

All maritime activities, including the development of marine renewable energies, require detailed hydrographic information if the activity or development is to be conducted in a safe, efficient and environmentally friendly manner. The required information includes, but is not limited to, seabed topography and composition; water level variation; wave statistics and the occurrence of severe marine conditions. Based on this information a wide range of nautical charts and other products can be prepared to assist in the establishment of the infrastructure required for generating marine renewable energy. Detailed information regarding the position and description of any infrastructure established for the generation of marine renewable energy must be communicated to mariners at sea and entered on the relevant nautical charts, both paper and electronic, in order to ensure the security of the infrastructure, the safety of navigation and the protection of the marine environment.

The International Hydrographic Organization (IHO) is the intergovernmental body that brings together the national hydrographic agencies responsible for the conduct of hydrographic surveys, the production of nautical charts and the distribution of Maritime Safety Information (MSI). The requirement to provide these services is set out in Regulation V/9 of the Safety of Life at Sea (SOLAS) Convention and is therefore an obligation placed on all contracting governments. The IHO provides guidance and standards for the conduct of all such hydrographic activities and its Member States cooperate in national, regional and global fora to achieve these aims. IHO Member States have established 15 Regional Hydrographic Commissions covering the globe that provide for regional cooperation and support for these hydrographic activities.

Given the increasing significance of the oceans, for all aspects of human life, and the consequential need for accurate hydrographic information, it is of concern that of the 161 States that have ratified SOLAS (1974) only 80 are member of the IHO. Coastal States that are not members of the IHO should give serious consideration to joining the Organization in order to take full advantage of the benefits that it provides in establishing hydrographic capability. The IHO has noted a significant reduction, over the last twenty years, in the number of survey ships operated by its Member States. Whilst there has been an increase in commercial hydrographic capability, and in the productivity of hydrographic equipment, this does not fully offset the significant reduction in governmental capability. Despite the importance of the oceans to life on earth it has to be noted that more is known about the surface of the Moon and Mars than of ocean bathymetry and circulation.