All-Atlantic Ocean Research Alliance

*Connecting-Acting-Cooperating*

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European Commission
Journey Towards the All-Atlantic Ocean Research Alliance

The Galway Statement on Atlantic Ocean Cooperation

May 2013, Galway, Ireland
In working together to advance the priority areas of research cooperation, we seek to improve efficiencies and effectiveness by:

- Organising, aligning 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 for better alignment of relevant activities and resources
Galway Statement Video

BY CONTINUING THE LAST GREAT EXPLORATION CAMPAIGN
Atlantic Ocean Research Alliance
Coordination and Support Action

The Last Great Exploration
Campaign on Earth

Atlantic Ocean Research Alliance (AORA)
supported by @EU_Commission @EU_H2020
AORAC-SA. Founded 2013 with signing of The
Galway Statement #AtlanticOcean #H2020
Galway, Ireland atlanticresource.org
Joined November 2015
1,468 Following 2,502 Followers
Followed by: Jorge Lopes, Alicia Wilson,
EuroNeets Plus, and 255 others

www.atlanticresource.org
EU H2020 project for Optimizing and Enhancing the Integrated Atlantic Ocean Observing System

AtlantOS improved and innovated Atlantic observing by using the Framework of Ocean Observing to obtain an international, more sustainable, more efficient, more integrated, and fit-for-purpose system.

Advances were achieved by improving the value for money, extent, completeness, quality and ease of access to Atlantic Ocean data and information required by industries, product supplying agencies, scientists and citizens.

www.atlantos-h2020.eu
An international programme leading to a comprehensive All-Atlantic Ocean Observing System that benefits all of us living, working and relying on the ocean.

**Basin-scale Implementation & Use Case Approach**

- to improve **international collaboration** in the design, implementation and benefit sharing of ocean observing;
- to promote **engagement and innovation** in all aspects of ocean observing;
- to facilitate **free and open access** to ocean data and information => **Digital-Twin Ocean**;
- to enable and disseminate methods of achieving **quality and authority** of ocean information;
- to strengthen the Global Ocean Observing System (GOOS) and contribute to **GEO Blue Planet** Initiative;
- to contribute to the **Galway and Belém Statements** on Atlantic Ocean Cooperation.

**Program Objectives**

- **Carbon Uptake** – Identifying sources and sinks of carbon
- **Mitigating Impacts of Sargassum on Coastal Communities in the Tropical Atlantic**
- **Networks to predict and explain marine animal movements in a changing environment**
- **Providing Basin-Scale Climate Services – Atlantic Meridional Ocean Circulation**
- **Supporting Ecosystems Based Management for Fisheries in Atlantic Upwelling Regions**
- **Building an All-Atlantic Ocean Community – Implementing the Belém Statement**
Belém Statement on Atlantic Ocean Research and Innovation Cooperation

Confederación Iberoamericana: Lisbon on 13-14 July 2017

Oceans play a key role in developing national and regional economies, achieving the Sustainable Development Goals, and addressing climate change. The ongoing activities related to the Atlantic Ocean Research Alliance and deepening scientific cooperation in the South and Tropical Atlantic and Southern Oceans are widely recognized.

The importance of research on the oceans underpins the strategic partnerships on marine research that Brazil and South Africa have with the European Union and many European partners.

On the basis of the Agreement on science and technological cooperation between the Republic of South Africa and the European Community (signed on 5 December 1996, which entered into force on 11 November 1997), the European Union and the Republic of South Africa have established close scientific collaboration, which is coordinated by the Joint Science and Technology Cooperation Committee established under this Agreement.

Equally, close scientific collaboration was established under the Agreement for scientific and technological cooperation between the European Community and the Federative Republic of Brazil (signed on 19 January 2004, which entered into force on 7 August 2007), as renewed in 2012 and coordinated by the Steering Committee on scientific and technical cooperation.

This Statement builds on the Joint Declaration of Intent between the European Commission and the Ministry of Science, Technology and Innovation of Brazil, signed on 17 November 2015, as well as on the Declaration of Intent between South Africa’s Department of Science and Technology and the European Commission on Marine Research and Innovation Cooperation, signed on 3 October 2016. It also takes account of the outcomes of the Atlantic Interactions Ministerial Summit and high-level Industry-Science-Government Dialogue, held at Tancrède (Aix) in April 2017.

We, the Commissioners for Research, Science and Innovation of the European Commission, on behalf of the European Union, the Minister of Science and Technology, on behalf of the Department of Science and Technology, a Government Department of the Republic of South Africa; and the Minister of State for Science, Technology, Innovations and Communications, on behalf of the Ministry of Science, Technology, Innovations and Communications of Brazil, would like to take further our collaborative scientific efforts in the Atlantic Ocean.
Priority Areas of Cooperation under the Belém Statement

• Promote and facilitate human capital development and scientific exchange;
• Provide a platform and opportunities for cooperation;
• Encouraging new models of cooperation in key areas of interest:
  ✓ Climate Variability
  ✓ Ocean Resources
  ✓ Ocean Observation
  ✓ Ocean Technology
  ✓ Emerging Pollutants
  ✓ Polar Research
All-Atlantic Ocean Research Alliance: deepen cooperation with Argentina & Cabo Verde
All-Atlantic Ocean Research Alliance Video
Major Horizon 2020 contributions to the All-Atlantic Ocean Research Alliance
ATLAS Project Objectives

ATLAS Compendium of Results

Unlocking the Potential of the Deep Atlantic Ocean

Report available on https://www.eu-atlas.org/
Five Overarching Objectives

iAtlantic Expeditions
- 30+ seagoing expeditions
- 2 flagship CB cruises in 2021
- IceAGE3 expedition currently underway
- www.iatlantic.eu/our-work/expeditions

iAtlantic Fellowship
- 35+ early career researchers across the partnership
- Dedicated CB programme: workshops, seagoing, webinars, mentoring scheme, etc.
- www.iatlantic.eu/our-team/iatlantic-fellows/
• Assess the status of the South and Tropical Atlantic marine ecosystem
• Develop a framework for predicting its future changes, from months to decades, and thus
• Contributes to the sustainable management of human activities in the Atlantic Ocean as a whole.
Mapping and assessing present and future status of Atlantic marine ecosystems under climate change and exploitation

- Mapping Human activities -> Pressure -> Ecosystem components -> and assess the Atlantic marine ecosystem using Integrated Ecosystem Assessment
- High Resolution modeling at the global scale of the entire ecosystem
- Data collection with long endurance autonomous systems
- Deliver a novel narrative of the Atlantic Ocean
Unlocking the potential of Marine Microbiomes for the Blue Economy & Marine Ecosystem Health
Impacts generated by AquaVitae

- New species, products and processes from all case studies. Development and introduction of new biosensors (sulphite, insitu bio-measuring) and integration into Internet of Things (IoT) platforms.
- Defining product characteristics from new and novel products.
- Measuring food safety and risks.
- Quantifying consumer attitudes towards LTS and species grown in different systems (e.g., IMTA).
- Measuring the environmental sustainability and risks assessment of cases studies in the various environments around the Atlantic.
- Economic analysis of value chains and profitability.
- Measuring socio-economic and ecosystem services. What economic value we can put on these?
- Analysis of policy and governance around the culture of low-trophic species (LTS) and advice on future best practise.
- Over-arching training, communication, dissemination and exploitation activities.
All Atlantic Ocean Sustainable, ProfiTable and Resilient AquacuLture

The **overall objective** of ASTRAL is to develop new, sustainable, profitable and resilient value chains for integrated multi-trophic aquaculture (IMTA) production within the framework of existing, emerging and potential Atlantic markets. ASTRAL will:

- Identify and mitigate risks related to climate change and environmental threats
- Increase circularity
- Develop a new and improved innovative technology pool
- Deliver new business models for IMTA
- Share and integrate co-generated knowledge, technology, practices and efforts with and for society
- Assess the environmental, social and economic impacts of IMTA
- Provide a collaborative ecosystem with industrial partners, smes, policy-makers, social representatives and other stakeholders
- Develop an ambitious and gender-sensitive human capital development plan (HUCAP)
- Carry out cross-Atlantic governance assessment
Goals

➤ To open-up key national and regional marine robotics research infra-structures to researchers in Europe and worldwide

➤ To establish a world-class marine robotics research infrastructure

Activities

➤ **Networking** activities towards a world-class marine robotics integrated infrastructure

➤ **Joint research activities** to make systems more operable

➤ **Trans-national access** to provide access to research infrastructures *(open calls)*

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AANChOR
All AtlaNtic Cooperation for Ocean Research and innovation

Visibility of Ocean Research Activities in the Atlantic Ocean – Portal and Database

https://allatlanticocean.org/main
All-Atlantic Ocean Youth Forum

23 All-Atlantic Ocean Youth Ambassadors from 15 countries connected to the Atlantic Ocean

Campaigns focused around 3 main themes:

• Be ‘Atlantic Friendly’ – Encouraging ocean-friendly initiative in the eco-tourism sector

• Culture and Celebration – Increasing ocean advocacy to increase ocean awareness, rejuvenate sustainable cultural practices, connect communities

• Getting to know the Atlantic – Discovering myths, legends, folklore to promote ocean stewardship and advocacy
The Forum marked a turning point in the work of the Alliance: science and innovation will support societal well-being around the Atlantic Ocean.

Report available on https://allatlanticocean.org/news

Save the Date for the next virtual All-Atlantic Ocean Research Forum hosted by South Africa on 3 – 4 December 2020!
AIR CENTRE is working closely together with AANChOR, and related projects within the context of the Belem Statement, to share information, develop joint activities and proactively promote networking among stakeholders interested in transatlantic interactions.

- The AIR Centre's central role in the ASTRAL project is the design and implementation of the Atlantic Integrated Multi-Trophic Aquaculture (IMTA) Alliance.
- The AIR Centre will lead the efforts to map, identify and engage the entire value chain, promoting its added value to public and private stakeholders as well as ensuring the legacy of the ASTRAL project.
- The AIR CENTRE will also participate in all dissemination and communication activities related to the ASTRAL project.
- AIR Centre’s main task in the MISSION ATLANTIC project is to promote cooperation through Science Diplomacy.
- AIR Centre will ensure articulation of the All Atlantic Ocean Community with the ongoing governmental-level efforts in partner countries, including dissemination and communication activities.
- AIR Centre will also contribute to build capacity to support an ecosystem-based approach to management of Atlantic resources.
Future Activities / Next Steps

• We will continue to work together on mutual ocean research and observation efforts in the Atlantic Ocean

• This work is wide-ranging and will include:
  
  ➢ Facilitating ongoing dialogue between industry, academia/research institutions and government entities
  
  ➢ New shared initiatives under the All-Atlantic Ocean Research Alliance from Pole to Pole with focus also on capacity building and empowering communities and
  
  ➢ Advancing cooperative ocean science in support of the UN Decade of Ocean Science for Sustainable Development (2021-2030) and 2030 Agenda
Keep in touch!

https://www.atlanticresource.org/aora
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All-Atlantic Youth
Thank You!