



AIRCENTRE

ATLANTIC INTERNATIONAL RESEARCH CENTRE

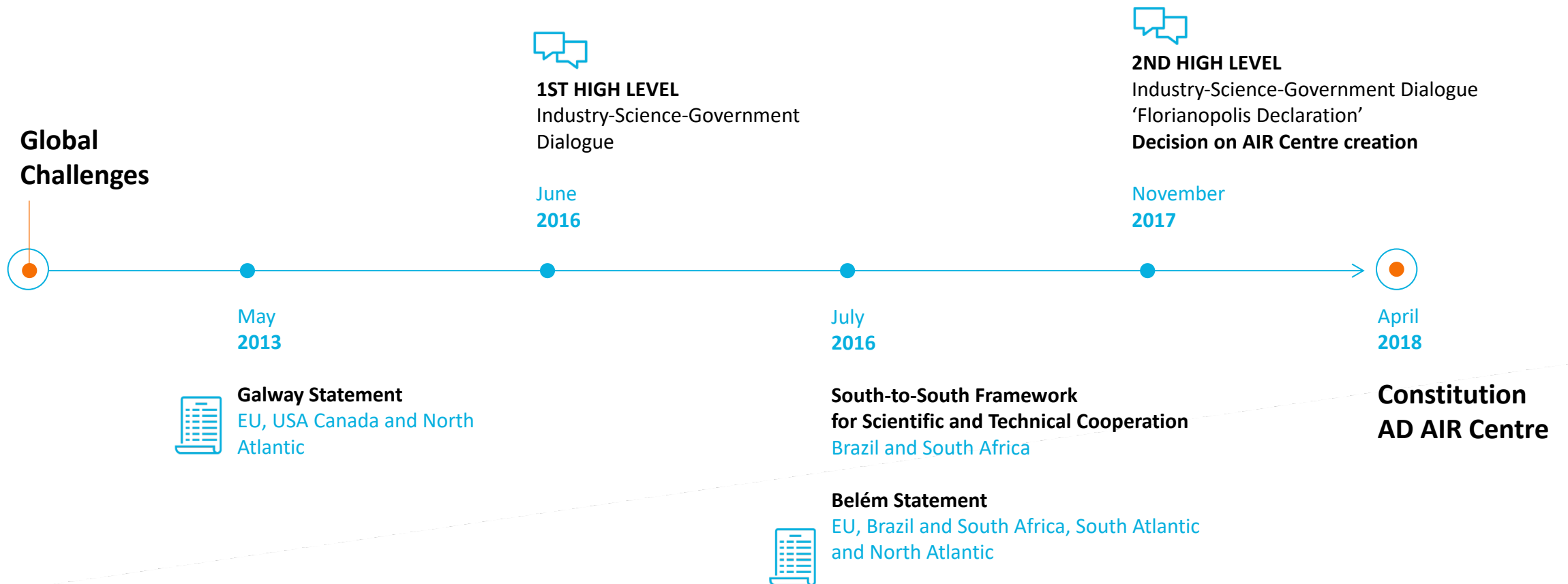
Portuguese – Spanish Workshop on Research and Education Networks and E-Science

Salamanca, 7th May 2018





IMPLEMENTING ATLANTIC INTERACTIONS AGENDA





AIR CENTRE WORKS FOR THE BENEFIT OF PEOPLE RELATED TO THE ATLANTIC & ALIGNED WITH UN SDGS

GLOBAL CHALLENGES

- Understanding, predicting and adapting to Climate Change
- Understanding Atlantic ocean for a Healthy & Productive Ocean
- Clean, Cheap and Secure Energy for All

UN Sustainable Development Goals





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FRAMEWORK GLOBAL IMPACT



- **6 megacities in the Atlantic** ,
(> 54 Mill. people 2016), Global Impact
1 B People (est. 2050)
- Shore length 111,866km,
Atlantic surface 106,460,000 km²
- More than 80 countries with a coastline on
Atlantic, more than 40 islands in the Atlantic Ocean
- **Atlantic African countries** > 1,688 \$ billions nom. GDP (2016)
Atlantic South American countries > 5,775 \$ billions nom. GDP (2017)
Atlantic European countries > 16,150 \$ billions nom. GDP (2018)
Atlantic Cont. North & Central America > 23,674 \$ billions nom. GDP
(2018)



FRAMEWORK AD AIR CENTRE



- 8 governments committed
4 observing countries
- 35 partners from R&D, Industry
and Public Administration
- **Scientific program** – 24 identified
ongoing projects + 22 project leads
- **Cross-cutting Work Plan** - 3 program
+ 2 in preparations



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FRAMEWORK OUR IMPACT





FROM FLORIANOPOLIS TO CAPE VERDE



**AIR Centre
ExCO SteeCo**

- 1st version AIR Centre Scientific Program & Cross-cutting activities
- AD AIR Centre constitution, Azores HQ

Consolidation of Internal AIR Centre Ecosystem

Expansion of External Ecosystem



INTEGRATING ATLANTIC SPACE, OCEAN, ATMOSPHERE, CLIMATE-ENERGY AND DATA SCIENCE



Marine Resources
& Biodiversity



Healthy &
Clean Ocean



From Outer Space to Deep
Ocean: Technology for
observation and
data integration



Mitigation
& Adaptation Climate
Change



Sustainable Energy
Systems
& Global Energy
Interconnections



Data Science, artificial
intelligence, learning
systems for climate issues
and atmosphere
dynamics



AIR_DataNET - Atlantic Data Cube, Atlantic GEOSS

Atlantic Research Infrastructures

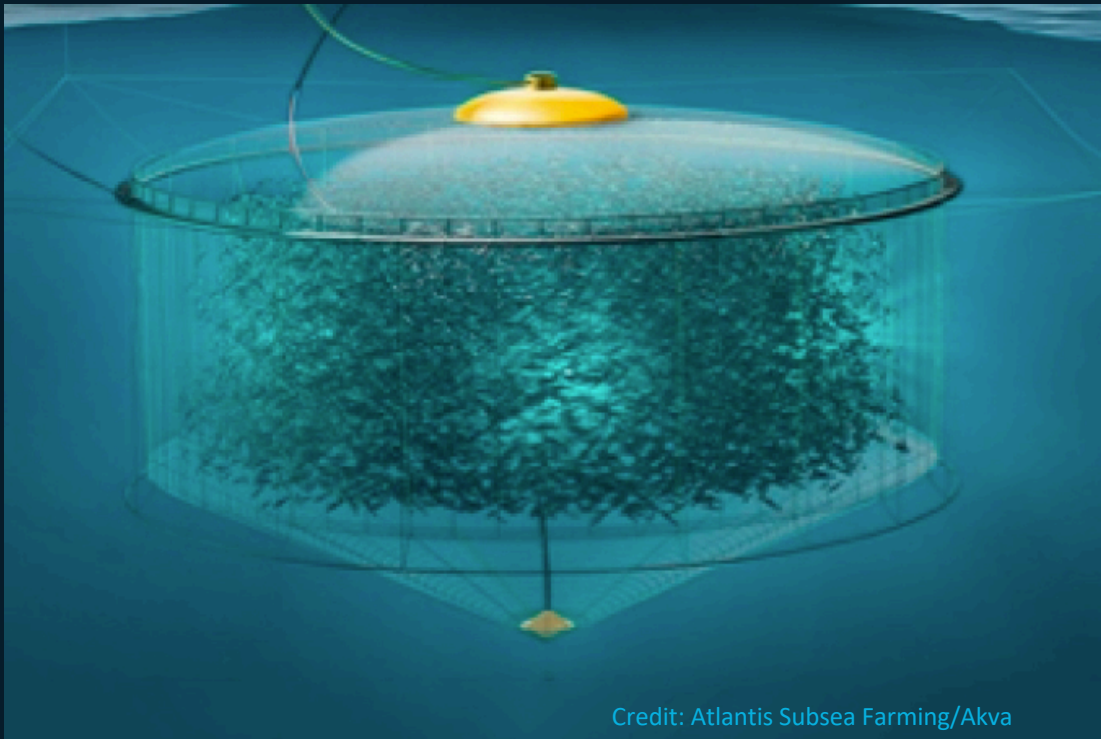
Knowledge for all



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ECOSYSTEM VALORIZATION

MARINE RESOURCES & BIODIVERSITY



Credit: Atlantis Subsea Farming/Akva

● Offshore Aquaculture

HEALTHY & CLEAN OCEAN

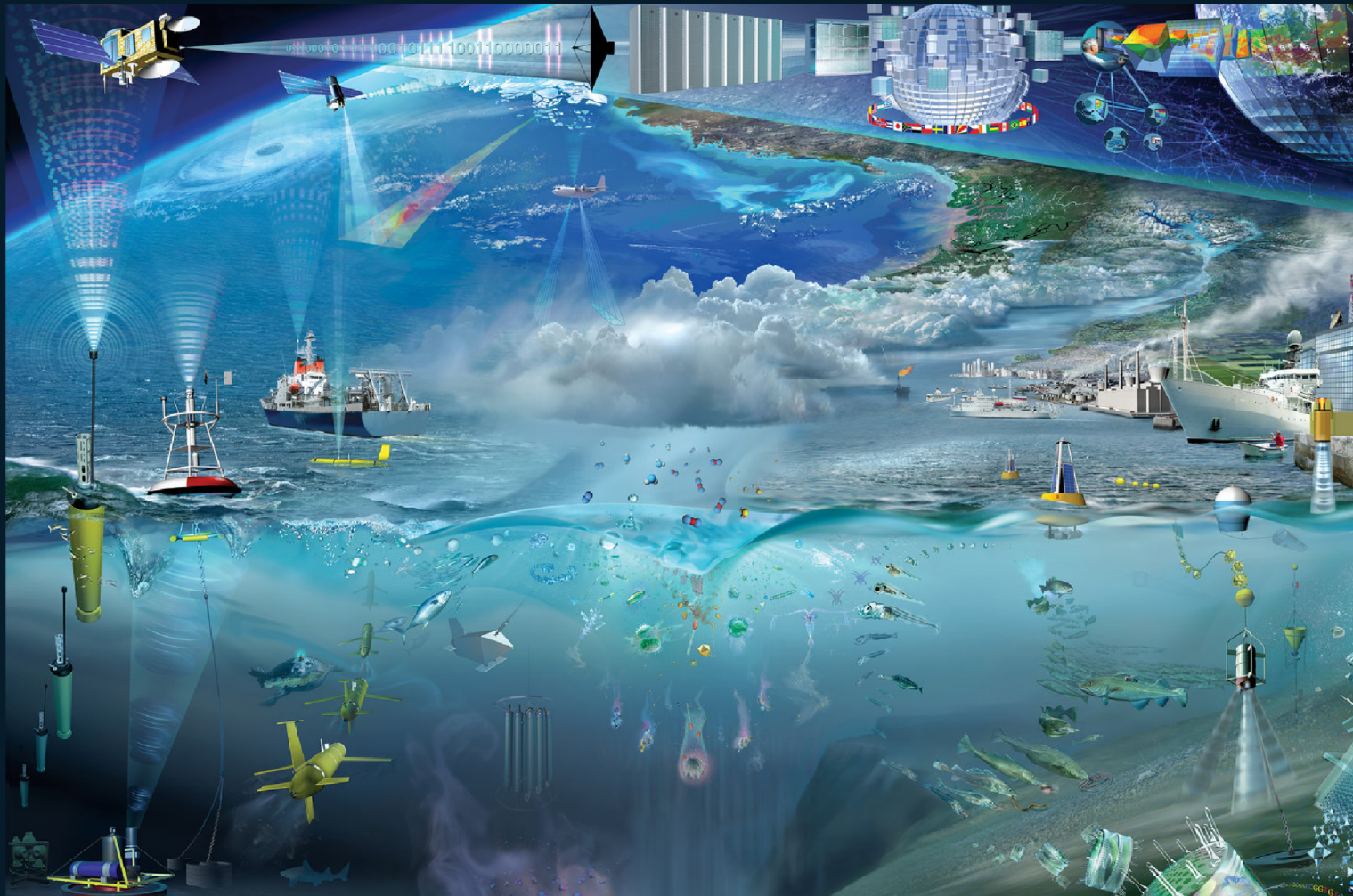


● Plastics & Pollutants



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SYSTEMS INTEGRATION, FROM OUTER SPACE TO DEEP OCEAN



Global Ocean Observing System Graphic (<http://www.unfalumni.org/happy-world-oceans-day/>)



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MITIGATION & ADAPTATION TO CLIMATE CHANGE



● Resilient Cities & Coastal areas



● Invasive species & loss of biodiversity



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GLOBAL ENERGY INTERCONNECTIONS



Cheap, Clean & Secure Energy for 1B People



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AIR_DATANET

ATLANTIC DATA CUBE, ATLANTIC GEOSS



- Foundation for Science and Technology (FCT), PT
- Foundation for National Scientific Computing (FCCN), PT
- Barcelona Supercomputing Center (BCN-CNS), SP
- University of Minho (UMinho), PT

Creation of AIR Centre Data Intelligence Network (AIR_DataNet)



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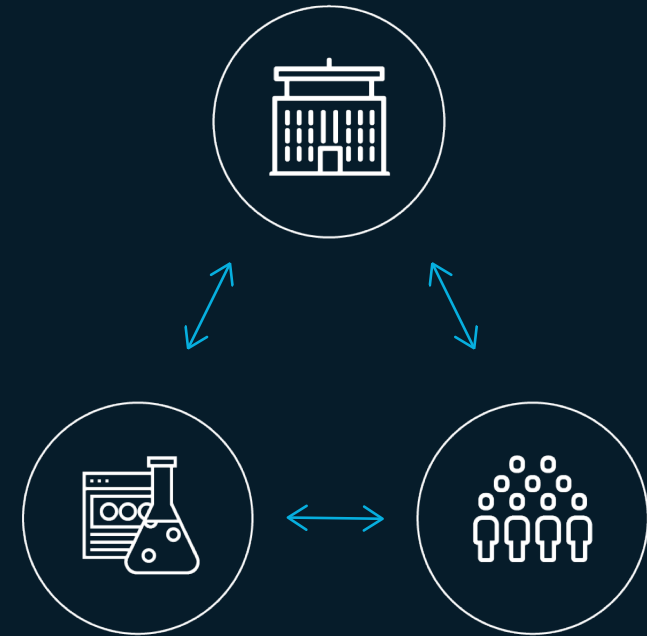
AIR_DATANET ATLANTIC RESEARCH INFRASTRUCTURES





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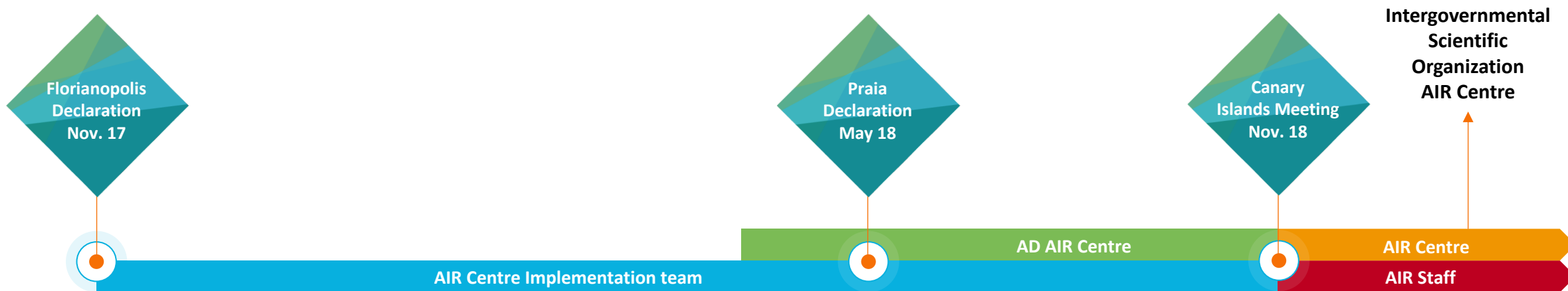
KNOWLEDGE FOR ALL



Credit: Ciência Viva



FROM CAPE VERDE TO CANARY ISLANDS



AIR Centre
ExCO SteeCo

- Approved AIR Centre Statutes

Roadmaps for Topics (1st versions)

AIR Centre Projects' specifications

Business model

Staff recruitment



AIRCENTRE

CONTACTS

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THANK YOU

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