ISSUES TO BE DISCUSSED

The Committee will be invited to note the achievements of the ICAN Pilot Project (as approved by the IODE Officers meeting 2012) and to consider the proposal to establish ICAN as an IODE project.

DECISIONS/ACTIONS REQUIRED FROM THE COMMITTEE

The Committee will be invited to formally adopt the Recommendation for the establishment of the International Coastal Atlas Network (ICAN) project.

APPENDIX: DRAFT TEXT FOR INCLUSION IN THE SUMMARY REPORT OF IODE-XXII

1 This agenda item was introduced by Prof. Dawn Wright. As one of the founders of the Network she provided the background to the International Coastal Atlas Network (ICAN) initiative and pilot project and the proposal to adopt this as a formal IODE Project.

2 She recalled that ICAN began as a coastal atlas workshop held in 2006 at University College Cork, Cork, Ireland – Coastal and Marine Research Centre (CMRC), which was then repeated with a trans-Atlantic workshop in 2007 at Oregon State University, Corvallis, OR, USA. The members of this all-volunteer initiative then proceeded to fund their coastal and marine atlas development activities via international meetings in July 2008 in Copenhagen, DK, hosted by the European Environment Agency; November 2009 at UNESCO’s International Centre for Theoretical Physics (ICTP), Trieste, Italy; and 2011 at the IOC Project Office for IODE in Oostende, Belgium. To date, all activities have been self-funded. The work of ICAN directly benefits both the African Marine Atlas (AMA) and Caribbean Marine Atlas (CMA) projects, and both of these were represented in the ICAN Pilot Project. The network now has more than 50 member organisations from over 14 different countries.

3 Prof. Wright then recalled that the proposal to merge the ICAN initiative into an IODE Pilot Project was approved by the IODE Officers in January 2012.
4 Prof. Wright further informed the Committee that, if approved, the first Session of the SG-ICAN of the new IODE/ICAN would be held in Victoria, British Columbia, Canada, in June 2013, which would then also be the 6th ICAN meeting.

5 The Committee will be invited to consider Recommendation IODE-XXII.25 as detailed below.

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**DRAFT RECOMMENDATION IODE-XXII.25**

**THE IODE INTERNATIONAL COASTAL ATLAS NETWORK PROJECT (IODE/ICAN)**

The IOC Committee on International Oceanographic Data and Information Exchange,

**Acknowledging** the importance of atlases as interdisciplinary products that assist decision makers,

**Noting with appreciation** that ICAN has already influenced, guided and informed users on development and use of coastal and marine web atlases, through periodic workshops and international conferences held in 2006, 2007, 2008, 2009, and 2011,

**Further noting** that ICAN members have produced a suite of open source tools for creating integrated web atlases and a major peer-reviewed published guide,

**Recommends** the establishment of the IODE International Coastal Atlas Network (IODE/ICAN) Project with the Terms of Reference as attached in Annex A to this Recommendation;

**Recommends** the establishment of the IODE Steering group for the IODE/ICAN Project with the Terms of Reference as attached in Annex B to this Recommendation;

**Urges** Member States and donors to support the development of IODE/ICAN.

**Financial implications**

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Annex A to Recommendation IODE-XXII-25

Terms of Reference of the IODE International Coastal Atlas Network (IODE/ICAN) Project

Objectives of the Project

The strategic goal of the IODE International Coastal Atlas Network Project is to encourage and help facilitate the development of digital atlases of the global coast, based on the principle of distributed, high-quality data and information, at local, regional, national or international scale. This will be achieved by sharing knowledge and experience among atlas developers in order to find common solutions for coastal and marine web atlas development while ensuring maximum relevance and added value for users. Many of these atlases will play an important role in informing national and regional decision- and policy-making across several themes, including:

- Marine spatial planning
- Climate change impacts, coastal vulnerability
- Coastal governance (boundaries, protected areas, etc.)
- Coastal conservation and protected areas management
- Coastal hazards monitoring and planning
- Coastal disaster management and mitigation
- Population pressures
- Resource availability and extraction

The Participants in the Project

All experts previously involved in ICAN are invited to participate in the Project, as well as other relevant experts designated by IOC Member States.

Annex B to Recommendation IODE-XXII-25

Terms of Reference of the IODE Steering Group for the IODE International Coastal Atlas Network (IODE/ICAN) Project

Objectives

The SG-ICAN shall:

(i) Advise the IODE Committee on the global vision, mission, policy and strategy, including partnerships of the IODE/ICAN project with IOC and other projects/organizations;
(ii) Advise the IODE Committee on IODE/ICAN’s strategy for its sustainability and further development including resource mobilization;
(iii) Assist with the preparation and implementation of work plans, and review progress;

Membership

The Project will be managed by an IODE Steering Group for IODE ICAN (SG-ICAN), initially composed of members of the former ICAN Steering Group and Management Working Group, the project coordinators of the Caribbean Marine Atlas and African Marine Atlas, as well as representatives from other regions, as listed in Annex A-1.
Annex A-1

Proposed initial ICAN Steering Group membership

Ned Dwyer*, Ireland (ICAN SG co-chair)
Roger Longhorn*, Belgium (ICAN SG co-Chair)
Angora Aman, Cote D'Ivoire
Kathy Belpaeme*, Belgium
John Bemiasa, Madagascar
Marcia Berman*, USA
Héctor Huerta, El Salvador
Kathrin Kopke*, Ireland
Tony La Voi*, USA
Adam Leadbetter*, United Kingdom
Liz O Dea*, USA
Ramon Roach, Barbados
Lucy Scott*, South Africa
Dawn Wright*, USA
Andrus Meiner*, (European Environment Agency), Denmark

*Members from original ICAN Steering, Working and Technical Groups
ANNEX

ICAN Overall Objective

The strategic goal of the IODE International Coastal Atlas Network Project will be to encourage and help facilitate the development of digital atlases of the global coast, based on the principle of distributed, high-quality data and information, at local, regional, national or international scale. This can be achieved by sharing knowledge and experience among atlas developers in order to find common solutions for coastal and marine web atlas development while ensuring maximum relevance and added value for users. Many of these atlases will play an important role in informing national and regional decision- and policy-making across several themes, including:

- Marine spatial planning
- Climate change impacts, coastal vulnerability
- Coastal governance (boundaries, protected areas, etc.)
- Coastal conservation and protected areas management
- Coastal hazards monitoring and planning
- Coastal disaster management and mitigation
- Population pressures
- Resource availability and extraction

Background

Workshops were organised by the Coastal and Marine Research Centre, University College Cork, Ireland (2006) and the Geosciences Department, Oregon State University, OR, USA (2007), held in Ireland and the United States respectively, to discuss issues for development and use of coastal web atlases. From these workshops emerged the concept of an International Coastal Atlas Network - an informal network that has since captured the interest of local and state governments, non-governmental organizations, universities and international organisations such as the National Oceanic and Atmospheric Administration (NOAA) in the United States, the European Environment Agency (EEA) and UNESCO's Intergovernmental Oceanographic Commission. The Network now has more than 50 member organisations from over 14 different countries.

ICAN is a highly motivated, productive group capable of generating tangible, useful products that are helpful to users in developing and promoting coastal and marine web atlases. Products to date include a working atlas interoperability prototype, an extensive and well-received peer-reviewed handbook on coastal web atlas design and implementation (published in 2010 by IGI-Global Publishers), scores of technical articles and mini-workshop materials, and a comprehensive web site (http://ican.science.oregonstate.edu/en).

Further international workshops were hosted by the European Environment Agency in Copenhagen, DK (2008), UNESCO's International Centre for Theoretical Physics, Trieste, IT (2009) and UNESCO'S IOC Project Office for IODE, Oostende, BE (2011). Proceedings have been issued from these workshops plus reports from regional meetings held in the USA (West Coast and Great Lakes). ICAN participants have contributed to a number of training events worldwide, including activities at IODE in Oostende, BE, and in the regions for the Caribbean Marine Atlas and the African Marine Atlas. An open source web-atlas development engine (http://smartatlas.ucc.ie), developed by one European ICAN organisation is being re-used in the national atlas development within the African Marine Atlas project.

IODE started the development of coastal atlases within the framework of the Ocean Data and Information Network for Africa (ODINAfrica) with the African Marine Atlas, launched in February 2007. In 2010, IODE initiated the Caribbean Marine Atlas. Through these two atlas...
projects IODE initiated collaboration with ICAN experts. The proposal to merge the initiative into an IODE Pilot Project was approved by the IODE Officers in January 2012.

Activities and Timeframe

ICAN has already influenced, guided and informed users on development and use of coastal and marine web atlases, through periodic workshops and international conferences held in 2006, 2007, 2008, 2009, and 2011 (reports available on the ICAN web site). ICAN members have produced a suite of open source tools for creating integrated web atlases and a major guide - the *Handbook of Coastal Informatics: Web Atlas Design and Implementation*, published in 2010 (IGI Global, PA, USA).

Within the framework of the IODE ICAN-PP the following activities and expected outcomes were identified:

- harmonization of methodologies between the African Marine Atlas and Caribbean Marine Atlas projects,
- promoting and developing interoperability and standards based systems among the coastal atlas developer communities,
- sharing of expertise between ICAN (pre-IODE) members/partners and IODE Atlas projects,
- development of terms of reference and further work plan of IODE ICAN Pilot Project,
- creation of an extended and global network of coastal atlas experts,
- further development of an IODE ICAN-PP web site (based on the existing ICAN web site) for communication among project partners, and awareness raising with coastal and marine communities of the value of coastal atlases, and
- training (Ocean Teacher Academy courses in web services are especially relevant).

The above mentioned activities were carried out between 1 May 2012 and 1 March 2013.

Participants

All experts previously involved in ICAN as documented on the ICAN web site are invited to participate in the Project, as well as other relevant experts designated by IOC Member States.

Governance

The Project will be managed by an IODE Steering Group for IODE ICAN (SG-ICAN), initially composed of the selected members of the current ICAN Steering Group and Management Working Group, plus the project coordinators of the Caribbean Marine Atlas (Mr Ramon Roach) and African Marine Atlas (Mr Angora Aman), as well as representatives from other regions where necessary to ensure global coverage. Members for the initial SG-ICAN have all been approached and accepted appointment to the SG.

Financial Implications

From its inception, the ICAN initiative has been self-funded, based on voluntary contributions of all participants and support for meetings and development work arriving from member organisations. Financial implications for the IODE ICAN Project will be absorbed within the African Marine Atlas (ODINAfrica) and Caribbean Marine Atlas (CMA) project budgets (amounts to be decided but expected to be small, relating to travel only).