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ATLANTIC OCEAN RESEARCH ALLIANCE

THE ATLANTIC: OUR SHARED RESOURCE

MAKING THE VISION REALITY



Overview

- Overarching Objectives
- Tri-partite Galway Implementation Committee
- Priority Areas of Cooperation
- Priority Area Working Groups
- NSF/NASA Alignment
- Horizon 2020 Consortia in Support of Galway Statement Implementation
 - Research and Innovation Actions
 - Coordination and Support Actions
- Shared Access to Infrastructure under the Galway Statement

Galway Statement on Atlantic Ocean Cooperation – Overarching Objectives

- Improve ocean health and stewardship
- Promote sustainable management of resources
- Improved ecosystem assessments and forecasts and deeper understanding of vulnerabilities and risks, including climate change
- Generate new tools to increase resilience, conserve rich biodiversity, manage risk and determine social, environmental, and economic priorities

Tri-Partite Galway Implementation Committee

Co-chaired by Canada, the European Commission, and the United States

- Trevor Swerdfager, Assistant Deputy Minister, Ecosystems and Oceans Science, Fisheries and Oceans Canada
- John Bell, Director of Bioeconomy, Agriculture, Food, Marine in Directorate-General Research and Innovation, European Commission
- Craig McLean, Assistant Administrator, Office of Oceanic and Atmospheric Research, NOAA

Priority Areas of Cooperation – “The What”

‘Ocean research and observation efforts’ subsequently defined under ‘statements of purpose’ in which we have agreed to work together in the following priority areas of cooperation:

- Ocean Health and Stressors
- Ocean Observation and Prediction
- Atlantic Seabed Mapping and Characterization
- Aquaculture
- Marine Microbial Ecology (EU-US)
- Information Management and Dissemination
- Ocean Literacy

Priority Areas of Cooperation – “The How”

In working together to advance results in the identified areas of research cooperation, we will seek to improve efficiencies and effectiveness by:

- Organizing and leveraging research activities in a way that takes advantage of opportunities for synergies in work already underway and the use of infrastructure or installations
- Better coordination of data sharing, interoperability and coordination of observing infrastructure
- Promoting researcher mobility
- Coordinating the planning and programming of relevant activities and resources

Galway Statement Implementation

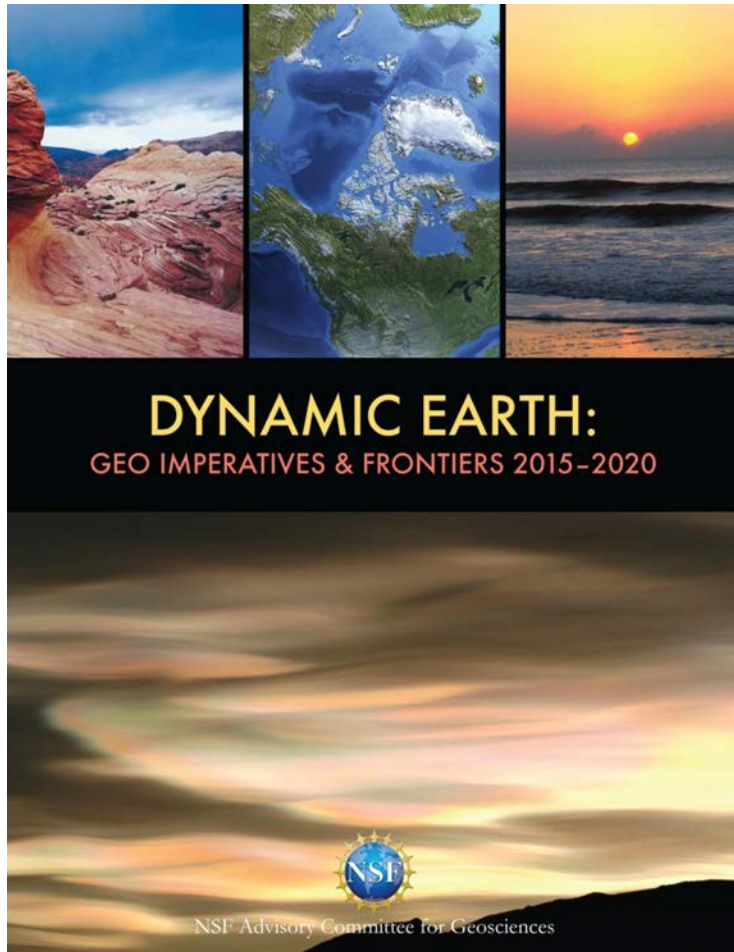
Working Groups - Priority Areas of Cooperation

Formal tri-lateral working groups have been established to advance scientific planning under agreed upon areas of priority research

- Aquaculture
- Oceans Literacy
- Atlantic Seabed Mapping

Establishment of formal working groups in remaining areas of research cooperation evolving

Galway Statement Implementation – NSF Directorate for Geosciences Near-Term Priorities and Focus Areas



*“Inter-agency and intergovernmental partnerships are forming that will enhance research opportunities in the Arctic and North Atlantic as well as in the Southern Ocean. One example is trans-Atlantic cooperation of NSF and NASA programs with Europe’s **Horizon 2020 framework** studies of the Arctic, sub-Arctic, and North Atlantic....”*

NSF Advisory Committee for Geosciences.

December, 2014

Galway Statement Implementation – A Planning Workshop for Transatlantic North Atlantic-Arctic Science Cooperation

A COLLABORATIVE INTERNATIONAL RESEARCH PROGRAM ON THE COUPLED NORTH ATLANTIC-ARCTIC SYSTEM

Science Plan

Developed from a Workshop held in

Arlington, VA

14-16 April 2014

Editors: Eileen Hofmann, Mike St. John, Heather Benway

Workshop Organizing Committee

Icarus Allen
Melanie Austen
Heather Benway
Eileen Hofmann
Jeremy Mathis
Paty Matrai
Dennis McGillicuddy
Mary Jane Perry
Mike Roman
Mike St. John
Mary Zawoysky

http://www.whoi.edu/website/NAtl_Arctic

www.atlanticresource.org



“ . . . to facilitate development of a core vision for advancing the next phase of research on the North Atlantic-Arctic system and strengthening international collaborations within and between the European Union and North America.”

- Gateways: Implications of warming and freshening.
- Circulation: Implications of large- to submeso-scale.
- Spring Bloom Dynamics: Initiation, evolution, termination.
- Sustainable Fisheries: Impacts of all of the above and fishing pressure.
- Marine Ecosystem Health: Resilience to change.
- Prediction: Robust models for decision-making.
- New Knowledge: And translating it into Advice

The National Science Foundation Dear Colleague Letter NSF 16-006: A Near-Term Action Plan For Advancing the Galway Agreement 2016-2018



NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230

NSF 16-006

Dear Colleague Letter: Interagency and International Research on North Atlantic - Arctic Oceanographic Processes

October 13, 2015

Dear Colleague:

The oceanography and ecology of the North Atlantic Ocean are fundamentally linked to the health, economy, and overall well-being of North America and Europe, and to the global climate system. The trilateral *Galway Statement on Atlantic Ocean Cooperation* of May, 2013, between the European Union (EU), Canada, and the United States (US) (available at <http://www.coopeus.eu/galway-statement/>) emphasizes the need for international cooperation in discovering and understanding processes influencing this dynamic region of the oceans. In April 2014, NSF and the European Commission cosponsored a workshop on the coupled North Atlantic-Arctic System to identify critical research questions, discuss common research interests, and explore areas of potential collaboration. Participants included multidisciplinary scientists from Canada, the EU, and the US and representatives from ocean-relevant US and EU government agencies. The workshop report is available at <http://www.whoi.edu/files/server.do?id=208864&pt=2&p=192971>.

This Dear Colleague Letter provides guidance for US scientists who will request support from the NSF Division of Ocean Sciences (OCE) and Division of Polar Programs (PLR) over the next 18 months to conduct research related to the workshop goals in collaboration with scientists from Canada or the European Union.

<http://www.nsf.gov/publications/ods/>

Enter 16-006 in the Search box to access the letter

- NSF 16-006 acknowledges community interest in North Atlantic-Arctic research and invites submission of proposals at one of the regular Ocean Sciences or Polar Sciences submission times
- Formal or informal collaboration with non-US colleagues encouraged but not required
- Submitted proposals will compete with and be evaluated along with other regular proposals
- Potential investigators are advised to discuss ideas with program managers in advance
- Release date: October 13, 2015



Galway Statement Implementation – NASA Export Processes in the Ocean from RemoTe Sensing (EXPORTS)

- EXPORTS Goal: Predict the export and fate of ocean net primary production (NPP) from satellite and other observations
- An EXPORTS Science Definition Team has been selected and announced
- In line with the recently released NSF Dear Colleague Letter, NASA release a notification on December 2, 2015

<http://nspires.nasaprs.com/external/viewrepositorydocument/cmdocumentid=448034/solicitationId=%7BEAB4311C-7130-7F75-BDC2-AB50BCC8A900%7D/viewSolicitationDocument=1/A.3%20OBB%20Amend%20033.pdf>

- Proposals for EXPORTS planned for early 2017
- EXPORTS to begin in July/August 2017

Galway Statement Implementation – Horizon 2020 Research and Innovation Actions

EU-Can-US research consortiums established under ‘Galway tagged’ marine thematic areas

Project	Objective
AORAC-SA	Provide scientific, technical and logistical support in developing and implementing Atlantic Marine Research Cooperation.
EU-PolarNet	Establish an ongoing dialogue between policymakers, business and industry leaders, local communities and scientists to increase mutual understanding and identify new ways of working that will deliver economic and societal benefits.
AtlantOS	Developing in-situ Atlantic Ocean Observations for a better management and sustainable exploitation of the maritime resources - Optimizing and Enhancing the Integrated Atlantic Ocean Observing System
DiscardLess	Strategies for the gradual elimination of discards in European fisheries
AquaSpace	Ecosystem approach to making space for aquaculture

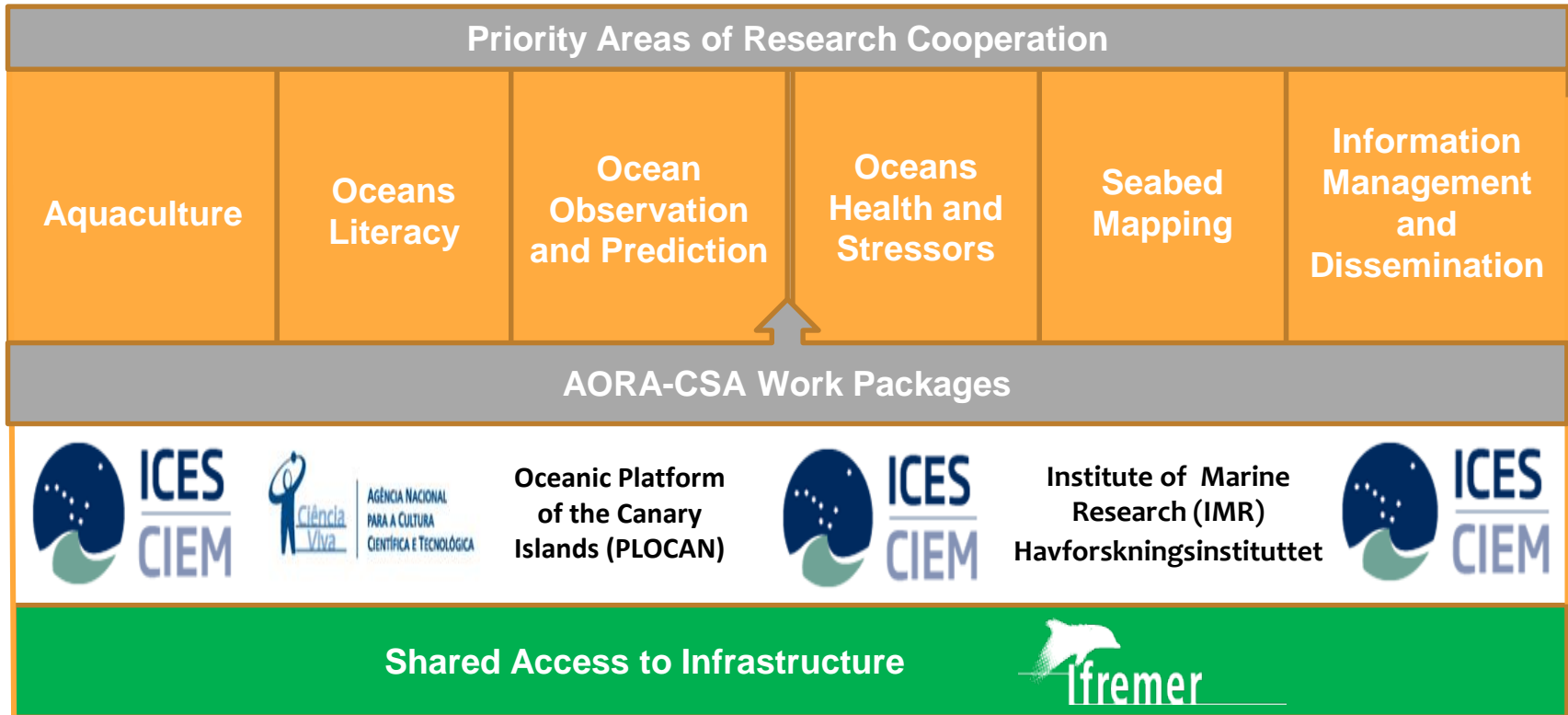
Galway Statement Implementation – Horizon 2020 Research and Innovation Actions

Project	Objective
INMARE	Enhancing the industrial exploitation potential of marine derived enzymes
LAKHsMI	Develop a new bio-inspired technology to make continuous and cost-effective measurements of the near-field, large-scale hydrodynamic situation, for environmental monitoring in cabled ocean observatories, marine renewable energy and port/harbor security.
PrimeFish	Developing innovative market orientated prediction toolbox to strengthen the economic sustainability and competitiveness of European seafood on local and global markets
ResponSEABLE SeaChange	Ocean Literacy – Engaging with Society – Social Innovation
ATLAS SponGES	Improving the preservation and sustainable exploitation of Atlantic marine ecosystems

Galway Statement Implementation – Horizon 2020 Coordination and Support Action (AORAC-SA, BG14)

- Supporting International Cooperation Initiatives: Atlantic Ocean Cooperation Research Alliance
- Eleven funded work packages to provide scientific, technical, and logistical support to the identified priority areas of research under the Galway Statement and its implementing Working Groups
- Support activities include the organisation of expert and stakeholder meetings, workshops , conferences, activity inventories, mapping exercises, etc.

Galway Statement Implementation – Coordination and Support Action (AORA-CSA, BG14)



AORA-CSA Work Package Leaders

Work Package	WP Leader	Organisation
WP4: Ecosystem Approach	Mark Dickey-Collas	ICES
WP5: Ocean Observation	José Joaquín Hernández Brito	PLOCAN
WP6: Marine Biotechnology	Sigurður Björnsson	RANNÍS
WP7: Aquaculture	Wojciech Wawrzynski	ICES
WP8: Ocean Literacy	Ana Noronha	Ciência Viva
WP9: Seabed & B.Hab. Mapping	Pål Buhl-Mortensen	Institute Marine Research
WP10: Shared Access to MRI	Aurélien Carbonnière	IFREMER
WP11: Knowledge Sharing Platform	Neil Philip Holdworth	ICES

AORA-CSA WP4 Objectives

To provide the Atlantic Ocean Research Alliance with relevant and responsive information on the status of “Ecosystem Approach” research in Europe relevant to scientific and industry needs in the North Atlantic.

This will be provided through the provision of :

- (a) a preliminary mapping and connectivity assessment of relevant ongoing “Ecosystem Approach” research activities and programmes in Europe relevant to the North Atlantic &
- (b) such detailed/sectoral assessments as are deemed necessary by the Alliance to contribute to aligning the planning and programming of trans-Atlantic research activities with a view to launching joint Research & Innovation initiatives, while building on existing ones.

Collate the findings of all Workshops to create a synthesis of a “Shared Vision” document on research directions, priorities and synergies for the ecosystem approach

within the broad area of cooperation Ocean Health and Stressors



Thank You!