

## **Report on the Use of Registry by the IHO**

Until recently, the hydrographic community have not been aware of the activities of the ISO/TC211 committee. Recent presentations at some of its standards maintenance working groups however, have resulted in a realisation that any further development of IHO standards, must be done in conformance with the ISO 19000 series of standards.

Possible extensions to the IHO S-57 standard could include:

- The addition of raster and matrix data models – by way of reference to the relevant 19000 standards.
- The addition of temporal and 3D components.
- XML encapsulation
- Alignment with ISO meta-data standards

It is anticipated that future developments to the S-57 standard, will make reference to any registered lists of TC211 elements where appropriate. In particular, references are expected to be made to meta-data elements and to lists of enumerated elements, where such lists are maintained using registries.

Consideration is also being given to defining the S-57 standard as a profile of the 19000 standards. Extensions to the S-57 standard would make reference to or select from options from the 19100 series of standards.

The IHO also maintains an Object Catalogue of features and attributes that are related to Electronic Nautical Charts (ENC). Although the addition of new objects and attributes for navigational use, is strictly controlled, provision has been made for the registration of non ENC objects and attributes, using a web based registration service. The IHO would be interested in the use of registries to maintain its object catalogue and to maintain alignment with other catalogues such as the DGIWG FACC catalogue.

The ENC product supports national data in a wide number of languages. The IHO is therefore interested in cultural and linguistic adaptability issues, and in the potential use of registration reference numbers for registered elements, as a mechanism to reference the definition of elements in a language independent manner.