



PHILADELPHIA DECLARATION

Expanding and Consolidating the
ATLANTIC INTERNATIONAL RESEARCH CENTRE (AIR CENTRE)
as a mission-oriented organization to support ocean/space/climate interaction, ocean-basin conservation and restoration efforts and to foster knowledge-driven sustainable economic development in the Atlantic

Philadelphia, USA

October 5, 2020

Taking into account the *Conclusions* of the 1st High-level Dialogue on Atlantic Interactions, April 20-21, 2017, held in Terceira Island, Azores, Portugal, and the common understanding described in the *Florianopolis Declaration*, signed at the 2nd High-level Dialogue on Atlantic Interactions, which took place in Florianopolis, Santa Catarina, Brazil, on November 20-21, 2017, over the establishment of the AIR Centre - Atlantic International Research Centre, as an internationally distributed scientific organization;

Considering the establishment of the *Association for the Development of the AIR Centre* (AD AIR Centre) on April 16, 2018, as a non-profit association created to promote a collaborative and integrative approach of Space, Oceans, Climate, Biodiversity, and Data Sciences, as expressed in the *Praia Declaration*, signed at the 3rd High-level Dialogue on Atlantic Interactions, May 7-8, 2018, in Praia, Cape Verde, as well as in the collaborative work based on the six main lines of actions established in the *Canary Islands Declaration*, signed at the 4th High-level Dialogue on Atlantic Interactions, November 26-27, 2018, in Las Palmas, Canary Island, Spain): i) marine resources and biodiversity, ii) healthy and clean oceans, iii) systems integration from inner space to deep ocean, iv) mitigation and adaptation to climate change, v) sustainable energy systems and vi) data science;



Bearing in mind the growing number of national, regional and international organizations collaborating in the AIR Centre Network, as well as the increasing and ever diversifying portfolio of projects, capacity building activities, advocacy initiatives and strategic stakeholder engagement actions as promoted in the *Lagos Declaration*, signed during the 5th High-level Dialogue on Atlantic Interactions” held in Victoria Island, Lagos, Nigeria, April 28-20, 2019;

Acknowledging the need for the implementation of effective ocean-basin governance frameworks, consultation methodologies, dialogues structures and collaboration mechanisms in addition to the demand to embed the AIR Centre’s scientific agenda in a global context of transformation;

Distinguishing the AIR Centre’s unique, multidimensional perspective, combining a mission-oriented, demand-driven, and problem-solving approach, which embraces diversity, incorporates different types of key stakeholders (government, academia, industry, and civil society), covers diverse geographies, cultures and technology readiness levels (European, American, African countries and island states or territories in the Atlantic region), fully accommodating both local priorities and global challenges, such as the UN 2030 Agenda for Sustainable Development, the Belém Statement on Atlantic Research and Innovation Cooperation, the Decade of Ocean Science for Sustainable Development (2021-2030), and the European Green Deal, among others;

The signatories, in the context of the 6th High Level Meeting of the AIR Centre, based in Pennsylvania State University and held via streaming between October 5th and 9th 2020, aiming at a mission-oriented organization, on the terms and common understanding described below, hereby agree to:



1. Fully support the AIR Centre's five-pronged mission-oriented approach to promote *new knowledge, institutional innovation and new observation methods fostering ocean/space/climate interactions*, including marine and coastal preservation and restoration, as well as to foster knowledge-driven economic development in the Atlantic region:
 - a. Clean and productive coasts, bays and estuaries - promoting the sustainable development of major bay and estuarine areas, including the comparative assessment and action research in several locations;
 - b. Resilience to coastal natural hazards - preventing, reducing and increasing preparedness for response against coastal hazard exposure and vulnerability to natural or man-made disasters, such as floods, sea-level rise and extreme weather, as well as adapting and mitigating climate change effects;
 - c. Sustainable food production - promoting new food value chains with sustainable fisheries and off-shore aquaculture and reducing environmental risks and pressures for food security;
 - d. Improved resource management of oceans, coasts and marine systems - promoting the sustainable development of ocean and coastal ecosystems, enhancing capacity for good governance of marine and coastal biodiversity, and raising awareness for local communities and decision makers on the economic value of the ecosystem and mechanisms for sustainable development;
 - e. Improved environmental and maritime monitoring - enabling the creation of impactful, affordable data collection and information systems employing a collaboratively developed nanosatellite constellation, marine robotics, and aerial autonomous systems coupled with earth observation, numerical modeling and artificial intelligence systems;



2. Continuously stimulate South/North, North/South, South/South and North/North cooperation in the Atlantic, the inclusive involvement of all Atlantic regions and countries, organizations and individuals, in order to widen the scope and the impact of AIR Centre Network;
3. Increase capacity building efforts, including mobility of human resources, advanced training programs, seed funding for initial collaborations, workshops and seminars;
4. Stimulate and facilitate the effective sharing of information, scientific infrastructures, technical and human resources among the AIR Centre Network institutions and affiliated entities and scientists, within the collaborative values of the AIR Centre;
5. Pledge to jointly contribute resources and capabilities to develop and implement demonstration projects or pilot-projects within the scope of the AIR Centre, including the development and promotion of low-altitude microsatellite missions contributing to an "Atlantic Constellation" aiming to be operational in the coming two years, as well as the promotion of advanced Earth Observation systems for the inclusive benefit of all Atlantic regions.

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