If we don’t have the right information, we can’t make the right decisions!
If we don’t provide the information, we can’t make any decisions!!
Resources:
- 5 MBES fitted survey vessels (3 new in 2014)
- Improved knowledge capacity (Ops / Data / ICT)
- National & EU support for mapping initiatives
- Approx. 20 people

Data:
- V. large publicly accessible online multibeam dataset
- 55 Tb data holding / 150 Tb server
- Striving towards an “Irish Digital Ocean”

R&D:
- Since 2008, 46 projects funded directly (>€1.25m)
- Research collaboration - Caris / Proteus / Kongsberg
  - Atlantic Centre for Earth Observations (ACE-Obs)
    (In-situ obs / Informatics / Modelling / Remote Sensing)
- Horizon 2020 ready –
  (10+ 3rd level R&D org. /100+ ocean tech companies)
2013 Milestones
• Atlantic Action Plan 2014-2020
• Galway Statement on Trans-Atlantic Ocean Co-operation (May 2013)
• Horizon 2020 – Ocean observation & seafed mapping

Galway Statement:
Common Objective, by 2020 to have: 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.

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

Recommendations: Establish mechanisms to promote trans-Atlantic data sharing, using a seabed mapping test case.

Laying Down The Challenge!
Irish National Seabed Survey (GSI)
1999-2005, €32m – largely outsourced

INFOMAR (GSI & MI Partnership)
2006-2026, €80m – largely self survey

“INtegrated Mapping FOr the Sustainable Development of Ireland’s MArine Resource”

**PHASE 1:** 2006 – 2015  26 Bays / 3 P. Areas
**PHASE 2:** 2016 – 2025  Remaining Areas

€3m per annum to 2018

Programmes:
1. Data Acquisition, Management & Interpretation
2. Data Exchange & Integration
3. Value Added Exploitation

2008 PWC Cost Benefit Analysis:  4-6 return on investment
What Does INFOMAR Provide?

Free Access
Charts / Maps
Data (Raw / Processed)
- Google Earth
- Fledermaus DTM’s
- ArcMap Grids
Reports
Publications

WWW.INFOMAR.IE

ACCESS PRODUCTS BY:
- Bay
- Chart
- Type
e.g. Google Earth Files
Client Decision Support Data?

Government

Industry

Efficiency

Resource

Clients All Have Different Needs

Environment

Safety

Risk

Academia

Global Market Opportunities ↔ Trans-Atlantic Cooperation

Image courtesy AWI & IFREMER
- MSFD Output: http://atlas.marine.ie
- 12 Marine themes / 100+ data layers
- OSPAR (Regional Seas Convention) considering EU implementation
Kilkieran Bay Marine Life
A series of photographs taken during dive expeditions of Kilkieran Bay.

www.arcgis.com/apps/MapTour

Exploring the diverse underwater flora and fauna in Kilkieran Bay.

Kilkieran Bay is a complex marine inlet which opens into the North Sound of Galway Bay, in the west of Ireland. It is subject to high wave exposure towards the entrance, and has extremely sheltered areas at the head of the bay.
Shipwrecks in Irish Waters

A selection from the vast collection of acoustic images of shipwrecks acquired during the national seabed mapping projects - INSS and INFOMAR.

HMS Guide Me II

An anti-submarine drifter with one 6-pounder gun. It sank following an accidental collision with another vessel in 1918. The wreck sits upright, slightly scoured into the seabed, with the hull completely intact bar the gash that sank her.
Shipwrecks mapped in Irish Waters

An Roinn Ealaion, Oidhreacht agus Gaeltachta
Department of Arts, Heritage and the Gaeltacht

Available at: http://www.gsi.ie/gsishop/
Evolution of The Real Map of Ireland

Double the value of our ocean wealth to 2.4% of GDP by 2030

Increase the turnover from our ocean economy to exceed €6.4bn by 2020
OUTPUTS IN DEVELOPMENT:
• Light Data Portal & INFOMAR Apps
  • Tiled data
  • Dynamic model links
• Schools Coding based Marine Project Toolkits
  • Compiler / Field reporting platform
• Regional Scale, Integrated, Land to Sea, Seamless Mapping
• Data Analytics & Feature Extraction

Harnessing Our Ocean Wealth:
• INFOMAR is Key Action (No. 23)
  “Enabler of Research, Knowledge, Technology & Innovation”
Oceans of Opportunity!

Real Map of the Atlantic?

Have the right information, make the right decisions!

Thank you!
See www.INFOMAR.ie to find out more!
The Future Map of Ireland

**Name:** SS Laurentic
**Type:** Ocean liner converted to armed merchant cruiser
**Built:** 1908, converted in 1914
**Lost:** January 25th, 1917
**Cause:** Struck a mine laid by U-boat U-80. Sank within 60 minutes.
**Lives Lost:** approx. 354
**Current Status:** Now lies in approx. 36m water at the entrance to Lough Swilly. 22 gold bars of her cargo were never recovered.