



**MACHC Circular Letter  
09/2013**

Date, June 2013

To: Countries in the Region

**Subject: information regarding Meso-American Caribbean Sea Hydrographic Commission (MACHC)**

Dear Sir/ Madam,

Herewith we inform you that the Suriname (Maritime Authority Suriname) was elected as Chair of the Meso- American Caribbean Sea Hydrographic Commission (MACHC) in the 13<sup>th</sup> MACHC for the biennium 2013- 2014. The meeting was held in Guatemala from 19- 23 November 2012.

Every year the MACHC organise its annual meeting for all its members, associate members. Others who are interested in the progress of the MACHC activities in the region also attend the meeting. The next meeting is scheduled from 9- 13 December 2013 in St. Maarten. Herewith we invite your delegation to this meeting. Relevant information regarding the meeting will be send to you in a timely manner.

Almost every human activity that takes place in, on or under the sea requires knowledge of the hydrography of the area, shape and nature of the seafloor, its characteristics and its hazards.

National Hydrographic Offices or Authorities of coastal States provide an essential service to national transport infrastructure by regularly collecting and processing hydrographic data. National Hydrographic Offices support safe and efficient navigation, foster national maritime development, help to safeguard life and property at sea, facilitate the protection of the marine environment and support the administration and sustainable development of the national maritime zones. National Hydrographic Services also support national security and maritime defence.

There are still many areas of the world that lack adequate nautical charts and supporting services. This poses a real and continuing threat to safety of life at sea and to the well-being of the marine environment.

To keep the marine transportation systems functioning in a way that is safe, efficient, and environmentally sound it is essential that information about the water depth, the shape of

the sea floor and coastline, the location of possible obstructions, and other physical features of water bodies is kept up to date.

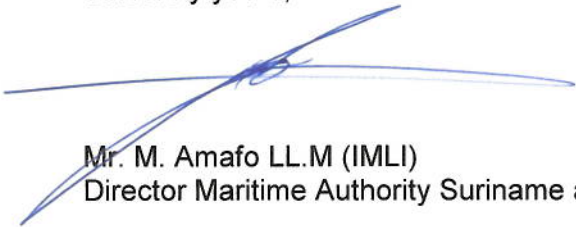
For further detail about the need for national hydrographic services we refer you to an International Hydrographic Organization (IHO) publication M-2 link [http://www.iho.int/iho\\_pubs/misc/M-2\\_3.0.1\\_E\\_19OCT2011\\_TheneedforNHS.pdf](http://www.iho.int/iho_pubs/misc/M-2_3.0.1_E_19OCT2011_TheneedforNHS.pdf).

Please also find attached:

- the IHO circular letter 13/2013 dated 14 February 2013, regarding World Hydrographic Day;
- MACHC Resolution on "The Blue Economy" MACHC 13 minutes Annex C.

With regard to the above mentioned, we look forward to your reply by July 31<sup>st</sup>, 2013.

Sincerely yours,



Mr. M. Amafo LL.M (IMLI)  
Director Maritime Authority Suriname and MACHC Chair

C.c.: MACHC members



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**CIRCULAR LETTER 13/2013**  
**14 February 2013**

## WORLD HYDROGRAPHY DAY 2013 - PREPARATIONS

Reference: IHB CL 69/2012 dated 11 July - *World Hydrography Day (WHD) 2012*  
*and Theme for WHD 2013*

Dear Hydrographer,

1. In the reference, the Directing Committee proposed "*Hydrography - underpinning the Blue Economy*" as the theme for the celebration of World Hydrography Day 2013 (WHD-2013). No adverse comments have been received from the Member States. Accordingly, the Directing Committee confirms this theme for 2013 which is intended to provide Member States with the opportunity to raise awareness of the importance and usefulness of hydrography to issues other than safety, and in particular, to highlight the economic benefits that governments, industry and the public can obtain by supporting hydrographic programmes at the national level.
2. The Directing Committee invites Member States to use the theme of this year's WHD to raise awareness of the economic value of hydrographic programmes to national economies and to promote the role of every national hydrographic service and the role of the IHO.
3. In support of WHD-2013 the Bureau will organize:
  - A dedicated page on the IHO web site, where papers and other material relevant to the celebration will be posted and which Member States can use as appropriate.
  - A Background Brief that Member States may use in support of their celebrations. A copy of the brief for WHD-2013 is included as Annex A to this letter. It is also posted on the IHO website.
  - A Media Conference and local interviews emphasizing the theme.
  - Various other activities with schools in the area in order to raise awareness about hydrography, the scope and significance of WHD and the theme of the celebrations.
  - A reception where His Serene Highness Prince Albert II of Monaco, Members of his Government and other officials and representatives from diplomatic missions, other organizations and local maritime industry will be invited.
4. Additionally, it is intended to hold the annual meeting between the IHO and the European Commission close to WHD 2013 in order to highlight the connection of this year's WHD theme with the strategic drivers of the European initiative "Marine Knowledge 2020" (CL 97/2012 of 15 November refers).
5. Member States are invited to forward as soon as possible to the IHB any material that is created in support of national WHD-2013 celebrations for posting on the IHO website. This will enable the widest possible dissemination of publicity and support material for the event.

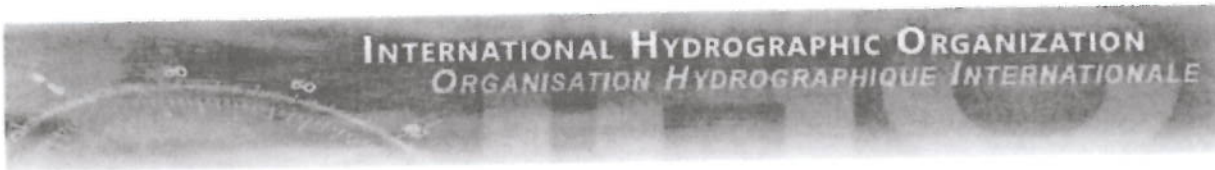
6. The Directing Committee also welcomes any comments and suggestions to improve the organization and support of this annual event. Furthermore, the Directing Committee invites Member States to propose themes for the celebration of WHD in 2014.

On behalf of the Directing Committee  
Yours sincerely,

A handwritten signature in black ink, appearing to read 'Mustafa IPTES', with a stylized flourish at the end.

Mustafa IPTES  
Director

Annex A: WHD-2013 - Background Brief



## WORLD HYDROGRAPHY DAY - 21 JUNE 2013

On 21st June each year the International Hydrographic Organization celebrates World Hydrography Day. World Hydrography Day is an opportunity to increase public awareness of the vital role that hydrography plays in everyone's life.

### *Hydrography - underpinning the Blue Economy*

The theme for this year's World Hydrography Day, which is also the 92<sup>nd</sup> anniversary of the establishment of the IHO, is: "*Hydrography - underpinning the blue economy*".

The term "*blue economy*" means... *the sum of all economic activity associated with the oceans, seas, harbours, ports, and coastal zones.*<sup>1</sup>

Every human activity conducted in, on or under the sea depends on knowing the depth and the nature of the seafloor, the identification of any hazards that might exist and an understanding of the tides and the currents. Obtaining and disseminating this hydrographic knowledge is the role of the world's hydrographic surveyors and nautical cartographers. Their work is the most fundamental of all the enablers required to develop and sustain the *Blue Economy*.

#### The Potential of the Blue Economy

The seas and oceans are major contributors to the world economy.

The seas and oceans occupy 71% of the world's surface area and over 90% of the world's trade travels by sea.

The seas and oceans, including the seabed and the sub-seabed, represent a vast resource for food, mineral resources, energy, water, bio-medicines, and infrastructure that in turn creates wealth for individuals and for nations.

The Blue Economy is more than the traditional core activities of fishing, maritime trade and passenger ships. It also includes, but is not limited to:

- Aquaculture
- Biomedicine
- Boats and Shipbuilding
- Cables and pipelines
- Ocean science and observation
- Port operations
- Robotics and submarines
- Shoreline development

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<sup>1</sup> As defined by *The Maritime Alliance* [www.themaritimealliance.org](http://www.themaritimealliance.org), based on *The National Report: State of the US, Ocean and Coastal Economies, 2009*.

- Coastal Zone management
- Defence and Security
- Desalination and water treatment
- Marine recreation
- Ocean energy and minerals
- Telecommunications
- Tourism
- Very large floating platforms
- Weather and climate science

Each of these important and growing maritime sectors can provide jobs and create wealth.

### Economic Facts

Here are some economic facts about benefits that are directly related to the safe, efficient and sustainable use of the sea.

- Cruise ship passengers spend at least \$100 each for each day ashore. That's over a quarter of a million dollars from a typical cruise ship for every day in a port  
*Cruise Line Industry Association*
- The Oceans already provide at least 15% of animal protein for about 3 billion people, aquaculture (farming) of fish and aquatic plants is worth more than \$106 billion, the fishing industry provides livelihood to more than 540 million people  
*UN Food and Agriculture Organization*
- Well over 95% of the world's intercontinental data and telephone traffic is passed by undersea cables. The proper and safe routing of the cables depends on hydrography  
*Submarine Cables and the Oceans – Connecting the World. UNEP-WCMC, 2009*
- High-resolution charts of scallop fishing areas in Nova Scotia, Canada, reduced trawling by 70%, increased productivity, avoided seafloor disturbance and supported sustainable fisheries management  
*Clearwater Seafoods Ltd; 2002*
- Offshore wind farms are increasingly cost competitive with fossil fuel and nuclear sources  
*Green Economy in a Blue World-Synthesis Report; UNEP and others, 2012*
- Port economic activity usually generates at least one other indirect job for each new job. For high tech industries this multiplier effect can reach up to 5 or 6  
*Moretti E, "Local Multipliers", American Economic Review, May 2012*
- Economic studies show that the cost:benefit ratio for national investment in hydrography and nautical charting is always positive and can be better than 1:10  
*Benefit-Cost Assessment of the Canadian hydrographic Service, Brinkman & Calverley, 1992;*  
*Analysis of the Economic Benefits of the Provision of Hydrographic Services in the APEC Region, APP & Globalworks, 2002*  
*Ireland: Infomar Marine Mapping Study, Price Waterhouse Coopers, 2008*  
*Scoping the Value of NOAA's Coastal Mapping Program; Leveson Consulting, 2012*
- For most ships, 30cm extra depth of navigable water allows at least 2,000 tonnes more cargo to be carried.  
*typical tonnes per centimetre tables*

### Lack of Survey Data to Support the Blue Economy

#### Better maps of the Moon and Mars ...

Over the millennia the seas and oceans have fed us, provided energy and raw materials, moderated our temperature, and let us enjoy it in a multitude of ways. Yet there is still much to explore - less than 10% of the world's seas and oceans have been systematically surveyed. At the beginning of the 21st century we have higher resolution maps of

the Moon and Mars than we do for most of our seas and oceans.<sup>2</sup> While many of the world's trade routes are charted, new, larger vessels demand more accurate surveys. Any development outside the regular trade routes becomes increasingly problematic because there is little or no hydrographic data to rely on. Marine Spatial Planning which encompasses not only navigable waters but the whole maritime domain, including the shoreline, is even more demanding.

### **Role of Hydrographic Surveyors and Nautical Cartographers**

Hydrographic surveyors work in both the public and private sector. Government hydrographic surveyors are usually involved in surveying to improve nautical charts and provide qualified base data for maritime geospatial information systems. Commercial hydrographic surveyors are often involved in specialized tasks including surveys for undersea pipelines and cables, the installation of offshore structures including wind farms, oil and gas platforms and surveys for new ports and harbours. They also survey under contract to improve charts.

**Equipment** Hydrographic surveyors use echo sounders, high definition sonars in boats and ships, lasers from aircraft and sometimes satellite images to obtain precise and accurate measurements of depth. They also need to be experts in precise positioning and in the measurement of currents and tides.

**Charts** Nautical cartographers take information from hydrographic surveys and from other sources and turn it into nautical charts and other marine geospatial products and services. Traditionally, the charts are printed on paper but increasingly now they are made in the form of digital electronic charts, as well. The charts use international standards set by the IHO to ensure that they can be used and understood by all mariners - from anywhere in the world.

### **Role of the IHO**

The principal role of the IHO, as the competent international authority for hydrography, nautical charting and associated matters, is to improve the provision of adequate and timely hydrographic data, products and services to all parts of the world. This directly supports the Blue Economy. The role includes the maintenance of international standards to help ensure that mariners and other users of hydrographic data can use and understand the data easily.

**Standards** IHO standards cover a wide range, from defining the training and experience required by hydrographic surveyors and nautical cartographers, through the minimum standards for the collection of data and its depiction on charts, to the rapid delivery of Maritime Safety Information to ships at sea. References related to non-navigational applications of hydrographic information, such as C-17 covering Maritime Spatial Data Infrastructures and C-51, the Manual on Technical Aspects of the UN Convention on the Law of the Sea are also published and maintained by the IHO. In addition, the IHO provides other references related to hydrography such as the hydrographic dictionary in three languages and a manual of hydrography. Establishing the standards and getting them recognised and used requires extensive international cooperation and the involvement of many other organisations.

**Regional Cooperation** Another role of the IHO is to help coordinate and enhance cooperation in hydrographic activities between countries on a regional basis, and between regions in order to provide consistent and reliable services to mariners and decision makers. This is done primarily through the IHO member countries creating 15 Regional Hydrographic Commissions that coordinate charting services across almost all of the world.

**Capacity Building** The IHO has an active capacity building programme that assists countries to develop and improve their hydrographic capabilities. Capacity building projects are often done in collaboration with other international organisations and with growing industry participation.

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<sup>2</sup> Introduction to the centenary edition of the GEBCO Digital Atlas

## MACHC Resolution on “The Blue Economy”

**Considering** that the Blue Economy<sup>1</sup> is the sum of all economic activity associated with the oceans, seas, harbours, ports, and coastal zones,

**Recognising** that hydrography is the fundamental enabler in the development of the Blue Economy and marine economic infrastructures,

**Recognising** that the seas and oceans occupy 72% of the World's surface area and over 90% of the world's trade travels by sea,

**Recognising** that every human activity conducted in, on or under the sea depends on hydrographic information if that activity is to be carried out safely, efficiently and cost effectively,

**Recognising** that the seas and oceans represent a vast resource for food, energy, water, bio-medicines, and infrastructure,

**Recognising** that hydrography is vital in supporting safety of navigation and protection of the marine environment and as required by Regulation 9 of Chapter V of The Convention of Safety of Life at Sea:

**The Meso-American and Caribbean Hydrographic Commission**, representing 23 States **Resolves** that:

All coastal States should work individually, collectively and collaboratively to significantly increase hydrographic capability and capacity in both the public and private sectors as a matter of economic priority as well as a safety and environmental protection priority, to maximise the economic and social benefits to each State.

<sup>1</sup> As defined by *The Maritime Alliance* [www.the-maritimealliance.org](http://www.the-maritimealliance.org), based on *The National Report: State of the US, Ocean and Coastal Economies, 2009*



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