

The International Coastal Atlas Network (ICAN)



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Outline

- Outline
- Background
- Strategic Aims
- Membership
- Workshop 3
- Prototype
- ICAN Future
- Conclusion

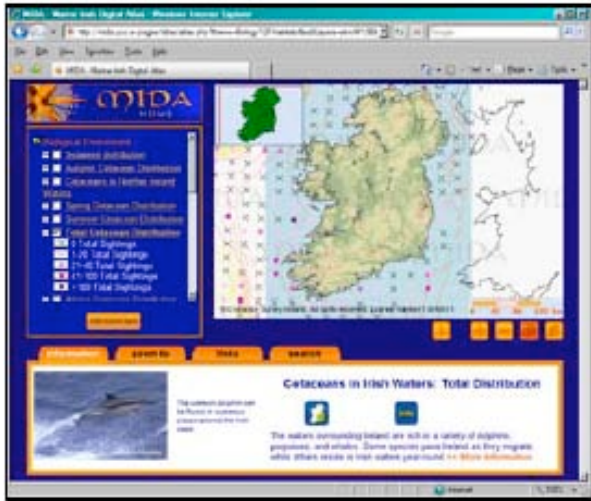
- Background
- Strategic Aims
- Current Membership
- ICAN Workshop 3
- Interoperability Prototype
- Strategic Directions
- Conclusion



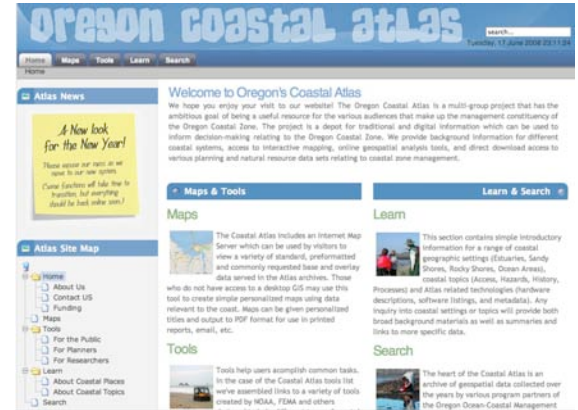
Background: Intellectual Merit

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- Issues of regional governance, coordination
- Significant capacity, varying approaches
- Best practices?
- Widespread solutions needed
 - Access to and documentation of data
 - Integration of tools
 - Decision support for coastal mgmt via atlases
 - “Semantic interoperability”



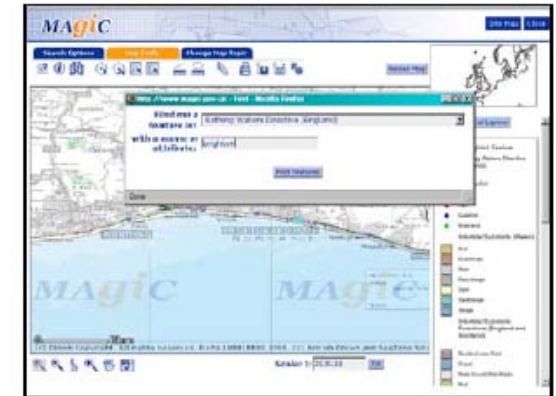
MIDA, Ireland



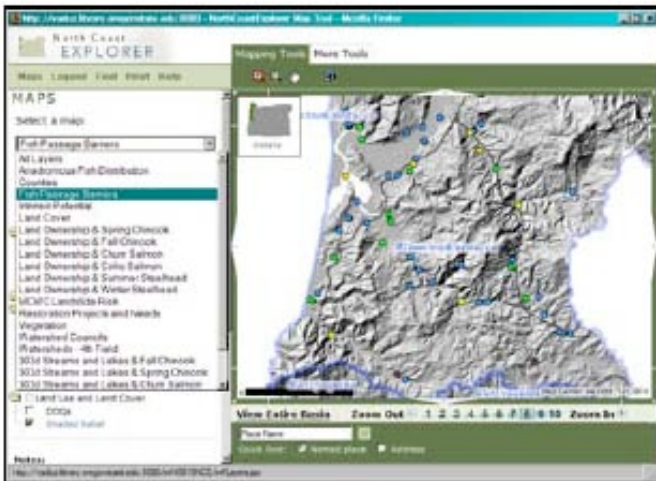
Oregon Coastal Atlas, USA



De Kustatlas, Belgium



Magic, UK



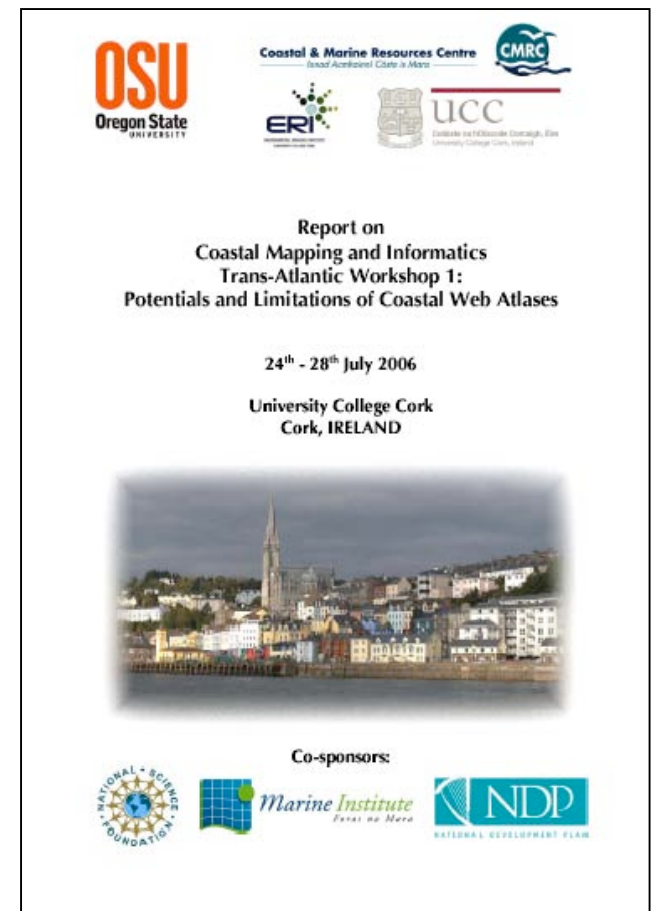
North Coast Explorer, USA



Background: Workshop 1, Cork, Ireland

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- To create & strengthen **relationships** between experts in marine & coastal mapping in North America and Europe
- To identify **state of the art** approaches to coastal mapping and informatics





Background: Workshop 2, Corvallis, USA

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- Improve searches between atlases
 - CVs and ontologies
 - **Marine Metadata Interoperability**
- Semantic interoperability
- Linkages to use cases, communities
- Proof-of-concept ontologies & **interoperability prototype**
- Large, collaborative funding proposals

The image shows the cover of a report titled "Report on Coastal Mapping and Informatics Trans-Atlantic Workshop 2: Coastal Atlas Interoperability". The cover features logos for OSU (Oregon State University), Coastal & Marine Resources Centre (CMRC), ERI (Environmental Research Institute), and UCC (University College Cork). The text on the cover includes the title, the date "16th - 20th July 2007", and the location "Oregon State University, Corvallis, Oregon, USA". Below the text is a photograph of a large, classical-style building with a portico, surrounded by trees and a lawn. At the bottom, it lists co-sponsors: National Science Foundation, Marine Institute (Foras na Mara), and National Development Plan (NDP).



ICAN Strategic Aims

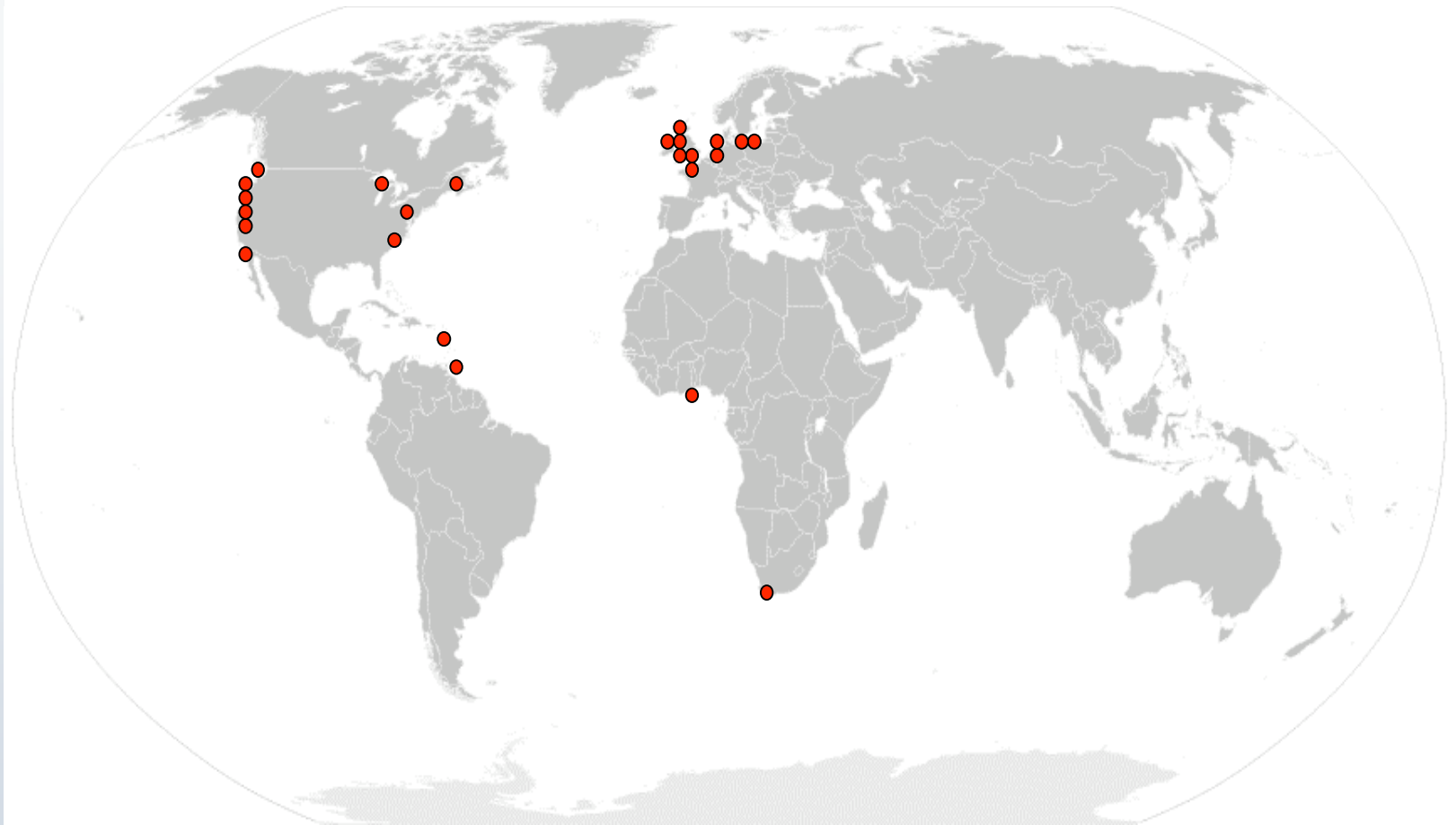
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- Share experiences and find common solutions to coastal web atlas development
- Ensure maximum relevance and added value for users, benefits to participating nations' CZM programs
- Globally integrate and interoperate among locally-maintained atlases
- Inform regional decision- and policy-making across several themes:
 - Climate change - coastal vulnerability
 - Coastal governance (boundaries, protected areas, etc.)
 - Coastal hazards
 - Population pressures
 - Marine spatial planning
 - Resource availability and exploitation



Current Membership

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Focus of Workshop 3

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- Advance actions in:
 - Technical developments
 - Review of interoperability prototype
 - Strategic directions
 - Governance structure
- Welcome new members
- Link to European relevant activities



Technical Developments

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- Review interoperability prototype



Interoperability Prototype

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- Integrate and facilitate access to several distributed & heterogeneous coastal atlases



Global atlas

Local atlases





Technical Developments

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- Focus on coastal erosion as a use-case
 - Overarching view : vulnerability of coastal communities to climate change
- Key Future work on prototype
 - At least 6 new nodes
 - Implement WMS on all
 - Implement WFS on advanced subset



Strategic Directions

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- Clarified vision and goals of ICAN
- Identified a range of key activities in following areas:
 - Technical project development
 - Awareness raising and publicity
 - Outreach and training activities
 - Documentation of resources, tools, expertise
 - Development of ICAN portal



Governance Structure

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- Generated Document providing model which outlines:
 - Committee structure
 - Governance activities
 - Pathway towards a *sustainable* business model
- Develop a transition plan from ad-hoc steering to formalised governance



ICAN Workshop 4

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UNESCO University Trieste, Italy
Autumn 2009



For More Information...

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Workshop 1 in Cork, Workshop 2 in Corvallis

- workshop1.science.oregonstate.edu

Workshop 3 in Copenhagen

- ican.science.oregonstate.edu

ICAN Interoperability Prototype

- ican.ucc.ie



Acknowledgments



U.S. National Science Foundation



Ireland - National Development Plan



Marine Institute Marine RTDI Networking
and Technology Transfer Initiative

European Environment Agency



Davey Jones' Locker
Seafloor Mapping/Marine & Coastal GIS

European Environment Agency



UCC
University College Cork



SeaZone
solutions limited