible audience.

An [S-57 Edition 4.0 information paper](#) has now been produced accordingly and is available on the IHO website. French and Spanish versions are under preparation. The main points are summarized here below.

1. The primary goal for S-57 Edition 4 is to support a greater variety of hydrographic-related digital data sources, products, and customers. This includes matrix and raster data, 3-D and time-varying data (x, y, z, and time), and new applications that go beyond the scope of traditional hydrography (e.g. high-density bathymetry, seafloor classification, marine GIS). It will also enable the use of web-based services for data discovery, browsing, query, analysis, and transfer. S-57 Edition 4.0 will not be an incremental revision of Edition 3.1. Edition 4 will be a new standard that includes both additional content and a new data exchange format.

2. The present intention is to release Edition 4.0 in late 2006. Edition 3.1 will continue to be valid for many years to come, even after Edition 4.0 has been released. Since most ECDIS equipment use ENC data conforming to the ENC

Product Specification contained in S-57 Edition 3.1, Hydrographic Offices should continue to produce Edition 3.1 ENC data in order to continue to improve worldwide ENC coverage. Current plans are to release a new ENC Product Specification approximately one year after publication of S-57 Edition 4.0.

3. Due to the worldwide prominence of ISO standards, IHO S-57 will conform to the "ISO way" of standards development. This alignment with the ISO 19100 series of geographic standards will require a re-structuring of S-57 Edition 4. More specifically, this requires a new framework, and a new (or revised) set of terms used to describe the components of S-57 Edition 4.0.

Your comments on this matter will be most welcome.

On behalf of the Directing Committee  
Yours sincerely,

A handwritten signature in black ink, appearing to read "K. Barbor". The signature is stylized with a large initial "K" and a long horizontal stroke at the end.

Rear Admiral Kenneth BARBOR  
Director