



The International Hydrographic Organization

Current Activities

Vice Admiral Alexandros Maratos
President of the IHB



Overview



1. The IHO.
2. International Resolutions
3. IHO Standards
4. Capacity Building
5. Uses of Hydrographic Data



HYDROGRAPHY - DEFINITION



That branch of applied sciences which deals with the measurement and description of the features of the sea and coastal areas for the primary purpose of navigation and all other marine purposes and activities including (inter alia) offshore activities, research, protection of the environment and prediction services.



INTERNATIONAL HYDROGRAPHIC BUREAU



- 1908 International Congress of Navigation, St Petersburg
- 1912 International Maritime Conference, St Petersburg
- 1919 International Hydrographic Conference, London
- 1921 The IHB was established by 24 nations and tasked to support Safety of Navigation and the Protection of the Marine Environment.

At the invitation of HSH Prince Albert 1st, a noted marine scientist, it was headquartered in Monaco where it remains today.



INTERNATIONAL HYDROGRAPHIC ORGANIZATION



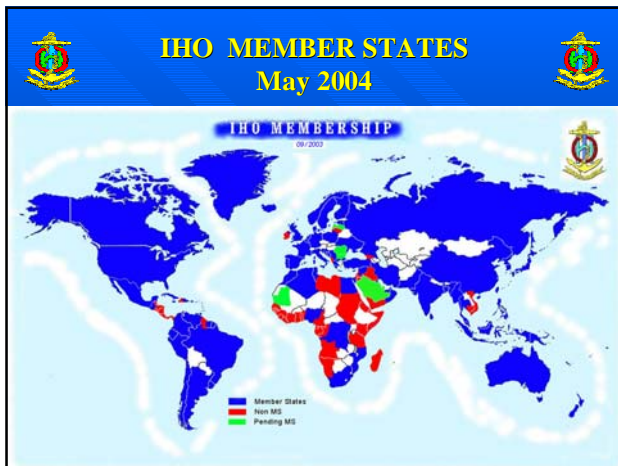
1970 – An International Convention changed the name and legal status.

The IHO comprises an International Hydrographic Conference and the International Hydrographic Bureau



INTERNATIONAL HYDROGRAPHIC BUREAU





IHO MEMBER STATES May 2004

ALGERIA	FINLAND	NIGERIA	TUNISIA
ARGENTINA	FRANCE	NORWAY	TURKEY
AUSTRALIA	GERMANY	OMAN	UKRAINE
BAHRAIN	GREECE	PAKISTAN	UNITED ARAB
BANGLADESH	GUATEMALA	PAPUA NEW GUINEA	EMIRATES
BELGIUM	ICELAND	PERU	UNITED KINGDOM
BRAZIL	INDIA	PHILIPPINES	URUGUAY
CANADA	INDONESIA	POLAND	USA (NOAA, CNMOC)
CHILE	IRAN	PORTUGAL	(NIMA)
CHINA	ITALY	RUSSIA	VENEZUELA
COLOMBIA	JAMAICA	SERBIA/MONTENEGRO	
CONGO	JAPAN	SINGAPORE	
CROATIA	KOREA-Rep	SLOVENIA	Pending:
CUBA	KUWAIT	SOUTH AFRICA	BULGARIA
CYPRUS	MALAYSIA	SPAIN	LATVIA
DENMARK	MEXICO	SRI LANKA	MAURITANIA
DOMINICAN REP	MONACO	SURINAM	MAURITIUS
DR KOREA	MOROCCO	SWEDEN	QATAR
Ecuador	MOZAMBIQUE	SYRIA	ROMANIA
EGYPT	MYANMAR	THAILAND	SAUDI ARABIA
ESTONIA	NETHERLANDS	TONGA	
FIJI	NEW ZEALAND	TRINIDAD AND TOBAGO	

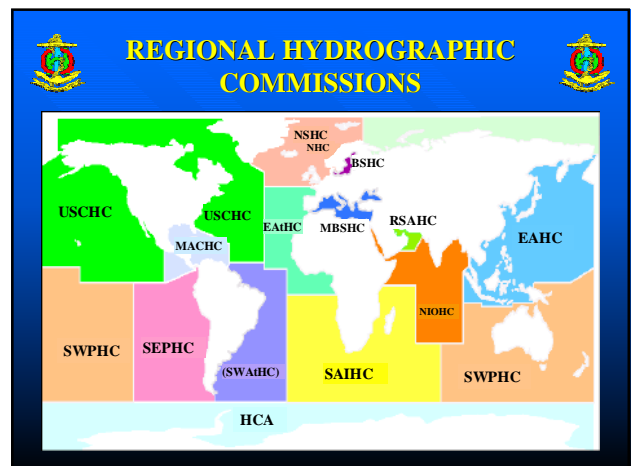
- ### IHO - Objectives
- The Objectives of the IHO are to:
 - Co-ordinate the activities of national hydrographic offices
 - Maximise uniformity of nautical charts and documents
 - Adopt reliable and efficient methods of carrying out and exploiting hydrographic surveys
 - Develop the science of hydrography and techniques used in descriptive oceanography

- ### IHO – Strategic Issues
- The Strategic Issues Approved at the 2000 Extraordinary Conference were:
 - Transition to the digital era.
 - Achievement of an adequate global hydrographic data coverage.
 - Responding to the external environment.
 - Achievement of adequate funding.
 - Capacity building.
 - Providing services other than for navigation.

COOPERATION AND COORDINATION

An International Organization
with
a strong Regional Focus

15 Regional Hydrographic Commissions
Hydrographic Committee on Antarctica





COORDINATION



The IHO has 17 Committees, Working Groups and Advisory Boards, (5 of which include other International Organizations)

These are tasked to examine important issues and provide guidance and direction for the benefit of all Member States.



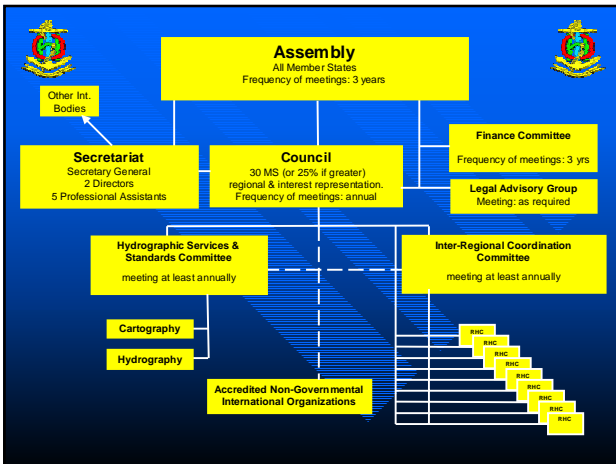
STRATEGIC PLANNING WORKING GROUP



An SPWG has been reviewing the structure and processes of the IHO. Its report will be considered at an:

Extraordinary International Hydrographic Conference

Monaco 11 – 15 April 2005.



International Conventions and Resolutions



- Safety of Life at Sea (SOLAS) – A revised Chapter V entered into force in July 2002.
- IMO Assembly Resolution 958(23) was adopted in December 2003
- UN General Assembly Resolution A/53/32 adopted in 1998
- UN General Assembly Resolution A/58/240 adopted in 2003



SOLAS - Chapter V - Regulation 9 Hydrographic Services



Contracting Governments are required to:

- Conduct hydrographic surveys.
- Issue and maintain official charts and publications.
- Provide data management services to support these services.
- Ensure the greatest uniformity possible taking into account, whenever possible, the relevant resolutions and recommendations of the IHO.
- Co-ordinate activities to the greatest possible degree.





SOLAS - Chapter V - Regulation 2 Definitions





*Nautical chart or nautical publication is a special-purpose map or book, or a specially compiled database from which such a map or book is derived, that is issued officially by or on the authority of a Government, authorized Hydrographic Office or other relevant government institution and is designed to meet the requirements of marine navigation.**

** Refer to appropriate resolutions and recommendations of the International Hydrographic Organization concerning the authority and responsibilities of coastal States in the provision of charting in accordance with Regulation 9.*



 **IMO Resolution A.958(23)** 
Provision of Hydrographic Services

INVITES Governments, in addition to their existing obligations under SOLAS regulation V/9, to:

(a) Promote through their national maritime administrations, the use of Electronic Chart Display and Information Systems (ECDIS) together with the use and further production of official Electronic Charts (ENCs);

 **IMO Resolution A.958(23)** 
Provision of Hydrographic Services

- (b) co-operate, as appropriate, in the collection and dissemination of hydrographic data with other Governments having little or no hydrographic capability;
- (c) promote support for Governments which may request technical assistance in hydrographic matters, in consultation with, and with the assistance of, the Organization and the International Hydrographic Organization;

 **IMO Resolution A.958(23)** 
Provision of Hydrographic Services

(d) Establish hydrographic offices where they do not exist, in consultation with the IHO;

FURTHER INVITES Governments which are not members of IHO to consider joining that organization;

 **UN Assembly Resolution A/53/32** 
(1998) The Year of the Oceans.

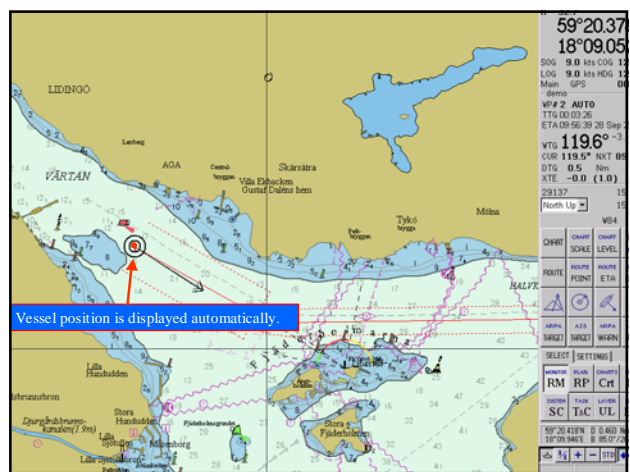
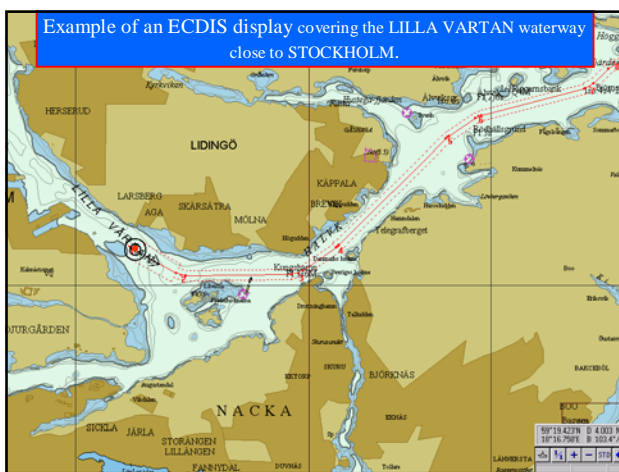
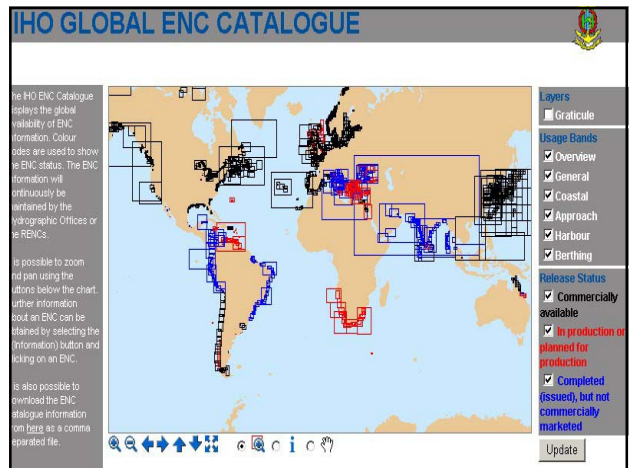
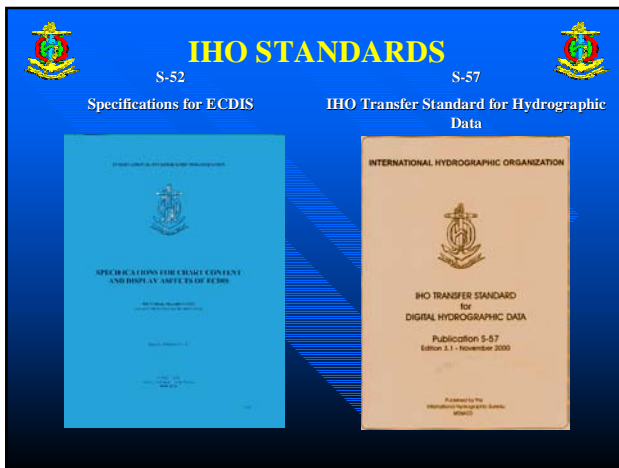
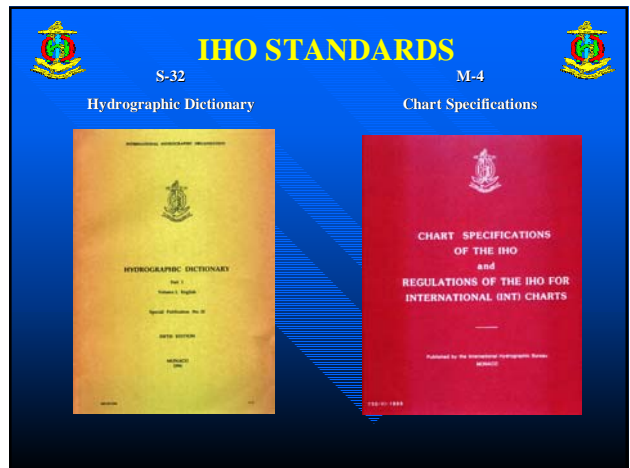
“Invites States to cooperate in carrying out hydrographic surveys and in providing nautical services for the purpose of ensuring safe navigation as well as to ensure the greatest uniformity in charts and nautical publications and to coordinate their activities so that hydrography and nautical information is made available on a worldwide scale.”

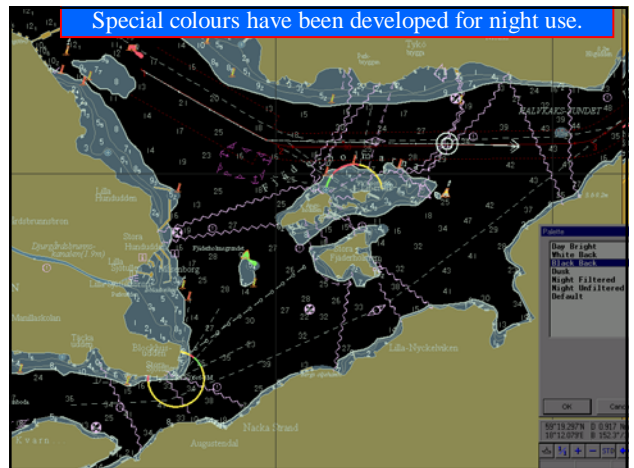
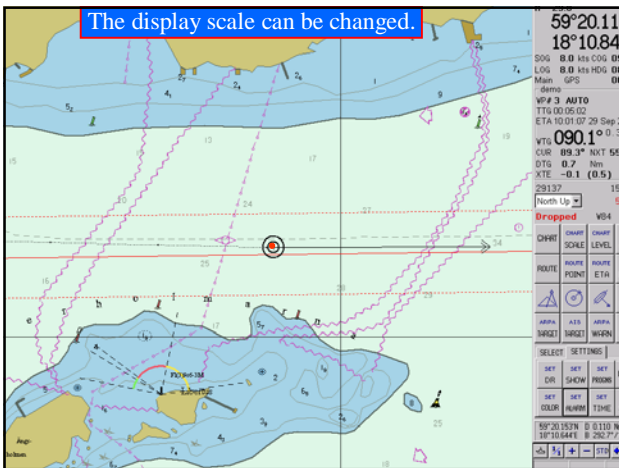
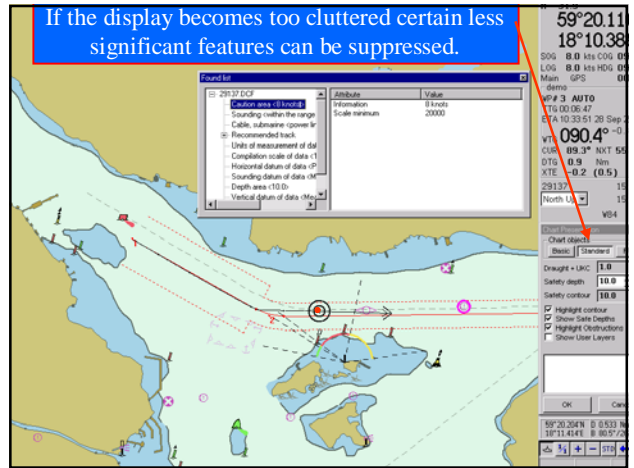
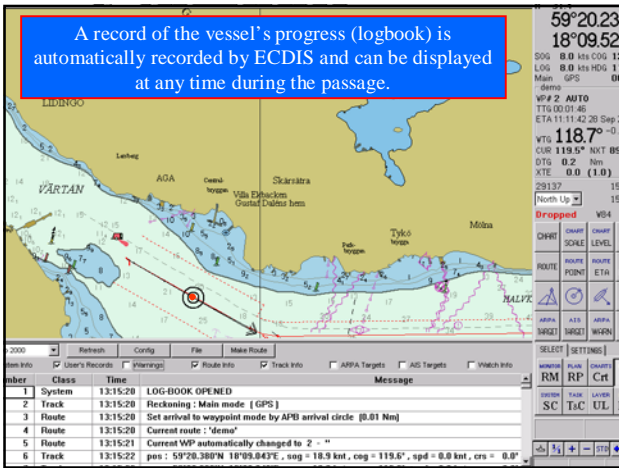
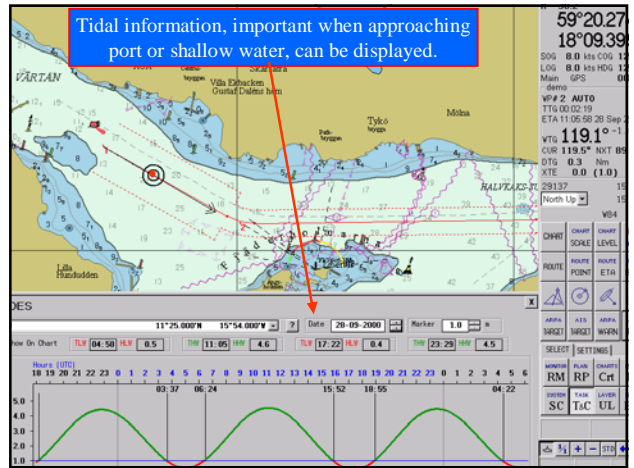
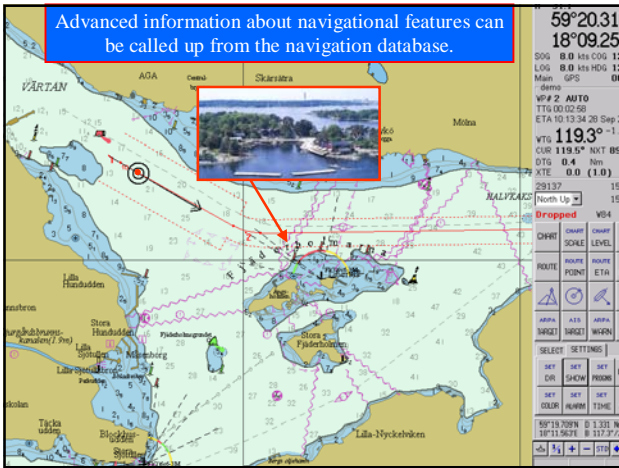
 **UN Assembly Resolution A/58/240** 
(2003) Oceans and the law of the sea.

Welcomes the work of the International Hydrographic Organization and its fourteen regional hydrographic commissions and encourages increased membership of the organization, noting the capacity of the organization to provide technical assistance, facilitate training and identify potential funding sources for the development or improvement of hydrographic services.....

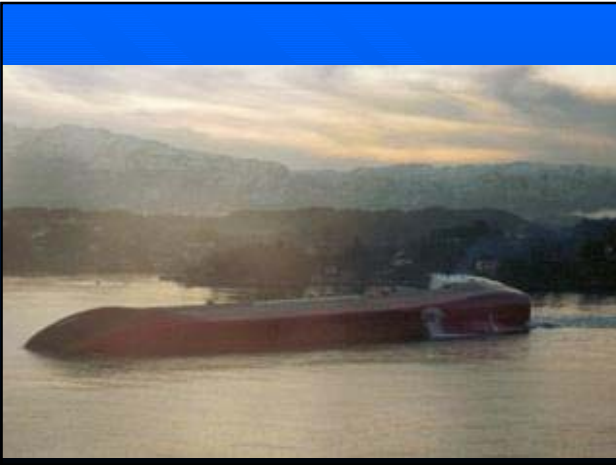
 **UN Assembly Resolution A/58/240** 
(2003) Oceans and the law of the sea.

Invites the International Hydrographic Organization and the International Maritime Organization to continue their coordinated efforts, to jointly adopt measures with a view to encouraging greater international cooperation and coordination for the transition to electronic nautical charts and to increase the coverage of hydrographic information on a global basis, especially in the areas of international navigation and ports where there are vulnerable or protected marine areas;

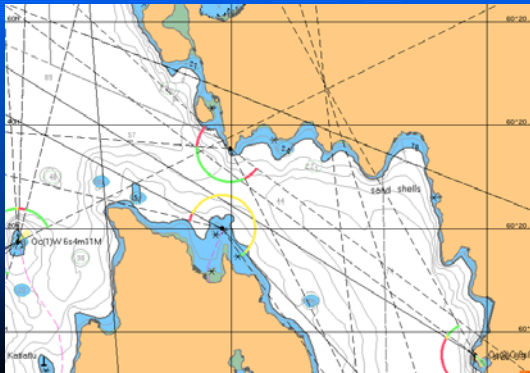




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CAPACITY BUILDING



• Definition:

With respect to the IHO, "Capacity Building" is defined as the process by which the organization assesses and assists in sustainable development and improvement of the states, to meet the objectives of the IHO and the hydrography, cartography and maritime safety obligations and recommendations described in UNCLOS, SOLAS V and other international instruments.



Uses of Hydrographic Data



- Safety of navigation
- Ocean Modelling
- Coastal and deep water circulation
- Coastal Zone Management and Engineering
- Environmental protection
- Fisheries
- Offshore windfarms
- Oil and Gas exploration
- International boundaries
- Pipeline and cable laying
- National security



The Growing Requirement to Provide Modern Hydrographic Services



The US Capitol Building & Grand Princess to scale.



The Growing Need for Modern Hydrography in Remote Areas



The Potential Outcome of Poor Hydrography & Cartography

Inland waters are just as vulnerable!

TO BE AVOIDED!

www.iho.shom.fr

The International Hydrographic Organization (IHO)

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Welcome to the IHO

Surveying and charting the oceans to ensure safety of navigation, and to promote a better understanding of the maritime and subsea environments.

Development of standards to promote uniformity of navigational products and services.

NEW
 IHO as the world's "Center of Maritime Safety and Security" (IHO's role in the maritime domain)

2004 - IHO Handbook available from the Download page

8th IHO Committee Meeting (IHO ADAPTAL 11-13 October 2004)

The mission of the IHO is to ensure the provision of adequate and timely hydrographic information for world-wide marine navigation and other purposes, through the endeavors of national hydrographic offices.

A subsidiary mission is the application of hydrographic data to support science, and to promote its use in geographic information systems, principally for the sustainable development of national maritime zones.

The Steering Committee of the IHO, on behalf of the International Hydrographic Organization, wishes to acknowledge the generous contribution made by the French Hydrographic Service (SHOM), in providing the web hosting facilities for this web-site.

THE INTERNATIONAL HYDROGRAPHIC ORGANIZATION

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