

Update on the Atlantic Ocean Research Alliance

The Atlantic Ocean Research Alliance¹ (AORA) is implementing the Galway Statement² signed on 24 May 2013. The Galway Statement establishes a formal Atlantic Ocean Research Cooperation between the European Union, its Member States, the United States of America, and Canada and partner countries that builds on existing initiatives and programmes to increase coherence and coordination of ocean research cooperation.

The following priority research areas adopted by the Atlantic Ocean Research Alliance were identified in the Galway Statement:

- Ocean stressors (marine ecosystem-approach)
- Aquaculture
- Observing systems
- Marine biotechnology
- Ocean literacy - engaging with society
- Seabed and benthic habitat mapping

The work on the Galway statement implementation has been streamlined through created marine working groups specific to each of the Galway priorities (some of the priorities already have their trilateral groups established, others are not yet established). Overall coordination is still on Karen Davison (DFO), Terry Schaefer, and Sieglinde Gruber (EC).

Two Galway issues that have been re-emerging recently: researchers' mobility and the South-Atlantic focus:

- The first, mentioned in the Statement, is now slowly introduced to the work of each thematic trilateral group. The parties are trying to couple funding for these activities, the Commission has the Marie Curie mechanism at hand in Horizon, and they are now after defined knowledge gaps. Once research roadmaps are agreed upon per Galway theme, implementation focus on Blue Growth will be of main concern (industry involvement, public-private partnerships).
- The second is a result of a push by the Portuguese R&I Commissioner. The Commission will attend focus meetings in Brazil and South Africa still this autumn, a big step for next year is

¹ <http://www.atlanticresource.org/>

² <http://www.atlanticresource.org/assets/galway%20statement%20atlantic%20ocean%20cooperation.pdf>

launching of the 'South Atlantic Science plan' and linking it into Galway.

Further gearing to the Galway is planned with the 'Coupled North Atlantic-Arctic System Science Plan³' (drafted in 2014, in Arlington) and with the running H2020 projects (e.g. PRIMEFISH or ATLANTOS).

Upcoming meetings with ICES participation in 2015: AORAC Operational Board (date/venue tbd) and the Trilateral Governance Meeting (organized by Trevor Swerdfager (DFO), John Bell (EC), Craig McLean (NOAA) on the 26th Oct in St. John's, NL. This meeting will be organized back to back with the Trilateral Seabed Mapping Working Group meeting and the Ocean Innovation Conference (Memorial University).

AORAC-SA

The Commission has funded a H2020 support action to underpin the Galway Statement implementation. ICES is leading work packages on aquaculture (ICES DHos), ocean stressors (ICES Ecosystem Coordinator) and knowledge sharing (Head of ICES DC). Under the umbrella of this project

The support action should also coordinate input from other running H2020 projects and several which will kick off early 2016:

- BG-1-2015: 'Improving the preservation and sustainable exploitation of Atlantic marine ecosystems',
- BG-2-2015: 'Forecasting and anticipating effects of climate change on fisheries and Aquaculture'
- SFS-11b-2015: 'Consolidating the environmental sustainability of European aquaculture'

ICES is in consortia responding to all three.

AORA aquaculture

The Trilateral Aquaculture WG and ICES are organizing a workshop on transatlantic aquaculture collaboration (October 20th 2015) in Rotterdam, back to back with the Aquaculture Europe Conference. The persons behind organization are: Jacques Fuchs (EC), David O'Brien (NOAA), Jay Parsons (DFO), and Wojciech Wawrzynski (ICES DHos). The meeting should facilitate consensus around the activities in order to implement well-developed topics (the plan is to close the discussion on priorities pre-defined in the AQ roadmap there and move on). Furthermore, discussions

³ <http://www.whoi.edu/files/server.do?id=194784&pt=2&p=192929>

will tackle an inventory of on-going cooperation initiatives (based on overview documents like the one on collaborations from the CWGMTC and several COFASP ERA-NET ones) and the establishment and funding of a trilateral aquaculture exchange programme (still in its embryonic stage). DHoS will present conclusions of the ICES AQ Dialogue Meeting and make sure these are taken on board. Some of the ADM recommendations will go to the ICES AQ WGs (e.g. 'Defining/mapping advice fields for ICES in terms of policy objectives of ICES Member Countries' or 'Identifying how social, economic, governance and environmental framing conditions influence aquaculture development').

AORA Ocean Stressors

This AORAC work package is tasked with supporting the soon to be created trilateral group (EU/USA/Canada) on ocean stressors/ecosystem approach, with input from the EU Horizon2020 projects under BG1 "Improving the preservation and sustainable exploitation of Atlantic marine ecosystems".

Following from the 2013 Galway declaration, AORAC is facilitating the Atlantic Ocean Research Alliance exploration of research and science needs for the ecosystem approach, ocean health and ocean stressors. This builds on the 2013 workshop on transatlantic marine and arctic cooperation which highlighted that "...it is crucial to assess complex effects of multiple stressors. To manage these systems following an ecosystem approach requires quantification of the influence of those multiple stressors and a systems vision of their interactions with natural processes." The workshop concluded there was considerable merit in collaborative research on "ecosystem approach for the sustainable use of marine resources". This conclusion and a further workshop in Arlington, USA were influential in creating the EU/NSF research programme on the coupled North Atlantic-Arctic system.

In preparing the foundations for describing the research and science needs, this work package is engaging "with national programmes, FAO, regional seas commissions, RFMOs and EU policy developers, including successful BG-1-2015 project coordinators, to understand what is seen as the "ecosystem approach" priorities and strategies of policy developers".

As part of a process to determine the science needs for the investigating ocean stressors and the ecosystem approach, AORAC is organizing a workshop to scope what is seen as the "ecosystem approach" priorities and strategies of policy developers and stakeholders. The *Making the ecosystem*

approach operational workshop (20-22 January 2016)⁴ will feed into the Galway process and be centred on science for blue growth.

The three day workshop (supported by ICES, FAO, NOAA and DFO), is designed to address questions currently challenging the ecosystem approach to the management of marine activities “where are we and where do we want to go, especially when considering moving from single to cross-sectoral evaluation of the ecosystem approach?”

The focus of the workshop is on the main sectors that operate in the Atlantic Ocean and adjacent seas, namely shipping and ports, oil and gas, renewable energy, fishing, tourism and aggregate extraction; specifically in relation to the blue growth agenda of the EU. The workshop is being organised, through AORAC, by the leading ecosystem approach experts from the UN, Europe, USA, and Canada.

The workshop creates an opportunity for stakeholders to come together to review concepts and address scientific, institutional, legal and socio-economic challenges related to operationalizing the ecosystem approach. It also allows for the exchange of experiences and constraints encountered, and the identification of approaches and strategies to make this approach operational.

AORA Knowledge Sharing Platform

For knowledge sharing, there is no tri-lateral working group to support this area for the time being. The Commission, US, and Canada are still lining up their respective experts.

So far efforts have focussed on establishing contacts with the key players. For the Commission, Marco Weydert (DG R & I) is the focal point. For Canada, Tobias Spears (DFO), Benoit Pirenne (ONC) and Mathieu Ouellet (DFO) have been identified as the focal points with Tobias and Mathieu also acting as joint leads in their own ‘Data management and dissemination’ working group. The US do not appear to have developed the internal leads, and so far Jennifer Jencks (NOAA) has been contacted by the US overall lead, although she is already associated with other tri-lateral working groups.

The immediate activity is now to start-up the dialogue with these contacts and start to elaborate the vision of what the three partners see as the priorities in developing an Atlantic knowledge sharing platform.

⁴ <http://ices.dk/explore-us/projects/Pages/Making-the-ecosystem-approach-operational.aspx>

Suggestions for the CWGMTC

Build visibility of ICES as a key aquaculture research player in North America: this image will need to be built basically from scratch, two potential opportunities:

- 1) The Trilateral aquaculture WG and ICES will be organizing a session/workshop during 'Aquaculture America', Las Vegas 23-26 February (overlapping with another AORAC conference 'Ocean Sciences' in New Orleans – this one observation/habitat mapping oriented); ICES visibility on aquaculture issues in Europe is progressing (with the 2014 OSPAR advisory request on interactions between wild and captive fish stocks, and a similar request received from NASCO lately – forwarded to WGAQUA and WGNAS in September. Though the ASC aquaculture session was the only one cancelled in 2015 in Copenhagen – due to low submission rate, no aquaculture-related session proposals were received for 2016 ASC).
- 2) ICES could perhaps think of acquiring invitation to another Dialogue Meeting on priority theme areas of the Galway Statement such as the Arctic, Ocean Stressors/Ecosystem Approach, Aquaculture, and/or knowledge sharing, in North America, in order to establish / strengthen ICES position in North American research.
- 3) Focus special theme sessions or activities at the ASC 2017 in the USA on priority theme areas of the Galway Statement such as the Arctic, Ocean Stressors/Ecosystem Approach, Aquaculture, and/or knowledge sharing.
- 4) First approach to a concept of a BONUS-like structure in the North Atlantic. A feasibility study / inquiry with research funding agencies in USA and Canada on possibilities to jointly fund transatlantic marine research projects, provided that EC funding is made available. Also a look at how this could support implementation of the ICES Strategic Plan.