

European Environment Agency



National Science Foundation
WHERE DISCOVERIES BEGIN

Outcomes of ICAN-3

Ned Dwyer

Coastal & Marine Resources Centre
Ionad Acmhainní Cósta is Mara



UCC

Coláiste na hOllscoile Corcaigh, Éire
University College Cork, Ireland

Dawn Wright

Oregon State
UNIVERSITY

OSU



Aims of Workshop 1, Cork, 2006

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



Report on
Coastal Mapping and Informatics
Trans-Atlantic Workshop 1:
Potentials and Limitations of Coastal Web Atlases

24th - 28th July 2006

University College Cork
Cork, IRELAND



Co-sponsors:



Marine Institute
Foras na Mara



Aims and Outcomes of Workshop 2, Corvallis

Aims

- Improve searches between atlases
 - Controlled vocabularies & ontologies
- Semantic interoperability
- Linkages to use cases, communities

Outcomes

- Establish International Coastal Atlas Network (ICAN)
- Implement proof-of-concept ontologies & web-based demo prototype
- Hold further workshops



Coastal & Marine Resources Centre
Foras na hOileáiní Coasta 'n Mara



Report on Coastal Mapping and Informatics
Trans-Atlantic Workshop 2:
Coastal Atlas Interoperability

16th - 20th July 2007

Oregon State University
Corvallis, Oregon, USA



Co-sponsors:



Marine Institute
Foras na Mara



Activities at Workshop 3, Copenhagen

- Reviewed 1st interoperability prototype
- Consolidated strategic directions
- Proposed a governance structure
- Welcomed new members
- Linked to relevant European activities
- Set out a 2008-09 **action plan**



Report of International Coastal Atlas Network
Workshop 3 on Federated Coastal Atlases:
Building on the Interoperable Approach

7 – 11 July 2008

European Environment Agency Headquarters
Copenhagen, Denmark



Chief sponsor and host:



More information can be found on the workshop web site:
<http://ican.science.oregonstate.edu/ican3>

Action Plan Themes

- Awareness Raising
- Outreach and Training
- Documentation
- Funding
- Technical
- Governance
- Assessment



Awareness Raising



- Poster
- Brochure



International Coastal Atlas Network

BACKGROUND

In recent years significant advances have been made in the development of Internet resources for decision makers, scientists, resource managers and the general public who are interested in coasts around the world. Coastal web atlases (CWAs) are a key component of these technological improvements.

WHAT IS A CWA?

We define a coastal web atlas (CWA) as: a collection of digital maps and datasets with supplementary tables, illustrations and information that systematically illustrate the coast for the purposes of coastal zone management and planning, oftentimes with cartographic and decision support tools, all of which are accessible via the Internet.

CWAs can be local, regional, national and international in scale.

ACTIVITIES

- Technical development: A major focus is on a cooperative interoperability and network project to globally-integrate locally-maintained coastal atlases (<http://ican.ucc.ie/>).
- Raising Awareness: Promote the benefits of ICAN to the developer and user communities including non-technical, high-level decision makers.
- Outreach and Training: ICAN encompasses a wide range of knowledge and expertise from different disciplines which will be made available to atlas developer and user communities, via handbooks and training courses.

AIM

ICAN aims to be a global reference for the development of coastal web atlases (CWAs). Via the expertise of more than 35 member organizations, ICAN intends to inform, guide and influence matters related to research, development and use of CWAs.

WHO IS IN

ICAN
International Coastal Atlas Network

ICAN EVENTS

- International workshops: Potentials and Limitations of Coastal Web Atlases (University College Cork, Ireland, 2006); Coastal Atlas Interoperability (Oregon State University, USA, 2007); Federated Coastal Atlases: Building on the Interoperable Approach (European Environment Agency, Copenhagen, Denmark, 2008).
- The next International workshop will take place in Italy, Autumn 2009.

The ICAN prototype (<http://ican.ucc.ie/>) addresses issues of atlas interoperability to connect individual CWAs to an integrated global atlas.

OBJECTIVES

- Ensure that ICAN has representation from CWA development and user groups from around the world.
- Develop technical and policy guidelines to assist CWA developers in acquiring data and engaging with data providers. Accordingly, collate and publish a set of best-practice guidelines for the development of CWAs.
- Highlight the benefits of interoperability and standards based systems to the coastal atlas developer communities.
- Develop collaborative projects for the sharing of know-how, implementation of technical solutions and demonstration of atlas benefits to users.
- Align the atlas efforts of the Network partners in order that interoperability can be facilitated.
- Engage with other relevant international projects and developments.
- Involve representatives of the user communities to help in tailoring CWAs to their needs.

CWAs provide valuable information, data and tools for coastal zone managers and decision makers.

CONTACT

If you would like to join the ICAN initiative or be kept informed of our progress, please email:
Dawn Wright at dswn@dusk.psu.orst.edu or
Ned Dwyer at n.dwyer@ucc.ie
For more information visit:
<http://ican.science.oregonstate.edu/>

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- **Conferences**

- GIScience 2008 Park City, UT, USA,
- JIGOT 2008, Marseilles, France
- Coastal geoTools '09, Myrtle Beach, SC, USA
- EU Maritime Days, Rome, Italy
- 3rd INSPIRE Conf. /GSDI 11, Rotterdam, Netherlands
- CoastalZone'09, Boston, USA
- CoastGIS'09, Itajai, Brazil
- Free and Open Source Software for Geospatial (FOSS4G), Australia



Meetings/Workshops

- EUCC - The Coastal Union Meeting
- OGC Geosemantics Working Group
- GEOSS Architecture Implementation Pilot Workshop, Boulder, CO, USA
- FGDC Marine and Coastal Spatial Data Subcommittee Meeting
- Spatial Ontology Community of Practice (SOCoP) Workshop, McLean, VA
- Littoral 2008, Venice, Italy
- USGS Coastal and Marine Geology Program teleconference series
- West Coast Coastal Atlas Coordination Meeting



Training

- CoastGIS 09, Brazil
 - GeoNetwork and Mapserver
- ODINAFRICA African Marine Atlas Task Team Meeting , Belgium
 - MIDA, ICAN, Atlas Technologies (visualisation, metadata)
- INSPIRE /GSDI Conferences, Netherlands
 - ICAN workshop



Outreach

Handbook of Research on Coastal Informatics



Part I - Principles

😊 **Chapter 1 - Introduction: Coastal Web Atlas Defined** (Dawn, Val)

✓ **Chapter 2 - Coastal Web Atlas Features** (coordinated by Liz) [:

- 2.1. Introduction
- 2.2. Map Area
- 2.3. Geographic Data
- 2.4. Map Legend/Layer List
- 2.5. Atlas Tools
- 2.6. Attribute Tables
- 2.8. Information/Extras
- 2.9. Technology
- 2.10. Conclusion

✓ **Chapter 3 - Coastal Web Atlas Implementation** (coordinated b
3.1. Getting Started

Publication: 2010



- **Resource Section on Website**



Resource Directory
Related Links
Software, Services
Documentation,
Tutorials,
Cookbooks
ICAN Publications
Acronyms



- **Handbook**



Funding

- NSF travel Grants for 2009/2010
- EU Framework 7
 - NETMAR (ICAN case study)



National Science Foundation
WHERE DISCOVERIES BEGIN

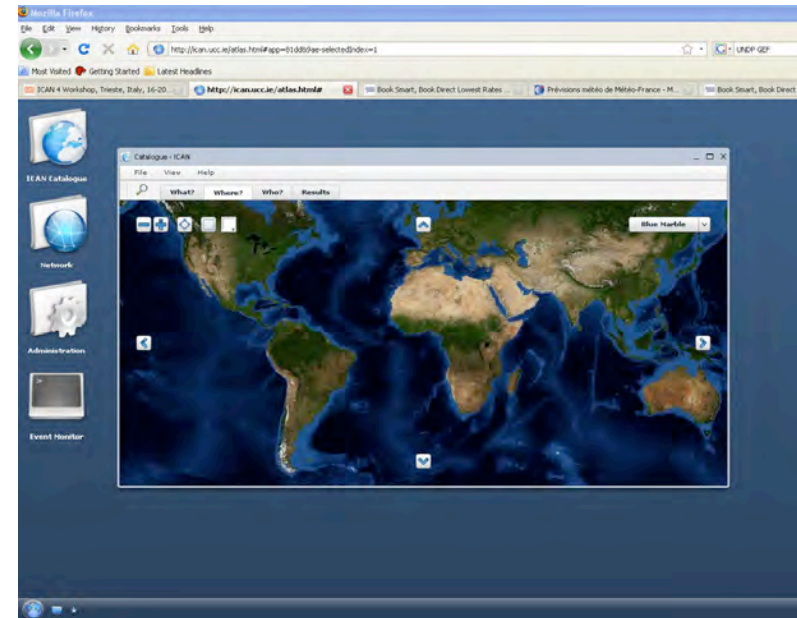




- ICAN Portal
- www.icoastalatlans.net



- ICAN Prototype





- Developed strategic plan
- Plan for formal governance
- Outline business model



Assessment

- CWA Inventory, USA
- ICAN CWA inventory
 - Coastal wiki database
- Web-based user survey tool
- Developer survey
- Benefits of semantic interoperability

