



Galway Statement Implementation - Atlantic Seabed Mapping

BACKGROUND

On 24 May 2013 the Galway Statement on Atlantic Ocean Cooperation was signed by high level officials from the European Union, Canada and the United States of America, launching an Atlantic Ocean Research Alliance.

The previous day, on 23rd May 2013, marine scientists from the United States of America, Canada and Europe gathered in Galway (Ireland) to identify the key scientific and societal challenges that need to be addressed in order to deliver (by 2020) a predictive capacity [both short term predictions and long term forecasts] for the major risks and changes in the dynamics of the North Atlantic as outlined in the vision statement below. This workshop aims to progress the discussion, establish key priorities, and develop approaches for targeted mapping.

Vision Statement included:

Through seamlessly integrating science and technology and improved collaboration between Canada, the European Union and the United States of America, our common objectives are to have by 2020:

- Mapped the Atlantic to underpin the accuracy of predictive models and forecasts and identified key tectonic /volcanic sites, as well as ecologically and economically important (and potentially undiscovered) seafloor and water column habitats;
- Supported the development, through public, academic and private sector partnerships (e.g. clusters of innovation), of a range of new and innovative knowledge based and globally traded products and services, including novel observing technologies and innovation to promote new opportunities for sustainable socio-economic growth;
- Revolutionised our understanding of the role of the North Atlantic in earth system dynamics, especially with respect to interactions with coastal zones and with the Arctic, Central Atlantic and Mediterranean;

The workshop identified challenges including: standardisation of sampling protocols, data access and use (and reuse), and the harmonisation of habitat classification systems.

Recommendations included:

Rapid progress towards this vision can be achieved by integrating current programmes and infrastructures on a trans-Atlantic basis. In this context, we recommend a series of Trans-Atlantic Workshops to:

- Establish mechanisms to promote trans-Atlantic data sharing, using as a test case seabed mapping;
- Make recommendations on the optimum approach to habitat mapping such that mapping initiatives, carried out separately or jointly, can be seamlessly merged. This will include a review of existing and emerging mapping techniques, common standards and habitat classification systems;

Summary of Session 3.1. Sea and Seabed Habitat Mapping

- Establish a mechanism to examine and expand communications to bring together existing seabed and seabed habitat mapping groups and develop procedures to (a) map national territories and (b) the high seas, possibly on a cost shared basis.
- Complete a preliminary phase of mapping the Atlantic seafloor (multibeam, backscatter and bathymetry). This mapping will underpin the accuracy of prediction models and forecasts, the accuracy of their outputs and identify areas requiring secondary phase (follow-up) mapping to include key tectonic / volcanic sites, critical habitats, seabed and water column habitats and time series mapping.
- Establish universal standards/classification systems for seabed and seabed habitat mapping.