

ALL-ATLANTIC OCEAN RESEARCH
AND INNOVATION ALLIANCE

#AAORIAForum25

From Enlightenment to Action
25-26 SEPTEMBER | BRUSSELS



AAORIA Hackathon Series

2025 INTERGENERATIONAL DIALOGUE

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Funded by
the European Union

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Context of the Issue

Background: Why Hackathons for AAORIA?

Hackathons are dynamic, collaborative events that bring together participants with diverse cross-disciplinary backgrounds to design, prototype, and pitch solutions within short timeframes (typically 24–48 hours). While hackathons originated in the cybersecurity industry, they have evolved into powerful tools for innovation across social, environmental, and policy domains. In the AAORIA context, hackathons can be easily scaled from smaller regional topics to global ones which cover the entire Atlantic ocean.

The Policy Hook: Alignment with Current Policy Priorities

The Atlantic ocean is related to around eighty sovereign states and territories across four continents. . A broad coalition of stakeholders from these states including, private sector entities, researchers, local and indigenous communities, policy planners, media professionals, artists and creative practitioners, legal experts, and other relevant actors, will participate in hackathons aimed at co-developing comprehensive prototypes and/or solution proposals. The hackathon model bypasses the usual costs associated with hiring consulting firms, as individuals join with the incentive of winning the competition and having their prototype or solution proposal implemented. Hackathons act as catalysts for innovation, fostering collaboration and knowledge exchange among diverse actors. They advance governmental priorities across the Atlantic basin by strengthening technology readiness, promoting ocean literacy, and bridging science to policy while actively solving local issues. .

The Challenge: Gaps and Barriers in Research-Policy Innovation

Despite the interest in evidence-based policy making, there are still significant gaps between policy practice, research and “real-life” implementations. Scientific findings have been characterized by their lack of accessibility to policy makers and non-academic communities, which hinders the inclusion of scientific evidence in the policy processes of political institutions. Fragmented communication, differing timeframes, lack of accessible pathways for people outside institutional research to contribute to innovation and policy dialogue, as well as limited cross-sectoral collaboration have been a hindrance to the inclusion of science in the policy process. Hackathons bridge the gaps by bringing about professionals from different sectors to the same place to create an actionable policy within the timeframe of the hackathon; they connect research and policy with grassroots creativity and local relevance. Furthermore, they can inform science by identifying gaps for deeper investigation and opportunities for research collaboration.

Why Now? Urgency and Relevance

Due to rising climate impacts, and socio-economic pressures, the Atlantic ocean faces an increasing amount of interconnected challenges that require innovative cross-sectoral solutions. Climate change is intensifying coastal erosion, sea-level rise, and extreme weather events, threatening millions of people and critical infrastructure along its shores. Overfishing, pollution, and declining biodiversity are straining marine ecosystems, while geopolitical competition and unequal access to ocean resources create governance and equity gaps. At the same time, the Atlantic hosts vital trade routes, energy corridors, and digital cables that sustain the global economy. Hackathons can bring together scientists, policymakers, technologists, businesses, media and creative professionals, and local communities to rapidly prototype solutions, from ocean observation and monitoring, and data sharing to blue economy innovation and resilient coastal planning, that align with global sustainability and security priorities.

Policy Recommendation

Proposed Action: Launching the AAORIA Hackathon Series

To strengthen science–society-policy collaboration and stimulate innovation across the Atlantic basin, it is proposed that AAORIA launches a “pilot Hackathon”, and as a pilot could begin in Brazil at the next AAORIA Forum, focusing on local challenges linked to Atlantic ocean governance, ocean literacy, blue economy, or coastal resilience. The results and lessons learned from this pilot would inform the development of a **transatlantic framework**, allowing future hackathons to engage diverse participants representing the member countries and the **entire Atlantic region** — from Africa and the Americas to Europe. Over time, the AAORIA Hackathon Series could evolve into a recognized platform for collaborative problem-solving, knowledge co-production, and innovation in ocean policy and governance.

Key Design Principles (Inclusion, Interdisciplinarity, Impact)

The design of the AAORIA Hackathon should be guided by three foundational principles:

- **Inclusion:** Ensure equitable participation by integrating voices from different regions, languages, and knowledge systems. Simultaneous translation and accessible formats will be essential to achieve full participation across linguistic and cultural boundaries when promoting regional integration.
- **Interdisciplinarity:** Bring together participants from diverse backgrounds — science, policy, business, technology, and civil society — to co-create actionable and context-specific

solutions that transcend disciplinary silos.

- **Impact:** Focus on developing tangible policy and governance innovations that can be piloted, evaluated, and scaled through AAORIA and its partners. A clear follow-up mechanism should ensure that ideas generated in hackathons translate into practical implementation pathways and sustained collaborations in local (countries context) to regional (All-Atlantic community).

Expected Outcomes for Policymakers and Stakeholders

These initiatives have resulted in a stronger pipeline of innovative, locally grounded policy and technology ideas, enhancing community engagement and ocean literacy across diverse sectors. They have also strengthened trust and collaboration between scientific institutions, policymakers, and communities, while directly contributing to the achievement of regional and global ocean sustainability goals.

Implementation Pathways (Funding, Partnerships, Governance)

Effective implementation of the AAORIA Hackathon will require coordination across funding agencies, research institutions, and regional organizations. OKEANO could provide partial funding and logistical support, including communication infrastructure, facilitation, and dissemination of results. However, additional resources should ideally be mobilized from the private sector and philanthropic partners to ensure sustainability and scalability. Moreover, it is recommended that awards for the best solutions be sponsored through partnerships with the private sector, reinforcing collaboration between science, policy, and business innovation.

To promote equity and participation at the regional level, funds should cover simultaneous translation, travel, and accommodation costs for selected participants, particularly from underrepresented regions. Governance should be coordinated through the AAORIA Secretariat, in collaboration with national focal points and key regional partners, to ensure transparency, inclusivity, and accountability throughout the process.

Evidence and Analysis

Lessons from Previous Hackathon Models

UNESCO's Ocean Decade Hackathons have proven effective in driving local innovation to address critical challenges such as marine litter and coastal resilience, empowering communities to develop context-specific solutions aligned with global ocean sustainability goals. Similarly, the EU Blue

Economy Hackathons have demonstrated strong impact by generating practical, market-ready solutions that have been subsequently adopted by small and medium-sized enterprises (SMEs) and local authorities, contributing to sustainable economic growth and enhanced coastal management across Europe.

Demonstrated Benefits: Innovation, Capacity Building, Collaboration

The hackathons serve as catalysts for innovation, enabling the rapid development of context-specific solutions to pressing marine and coastal challenges. They also strengthen capacity building by equipping participants with essential skills in problem-solving, design thinking, and policy engagement. Furthermore, they foster enduring collaboration through cross-sector partnerships that continue beyond the event, reinforcing networks between academia, industry, government, and civil society.

Risks and Limitations (and How to Mitigate Them)

Short-term engagement can limit long-term impact; to address this, follow-up mentorship and funding opportunities should be established to sustain participant involvement. Unequal participation may arise due to resource or accessibility gaps; providing travel bursaries and ensuring inclusive facilitation can promote equitable engagement. Limited policy uptake can undermine the relevance of outcomes; involving policymakers throughout the design and implementation phases helps ensure solutions are aligned with policy priorities and more readily adopted.

Metrics for Success (Measuring Impact on Policy and Society)

Success can be measured through the proportion of hackathon-generated solutions that are adopted or piloted; additionally, the number and diversity of participants and partners engaged should be measured. Additional indicators include evidence of increased ocean literacy and community engagement among participants, and the extent to which solutions are integrated into policy frameworks or inform local decision-making processes.

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2025