

SPEECH DELIVERED BY ROBERT WARD,  
PRESIDENT OF THE DIRECTING COMMITTEE OF THE  
INTERNATIONAL HYDROGRAPHIC BUREAU IN THE PRESENCE OF  
HSH PRINCE ALBERT OF MONACO

**30 June 2015**

Your Serene Highness, Distinguished Guests, Ladies and Gentlemen,

On behalf of the International Hydrographic Organization, I welcome you all to our reception in support of World Hydrography Day.

As most of you know, the IHO is the intergovernmental organization whose aim is to improve the surveying and charting of the world's seas, oceans, and other navigable waterways. To do this, we coordinate the efforts of our 85 Member States from around the world. We also set the relevant international standards and we operate a capacity building programme.

In doing our work, we are very proud and privileged to enjoy the continuing generous support of Your Serene Highness and Your Government who provide the Organization with its international headquarters here in Monaco - now for the 95th year. Our thanks also to our colleagues and friends in your Department of External Relations and Cooperation for their important and continuing assistance and support at the diplomatic level.

This year's reception is taking place on this fine vessel "Kojima" of the Japan Coast Guard. For those of you that are not aware, the Japan Hydrographic and Oceanographic Department, the department responsible for surveying and charting Japan's sea areas, is part of the Japan Coast Guard.

The theme for this year's World Hydrography Day is "*Our seas and waterways - yet to be fully charted and explored*". This theme has been chosen by our 85 Member States to highlight the uncomfortable fact that much of the world's seas, oceans and navigable waters, upon which mankind is increasingly dependent, remain unsurveyed. There are more detailed maps of the Moon, Mars and Venus than there are of many parts of our seas and coastal waters. In our estimation, more than half of the world's coastal waters have yet to be surveyed for the first time.

This should be a matter of concern for all mankind.

The seas and oceans are now acknowledged as major contributors to the world economy and well-being. Over 90% of the world's trade travels by sea. In addition, the seas and oceans, including the seabed, represent a vast resource for food, mineral resources, energy, water, bio-medicines, and infrastructure. The oceans and the way the water moves and behaves are major influences on weather and climate. The shape and the depth of the seafloor have a significant impact on how sea level rise, storms and tsunamis affect the coastline.

The rapid growth and development of the so-called *blue economy* makes knowing the depth of the seas and oceans more important than ever before. But, less than 10% of the world's oceans have been systematically surveyed - the depth measurements that we do have are often tens or hundreds of kilometres apart. Recent searches for lost aircraft in the ocean have highlighted this. Along many coasts the state of affairs is little better. As I said earlier, we estimate that over 50% of the world's coastal waters are yet to be surveyed for the first time. As a result, ships cannot use new routes or visit new places. And trying to establish sustainable commercial maritime activities in unsurveyed areas is, in my view, most unwise.

So, this year's theme for World Hydrography Day aims to raise awareness of all these issues and to promote ways to improve the situation.

In particular, we are looking at innovative ways to obtain more depth information for the sea. The IHO operates a Data Centre for Digital Bathymetry. This Data Centre is the principal web-based data store that provides access to most of the existing depth measurements for the ocean.

Today, I am pleased to announce that the IHO data centre for bathymetry is being upgraded to make it not only a data store but also the world portal for the upload and download of so-called *Crowd-Sourced Bathymetry*. Crowd-Sourced Bathymetry is depth data that can be collected by any ship or

boat using its regular navigation echo sounder as part of a normal voyage across the sea and along the coastline. We aim to harness the collecting power of all mariners to obtain depth data where there is currently no data or the data is uncertain. This is a new IHO initiative - and, importantly, all the data collected will be made available as a common, open data resource for the benefit of everyone.

At the same time, the IHO is encouraging scientists and industry to look in their vaults and archives for depth data that has already been collected and could be added to the world collection in our data centre.

While these initiatives will not replace highly accurate and thorough hydrographic surveys using specialist ships and equipment, they will still provide useful depth information where otherwise we have none at all.

But our new initiative isn't actually that new. It is, in many ways, only extending the scope of the original General Bathymetric Chart of the Ocean or GEBCO ocean mapping project, that was instigated, Monseigneur, by your great-great grandfather Prince Albert I over 100 years ago and has been associated with the IHO since 1929.

The GEBCO project has always relied on crowd-sourced depth data, but mainly data obtained from the scientific "crowd" to develop what are still the most authoritative maps of the ocean that we have today. Now, we are about to enter a new age, where we can harness the entire maritime crowd to dramatically improve our knowledge of the shape and the nature of the two thirds of the globe that is covered by water. This is an exciting prospect.

Monseigneur, Ladies and Gentlemen, and in conclusion, I would like to mention that the international dimension of our celebration today is emphasised not only by the presence of the *Kojima* and her crew, but also by the presence of the members of the IHO Nautical Information Provision Working Group, which is currently in session at our headquarters and Dr Vladimir Ryabinin, Executive Secretary of the Intergovernmental Oceanographic Commission of UNESCO - one of our sister organizations.

Welcome to you all once again and thank you for sharing this event with the IHO and the Japan Coast Guard. We look forward to you all supporting the IHO and particularly supporting our new crowd-sourced bathymetry initiative.

Thank you.

**Photo 19**

President Ward addresses HSH Prince Albert II and guests at the WHD celebration on board the Japanese vessel *"Kojima"*



**Photo 6**

President Ward's presentation to the Japan Coast Guard trainees



**Photo 16**

Commander of the *"Kojima"*, Captain Tetsushi Mitsuya receiving the IHO crest



**Photo 44**

Prince Albert II and DC with the JCG trainees



**Photo 78**

Demonstration of Kendo on board "Kojima"

