

# Australia and Canada Co-operate on IHO-standard Development

The Canadian and Australian governments have joined forces to develop the Maritime Limits and Boundaries IHO standard (S-121), which is expected to improve and speed up the development of a flexible and adapted digital standard suiting all Maritime Limits and Boundaries described in the United Nations Convention on the Law of the Sea. The collaboration is aimed at producing well-integrated standards aligned with the modern needs of governments, mariners and industry.

S-121 will provide a mechanism for countries to exchange precise digital maritime boundary information and is potentially a format for depositing boundary information with the United Nations in conformance to the Convention.

Currently most hydrographic products created using IHO standards are using IHO S-57 Transfer Standard for Digital Hydrographic Data. This standard originally adopted in May 1992, was primarily developed to meet Electronic Nautical Chart (ENC) requirements driven to support Electronic Chart Display and Information System (ECDIS). the last update of S-57 standard occurred on November 2010 (version 3.1). In order to deal with more modern data requirements, S-57 structure and flexibility limitations have become counterproductive. Thus, on January 1st, 2010, the International Hydrographic Organisation adopted the Universal Hydrographic Data Model designated as S-100.

The S-100 standard is based on ISO 19100 series of geographic standards and will therefore be ISO compliant. The development of S100 standards is expected and will support a wider variety of hydrographic-related digital data sources, such as imagery and gridded data, and 4-D data (x,y,z, time). This improved flexibility will not only benefit hydrographic products but will also support new applications that go beyond the traditional scope of hydrography. This flexibility recognises that for many regulators and industries in the marine domain, hydrographic products are not the sole means of storing and presenting spatial information.

S-100 provides a platform on which these users can build subject-specific standards that can be employed across both hydrographic and non-hydrographic platforms, in particular online mapping and GIS applications.

Many standards exist or are currently under development to support ENC, bathymetric surface (published in 2012), sub-surface navigation, currents, marine protected areas, etc.

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