

Group on Earth Observations
Tenth Plenary Session – GEO-X
Geneva, Switzerland, 15-16 January 2014
Item 6 - Formal Statements from Members and Participating Organizations
on key events and activities

IHO Statement

The principal role of the IHO, the International Hydrographic Organization, is to ensure that the world's seas, oceans and coastal waters are properly surveyed and charted. Let me highlight briefly the activities of the IHO that are relevant to the objectives of GEO and the implementation of GEOSS.

The IHO supervises, jointly with the IOC (Intergovernmental Oceanographic Commission), the GEBCO project (General Bathymetric Chart of the Oceans) which is recognized as a GEO Observer. GEBCO develops and makes available a range of global reference bathymetric products which can be accessed through the GEBCO website at www.gebco.net.

GEBCO's latest bathymetric product is a global terrain model at 30 arc-second intervals. This "GEBCO Grid" was originally released in 2009. A new release is expected in 2014.

Progress in improving the bathymetry of all the world oceans relies mainly on regional mapping projects. The International Bathymetric Chart of the Arctic Ocean version 3.0 was completed at the end of 2012. The International Bathymetric Chart of the Southern Ocean version 1.0 was completed at the beginning of 2013. The Indian Ocean Bathymetric Compilation Project is now beginning and will result in a new bathymetric grid of the Indian Ocean. A new regional mapping project of the Baltic Sea has been initiated under the auspices of the Baltic Sea Hydrographic Commission.

The GEBCO products are derived from global bathymetric datasets maintained by the IHO Data Centre for Digital Bathymetry which is hosted and managed at the US National Geophysical Data Centre by NOAA. The datasets include oceanic soundings acquired by hydrographic, oceanographic and other vessels during surveys or while on passage and a selection of coastal soundings extracted from Electronic Navigational Charts (ENC).

The IHO is developing standards related to new generation digital products and services under the framework of the IHO S-100 Universal Hydrographic Model. The IOC and the WMO (World Meteorological Organization) are involved in this development through JCOMM (Joint Technical Commission for Oceanography and Marine Meteorology). S-100 conforms to the ISO 19000 series of geographical information standards. S-100 provides a framework to meet the growing requirement to include a maritime component in Spatial Data Infrastructures at the national, regional and worldwide levels. IHO Member States are developing programmes to provide seamless land-sea mapping in order to support integrated coastal zone management and marine spatial planning.

In relation with the development of Marine Spatial Data Infrastructures as well as for scientific applications, including monitoring sea-level changes, IHO Member States are also active in:

- maintaining tidal observatories,
- collecting, processing and making available long term series of tidal observations, and
- defining, establishing and maintaining vertical reference frameworks.

For further information: www.iho.int.

Contact: info@iho.int.