

NORTH ATLANTIC SEABED MAPPING PROJECT

**DAVID WYATT
ASSISTANT DIRECTOR, IHB
and
JENNIFER JENCKS
NCEI-NOAA**

**Kuala Lumpur, Malaysia
October 2015**



GALWAY STATEMENT ON ATLANTIC COOPERATION



Signed in May 2013, by representatives of the European Union, the United States and Canada who agreed to join forces on Atlantic Ocean Research.



KEY CHALLENGES

May 2013 The Atlantic: A Shared
Resource Workshop

“Build an industry, academia and government cross sector vision of a shared data collection, management and information infrastructure.

Standardization of sampling and observation techniques, common data standards and harmonized habitat

classification systems to facilitate open data access and the use and reuse of data.”



LONG TERM GOALS

- **Bring member states' political weight and support for activities**
- **Link international research efforts and programmes for greater efficiency**
- **Improve outreach**
- **Link Horizon 2020* work programme priorities with national priorities and mutual enhancement with future Horizon 2020 Coordination and Support Activity for marine and arctic research.**

**Horizon 2020 is the EU Framework Programme for Research and Innovation*



ATLANTIC SEABED MAPPING WG

Mission Statement:

“Through partnership, social inclusion, and resourcing infrastructure access and collaboration, the Atlantic Partners aim to develop and implement a cohesive seabed mapping strategy, underpinning the Galway 2013 Vision Statement, and the security of Atlantic ocean resources.”



ATLANTIC SEABED MAPPING WG MEETINGS

**Atlantic Seabed Mapping Workshop –
Dublin Castle – 2 Dec 2014**

1st Meeting – Brussels – 23-24 Feb 2015

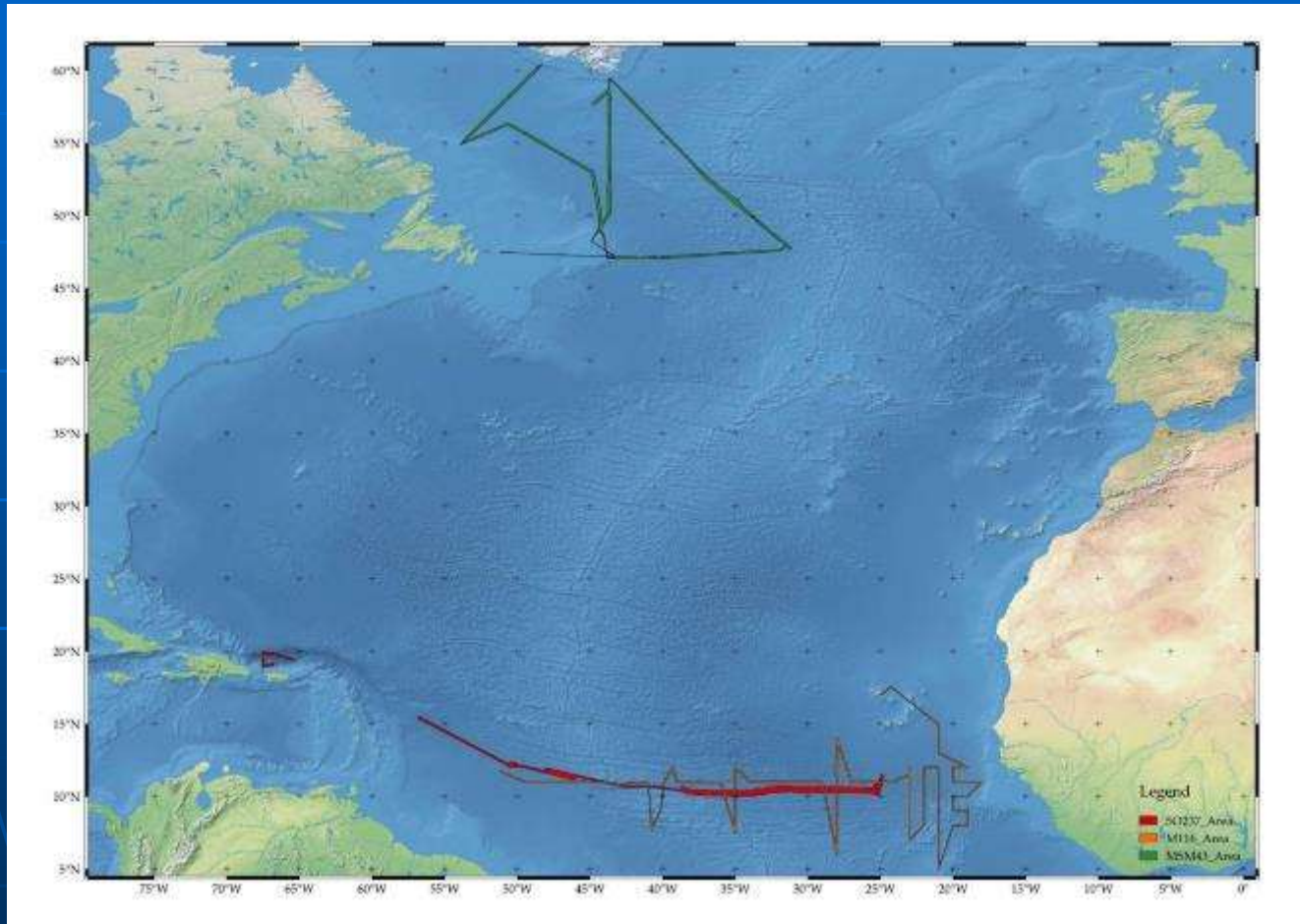
2nd Meeting – Cork – 9 Jul 2015

**3rd Meeting – St John's NL – 29 Oct
(after Ocean Innovation 2015
Conference)**



NORTH ATLANTIC MAPPING SURVEYS

GEOMAR 2015

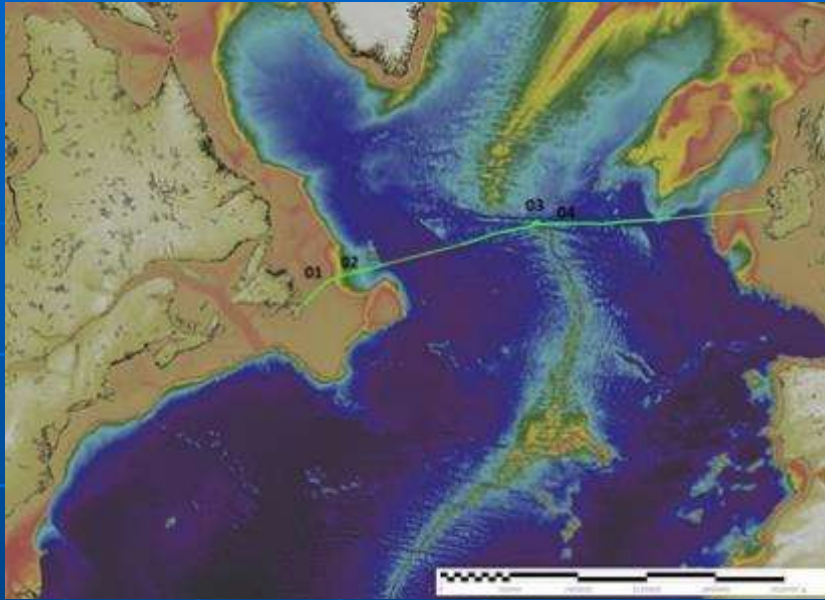


- Transects collected January to February 2015
- Transects during physical oceanography cruise April 2015
- Transects during a physical oceanography cruise May 2015

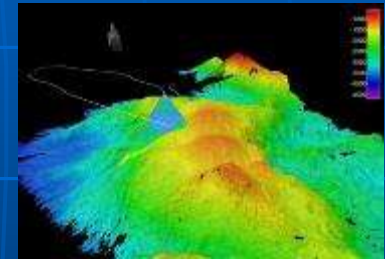
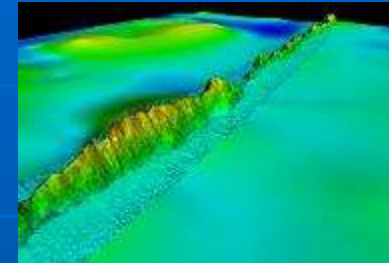


TRANS-ATLANTIC MAPPING SURVEYS

St John's NL – Galway, IRL (June 2015)



R.V. Celtic Explorer



Halifax– Oslo (July 2015)





IHO Home / IHO DCDB

IHO Data Centre for Digital Bathymetry (DCDB)

The International Hydrographic Organization Data Centre for Digital Bathymetry (IHO DCDB) was established in 1988 to steward worldwide bathymetric data on behalf of the IHO Member States. The Centre provides long term archive of and access to single and multibeam deep and shallow water ocean depths contributed by a range of mariners.

[Access Data](#)

[Contribute Data](#)

[Crowdsourced Bathymetry](#)

[Shallow Water Bathymetry](#)

[Data Uses](#)

[Other Resources](#)



IHO Member States

[Contribute Data](#)

The IHO DCDB welcomes bathymetric data and metadata, accepts descriptions and spatial footprints of data that is already online and of data that are not publicly available to provide easy search and discovery. Thank you for contributing to more accurate and comprehensive bathymetric maps, grids and products.

We accept bathymetric data via File Transfer Protocol (FTP), email, CD and DVD, and hard drive in MGD77T format. Other formats will be considered on a case-by-case basis.

Do You Know?

- Detailed knowledge of global bathymetry is critical for understanding how Earth's systems interact and to support coastal zone management, environmental protection, tsunami modelling, inundation forecasting, and charting.
- The shape of the ocean basins, ridges and mountains influence the flow of sea water carrying heat, salt, nutrients, and pollutants. These features also influence the propagation of energy from undersea seismic events that result in potential disasters such as tsunamis.
- Less than 5% of our oceans are mapped with in situ soundings, making it critical to preserve and share the data already collected and to identify and work together to fill high priority data gaps to support these important uses.



LEVERAGING INFRASTRUCTURE

NOAA NATIONAL GEOPHYSICAL DATA CENTER
NATIONAL GEOPHYSICAL DATA CENTER
Bathymetry & Digital Elevation Models
National Geophysical Data Center

NOAA > NESDIS > NGDC > Maps > Bathymetry

Layers

Bathymetric Surveys

Multibeam Bathymetric Surveys
 Single-Beam (Trackline) Bathymetric Surveys

NOS Hydrographic Surveys:

Surveys with BAGs (Bathymetric Attributed Grids)
 Surveys with Digital Sounding Data
 Surveys without Digital Sounding Data

Filter Surveys Reset

BAG Color Shaded Relief Imagery

Digital Elevation Models (DEMs)

DEM Footprints
 DEM Color Shaded Relief Imagery

Bathymetric Lidar

Coastal Lidar Datasets available from [NOAA's Office for Coastal Management](#)

Legend
More Information
Help

1. Locate and access publicly available data
2. Identify locations of proprietary data and provide contact information
3. Stay informed about all proposed and planned upcoming surveys
4. Easily contribute data by leveraging the GEBCO Data Store

THE ROLE OF IHO-IOC GEBCO

- **Ocean Literacy and outreach;**
- **Direct involvement in transects and area mapping efforts;**
- **Encouraging data release from academic and research**
- **Provision of MBES system operators for transects;**
- **QC/QA of data for inclusion in IHO-DCDB.**

