



International, Horizon 2020 project, “Mission Atlantic” launched to map and assess sustainable development of the Atlantic Ocean

Press release: 30 September 2020

International ocean experts from Europe, Brazil, South Africa, Canada and the USA have joined forces to map and assess the current and future risks from climate change, natural hazards and human activities to Atlantic ecosystems.

Funded by a €11.5M grant from the European Union's Horizon 2020 programme, **MISSION ATLANTIC** will be the first initiative to develop and systematically apply Integrated Ecosystem Assessments (IEAs) at Atlantic basin scale.

This unique IEA approach engages scientists, marine stakeholders, and resource managers, integrating all components of the ecosystem, including human activity, into the decision-making process. In this way, managers and policy makers informed by science, can balance the need for environmental protection with secure, sustainable development, thereby ensuring a positive future for the Atlantic Ocean and its peoples.

Patrizio Mariani, **MISSION ATLANTIC** Project Coordinator, said *“In an era of rapid transformations affecting our societies and our lives, we are asked to provide the scientific knowledge necessary to face future challenges and to guarantee a sustainable future for the next generations. By studying the complex Atlantic Ocean ecosystems, MISSION ATLANTIC will contribute to a better and more sustainable future for life on Earth.”*

Using high-resolution ocean models, artificial neural networks, risk assessment methods and advanced statistical approaches, **MISSION ATLANTIC** will accurately assess pressures imposed on Atlantic marine ecosystems, identifying the parts most at risk from natural hazards and the consequences of human activities.

The team will combine existing data from global ocean monitoring programmes with new observations collected using advanced marine robots and acoustic sensors. A truly multidisciplinary approach, these tools will be used to explore plankton and fish distribution in unknown waters, including sub-Arctic and Tropical regions in the Atlantic Ocean.

Dr Lynne Shannon (Department of Biological Sciences, UCT) is leading the Southern Benguela Case Study in **MISSION ATLANTIC**. She identifies two key questions that she hopes the work undertaken as part of **MISSION ATLANTIC** will help to address: 1) How can we facilitate operationalisation of Ecosystem-based Management in the Southern Benguela? And 2) How can we expand our understanding of ecosystem changes in the Southern Benguela in a way that practically enhances adoption of improved fisheries management strategies in a changing environment? With respect to the first key question, she says “we are excited to undertake Integrated Ecosystem Assessments that build upon some of the initial Ecological and Climate Risk Assessments previously done in the region”, and with respect to the second, she acknowledges that “much work has already been done

in documenting and quantifying ecosystem changes in the Benguela and classifying regime shift periods, but the gap is the practical application / uptake of such work in fisheries management itself”.

In addition to expanding scientific knowledge of the Atlantic Ocean, **MISSION ATLANTIC** will focus on improving education and professional development opportunities in countries bordering the North, South and Tropical Atlantic Ocean. Regional stakeholder platforms will act as “science to governance” interfaces in these areas, enabling local communities to engage with their representatives and stimulate effective policies.

Through co-creation of management recommendations, **MISSION ATLANTIC**, will contribute to the commitments outlined in the Belém Statement on Atlantic Ocean Research and Innovation Cooperation between the European Union, Brazil and South Africa, and as part of the UN Decade of Ocean Science (2021-2030), supporting society in achieving a sustainable ocean.

Michael St. John, **MISSION ATLANTIC** Policy lead and Belém Panel Chair, said *“In support of the Belém statement, MISSION ATLANTIC will be a catalyst in linking research activities in the South Atlantic and Southern Ocean with those in the North Atlantic. It will identify and strengthen synergies between the Atlantic Research Agenda, AIR Centre; Joint Programming Initiatives, as well as the Strategic Forum for International Science and Technology Cooperation, the European Union's Earth Observation and Monitoring programme - Copernicus, and the Benguela Current Commission. Through its activities, MISSION ATLANTIC will optimise the use and sharing of research infrastructures and, via the development of state-of-the-art data methodologies, enhance access to and management of data on the stressors and services provided by Atlantic ecosystems. Finally, and critically, the project will provide the knowledge and tools necessary to sustainably manage Atlantic ecosystem services as they are impacted upon by climate change and human activities.”*

More information coming soon on www.missionatlantic.eu | Follow us on twitter: @MISSIONATLANTIC



*Tourism, maritime transport, and small-scale fisheries are among the human activities to be assessed in **MISSION ATLANTIC**'s IEA approach, which will ultimately enable local communities to engage with ocean governance policies and ensure a positive future for the Atlantic Ocean and its peoples. [Image taken in Buzios, Brazil © Patrizio Mariani]*