

INTERNATIONAL HYDROGRAPHIC
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The International Hydrographic Organization (IHO) would appreciate your personal contribution to the preparation of a comprehensive report on the subject "Maritime security and safety" - for the ninth meeting of the Consultative Process, as requested in your letter of 14 September 2007. Clearly, safety of navigation, and consequently protection of the marine environment, is a fundamental goal of the IHO. As specified in our Convention, the IHO is an intergovernmental organization of a consultative and technical nature comprising 80 Member States each represented by their respective national hydrographic service (NHS). Its activities include the coordination of the activities of national hydrographic offices, the standardization of nautical charts and publications, and the adoption of reliable and efficient methods for conducting hydrographic surveys, all aimed at improving safety at sea. The IHO works on all these issues in close co-operation with its Member States and other international organizations, particularly the International Maritime Organization (IMO), and the Intergovernmental Oceanographic Commission (IOC).

There are three major safety-related responsibilities of the IHO: the collection of hydrographic data by undertaking hydrographic surveys under national jurisdiction, the production of nautical charts, in particular electronic navigational Charts (ENCs); and the promulgation of Maritime Safety Information (MSI). Contracting Governments to SOLAS, under Regulation 9 of Chapter V, are obliged to satisfy these hydrographic requirements. The IHO has developed and organized funding for Capacity Building and Training activities on the above subjects for developing countries, in order to enhance their hydrographic capabilities and their national infrastructures to respond to safety needs and requirements.

Current IHO activities for improving safety at sea are of three

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Collection of hydrographic data

Safety at sea very much depends on the existence and availability of accurate and up-to-date hydrographic data. Contracting Governments in SOLAS, when recommending the IHO, are responsible for collecting these data, by undertaking hydrographic surveys, production of nautical charts and other products needed for navigational safety. This exercise should be considered as a fundamental responsibility and obligation of maritime States.

The IHO, recognizing the technological developments achieved over the past 10 years in the equipment and techniques used for hydrographic surveys, especially in depth measurement and positioning at sea, the experience gained with the use of the existing Standards for the execution of hydrographic surveys and taking into account comments made by IHO Member States, the maritime industry and mariners,

- a. has established a Group of Experts to review the IHO Standards for hydrographic surveys and propose improvements that will enhance safety. This work is expected to be completed by the end of 2007 for approval by the IHO Member States;
- b. has coordinated its Member States' efforts, through its Regional Delegation Commissions, with respect to the collection of hydrographic data, especially the recurring surveys of coastal waters, harbours, ports, straits, narrow channels and channels.

Production of Electronic Navigational Charts (ENCs)

The risk of loss of life and the threat to ships and goods and to the marine environment as a result of maritime collisions and groundings are self-evident. Accurate and up-to-date nautical charts in a uniform format provide a fundamental tool to assist competent mariners to avoid collisions and groundings. It has been accepted by IMO, Classification Societies, Maritime Safety Administrations and mariners, that the use of ENCs within an Electronic Chart Display and Information System (ECDIS) developed and accepted by IHO and IMO, further reduces the risk of groundings and collisions by instantaneously plotting the ship's position and displaying critical navigational information and providing certain advance warnings in a clear and concise manner.

The IHO is working closely with IMO and is coordinating the efforts of its Member States in order to have an appropriate coverage of consistent ENCs in place by 2000, by which time mandatory carriage requirements for ECDIS could be introduced by IMO.

Promulgation of Maritime Safety Information (MSI)

MSI is critical to safety. MSI provides essential navigational and meteorological warnings and other urgent safety-related messages in any part of the seas and oceans through an internationally coordinated network of coastal transmissions and satellite broadcasts via Inmarsat. Advances in MSI through the Global Maritime Distress Safety System (GMDSS) have improved the dissemination and receipt of MSI by ships at sea and by shore-based institutions equipped to provide assistance to shipping, thus enhancing safety through the prevention of marine incidents.

The IHO and IMO work in close cooperation to improve procedures used by the NAVAREA Coordinators for the collection and promulgation of MSI, make effective use of new technologies that will enhance safety at sea; and respond to requests for the promulgation of additional information related to security issues in ports and on ships and for the prevention of accidents and support in cases of man-made disasters.

Capacity Building and Training

The IHO, through its fifteen Regional Hydrographic Commissions which cover all oceans and seas, has developed a Capacity Building and Training programme in order to establish or enhance their hydrographic capabilities and provide support to safety at sea at national, regional and global levels in accordance with the obligations and requirements of Regulation 9 of Chapter V of SOLAS. Every year, the IHO organizes seminars, symposia and training activities in different parts of the world on the three main activities described above directly related to security and safety. Currently, the IHO has planned the following training activities for the last quarter of 2007:

- a. Workshop on MSI for the benefit of the countries in the North Indian Ocean and ROPME sea regions in Jubail, Saudi Arabia, 13-14 November 2007.
- b. Workshop on fluvial hydrographic surveying to be held in Iquitos, Peru, 14-16 November 2007.
- c. Seminar on MSI in Maputo, Mozambique, 13-15 November 2007.

The IHO, in cooperation with the IOC, has visited countries bordering the Indian Ocean (Bangladesh, Thailand, Seychelles, Mauritius, Madagascar, Myanmar, Sri Lanka, Mozambique and Tanzania) in order to interact with and provide guidance and technical support to acquire and utilize coastal bathymetric data and information, in preparation of products and charts, against extreme events like tsunami, thus supporting safety at sea, maintaining coastal protection. This support will be provided to other countries and in different areas, as considered appropriate.

Conclusion

The IHO and its Member States have a long history of advocating safety of navigation through the collection of the appropriate hydrographic data and information, the production of nautical charts and publications and the promulgation of MSI. The IHO is aggressively pursuing, especially in developing countries, an increased capacity to collect and process hydrographic data using modern techniques, an appropriate and accurate chart coverage and the promulgation of urgent safety information. The IHO will continue to cooperate with IMO, IOC and other organizations for the provision of hydrographic services that will support and increase safety and security.

There are 167 participating nations in IMO. The IHO encourages new member States to join its current membership of 80, believing that, in this way, it can benefit support, especially by joining the IHO, member States have better opportunities through their participation in the work of IHO, to benefit and enhance their hydrographic, cartographic and geospatial capabilities, products and services for their flag participating maritime industry and security.