D 1.2 “EXCELLENCE FOR ERA” ROADMAPS

Madeira Regional Directorate of Environment and Sea

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Information

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SUMMARY

REMORA's first strategic objective is to strengthen the competitiveness and Horizon Europe participation of 3 Outermost Regions' key regional Ocean research centres – CITEB, OKEANOS, and OOM, the Oceanic Observatory of Madeira. To that end, WP1 supported these organizations in the design of a dedicated "excellence for ERA roadmap" : a detailed action plan to integrate the European Research Area standards, increase scientific excellence and improve their submission intensity and success rate in the Framework Programmes (FP).

Following a thorough methodology detailed in Del 1.1. "*Guidelines to elaborate an excellence for ERA roadmap"*, the three research centres engaged from September 2024 to May 2025 in a series of activities to investigate and address four dimensions that impede their performance : human resources policies to attract and retain talents, responsible research and innovation practices to maximize knowledge transfer and impacts, pro-Horizon policies to reinforce staff-members' willingness and capacities to apply successfully, and funding synergies, notably to use strategic, ESIF-funded infrastructures, as assets to take part in FP projects.

These activities notably include :

- A desk analysis to reveal the main strengths and weaknesses regarding these four dimensions, using a "self-assessment tool"
- Semi-directive interviews to discuss the identified weaknesses with researchers, financial officers and governance members and identify the underlying factors.
- Collaborative workshops with team members to share and adjust the conclusions of the preliminary diagnosis and define key priority objectives and interventions to solve the identified issues and reinforce internal strengths.
- Mutual learning events bringing together representatives from the 3 research centers, consortium and Advisory Board members to discuss the main conclusions, progress together, and provide inspiration.

This deliverable compiles the detailed roadmaps designed by CITEB, OKEANOS and OOM.

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Table

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REMORA
Small fishes in a big pond

« Excellence for ERA » roadmap

CITEB

May 2025

Madeira Regional Directorate of Environment and Sea

Information

Project name	REMORA
Grant agreement	Horizon Europe n°101159246
Organization name	CITEB
Document name	“Excellence for ERA” roadmap - CITEB
Version	1
Author(s)	Alina TUNIN-LEY

EXECUTIVE SUMMARY

As part of the diagnosis conducted in **Work Package 1 (WP1)** of the **REMORA project**, this strategic roadmap presents CITEB's ambition to strengthen its position in research and innovation (R&I) and to significantly increase its participation in **Horizon Europe (HEU)**. Based in Reunion Island, CITEB operates at the crossroads of tropical marine biodiversity and innovation, with the aim of becoming a key actor in the sustainable blue economy within the Indian Ocean and beyond.

CITEB's ambition is to transition from a locally focused technical center to a recognized contributor to the **European Research Area**, leveraging its unique ecosystems and applied research expertise. The roadmap is structured around four strategic dimensions:

In terms of Human Resources, CITEB relies on a versatile team of senior researchers with interdisciplinary expertise in aquaculture, fisheries, marine biotechnologies, and water monitoring. However, the small size of the team and the absence of stable funding mechanisms limit its resilience and attractiveness. To address this, the plan includes improving working conditions, introducing a stable salary scale, implementing individual training plans, and attracting postdoctoral researchers to increase capacity and international visibility.

Regarding Responsible Research and Innovation (RRI), ethical practices, gender balance, and science education are well integrated into CITEB's daily operations. Nevertheless, the lack of formal strategies, documentation, and training aligned with EU RRI standards remains a challenge. Actions include staff training on gender and open access, appointing an internal RRI focal point, and drafting institutional plans such as a Gender Equality Plan to formalize these dimensions.

With respect to Horizon Europe strategy, CITEB benefits from unique natural research assets—access to little-studied tropical ecosystems, a "living lab" environment, and advanced facilities. Yet, its remote location and lack of dedicated support for EU project development hinder its connection to European networks. To address this, the roadmap foresees staff training on HEU, improved communication tools in English, participation in EU scientific events, and development of strategic partnerships.

Concerning funding synergies, CITEB manages advanced infrastructures (e.g., seawater-supplied technical platforms, a microalgae collection) supported by regional structural funds. However, no strategy currently exists to align these resources with European funding frameworks. The roadmap aims to integrate a European dimension into future infrastructure investments, mobilize ERDF for visibility and mobility, and train staff on how to build bridges between structural funds and competitive calls.

Through this roadmap, CITEB outlines a clear and realistic pathway to reinforce its scientific excellence, build institutional capacity, and expand its role in European marine science and innovation programs.

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I. ORGANIZATIONAL DIAGNOSIS AND KEY CHALLENGES

A. PRESENTATION OF CITEB

1. Vision, Mission, and Strategic Objectives

CITEB is a technical, research and development center for aquatic environments whose activities aim to support the development of the blue economy in Reunion, while ensuring a better understanding of these aquatic environments in order to better preserve them. It aims to become a reference institute in the Indian Ocean providing its expertise, infrastructure and skills to players in the blue economy at local, regional, European and international levels. CITEB is also involved in supporting the private sector and technology transfer, particularly in connection with the valorization of biodiversity and marine resources and the development of blue biotechnologies.

Historically present since the 1990s on Reunion Island, CITEB has undergone several administrative changes, moving in 2019 from the status of an association to that of a subsidiary of the Réunion regional development agency, following the liquidation of the former organization. During this transfer, only part of the expertise was retained, which resulted in a more restricted operation based on a reduced team. To foster the impact and the field of its missions, CITEB will be integrated into the "Institut Bleu" (expected transfer in 2025), an association aiming to support, coordinate and unite socio-professional, institutional, and scientific actors of the sustainable blue economy in the territory of Reunion. Together the 2 organizations will ensure promotion, development, research, innovation and transfer to professional players in the maritime ecosystem.

2. Research Fields, Facilities, and Resources

The main research fields and development axes developed by CITEB are:

1. aquaculture and biotechnologies,
2. fisheries,
3. risk and impact assessment.

CITEB activities are possible thanks to two technical platforms: one on GIP CYROI in Sainte Clotilde, and another one in Le Port.
The former shelters chemistry, biology, and hydrology laboratories along with CITEB's collection of microalgae and provides high-end shared facilities.
The latter is a wet technical platform specializing in research and economic development for the blue economy sector, meeting the current and future needs of stakeholders. Located close to the main harbor of the island, it is directly supplied with seawater from a drilling. It hosts aquaculture rooms with several ponds and aquariums for marine productions (fish, prey growing, benthic invertebrates….), a microalgae room with cylindro-conicals for pre-industrial and pilot scales biomass production, a biology lab for fish studies, and a future platform for experimenting on corals (2025-2026).

3. Team

CITEB relies on a multi-disciplinary and efficient team bringing together varied but connected expertise. The team is made up of 4 senior researchers responsible for the different themes developed, one engineer and 3 polyvalent technicians. The team of researchers is composed of:

- Dr Jean Turquet, CITEB director, holds a PhD in environmental toxicology and has great experience in R&I organizations management, R&I fundraisings and collaborative R&I & technology transfer programs development. He also provides its expertise in the fields of microalgae ecology and environmental monitoring.
- Dr Alina Tunin-Ley, REMORA's correspondent. She holds a PhD in Ocean sciences and is responsible for biotech unit of CITEB. As an expert of microalgae valorization, she develops R&I projects assessing biotechnologies related to microalgae and other marine organisms. With her expertise in tropical phytoplankton she is also involved in the environmental research and programs.
- Dr Perrine Mangion, she has a PhD in biogeochemistry and is responsible for the Marine Environment unit. Through her studies and missions, she is exploring different aspects of risk and impacts in marine waters, such as pollutants, plastics waste or nutrients loads, and participate to the development and the deployment of innovative monitoring devices and approaches.
- Dr Evgeny Romanov has a PhD in fishery. He is the head of the Fisheries unit. He is developing projects related to the sustainable exploitation of marine resources.

The complementary expertise and skills of CITEB's researchers and technicians allow them to carry out inter-disciplinary projects on different yet interconnected research axes.

4. Participation in Horizon projects

ACRONYM	TITLE	FP	Pillar/Cluster	Organization Budget	Role
ECSAFESEAFOOD	Priority environmental contaminants in seafood: safety assessment, impact and public perception	FP7	Cooperation, Food, Agriculture and Fisheries, and Biotechnology (KBBE)	90 097,00 €	Contribution to activities related to monitoring of priority contaminants in seafood, more specifically on emerging biotoxins from harmful algal blooms
BlueShellfish	Solutions to prevent and mitigate the impacts of HABs in Aquaculture and Fisheries, in the context of global warming	HEU	MSCA Staff Exchanges	4 600,00 €	Partner for staff exchange (a PhD welcomed at CITEB for 3 months and a CITEB technician trained at IRTA for 1 month)

B. SELF-ASSESSMENT GLOBAL RESULTS

1. Self-assessment on 4 dimensions

A self-assessment tool was designed to help evaluate how the organization is positioned in relation to the main factors that influence organization's competitiveness in the European Research AREA and successful participation in Horizon Europe.

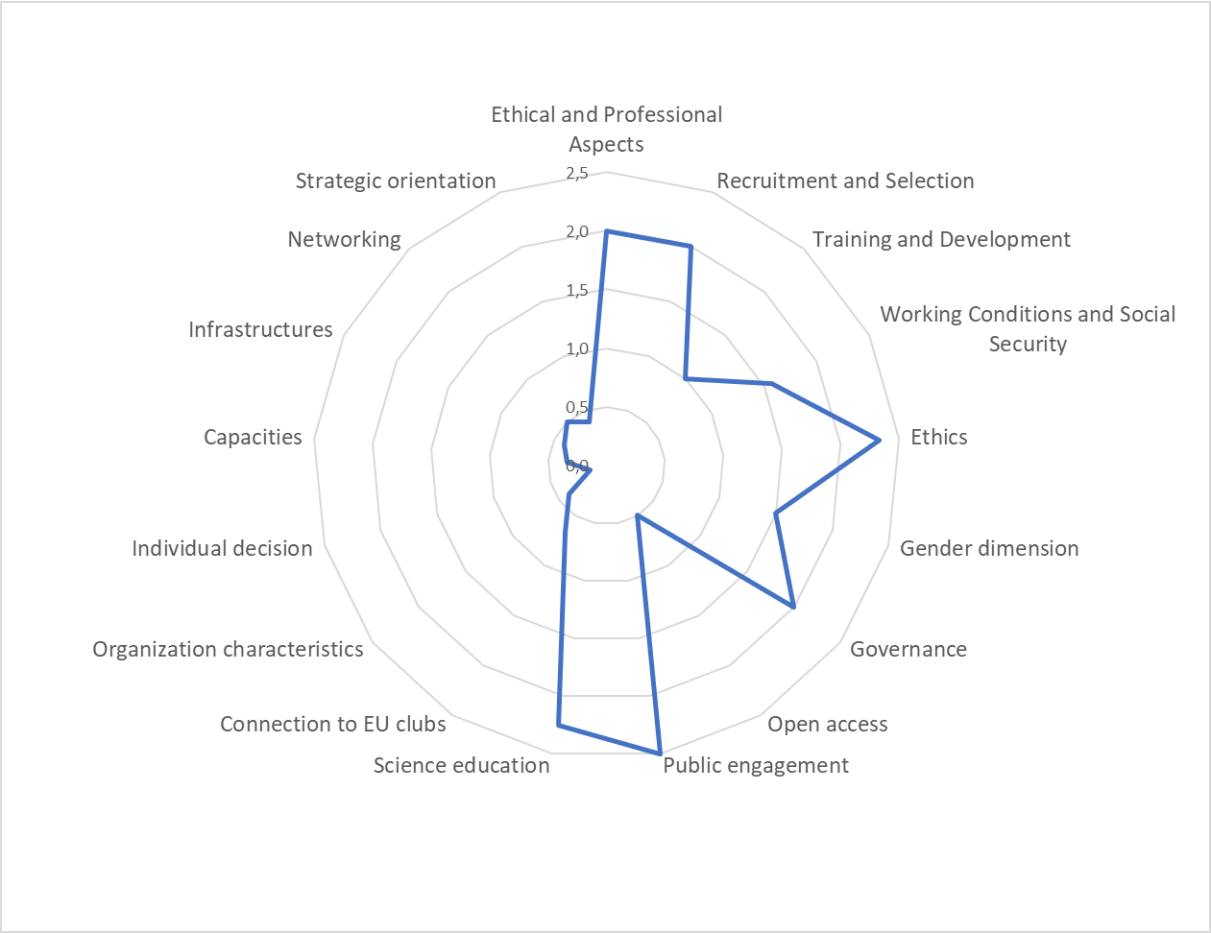
Using scientific publications, institutional reports and existing instruments, this tool focuses on four key Human resources: *How to attract and retain international talents to reach a critical mass of researchers and improve scientific productivity and reputation through an adequate human resources strategy and better working conditions?*

- Responsible Research and Innovation: *How to maximize the impacts of your research activities through the incorporation of advanced R&I management standards (such as open science, ethics, public engagement, etc.) ?*
- Pro-Horizon Europe strategy: *How to intensify transnational collaborations and participation in Horizon Europe through the creation of favorable environment and institutional policy that encourages and supports researchers to submit highly competitive applications ?*
- Funding synergies: *How to effectively mobilize existing assets (such as infrastructures and equipment) and the resources provided by structural funds (such as ERDF) to intensify international collaborations notably with Horizon Europe "champions" (the organizations and networks that constitute the core of the European Research Area and monopolize coordination positions), through greater synergies ?*

2. Results

The synthetic radar diagram that encapsulates CITEB's score on the 4 dimensions highlights a rather strong position in Human Resources (Ethical and Professional aspects, Recruitment and Selection) and responsible R&I (Ethics, Governance, Public engagement). This reflects both the quality of the team and the strong importance attached to knowledge diffusion and valorization, a core mission. In these 2 dimensions, improvements should be expected on Training & Development, Working conditions, Gender dimension and Open access.

However, this potential is not transformed into effective Horizon participations, in the absence of favorable environment and strategy. Funding synergies also remain out of the scope of current activities, confirming the need for a dedicated roadmap and advanced capacity-building activities.



C. HUMAN RESOURCES ANALYSIS

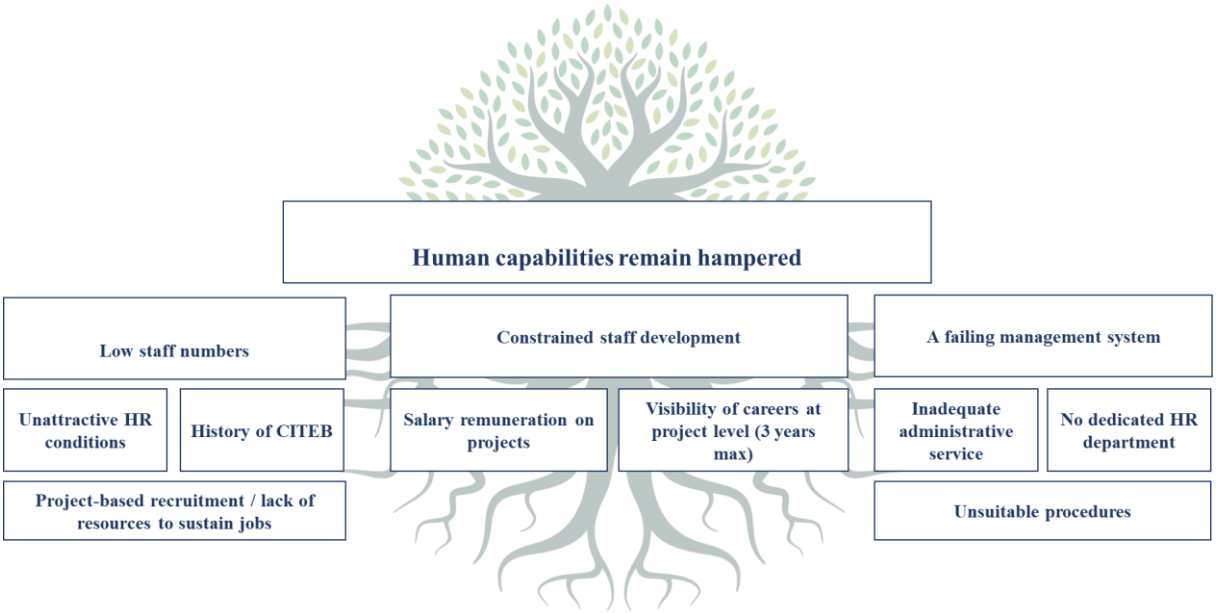
1. Self-assessment results

- Ethical and professional aspects are globally well implemented at CITEB. The limits of implementation are linked to the specificity of the organization: **small size**, mainly **applied research**, **in accordance with regional policies** and objectives. Furthermore, there is currently **no specific documentation or strategy** on these aspects.
- Recruitment and selection processes mostly follow the European Charter's definition, but due to the size of the organization, **CITEB lacks an international dimension in recruitment process** and a formal recruitment committee with external experts/peers.
- At CITEB, training and development do not yet meet European standards: as a small organization, the **time of researchers and other staff is entirely funded by the various projects and action plans**, and little time is devoted to training. Staff training therefore poses a problem for the general financing of the structure.
- Regarding working conditions and social security aspects, CITEB has implemented actions aimed at achieving gender parity and employee stability. But **no strategy or documentation clearly defines the level and evolution of salaries, and other benefits** linked to working conditions, flexibility or mobility. CITEB cannot therefore provide guarantees on these aspects to attract and retain international researchers. There is also a real **need for a specific human resources management office**.

2. Factors identified during interviews

- <u>Financial and administrative support to collaborators' capacities:</u> No actions implemented at present
- <u>Financial and administrative constraints regarding HRS4R norms implementation:</u>
  - Financial and administrative instability
  - Mostly financing from projects
  - Capping of salaries by the ERDF
  - No structured training plan over the medium/long term
  - No budget identified specifically for training
- <u>Key objectives to improve recruitment processes and working conditions for the next 5 years:</u>
  - Improve salary scales
  - Reflection on working time flexibility

3. Factors identified during internal workshop



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D. RESPONSIBLE RESEARCH AND INNOVATION ANALYSIS

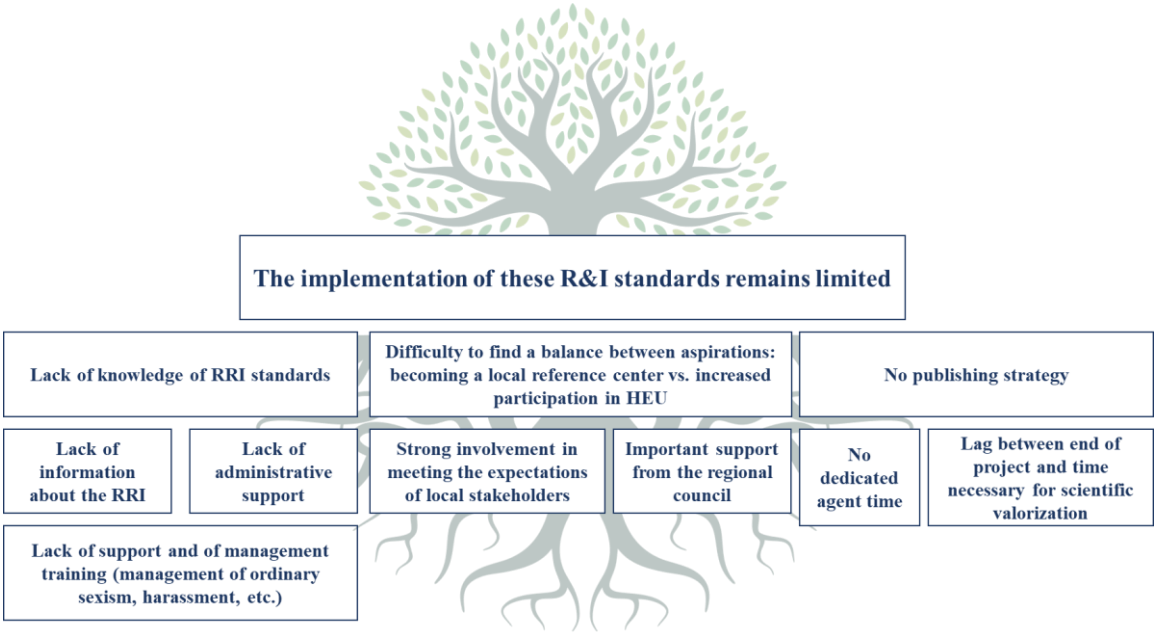
1. Self-assessment results

- Ethics are well considered in every research step at CITEB, but it still **lacks external perspectives** and advices mostly **due to CITEB size.**
- Gender dimension is mostly considered in practice but there is **no formal strategy and documentation** on this aspect, and the field of actions remains limited **due to CITEB size.**
- On governance, the HRS4R principles are well considered at CITEB but they are **globally limited to research fields driven by regional priorities.**
- The aspects related to open access are not enough considered at CITEB; there **is no strategy nor funding** at CITEB allowing to promote open access.
- Regarding public engagement, there is a **need for improving CITEB's communication abilities through social media both at individual and organization** level; It is currently restrained by the **absence of trained or dedicated staff**. A future mutualization of communication activities with Institut Bleu may be considered.
- In science education, CITEB target and imply a lot of different stakeholders through diverse activities and media (except for social media) but **mainly at regional scale** (Reunion and Indian Ocean).

2. Factors identified during interviews

- Financial and administrative support to RRI norms implementation: No actions implemented at present
- Financial and administrative constraints regarding RRI implementation:
  - Mostly financing from projects
  - No specific budget
- Key objectives to foster capacities and willingness of the collaborators for the next 5 years:
  - Identify dedicated agent time and funding
  - Finding motivation for researchers to invest in this aspect

3. Factors identified during internal workshop



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E. PRO-HORIZON EUROPE STRATEGY ANALYSIS

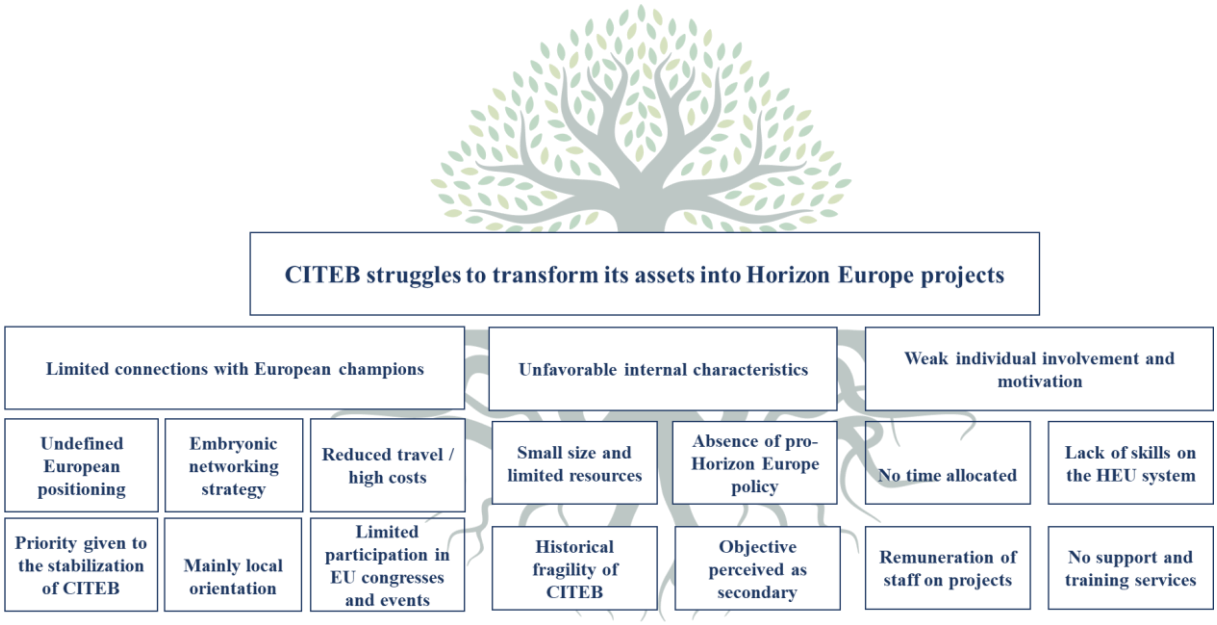
1. Self-assessment results

- Connections to EU clubs: increasing networking activities, especially with potential European and international partners, remains very difficult given the **remote location of the island** (high travel costs) and the **small size** of the organization (few applicants to travel and to network due to the small team).
- The organization characteristics highlight the limited connection of CITEB to EU research and its low participation to HEU opportunities. **Training of CITEB staff** to apply for **Horizon Europe opportunities such as MSCA postdoctoral fellowship** would be an interesting first approach to increase the attractivity and the connection of CITEB to EU champion institutes. There is a big need for improving Horizon Europe **capacity-building at CITEB** and to have **support from a specific Horizon Europe service,** along with creating a **favorable environment** allowing researchers to be more involved and motivated to apply for Horizon Europe calls
- At the level of researchers, some progress can be expected with regard to individual decision: it is necessary to **train researchers**, to **devote time to the construction of projects**, to **hire European project managers** and to constitute **administrative staff efficient with experience in FP programs**.

2. Factors identified during interviews

- Organization's support to researchers for accessing and managing HEU projects:
  - By providing tailored support to researchers interested/involved in/in Horizon Europe projects
  - Dedicated resources are provided on a case-by-case basis
- Financial and administrative obstacles that limit CITEB capacities to participate efficiently to HEU:
  - No agent time dedicated to setting up Horizon Europe projects
  - Time-consuming and risky operations (very competitive financing)
- Objectives envisaged to promote and support the development of HEU projects in the next 5 years:
  - Define specific time for setting up the HEU project for each project manager
  - Define a real networking policy with a specific budget to be able to participate in events or conferences bringing together European marine science stakeholders
  - Rely on an organization that identifies calls of interest and supports us in setting up the project

3. Factors identified during internal workshop



F. FUNDING SYNERGIES ANALYSIS

1. Self-assessment results

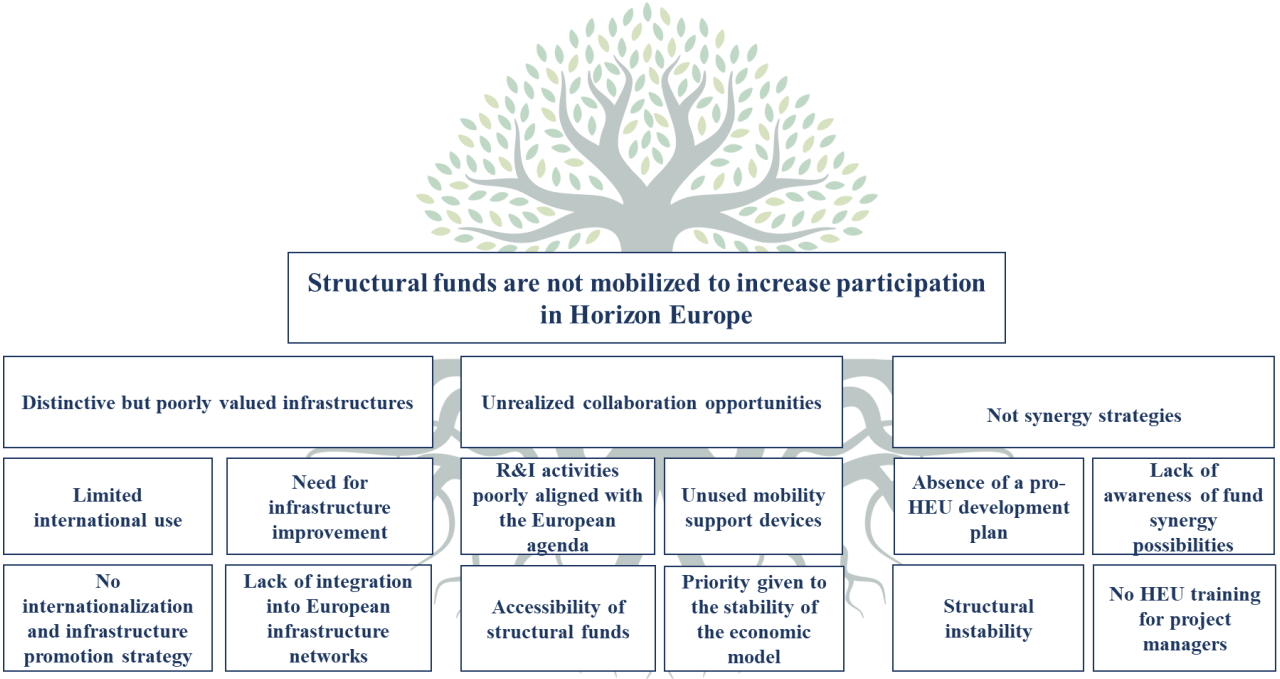
- Capacity and knowledge among **administrative and financial staff** to manage HEU and improve synergies are **absent or very limited** at CITEB.
- There is **little or no promotion** of CITEB infrastructures toward European research institutes; furthermore, **no strategy pro-Horizon Europe is implemented** in infrastructure development.
- **No funds** are specifically allocated to networking. Staff skills and time are limited, there is no implemented strategy aimed at attracting and retaining international talent; finally, there is a need to increase CITEB experience in mobility instruments.
- Regarding Strategic orientation, **no Pro-Horizon Europe strategy is yet implemented** at CITEB; it is also **necessary to create a more favorable environment** for the implementation of synergies.

2. Factors identified during interviews

- Organization's way of using EU structural funds with HEU financing: complementarity effort and leverage effect, but in an anecdotal manner
- Examples of efficient strategies to create synergy between financing sources: no existing examples
- Difficulties encountered in aligning these funding sources to support the organization's research and innovation objectives: No particular difficulties in aligning these different types of financing
- Objectives proposed to reinforce the synergy between structural funds and competitive funds in the next 5 years:

- The sources of competitive financing should be more adapted to the context of the ORs (remoteness, highly regionalized structural funds) and the OR component should be more highlighted in the themes of the calls
- Structural funds should be able to finance projects with a dimension greater than that of the territory

3. Factors identified during internal workshop



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G. CITEB KEY ASSETS & CHALLENGES

HUMAN RESOURCES	Key assets - Versatile experts in various fields of research (sustainable fisheries, marine biotoxins, blue biotechs, aquaculture, water monitoring. - Inter-and multidisciplinary skills and expertise.
	Key challenges - As a small team, there is a need to grow in HR capacities - Working conditions should be improved to stabilize the current staff and become more attractive to new talents - Need for a more efficient and aware administrative office

RESPONSIBLE RESEARCH AND INNOVATION	Key assets - Horizontal aspects such as ethics, gender balance or science education are already well integrated in CITEB activities and missions - CITEB has strong connections to the R&I regional system - CRT label (French certification of technological resources centres) guarantees that the transfer of knowledge and technologies is a priority objective at CITEB
	Key challenges - The team needs to be trained on RRI standards as defined by EU, to improve their consideration and implementation in research activities, - The RRI aspects, mostly integrated in daily practices, must be formalized through legal relevant documentation and rules - The different aspects of RRI should be considered from a broader perspective, beyond the regional scale, to meet European expectations

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PRO-HORIZON EUROPE STRATEGY ANALYSIS	Key assets - A European anchor point in the southern hemisphere, at the confluence of Asia and Africa, in a tropical environment - Access to unique ecosystems in Indian Ocean, largely understudied - A living lab for studying impacts in tropical context
	Key challenges - CITEB needs to increase its visibility, especially at European scale, through a pro-HEU dedicated communication strategy - CITEB should foster connections to European Research Area and European networks - The administrative and scientific staff members need to acquire knowledge and capacities on HEU

FUNDING SYNERGIES	Key assets - CITEB has a diverse set of facilities and infrastructure, including an experimental platform with access to seawater, allowing the development of research in the fields of aquaculture, bluebiotechs, microalgae, corals, ecotoxicology, etc., and a collection of more than 300 strains of microalgae from the Indian Ocean. - Hosted by CYROI, CITEB provides privileged access to this shared scientific and technological platform, dedicated to biotechnologies and innovation, particularly in the field of health and natural extracts.
	Key challenges - While a restructuring plan is scheduled to improve CITEB current infrastructure in the coming years, this constitutes a unique opportunity to focus on providing added value in light of the major European strategic research guidelines. - CITEB could strengthen its communication and mobility capacities at European level by learning to master the different tools offered by ERDF funds

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II. AMBITION AND ACTION PLAN

A. BECOMING EU CHAMPIONS

1. AMBITION IN RESEARCH & INNOVATION

On a local and regional scale, CITEB plans to become a reference center in the field of the blue economy. With this in mind, CITEB aims, among other things, to develop its infrastructures, in particular the establishment of a regional analytical and instrumental platform and the acquisition of its own nautical resources. CITEB also aims to increase its visibility both on the European and international levels.

2. HORIZON EUROPE PARTICIPATION AMBITION

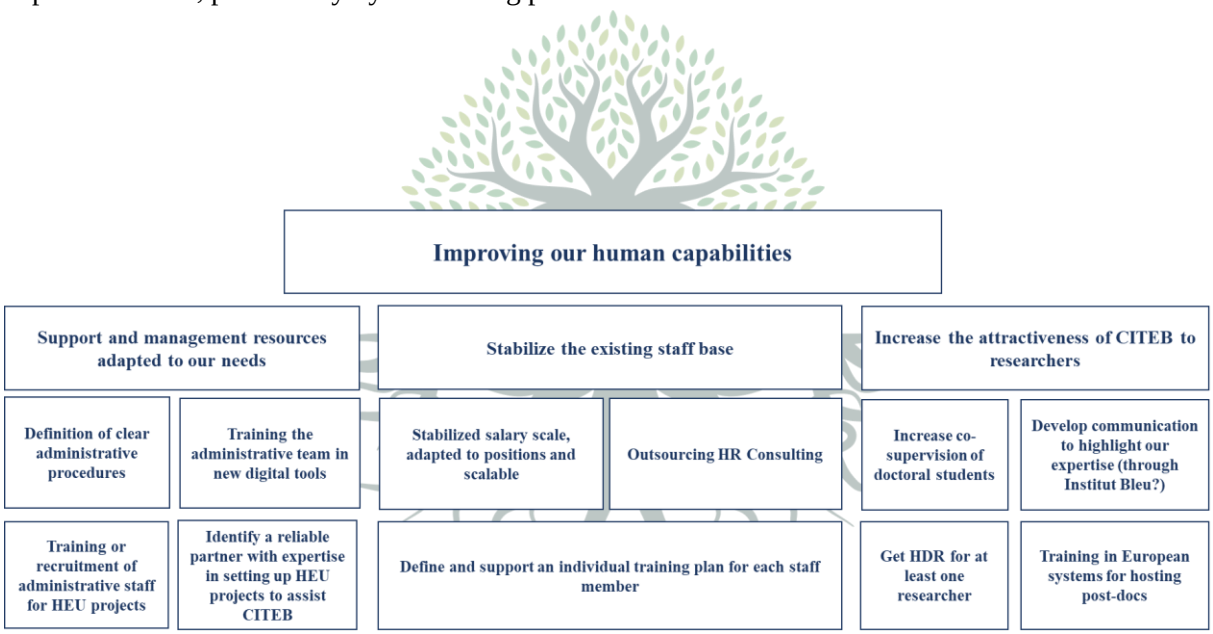
CITEB plans to participate in 3 HEU projects as a partner in the 5 coming years, in order to gain experience in HEU financing and foster connections with EU champions. An increasing involvement in European networks is targeted to improve the possibilities of partnership for HEU programs.

B. ACTION PLAN

1. Strategic objective n°1 : Improving our human capabilities

The first workshop highlighted that one of the main limiting factors of CITEB, partly explaining its low participation in Horizon Europe, is its critical mass, which remains too low (less than 10 staff members).This situation inherited from years of unstable governance, directly impacts the diversity of positions and functions within the organization, the efficiency of administrative management and the staff time available to set up more European projects, particularly HEU.

The first strategic objective is therefore to improve CITEB's human resources by optimizing the resources of existing staff on the one hand, and by attracting new talents on the other. The 5-year objective is to stabilize existing staff by working on the working environment and conditions and to expand the team, particularly by welcoming post-doctoral fellows.



a) Stabilize the existing staff base

Due to its small staff size, CITEB is highly dependent on staff stability for the sustainability of its research themes (each led by one researcher). Thus, each staff departure has a significant impact on CITEB's operations and weakens its economic model. It is therefore essential that CITEB stabilizes the current team in order to secure its development. This is also a prerequisite for attracting new researchers and internationalizing its expertise.

To achieve that goal, several actions will be targeted :

- **Stabilized salary scale, adapted to positions and scalable.**
- **Define an individual training plan with support**
- **Outsourcing HR Consulting**

These actions will involve the administrative service of Institut Bleu and the HR consulting office that will help CITEB to adapt and improve its HR strategy. This will require funding a consultation with a specialist HR firm and allowing time for the administrative team to develop the HR strategy and support staff training.

b) Provide support and management resources adapted to CITEB needs

To gain efficiency and free up researcher time, it is essential that CITEB can rely on robust administrative and management resources that meet research needs

To that purpose, the following actions have been identified :

- **Define of clear administrative procedures.**
- **Train the administrative team in new digital tools**
- **Train or recruit administrative staff for HEU projects**
- **Identify a reliable partner with expertise in setting up HEU projects to assist CITEB**

These actions should enable the administrative service to respond to the needs of researchers, to assist them in the writing and management of European projects, particularly for HEU programs. They should involve both administrative, managing, and scientific staff. To implement these actions, it will be necessary to free up staff time (both administrative and scientific) and to seek external expertise to assist in setting up the HEU project.

c) Increase the attractiveness of CITEB to researchers

To increase the critical mass of a small organization like CITEB, it is necessary to improve its visibility and attractiveness. In order to recruit new talents in the future, hosting doctoral and postdoctoral fellows represents a very interesting opportunity, as it allows for the diversification of expertise, but also promotes CITEB research activities and assets, and fosters networking and connections at the European and international levels.

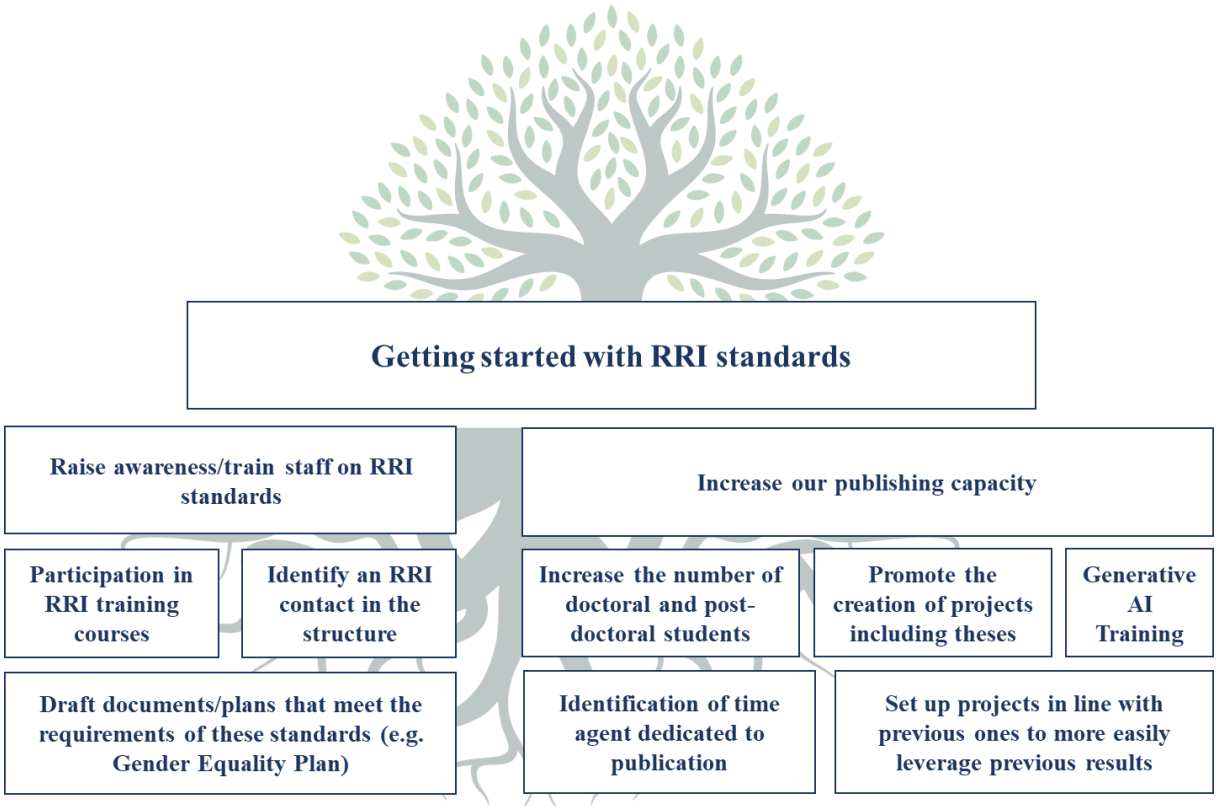
To achieve that goal, several actions have been identified :

- **Develop communication tools to highlight CITEB expertise** (for example through a joint communication strategy with Institut Bleu)
- **Train staff members on European funding tools for hosting post-docs**
- **Obtain for one researcher the French "habilitation à diriger des recherches", to enable the supervision of doctoral students**
- **Increase co-supervision of doctoral students**

These actions will involve all the researchers of CITEB and the mission manager from Institut Bleu. They will need to organize training sessions, design multimedia communication tools, and develop post-doctoral fellowships, notably through HEU. Time will be needed to build funding files to recruit post-doctoral within the 5 next years.

2. Strategic objective n°2 : Getting started with RRI standards

The first workshop revealed a lack of awareness of European RRI standards among CITEB staff. As a result, few horizontal dimensions are formally addressed, even though some of them are well taken into account in practice. The second strategic objective thus aims to improve knowledge of RRI standards and associated issues among CITEB members.



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a) Raise awareness/train staff on RRI standards

The least developed standards at CITEB relate more specifically to gender and open access. It is in these two dimensions that there is a need for training for CITEB staff. Furthermore, there are still no documents or plans outlining CITEB's actions and strategy regarding all of these standards.

To remedy this, it is foreseen to :

- **Participate to RRI training courses, with a focus on Gender dimension and Open access**
- **Designate a RRI referee in CITEB**, who can follow the implementation of related actions
- **Draft institutional documents or plans that meet the requirements of these standards (e.g. Gender Equality Plan)**

These actions will involve CITEB researchers and governance of Institut Bleu. To implement these actions, it will be necessary to rely on a partner who is familiar with RRI standards and to identify time for appropriate training.

b) Increase our publishing capacity

CITEB, a technical center supported by the Regional Council, develops research addressing regional challenges and stakeholders' needs related to blue economy. Therefore, unlike traditional research organizations, publication is not a priority. However, the low publication rate at CITEB has been identified as a factor limiting public access to CITEB's research projects, data, and results, as well as peer recognition. This also hinders the implementation of an open access strategy.

As a consequence, some actions will be undertaken in the next 5 years to correct this situation :

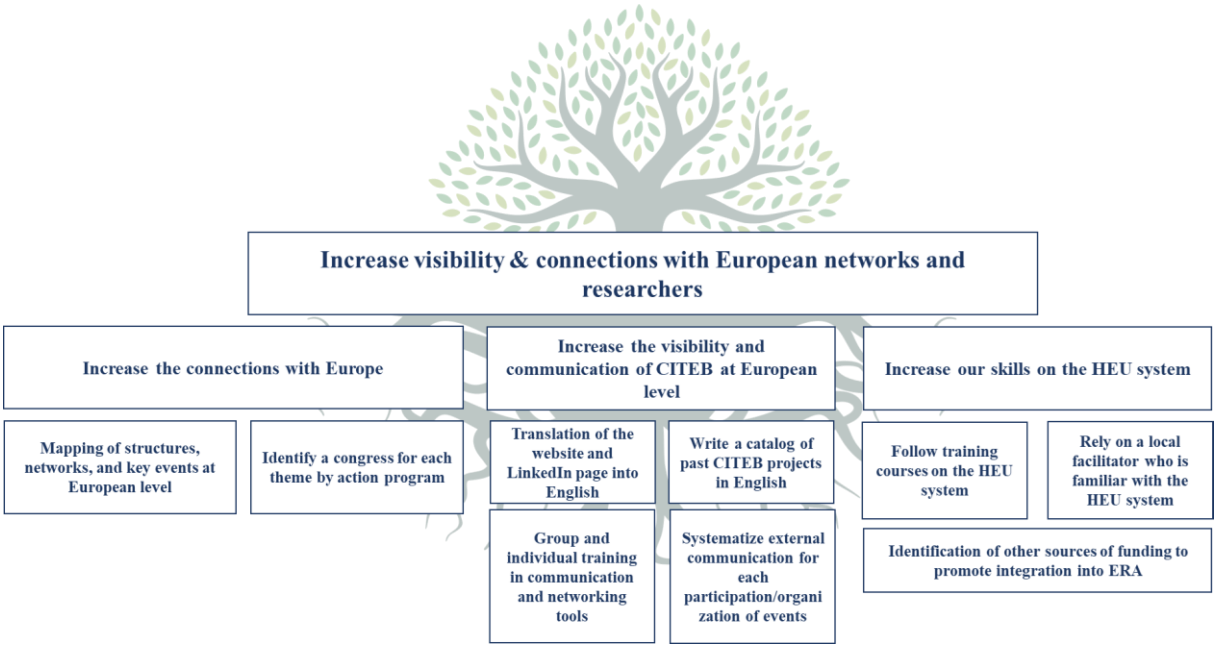
- **Increase the number of doctoral and post-doctoral students to foster publishing capacities**
- **Promote the creation of projects which include publishing activities**
- **Set up projects in line with previous ones to more easily leverage previous results**
- **Identify staff time exclusively dedicated to publishing**
- **Train researchers on advanced tools like Generative AI to facilitate the publishing process**

To implement these actions, it will be necessary to free up consequent researchers' time and to plan a specific training budget.

3. Strategic objective n°3 : Increase visibility & connections with European networks and researchers

As an outermost research organization, CITEB suffers from geographic and institutional distance and lacks recognition within the ERA. Furthermore, as described earlier, as a research center supported by regional authorities, its scientific activities prioritize local themes and funding sources. In response, the third strategic objective aims to increase CITEB's representation and connection to European networks

and major ERA research centres in order to create a more favourable dynamic for CITEB to apply successfully to HEU calls.



a) <u>Increase the connections with Europe</u>

As a first step to connect CITEB with major EU networks and research organisations, the following 2 actions will be implemented :

- **Map key structures, networks and events at European level** to identify the most relevant with regard to the research areas and CITEB assets to be promoted
- **Identify and participate in a conference for each research field yearly.** Indeed, direct exchanges and meetings with research peers during scientific events provide opportunities for future collaborations.

These actions will involve CITEB researchers and will need support of a partner for the mapping. Targeted funds and time will have to be identified within the action program of CITEB to allow researchers to attend to conferences in Europe.

b) <u>Increase the visibility and communication of CITEB at European level</u>

To promote CITEB on the European scene, it is imperative to build a distinctive communication strategy, which is not currently the case. This involves, in particular, better mastery of the different multimedia channels, translation of information into English and the creation of different online communication media.

Specific activities will be addressed to that purpose in the next years :

- **Translate the website and LinkedIn page into English**
- **Write a catalog of past CITEB projects in English**
- **Train staff members on communication and networking tools**
  Systematize external communication for each participation/organization of events

To implement these actions, it will be necessary to free up researchers' time and to plan a specific training budget with the support of Institut Bleu.

c) Increase our skills on the HEU system

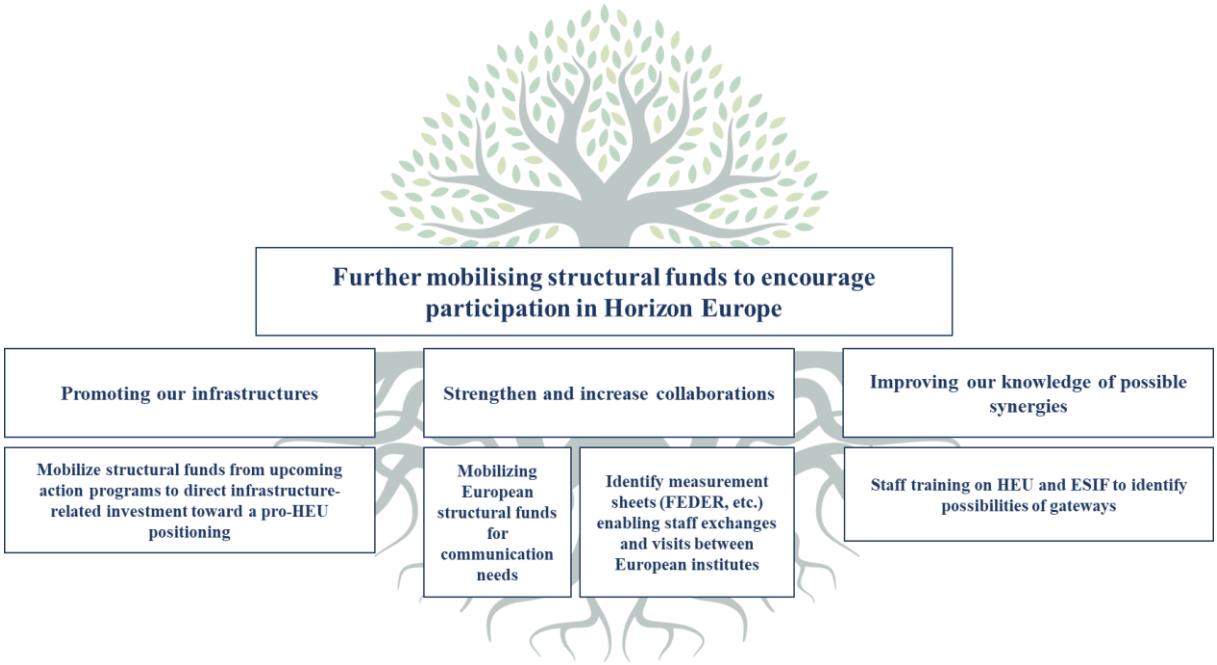
CITEB's low participation in H2020 and HEU projects stems partly from a general lack of awareness of this funding mechanism. To address this deficit, several actions are being considered :

- **Follow training courses on HEU** to upgrade the knowledge of both scientific and administrative staff
- **Rely on a local facilitator who is familiar with the HEU system,** which can help to identify relevant calls or strategic partners and support researchers in project writing
- **Identify other sources of funding to promote integration into ERA**

These actions will involve CITEB researchers and administrative staff, governance of Institut Bleu.
To implement these actions, it will be necessary to identify time and budget for training and projects' development. The objective at 5 years is to fill in the gaps of CITEB on HEU functioning, which will help to eliminate some of the individual barriers that currently prevail.

4. Strategic objective n°4 : Further mobilising structural funds to encourage participation in Horizon Europe

CITEB observes a significant dependence on ESIF funding for the implementation of its research projects and its multi-annual action program, both of which are closely linked to regional issues. Until now, these funds were rarely used for infrastructure development or communication and they have not yet been considered as a possible springboard for promoting CITEB at European level. The fourth strategic objective aims to increase the mobilization of European structural funds to promote and foster CITEB participation in Horizon Europe.



a) Promote our infrastructures

Future investments are planned to improve and expand CITEB's infrastructures by requesting ESIF funding. REMORA provides the opportunity to guide these future developments to ensure that the upgraded infrastructures reinforces CITEB's added value on a European scale.

To achieve that, il will be necessary to **mobilize structural funds from upcoming action programs to direct infrastructure-related investment toward a pro-HEU positioning** These actions will involve CITEB and Institut Bleu governance. The goals at five years are to identify priority investment with a distinctive EU added value and to connect these infrastructures to major EU networks.

b) Strengthen and increase collaborations

As mentioned above, CITEB suffers from a lack of visibility at a European level. ESIF funds can also be mobilized to promote and upgrade the communication and exchange strategy.

On these aspects, 2 actions are foreseen:

- **Mobilize European structural funds for communication needs and networking purposes**
- **Mobilize EU funding opportunities enabling staff exchanges and visits between European institutes** to foster a wider CITEB recognition.

These actions will involve CITEB researchers and the project manager of Institut Bleu in charge of the communication aspects.

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c) Improve our knowledge of possible synergies

One of the findings of the first workshop is the lack of awareness within CITEB of the possibilities for synergies between ESIF and HEU funds.

To improve our understanding of these 2 funding programs, it is planned to

- **organize staff training on HEU and ESIF with emphasis on the possibilities of bridges between the two.**
- **engage a strategic dialogue with ESIF managing authorities to reinforce synergies**

These actions will involve scientific, administrative and governance staff. They will notably lead to integrate these new insights into CITEB economic model and funding strategy by the next 5 years.

C. ACTION PLAN MONITORING

<table>
<tr><th colspan="2">Strategic objective 1 - Improving human capabilities</th></tr>
<tr><td>Responsible people/team : CITEB governance members</td><td rowspan="4">Expected results :

The existing staff stabilized through improved working environment and conditions / a larger team, particularly by welcoming post-doctoral fellows

Outcome indicator(s) :

• Number of staff members
• 100% staff members declaring improved working conditions.
• Number of foreign post-doc fellows
• Number of PhD students welcomed at CITEB

Dedicated resources :

• Human resources : Researchers and administrative staff time
• Financial resources : annual action plan</td></tr>
<tr><td>Op objective a - Stabilize the existing staff base
➢ Responsible : CITEB governance members
➢ Target groups : Administrative services
➢ Implementation indicators
o Definition of a salary scale (Y/N)
o 100% of staff members with an individual training plan</td></tr>
<tr><td>Op objective b - Provide support and management resources adapted to CITEB needs
➢ Responsible : CITEB governance members
➢ Target groups : Administrative services
➢ Implementation indicators
o Accessible administrative procedures (Y/N)
o 100% of administrative staff trained on HEU and new digital tools
o Recruitment of a HEU assistance (Y/N)</td></tr>
<tr><td>Op objective c - Increase the attractiveness of CITEB to researchers
➢ Responsible : Institut Bleu Manager (TBC)
➢ Target groups : CITEB researchers / Institut Bleu manager
➢ Implementation indicators
o Publication of communication tools (Y/N)
o Number of staff members in capacity to supervise doctoral students
o Number of collaborative projects that include a co-supervision of doctoral students.</td></tr>
</table>

<table>
<tr><th colspan="2">Strategic objective 2 - Getting started with RRI standards</th></tr>
<tr><td>Responsible people/team : CITEB research coordinator (TBC)</td><td rowspan="2">Expected results :

CITEB activities integrate and promote RRI standards

Outcome indicator(s) :
• Number of publications in international journals
• % of projects designed with RRI standards.</td></tr>
<tr><td>Op objective a - Raise awareness/train staff on RRI standards
➢ Responsible : CITEB governance members
➢ Target groups : CITEB researchers & technicians; Institut Bleu staff members
➢ Implementation indicators
o 100% staff members trained on RRI, notably on gender equality and open access
o Appointment of a RRI referee (Y/N)
o Adopted gender equality plan (Y/N)</td></tr>
</table>

Op objective b – Increase our publishing capacity ➢ *Responsible : Research manager/ coordinator (TBC)* ➢ *Target groups : Researchers* ➢ *Implementation indicators* ○ Number of working days dedicated to publishing activities. ○ 50% of research projects leading to publication ○ 50% of research projects integrated in a larger, pluriannual research program	**Dedicated resources :** • Human resources : researchers dedicated time • Financial resources : annual action plan

Strategic objective 3 - Increase visibility & connections with European networks and researchers	
Responsible people/team : *CITEB research coordinator (TBC)*	**Expected results :** *A better visibililty and integration of CITEB in European networks and intensified collaborations with HEU champions.* **Outcome indicator(s) :** • Number of joint activities with new European partners • Number of HEU applications submitted **Dedicated resources :** • Human resources : dedicated time of researchers and communication manager • Financial resources : annual action plan
Op objective a - Increase the connections with Europe ➢ *Responsible : Researchers* ➢ *Target groups : researchers and technicians* ➢ *Implementation indicators* ○ % of research areas supported by a thorough mapping of EU organizations and networks ○ Number of participations in international conferences	
Op objective b - Increase the visibility and communication of CITEB at European level ➢ *Responsible : Institut bleu communication manager* ➢ *Target groups : researchers* ➢ *Implementation indicators* ○ Number of communication supports available in English ○ 100% of staff members trained on communication and networking tools	
Op objective c - Increase our skills on the HEU system ➢ *Responsible : CITEB research coordinator (TBC)* ➢ *Target groups : Researchers and administrative staff* ➢ *Implementation indicators* ○ 100% of staff members trained on HEU ○ Pluriannual strategy to participate in relevant HEU calls (Y/N)	

Strategic objective 4 - Further mobilising structural funds to encourage participation in Horizon Europe	
Responsible people/team : *CITEB governance members (TBC)*	**Expected results :** *A strategic use of structural funds to foster CITEB participation to HEU* **Outcome indicator(s) :** • *Number of European organizations using CITEB's infrastructures* • *Number of participations in HEU projects* • *Share of HEU in CITEB's budget.* **Dedicated resources :** • Human resources : Researchers and administrative staff time • Financial resources : annual action plan
Op objective a - Promote our infrastructures ➢ *Responsible : CITEB research coordinator* ➢ *Target groups : Researchers and technicians* ➢ *Implementation indicator* ○ 100% of infrastructures integrate a dedicated ERA orientation and pro-Horizon Europe strategy.	
Op objective b - Strengthen and increase collaborations ➢ *Responsible : CITEB research coordinator* ➢ *Target groups : Administrative staff ; researchers.* ➢ *Implementation indicators* ○ Volume of structural funds dedicated to European promotion and networking ○ Number of participations in EU projects supporting staff exchanges and mobility.	
Op objective c - Improve our knowledge of possible synergies ➢ *Responsible : Administrative staff* ➢ *Target groups : Administrative staff ; researchers ; Institut Bleu manager* ➢ *Implementation indicators* ○ 100% staff members trained on funding synergies ○ Proposition of new funding instruments to ESIF managing authorities (Y/N).	

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ANNEXES TO THE EXCELLENCE FOR ERA ROADMAP

1. Completed self-assessments
2. Interview results
3. List of attendees to workshop n°1
4. Workshop n°1 Satisfaction survey results

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ANNEX 1: Self Assessment Tool

The next pages provide an overview of the conclusions from the self-assessment tools, for detailed results, please contact Dr. Alina Tunin-Ley (alina.tunin-ley@citeb.re)

Dimension 1 : Human resources	How to attract and retain international talents to reach a critical mass of researchers and improve scientific productivity and reputation through an adequate human resources strategy and better working conditions?

Measurement of the State of implementation	Measurement options	Explanation
	Not considered (No action taken or planned)	
	Initial steps taken (some actions in place) but limited progress	
	Mostly implemented with room for improvement	
	Continous implementation and optimization	

The assessment of this dimension is adapted from the HRS4R (Human Resources Strategy for Researchers) gap analysis tool.

Sub-dimension 1 : Ethical and Professional Aspects		Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
Principles	Definition according to the European Charter for Researchers	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation ? Initiatives undertaken/new proposals to improve the situation
Research freedom	Researchers should focus their research for the good of mankind and for expanding the frontiers of scientific knowledge, while enjoying the freedom of thought and expression, and the freedom to identify methods by which problems are solved, according to recognised ethical principles and practices. Researchers should, however, recognise the limitations to this freedom that could arise as a result of particular research circumstances (including supervision/guidance/management) or operational constraints, e.g. for budgetary or infrastructural reasons or, especially in the industrial sector, for reasons of intellectual property protection. Such limitations should not, however, contravene recognised ethical principles and practices, to which researchers have to adhere	Initial steps taken (some actions in place) but limited progress	1	Research at CITEB concerns highly applied fields linked to the interests of the Réunion region. In fact, fundamental research is excluded from our missions, and the possible scopes for research projects is relatively limited to the defined objectives of the organisation
Professional attitude	Researchers should be familiar with the strategic goals governing their research environment and funding mechanisms, and should seek all necessary approvals before starting their research or accessing the resources provided. They should inform their employers, funders or supervisor when their research project is delayed, redefined or completed, or give notice if it is to be terminated earlier or suspended for whatever reason.	Mostly implemented with room for improvement	3	All the research at CITEB is drived by the annual or pluriannual programm and is ruled by the different conventions
Dissemination, exploitation of results	All researchers should ensure, in compliance with their contractual arrangements, that the results of their research are disseminated and exploited, e.g. communicated, transferred into other research settings or, if appropriate, commercialised. Senior researchers, in particular, are expected to take a lead in ensuring that research is fruitful and that results are either exploited commercially or made accessible to the public (or both) whenever the opportunity arises	Initial steps taken (some actions in place) but limited progress	1	
Public engagement	Researchers should ensure that their research activities are made known to society at large in such a way that they can be understood by non-specialists, thereby improving the public's understanding of science. Direct engagement with the public will help researchers to better understand public interest in priorities for science and technology and also the public's concerns.	Mostly implemented with room for improvement	3	Several participations to public events each year
Non discrimination	Employers and/or funders of researchers will not discriminate against researchers in any way on the basis of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition.	Mostly implemented with room for improvement	3	No related document but achieved indeed
Evaluation/ appraisal systems	Employers and/or funders should introduce for all researchers, includingsenior researchers, evaluation/appraisal systems for assessing their professional performance on a regular basis and in a transparent manner by an independent (and, in the case of senior researchers, preferably international) committee. Such evaluation and appraisal procedures should take due account of their overall research creativity and research results, e.g. publications, patents, management of research, teaching/lecturing, supervision, mentoring, national or international collaboration, administrative duties, public awareness activities and mobility, and	Initial steps taken (some actions in place) but limited progress	1	No defined goals on these aspects except for CRT label and Action programm, for which such indicators are moslty yearly defined

Comments & feedbacks :

Ethical and professional apsects are globally well implemented at CITEB. The limits of implementation are linked to the specificity of the organisation: small center, mostly applied research in accordance with regional policies and objectives, and no specific documentation or strategy on these aspects yet defined

Total for subdimension 1 "Ethical and Professional Aspects"	2

Dimension 2 : Responsible Research and Innovation	How to maximime the impacts of your research activities throuhg the incorporation of advanced R&I management standards (such as open science, ethics, public engagement, etc.) ?

Measurement of the State of implementation	Measurement options	Explanation
	Not considered (No action taken or planned)	
	Initial steps taken (some actions in place) but limited progre	
	Mostly implemented with room for improvement	
	Continous implementation and optimization	

The assessment of this dimension is adapted from the "RRI self-reflection tool" designed by H2020 RRI Tools project

Sub-dimension 1 : Ethics		Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
Principles	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation ? Initiatives undertaken/new proposals to improve the situation
Ensuring the integrity of R&I practices	All research and innovation practices adhere to ethical guidelines and to the Code of Conduct for Research Integrity (for instance by encouraging peer review, consulting ethics experts, promoting internal discussions, etc.)	Initial steps taken (some actions in place) but limited progress	1	
Preventing potentially harmful impacts on the public or the environment	Taking proactive measures to anticipate and minimize risks to society or the environment, while ensuring that the outcomes of research are responsibly used even after the project's conclusion.	Mostly implemented with room for improvement	3	
What are possible ethical considerations for your R&I practices?	Environmental impacts Human and animal health impacts Local economic and development impacts Social justice Education Data management	≥ 4	3	CITEB's concerns: Environmental impacts Human and animal health impacts Local economic and development impacts Education Data management

Comments & feedbacks :

Ethics are well considered in every research steps at CITEB, but it lacks still external perspectives/advicse due to CITEB's size

Total for subdimension 1 Ethics	2,333333333

Sub-dimension 2 : Gender dimension		Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
Principles	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation ? Initiatives undertaken/new proposals to improve the situation
Gender equality plan	My organization has a formal strategy or framework in place to promote gender equality within its operations and decision-making processes	l steps taken (some actions in place) but limited prog	1	No gender equality plan but mostly considered in practice
What are your gender equality practices regarding staff and working conditions ?	We aim for gender-balanced teams We aim for gender-balanced management positions We have family-friendly work spaces We have equal salary guarantees We have equal contract conditions We promote awareness and support of diverse working approaches	≥ 4	3	Capicites and exppertise more important than gender at CITEB Not achieved at CITEB: - family-friendly work spaces - equal salary guarantees - awareness and support of diverse working approaches
How is gender equality evaluated within your organisation ?	We have specific actions and criteria for evaluating gender equality We have a team dedicated to evaluating gender equality We evaluate gender awareness through career development activities We monitor gender balance of teams We monitor gender balance of participants to R&I activities	≤ 2	1	Not enough critical mass Achieved at CITEB: - We monitor gender balance of teams

Dimension 3 : Horizon Europe	How to intensify transnational collaborations and participation in Horizon Europe through the creation of favourable environment and institutional policy that encourages and supports researchers to submit highly competitive applications ?

Measurement of the State of implementation	Measurement options	Explanation
	Not considered (No action taken or planned)	
	Initial steps taken (some actions in place) but limited prog	
	Mostly implemented with room for improvement	
	Continous implementation and optimization	

Sub-dimension 1 : Connection to EU clubs		Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
Factors	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation
Exploiting collaborations with Horizon Europe champions	My organization builds on previous collaborations with organizations and networks active in Horizon Europe to develop new proposals and integrate new networks	Initial steps taken (some actions in place) but limited progress	1	
Implementing an effective networking strategy	My organization has mappped out key organizations and networks to connect with and engages in effective networking activities to strenghten our relationships with EU champions and enhance our international reputation	Not considered (No action taken or planned)	0	But thanks to Remora, this will change soon :)
Defining clear added-value and value proposition	My organization has identified its unique, distinctive assets (i.e. infrastructures, equipments, know-how, expertise, networks) at EU level	Initial steps taken (some actions in place) but limited progress	1	

Comments & feedbacks :

Increasing networking activities, especially with potential European and international partners, remains very difficult given the remote location of the island (high travel costs) and the small size of the organization (few applicants to travel and to network due to the small team).

Total for Sub-dimension 1 : Connection to EU clubs	0,666666667

Sub-dimension 2 : Organization characteristics		Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
Factors	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation
International openess	My organization actively promotes the recruitment of foreign students, PhD candidates and researchers and has developped a strategy to reinforce international research collaborations leading to co-publications and/or projects	Not considered (No action taken or planned)	0	
Scientific productivity and impact	My organization implements a comprehensive action plan to increase its research intensity, scientific productivity (expressed in number of publications per full time equivalent) and publications impacts (average number of citations)	Not considered (No action taken or planned)	0	Publications are not a prioritised criteria at CITEB considering the small size, the fundinf and the functioning of the organization.
Size	My organizations follows a strategy and/or takes actions to grow and reach a critical mass, notably in terms of researchers	Not considered (No action taken or planned)	0	In my point of view but Jean may have a clear long-term vision on that aspect
Reputation	My organization allocates resources to increase its international reputation	Not considered (No action taken or planned)	0	
Orientation of R&I activities	My organization's R&I activities are closely aligned with Horizon Europe calls and the targeted calls fully support our vision and mission.	Not considered (No action taken or planned)	0	
Administrative and financial procedures	My organization has established well-defined policies and procedures and provides strong administrative support for research activities	Not considered (No action taken or planned)	0	
Institutional strategy	My organization has designed and implements a SMART strategy with clear objectives and dedicated resources to increase its participation in Horizon Europe	Initial steps taken (some actions in place) but limited progress	1	Through REMORA again
Horizon Europe capacity-building	My organization regularly organizes capacity building activities, such as training sessions and individual coaching to encourage and enhance the willingness and capacity of staff members to engage in Horizon Europe	Initial steps taken (some actions in place) but limited progress	1	Training sessions are communicated to the team and researchers are encouraged to attend but CITEB doesn't organize these kind of training sessions because of the small size of the organization
Horizon Europe support services	My organization hosts or provides access to expert Horizon Europe support services that offer professional assistance in identifying relevant calls, establishing or joining consortia and contributing to proposal writing	Initial steps taken (some actions in place) but limited progress	1	No EU office with experts in Horizon Europe established for long-term at CITEB -> few perspectives for improvement in Citeb and other R&I organizations

Dimension 4 : Funding synergies	How to effectively mobilize existing assets (such as infrastructures and equipment) and the resources provided by structural funds (such as ERDF) to intensify international collaborations notably with Horizon Europe “champions” (the organizations and networks that constitute the core of the European Research Area and monopolize coordination positions), through greater synergies ?

Measurement of the State of implementation	Measurement options	Explanation
	Not considered (No action taken or planned)	
	Initial steps taken (some actions in place) but limited progress	
	Mostly implemented with room for improvement	
	Continous implementation and optimization	

Sub-dimension 1 : Capacities		Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
Factors	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation ? Initiatives undertaken/new proposals to improve the situation
Supportive administrative and financial team	Staff members responsible for administrative and financial aspects are trained on synergies and have developed internal guidelines to support their implementation.	Not considered (No action taken or planned)	0	No administrative service specific to CITEB's activities
Knowledge of the policy context	Staff members are well-informed about the policy frameworks of both Horizon Europe and structural funds, as well as the synergy opportunities available within these regulations.	Initial steps taken (some actions in place) but limited progress	1	
Horizon Europe capacities	Structural funds are used to conduct capacity building interventions related to Horizon Europe (such as training sessions on proposal writing)	Not considered (No action taken or planned)	0	

Comments & feedbacks :

Capacity and knowledge among administrative and financial team to manage HEU and improve synergies are absent or very limited at CITEB.

Total for Sub-dimension 1 : Capacities	0,333333333

Sub-dimension 2 : Infrastructures			Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
	Factors	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation ? Initiatives undertaken/new proposals to improve the situation
Infrastructures	Strategic development plan	ESIF-funded infrastructures and equipments are equipped with a multi-year development plan that integrates Horizon Europe objectives and resources.	Initial steps taken (some actions in place) but limited progress	1	
Infrastructures	Pro-Horizon Europe policy	ESIF-funded infrastructures and equipments have a dedicated Horizon Europe engagement roadmap featuring SMART objectives, adequate resources and a monitoring system	Not considered (No action taken or planned)	0	
Infrastructures	Openness to European stakeholders	ESIF-funded infrastructures are utilized to host European colleagues	Initial steps taken (some actions in place) but limited progress	1	
Infrastructures	Asset	ESIF-funded infrastructures are promoted as assets to partner with strategic European organizations and to integrate promising Horizon Europe consortia and applications	Not considered (No action taken or planned)	0	
Infrastructures	Participation in infrastructure networks	ESIF-funded infrastructures are part of established European Infrastructure Networks	Not considered (No action taken or planned)	0	

Comments & feedbacks :

Little or no promotion of CITEB infrastructures to European research institutes; no strategy pro-Horizon Europe in infrastructures development

ANNEX 2: Interview results

See next page

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PROTOCOLE 1 : CHERCHEUR/CHERCHEUSE SENIOR

Introduction

REMORA est un projet Horizon Europe, qui ambitionne de transformer 3 institutions des sciences marines de La Réunion, Madère et les Açores en champions d'Horizon Europe : CITEB, OKEANOS et OOM. À cette fin, REMORA renforcera leur compétitivité (notamment ses ressources humaines, ses capacités de transfert de connaissances et d'innovation), leur positionnement stratégique et leurs liens avec les principaux réseaux de l'UE grâce à une stratégie d'internationalisation commune. REMORA utilisera ensuite la transformation réussie de ces 3 modèles pour amener d'autres organisations et décideurs politiques dans les régions ultrapériphériques et autres territoires « Widening » à établir davantage de synergies entre les fonds structurels (tels que FEDER) et Horizon Europe.

Objet de l'interview :

L'objectif principal du Workpackage 1 de REMORA (WP1) est de surmonter deux points bloquants majeurs qui contribuent à la dépendance de CITEB, OKEANOS et OOM vis-à-vis des fonds structurels et inhibent leur participation à Horizon Europe : l'absence de stratégie organisationnelle et le manque de motivation et de capacités individuelles. À cette fin, le WP1 analysera les obstacles internes, concevra des feuilles de route « Excellence pour l'Espace européen de la recherche » (Excellence for ERA) et mettra en œuvre des activités de renforcement des capacités pour stimuler la compétitivité des organisations partenaires dans le cadre d'Horizon Europe.

Les feuilles de route « Excellence for ERA » sont des programmes de transformation institutionnelle visant à accroître les capacités de recherche et d'innovation et leur mobilisation effective par l'adoption de standards et normes avancées (telles que la recherche et l'innovation responsables) ainsi qu'à renforcer la volonté et la compétitivité pour postuler avec succès à Horizon Europe, notamment en tant que coordinateurs.

Cet entretien vise à enquêter, aux niveaux institutionnel et individuel, sur les pratiques actuelles et les obstacles rencontrés en matière de

- Stratégie de ressources humaines
- Principes de recherche et d'innovation responsables
- Participation à Horizon Europe
- Synergies entre les Fonds structurels et Horizon Europe.

Chaque partenaire doit organiser trois entretiens bilatéraux (d'une heure chacun) avec :

- Un-e chercheur/chercheuse principal-e
- Un-e directeur /tricefinancier ou un-e dirigeant-e;

- Un-e membre de la gouvernance (administrateur/trice, président-e, membre du conseil d'administration, etc.)

a. Ressources humaines

En 2023, l'Union européenne a publié la Charte européenne des chercheurs, une liste de 20 principes que les organisations doivent respecter pour attirer et retenir les chercheurs, organisée en 4 dimensions : recrutement ouvert et basé sur le mérite, conditions de travail adaptées et respectueuses, formation continue et développement professionnel, respect de l'éthique et des principes professionnels.

Comment décririez-vous les conditions de travail actuelles des chercheurs au sein de votre organisation ? Y a-t-il des facteurs spécifiques qui soutiennent ou entravent particulièrement votre travail ?	Bonne organisation/ structuration des équipes et un environnement humain motivant. Absence de soutien adminsitratif et personnel technique limité, ce qui engendre un surplus de tâches pour les chercheurs. Concernant les conditions de travail, une marge d’amélioration existe pour augmenter l’attractivité de la structure.
De votre point de vue, quels sont les défis les plus pressants pour attirer et retenir des chercheurs talentueux ?	Mettre en place de meilleures conditions salariales. Améliorer la visibilité du CITEB au niveau national et international. s
Selon vous, quels sont les principaux objectifs qu'une stratégie efficace en matière de ressources humaines devrait viser au cours des cinq prochaines années pour soutenir les chercheurs ?	Embauche ou formation de personnel compétent au niveau administratif et technique. Mettre en place des perspectives / plan d’évolution dans l’entreprise.

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b. Recherche responsable et innovation

La Recherche et l'Innovation Responsables (RRI) est une norme européenne conçue pour augmenter les impacts des activités de recherche grâce à l'intégration de 6 dimensions dans leur conception et leur mise en œuvre : l'engagement public, l'éthique, l'enseignement des sciences, l'égalité des sexes, l’open access et la gouvernance.

Dans quelle mesure intégrez-vous ces dimensions dans vos activités quotidiennes de recherche et d'innovation (R&I) ?	Pas intégré actuellement.
Quels sont les principaux défis auxquels vous êtes confrontés dans l'application de la recherche responsable et de l'innovation dans vos activités quotidiennes de R&I ?	Manque de connaissances sur les normes RRI. Manque de temps pour se former et les intégrer. Manque de moyens.

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Quels objectifs pourriez-vous vous fixer, ainsi qu'à d'autres chercheurs, pour mieux intégrer les principes de la Recherche et de l'Innovation responsables (IRR) au cours des cinq prochaines années ?	Se former aux standards européens en termes de RRI et trouver une stucture d’accompagnement

c. Horizon Europe

Pensez-vous que votre organisation offre un environnement favorable à la participation à Horizon Europe ? Quels sont les principaux obstacles internes (administratifs, techniques, financiers) que vous et vos collègues rencontrez lorsque vous postulez à un financement Horizon Europe ?	Manque de connaissance de ces dispositifs et aucune expérience. Equipe trop petite et pas de personnel administratif dédié.
Certains chercheurs peuvent décider de ne pas postuler aux appels d'Horizon Europe parce qu'ils estiment qu'ils ne disposent pas des capacités ou du soutien appropriés, ou qu'ils considèrent que le programme est trop compétitif et trop coûteux pour y accéder. Dans quelle mesure ce phénomène d'« autosélection » s'applique-t-il à vous ? à vos collègues ?	Absence de candidature car manque de connaissance des financements HEU (thématiques, priorités, agenda, fonctionnement…) ; un financement HEU n’est actuellement même pas une option considérée. Les fonds structurels suffisent à maintenir la structure et servent à financer les objectifs prioritaires des prochaines années, ce qui ne laisse pas de temps pour développer d’autres projets sur d’autres types de financement (le temps agent est entièrement pris pas les missions des projets ERDF déjà en cours).

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Quel niveau d'ambition et d'objectifs pour les projets Horizon Europe semblent réalisables pour vous et vos collègues chercheurs au cours des cinq prochaines années ?	Etre partenaire d’un projet HEU d’ici 4-5 ans.

d. Synergies entre les Fonds structurels (FEDER, FEAMP, FSE, etc.) et Horizon Europe

Avez-vous déjà utilisé les fonds structurels pour participer à des projets Horizon Europe ? Si oui, comment ?	Non
Dans quelle mesure le soutien interne ou externe vous aide-t-il à naviguer ou à combiner les sources de financement de votre recherche ?	Pas de soutien, hormis la direction technique (Jean Turuqet) qui fait le relais de certains AMI et AAP

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Comment les infrastructures de recherche / équipements / banques existantes pourraient-elles être mieux exploitées pour favoriser les projets Horizon Europe ?	Il y a un réel besoin d’investissement et de diversification de nos infrastructures pour pouvoir être plus attractifs. Il faudrait améliorer la visiblité du CITEB, y compris à l’échelle régionale.

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PROTOCOLE 2 : DIRECTEUR FINANCIER / DIRECTEUR

Introduction

REMORA est un projet Horizon Europe, qui ambitionne de transformer 3 institutions des sciences marines de La Réunion, Madère et les Açores en champions d'Horizon Europe : CITEB, OKEANOS et OOM. À cette fin, REMORA renforcera leur compétitivité (notamment ses ressources humaines, ses capacités de transfert de connaissances et d'innovation), leur positionnement stratégique et leurs liens avec les principaux réseaux de l'UE grâce à une stratégie d'internationalisation commune. REMORA utilisera ensuite la transformation réussie de ces 3 modèles pour amener d'autres organisations et décideurs politiques dans les régions ultrapériphériques et autres territoires « Widening » à établir davantage de synergies entre les fonds structurels (tels que FEDER) et Horizon Europe.

Objet de l'interview :

L'objectif principal du Workpackage 1 de REMORA (WP1) est de surmonter deux points bloquants majeurs qui contribuent à la dépendance de CITEB, OKEANOS et OOM vis-à-vis des fonds structurels et inhibent leur participation à Horizon Europe : l'absence de stratégie organisationnelle et le manque de motivation et de capacités individuelles. À cette fin, le WP1 analysera les obstacles internes, concevra des feuilles de route « Excellence pour l'Espace européen de la recherche » (Excellence for ERA) et mettra en œuvre des activités de renforcement des capacités pour stimuler la compétitivité des organisations partenaires dans le cadre d'Horizon Europe.

Les feuilles de route « Excellence for ERA » sont des programmes de transformation institutionnelle visant à accroître les capacités de recherche et d'innovation et leur mobilisation effective par l'adoption de standards et normes avancées (telles que la recherche et l'innovation responsables) ainsi qu'à renforcer la volonté et la compétitivité pour postuler avec succès à Horizon Europe, notamment en tant que coordinateurs.

Cet entretien vise à enquêter, aux niveaux institutionnel et individuel, sur les pratiques actuelles et les obstacles rencontrés en matière de

- Stratégie de ressources humaines
- Principes de recherche et d'innovation responsables
- Participation à Horizon Europe
- Synergies entre les Fonds structurels et Horizon Europe.

Chaque partenaire doit organiser trois entretiens bilatéraux (d'une heure chacun) avec :

- Un-e chercheur/chercheuse principal-e
- Un-e directeur /tricefinancier ou un-e dirigeant-e;

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- Un-e membre de la gouvernance (administrateur/trice, président-e, membre du conseil d'administration, etc.)

a. Ressources humaines

En 2023, l'Union européenne a publié la Charte européenne des chercheurs, une liste de 20 principes que les organisations doivent respecter pour attirer et retenir les chercheurs, organisée en 4 dimensions : recrutement ouvert et basé sur le mérite, conditions de travail adaptées et respectueuses, formation continue et développement professionnel, respect de l'éthique et des principes professionnels.

Comment l'équipe administrative et financière soutient-elle aujourd'hui le développement des capacités des collaborateurs ?	*Pas d’actions mises en œuvre à l’heure actuelle*
Quelles sont les contraintes financières ou administratives qui limitent la capacité de votre organisation à mettre pleinement en œuvre les normes HRS4R ?	*Instabilité administrative et financière* *Financement sur projet* *Plafonnement des salaires par le FEDER* *Pas de plan de formation structurée sur du moyen/long terme* *Pas de budget identifié spécifiquement pour la formation*
Quels objectifs clés suggéreriez-vous pour améliorer les pratiques de recrutement et les conditions de travail au cours des cinq prochaines années ?	*Améliorer les grilles salariales* *Réflexion sur la flexibilité du temps de travail*

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b. Recherche responsable et innovation

La Recherche et l'Innovation Responsables (RRI) est une norme européenne conçue pour augmenter les impacts des activités de recherche grâce à l'intégration de 6 dimensions dans leur conception et leur mise en œuvre : l'engagement public, l'éthique, l'enseignement des sciences, l'égalité des sexes, le libre accès/open access et la gouvernance.

De quelle manière l'équipe administrative et financière soutient-elle la mise en œuvre des normes de Recherche et d'Innovation Responsable (IRR) au sein de votre organisation ?	*Aucune action particulière n’est entreprise*
Y a-t-il des contraintes budgétaires qui affectent la mise en œuvre pratique de l'IRR (par exemple, le financement de l'engagement public ou de l'égalité des sexes) ?	*Financement sur projet* *Pas de budget spécifique*

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Quels objectifs pouvez-vous proposer pour renforcer les capacités et la volonté de vos collaborateurs à adopter les normes RRI ?	*Identifier du temps agent et des fnancements dédié* *Trouver de la motivation pour que les chercheurs s’investissent sur de volet*

c. Horizon Europe

Comment votre organisation soutient-elle les chercheurs dans l'accès et la gestion des projets Horizon Europe ?	*En apportant un soutien adapté aux chercheurs intéressés/impliqués par/dans des projets Horizon Europe* *Les ressourecs dédiées sont apportées au cas par cas*
Quels sont les obstacles administratifs ou financiers qui limitent la capacité de votre organisation à participer efficacement à Horizon Europe ?	*Pas de temps agent dédié au montage de projet Horizon Europe* *Opérations chronophages et à risque (financements très compétitifs)*

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Quels objectifs pourriez-vous vous fixer au cours des cinq prochaines années pour mieux promouvoir et soutenir le développement des projets Horizon Europe ?	*Définir du temps spécifique au montage de projet HEU pour chaque chef de projet.* *Définir une vraie politique de networking avec budget spécifiquepour pouvoir participer à des événements ou conférences regroupant les acteurs européens des sciences marines* *S’adosser à une organisation qui identifie les calls d’intérêts et nous appuie sur le montage de projet*

d. Synergies entre les Fonds structurels (FEDER, FEAMP, FSE, etc.) et Horizon Europe

Comment votre organisation utilise-t-elle les fonds structurels de l'UE en coordination avec le financement d'Horizon Europe ?	*Effort de complémentarité et effet-levier, mais de manière anecdotique*
Quelles stratégies ont été efficaces pour créer une synergie entre les sources de financement, et pouvez-vous nous donner un exemple de réussite ?	*Pas d’exemples pour le moment*

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Avez-vous rencontré des difficultés à aligner ces sources de financement pour soutenir les objectifs de recherche et d'innovation de l'organisation ?	*Pas de difficultés particulières pour aligner ces différents types de financement*
Quels objectifs pourriez-vous proposer au cours des cinq prochaines années pour renforcer la synergie entre les sources de financement structurelles et compétitives ?	*Il faudrait que les sources de financement compéttitf soient plus adpatées au cnextet des RUPs (élognement, fonds structurels très régionalisés) et que le volet RUP soit davantage mis en avant dans les téhatiques des calls* *Il fauriat que les fonds structurels puissent financer des projets avec une dimension supérieure à celle du territoire*

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ANNEX 3: List of attendees to workshop n°1

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REMORA
Small fishes in a big pond

CITEB
CENTRE TECHNIQUE de RECHERCHE et de VALORISATION des MILIEUX AQUATIQUES

WP1 – T1.2 « Excellence for ERA » gap analysis
CITEB workshp – 10/12/24
Attendance sheet & groups composition

Attendance sheet

Name	Signature
Salomé Khatib	
Yelena Laforce-Cardot	
Fanny Maillot	
Perrine Mangion	
Cléa Maurines-Carboneill	
Evgeny Romanov	
Alina Tunin-Ley	
Jean Turquet	
Yoann Vaïtilingom	

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REMORA
Small fishes in a big pond

« Excellence for ERA » roadmap

OKEANOS

January 2025

Madeira Regional Directorate of Environment and Sea

Information

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Author(s)	Filipe M Porteiro, Amparo Ferragud, Gui Menezes

EXECUTIVE SUMMARY

The Institute of Marine Sciences—OKEANOS, part of the University of the Azores and based on Faial Island, is a prominent marine research center in the North Atlantic. With scientific roots dating back to 1976 and institutional autonomy since 2019, OKEANOS leads advanced research on deep-sea, open-ocean, and coastal ecosystems. Its mission aligns with the European Green Deal and UN Sustainable Development Goals, promoting sustainable marine management and innovation through its strategic pillars: Global Change, Blue Economy, Technology, Governance, and Literacy.
Equipped with cutting-edge infrastructure such as the DeepSeaLab, AquaLab, and the Condor Bank Observatory, and engaged in key European research initiatives, OKEANOS contributes to science-policy development in areas like fisheries, marine biodiversity, aquaculture, and ocean monitoring. Its international partnerships and growing research output underscore its scientific excellence and regional relevance.

The main structural challenges include precarious human resources, a lack of permanent contracts, and insufficient technical and administrative capacity. Researchers face unstable employment and limited support for project management and funding acquisition. There is no institutional Horizon Europe strategy, and access to European Structural and Investment Funds (ESIF) remains uncoordinated and underutilized.
While stakeholder engagement, gender equality, and ethical compliance are in place, Responsible Research and Innovation (RRI) principles lack full institutionalization and impact measurement. The absence of an internal project office, weak internal communication, and fragmented governance across multiple entities further hinder efficiency and strategic alignment.
To unlock its full potential, OKEANOS must reinforce institutional autonomy, establish a strategic funding and HR plan, professionalize project support, and better leverage structural funds to boost its scientific competitiveness and leadership in European marine research.

The OKEANOS Action Plan lays out a transformative roadmap to establish the institute as a European leader in deep-sea and open-ocean science, aligned with the European Research Area and Horizon Europe priorities. It is built around two strategic objectives: (1) to implement high-end governance and management standards for sustainable institutional growth, and (2) to position OKEANOS as an international hub for marine research, innovation, and education.
Key actions include the creation of a local research management office, recruitment of 10 specialized professionals, development of a financial sustainability model, and adoption of Responsible Research and Innovation (RRI) principles. The plan supports the establishment of an international training center, long-term open science data infrastructure, and enhanced participation in EU and Atlantic collaborative networks.
Over five years, OKEANOS aims to double its Horizon Europe projects, increase external funding, recruit international talent, and become a reference institution in global ocean science. This action plan is essential for strengthening competitiveness, ensuring institutional resilience, and maximizing the socio-economic impact of scientific excellence in the Azores and Europe.

TABLE

I. ORGANIZATIONAL DIAGNOSIS AND KEY CHALLENGES

A. PRESENTATION OF OKEANOS

1. Vision, Mission, and Strategic Objectives

The Institute of Marine Sciences, OKEANOS (OKEANOS) is an organic unit of the University of the Azores (UAc), and based at the Horta campus in Faial island Created in 2015, it inherited the scientific knowledge and resources from the former Department of Oceanography and Fisheries, established in 1976. In 2019, OKEANOS acquired scientific and administrative autonomy, and its statutes were published in 2022. The institution's organizational structure includes the Scientific Council, the Scientific Coordination Committee, the Executive Board of Directors, and an External Scientific Advisory Board. OKEANOS is governed by the statutes of the University of the Azores and by its own statutes.

The UAc campus at Horta is also home to the Department of Oceanography and Fisheries, which currently is a subunit of the Faculty of Science and Technology responsible for master's and doctoral programs. The Instituto do Mar (IMAR), a management entity to OKEANOS activity, also has its headquarters in Horta. The Institute also works with the Gaspar Frutuoso Foundation (FGF), another UAz management organization based at Ponta Delgada in São Miguel island.

OKEANOS' technical and scientific activities are supported by the multi-annual public funding mechanisms of Fundação para a Ciência e Tecnologia, I.P. (FCT-IP) and the Direção Regional para a Ciência, Inovação e Desenvolvimento do Governo Regional dos Açores (DRCID/GRA) for national and regional R&I Units and by competitive projects and services provided in addition to the UAc formal budget.

The R&I Units integrates the Azorean Scientific and Technological System of the Azores (SCTA). It is accredited by the Foundation for Science and Technology (FCT-IP) and was evaluated with the classification of *Excellent* for the periods 2018-2023 and 2025-20229.

Mission

OKEANOS, has the statutory mission of *Production, facilitation and promotion of scientific and technological research, contributing to the advanced training of human resources, to the innovation and dissemination of knowledge and to the definition of policies in the fields of marine sciences and technologies, favouring a multidisciplinary approach.*

Concurrently, OKEANOS has defined its scientific mission as *Conducting advanced research to understand the ecosystems of the deep sea, the open ocean and coastal zones on a changing planet, promoting a sustainable blue economy and the sustainable management of the marine environment for the benefit of society and the environment.*

OKEANOS adopted the following **strategic pillars** to inspire and accommodate its research areas.

Global changes - addressing ecosystem function and services and biodiversity maintenance, their stability and resilience to climate change and other anthropogenic pressures.

Blue Economy - providing key information to support existing and future opportunities for blue growth in key sectors such as fisheries, maritime tourism, aquaculture and biotechnology, safeguarding the sustainable management of oceanic and coastal ecosystems.

Technology – promoting technological solutions to overcome methodological constraints and difficulties in accessing, observing and discovering the open ocean and the deep-sea.

Governance - transferring knowledge for the sustainable management and preservation of marine ecosystems and supporting the implementation of relevant agreements, strategies, Directives and laws and other policy instruments, at international, European, regional, national and local levels.

Literacy – increasing capacity and commitment to enhance advanced high-level education and training in ocean sciences and to transfer and share knowledge within the scientific community, marine stakeholders and the society.

The Institute assumed the following **objectives**:

1. To guarantee and promote scientific research in marine sciences, within an international and national reference framework;

2. To promote and ensure the qualification of human resources for excellence through academic and professional training;

3. To contribute to the dissemination of a scientific culture, as a means to awareness and appreciation of an informed and active citizenship toward a healthy and productive ocean;

4. To promote the conservation and protection of marine natural capital;

5. To contribute to an integrated management of marine resources system, maintaining the ecosystems functioning and guaranteeing the sustainable use of their resources, for the benefit of current and future generations;

6. To design, implement and manage ocean observation, monitoring and data acquisition and management programs;

7. To encourage technical and scientific cooperation in key ocean research areas, marine technology and innovation, with public and private, national and international, entities;

8. To support the definition and implementation of public policies in marine conservation and management planning, considering human uses and the exploitation of marine living and non-living resources;

9. To provide technical and scientific consultancy services in the marine field to public and private organisations, non-governmental associations and other non-profit organisations;

10. To represent the University of the Azores in external events scientific research units of a similar nature or related to its mission and objectives;

11. Promote the discussion and dissemination of scientific research results

2. Research Fields, Facilities, and Resources

The Institute OKEANOS, located at the center of the North Atlantic, focuses its research on biological sciences specifically on ecology and biology of deep-sea and open-ocean ecosystems and on coastal insular environments.

The research areas that OKEANOS specializes in are aligned with Horizon Europe's (HE) priorities. Most OKEANOS's research supports the implementation of EU policies (i.e., Integrated Maritime Policy, Sustainable Blue Economy Strategy, Biodiversity Strategy and other related with the Green Deal) and global policies to achieve the UN's Sustainable Development Goals (namely the ODS 14). The research produced by OKEANOS also contributes to understanding the impacts of global changes (climate and anthropogenic). It profits from the objectives defined to the Horizon Europe mission Restore our Ocean and Waters, contributing to the restoration of oceans and coastal waters, impacting policies and the society. Knowledge and data acquired on central North Atlantic ecosystems contribute to the development of a future Digital Twin Ocean for this region.

The OKEANOS research fits HE pillar II, Global Challenges and European Industrial Competitiveness, namely Clusters 5 and 6 Climate, Energy & Mobility and Food and Bioeconomy, Natural Resources, Agriculture and Environment, respectively.

The OKEANOS ambitions to strengthen the European Research Area through excellence by participating in the Widening program to upgrade the research and innovation systems of the institute and of the Azores region.

Distinctive assets

· A 50-year research institute at the heart of the North Atlantic, advancing marine science and facilitating the access to deep-sea and open-ocean ecosystems.

An institution located at an oceanic biodiversity hotspot in the central North Atlantic, in the Azores tectonic triple junction and in an oceanographic ecotone between subtropical and temperate marine biomes.

- The Condor Bank Observatory at the Azores is an offshore Marine Protected Area dedicated to research and conservation, including ecological recovery and restoration experiments. Integrated in the EMSO-PT infrastructure.
- A productive scientific team recognized for its expertise in deep-sea and open-ocean research.
- A solid participation in Atlantic and global marine science and science-policy networks and initiatives.
- Large datasets of oceanic and coastal fisheries and marine biodiversity, secured during long-term monitoring programs.
- A key institution in Azores marine science and technology innovation ecosystem and cluster (OKEANOS Institute; Azores Sea School; MARTEC technopole [in construction]; Oceanic research vessel [available in 2026], Air Centre, among others).

OKEANOS key research fields

Deep-sea ecosystems

- Large-scale exploration and habitat mapping, especially in the Azores Region.
- Ecology, biogeography and spatial distributions of deep-sea Vulnerable Marine Ecosystems.
- Ecology, biogeography, spatial distributions and fisheries of demersal and deep-sea teleosts and elasmobranchs.
- Taxonomy and biology of cold-water corals and sponges, including mesocosm studies at DeepSea Lab.
- Impact of climate change (warming, acidification, deoxygenation and food availability) on physiology, biodiversity, distribution and trophic ecology of deep-sea fauna (including commercial deep-sea fishes), through laboratory experiments at the DeepSeaLab and ecological modelling.
- Impacts of human activities (fishing, deep-sea mining) in habitats integrity, species biodiversity, abundance and health, ecosystem functioning and services, through laboratory experiments, field work and ecological modelling.
- Active and passive restoration activities of seamount benthic communities, namely cold water coral gardens.
- Trait based approaches for functional ecology and diversity of Vulnerable Marine Ecosystems in Azores Marine Protected Areas, the Mid-Atlantic Ridge and Clarion Clipperton Zone at central Pacific.
- Oceanic trophic ecology in the Azores region through stable isotopes and lipid analysis and ecological modelling.
- Biological and ecological connectivity pathways using hydrodynamic and connectivity models applied to Azores Triple Junction and other North Atlantic hydrothermal vent ecosystems.
- Temporal variation of deep-sea hydrothermal vents community composition at the Azores triple junction and nodule fields at Clarion Clipperton fracture Zone.

O*pen-ocean* ecosystems

- Synoptic 3D behaviour and physiology of migratory pelagic megafauna (cetaceans, marine turtles, seabirds, fishes, including sharks and manta rays) using tagging, biologging and genetic techniques.
- Large scale migration processes (including responses to environmental drivers), of megafauna populations dynamics, using tagging, satellite telemetry, optical technologies and ecological niche modelling.
- Trophic coupling and energy fluxes between predators and their (meso- and epi-) pelagic preys using acoustics, behavioural data, genetics and other sampling technologies.
- Oceanographic drives and benthopelagic ecological coupling: influence of environmental parameters and oceanic geologic structures, namely seamounts on micronekton and megafauna behaviour and ecology.
- Vulnerability of megafauna, namely cetaceans, to climate change and human activities (tourism and shipping).

Coastal ecosystems

- Biodiversity of Azores coastal communities and the impacts of marine protected areas and other conservation policies.
- Development of sustainable human activities at the sea and shores mitigating the impacts of climate changes, bioinvasions and anthropogenic activities.

Fisheries biology, monitoring and management

- Stock assessment modelling and development of holistic approaches for assessing and managing small-scale fisheries in the Azores.
- Biological sustainability assessment of priority marine stocks in the Azores, optimizing scientific knowledge for fisheries management.
- Recovery and restoration of a demersal deep-sea fish community after a fishery closure on Condor Seamount MPA and scientific observatory following six decades of intensive commercial fishery.
- Characterization of pelagic longline fishery in the Northeast Atlantic (target species; by-catch; fishing distribution and seasonality)
- Determination of impacts and risks of pelagic and demersal fisheries to shark populations.
- Deep-sea elasmobranchs diversity and distribution, based on fishery data, and mitigation of shark and rays by-catch using deterrent techniques.
- Scientific monitoring of fishery biology parameters and abundance data for stock assessment of demersal commercial fishes.
- Comparative research of extractive and non extractive techniques and methodologies for fisheries monitoring of abundance and biodiversity
- Development of advanced computer vision technologies for commercial fisheries data-collection.

Experimental aquaculture

- Cultivation techniques for abalone and limpets (larval and post-larval stages).
- Invertebrate alternative feeding protocols using macro and micro algae.

Blue biotechnology

- Diversity of microbial communities and functional genes in metagenomes, from deep-sea hydrothermal vent sediments in the Azores.
- Bioprospecting the potential utilization and valorization of microbial communities associated to extreme environments such as deep-sea hydrothermal vent organisms and hydrothermal sediments as source of marine natural products.
- Application of omics tools to exploring deep-sea hydrothermal vent mussel *Bathymodiolus azoricus* to discover novel bioproducts showing potential interest for blue biotechnology.

Ecotoxicology

- Nutritional quality of commercial fish, supporting market value and promotion.
- Determination of contaminants in commercial fish and the marine environment.

Marine litter and pollution

- Evaluating trends and ecological risks of plastic pollution in remote oceanic islands by mapping, monitoring and quantifying marine litter in coastal areas, deep-sea bottoms, epipelagic waters and biota (i.e., invertebrates, fish, seabirds and turtles).
- Physiological impacts of microplastics in marine biota.

Ocean observation and other marine related technologies

OKEANOS developed or co-developed various equipment to facilitate access and improve data collection from deep-sea and open ocean ecosystems and faunas. Those developments were achieved through partnerships with technological laboratories and companies. The following are being used by OKEANOS researchers, who are continually improving the prototypes reaching higher TRL.

- Innovative multisensory biologging tags (8 prototypes; TRL7-9) for open-ocean megafauna ecological and physiological studies (iTag: squid behavior and environmental sensor; G-Pilot: non-invasive behavior & environmental; i-Pilot: non-invasive video & environmental; Remora: internal temperature and behavior; NAUTILOS: non-invasive behavior and dissolved O2; Dome: behavior and dissolved O2; Turtle microsatellite: behavior and tracking juvenile turtle; TRITON: low-cost sensors for whale ecology.).
- The Azores drift-cam (TLR 7), a cost-effective and easily handled scientific tool to democratize deep-sea exploration. A cabled drifting stereo video platform that enables rapid appraisal and mapping of deep-sea benthic habitats to 1000 m deep.
- The “System for measuring fish using a camera and a structured light projector"; property of Fishmetrics, Ltd it is a system to fish size sampling from fisheries using vision technologies. It is installed in several fish auctions in Portugal. OKEANOS co-authored a National Invention Patent (nº 109333) with Fishmetrics, Ltd.
- A citizen science mobile app for monitoring cetaceans occurrences based on opportunistic data obtained by the general public or companies, which can be used for research projects.

Ocean Governance

An important fraction of the research effort by the Institute OKEANOS is dedicated to field monitoring programs executed by IMAR under contracts of services provisions established with the Azores Regional Government from the 90’s to present. The data gathered through those programs is essential to support the implementation of Azores, national, regional and European marine policies.

Monitoring programs (fisheries and biodiversity)

<u>Arquedaço</u>

- Gathers abundances of demersal and deep-sea fish species based on an independent annual scientific fishing survey.
- Collects information on biology of commercial species (size, growth, reproduction, etc.)
- Tag and release program for ecological studies on selected species.
- Supports research in fisheries biology and stock assessment.
- Allows research on the impacts of demersal fishing in marine benthic ecosystems (sampling of deep-water corals and sponges and other by-catch).
- Supports the Azores administration within the framework of the Common Fisheries Policy.

POPA

- Monitors tuna commercial fisheries and exploratory fisheries.
- Collects data on fishing events, technology and operations;
- Target species, by-catches and associated species; Marine litter and environmental parameters.
- Supports the Azores administration within the framework of the Common Fisheries Policy, MSFD and Natura 2000.
- Guarantees dolphin safe certification of tuna fishery in the Azores.

COSTA

- Monitors pelagic longline fishery.
- Promotes good practices for handling and release accidental captures of turtles.
- Consolidates the turtle tagging program (IMAR/OKEANOS since 1986).
- Supports the Azores administration within the framework of the Common Fisheries Policy, MSFD and Natura 2000.
- Involve local communities and tourists in conservation actions.

MoniCo

Monitors the status of commercial coastal resources and coastal biodiversity on Marine Protected Areas, thorough visual census and optical cameras.

Collects information on marine litter, invasive species.

Supports the Azores administration within the framework of the Common Fisheries Policy, MSFD and Natura 2000.

Involve local parties in use and management of Azores coastal areas and resources.

MoniPol

- Monitors and evaluates quality (nutritional and contaminants) of Azores commercial fish and shellfish.
- Supports the Azores administration within the framework of the Common Fisheries Policy, MSFD and European, national and regional food safety regulations.
- Informs administration, fisheries sector and consumers.

Condor

- Monitors and evaluates the recovery of commercial fish after fishing closure of the MPA Condor Bank.
- Supports the Azores administration within the framework of the Common Fisheries Policy, MSFD and other relevant European, national and regional marine policies.
- Promote conservation of biodiversity and vulnerable marine ecosystems of seamounts ecosystems.
- Informs administration, fisheries sector and citizens.

Ocean governance

- Conducting applied research to support the Regional Government of the Azores on the implementation of mandatory European policies such as the Marine Strategy Framework Directive, Water Directive, Natura 2000 Directives, Common Fishery Policy, Marine Spatial Planning Directive, Biodiversity Strategy, among others on marine conservation and sustainable human activities.
- Knowledge transfer to the Regional Government of the Azores for identification, conservation, restoration and sustainable management of deep-sea Vulnerable Marine Ecosystems, balancing ecological, economic and social development, thorough Area-Based Management Tools contributing to Maritime Spatial Planning, Marine Protected Areas designation and environmental regulations on fisheries, contaminants in commercial fish, maritime tourism and deep seabed mining.
- Contributing with data and knowledge to the International Council for the Exploration of the Sea (ICES) and OSPAR Convention, by participating in working groups and expert groups related to deep-sea ecosystems (deep-sea ecology and benthic habitats), marine biodiversity (e.g. turtles, fish and cephalopod) and ecology (food web), conservation (POSH), fisheries, marine litter, etc.
- Promotion of international networking for collaborative studies advancing the ecology and conservation of sharks and ray (Ecuador, Mexico, Costa Rica, Colombia, Philippines, USA & UK)
- Contribution to global consultancy processes and initiatives (i.e. IUCN, ISA, CBD, FAO, IMO, GESAPM, COI- UNESCO).

Communication and ocean literacy

- Promotion of best practices on pelagic and demersal fisheries to the Azores and Northeast Atlantic fishers.
- Scientific dissemination through TV documentaries (e.g. in RTP, Discovery, Disney+, ARTE, NHK, National Geographic, etc.), video interviews (e.g. OceanXplores), articles and interviews in magazines, newspapers.
- Dissemination of research and scientific activity through OKEANOS social networks and webpage

Key Facilities and Infrastructures

Laboratories at the OKEANOS headquarters.

Laboratory	**Research**	**Equipment**
Microbiology and molecular diagnosis	Marine microbiotechnology; molecular environmental assessment	Laminar flow chamber (biosafety II); PCR station; Real-time thermal cyclers; refrigerated centrifuge; automatic DNA, RNA and protein extractors

Molecular analytical instrumentation	Proteomics and adaptive physiology	Rotary evaporator; refrigerated centrifuge and non-refrigerated centrifuge; muffle furnace; plate spectrofluorometer; protein purifier; Kjeldahl digester; benchtop homogenizer; vacuum pump; demineralizer; ice machine; PURELAB water purification system; shaker incubator
Genetics and Molecular Biology	Omic sciences; population genetics, integrated taxonomy	PCR station; thermal cyclers (PCR station); RNA/DNA electrophoresis; spectrophotometers; refrigerated centrifuges; refrigerated centrifuge; automatic DNA, RNA and protein extractors; Qubit 4 fluorometer; FastPrep-24™ 5G homogeniser; Orbital Rotary Incubator; electrophoresis vats.
Ecotoxicology and Analytical Chemistry	Environmental monitoring and risk analysis	Mercury Analyser for Solids; UV/VIS plate spectrophotometer; gas chromatograph; precision scales; orbital shaker with speed and temperature control; pH meter for liquids and solids; HPLC; vertical ultra-arc -86ºC. 2 drying ovens; lyophiliser; demineraliser; distiller; evaporator (speedvac)
Biological Sampling	Biological sampling (reproduction, feeding, pollutants); Taxonomy; other wet sampling	Stainless steel sampling bench with drain and washing tank. 3 drying ovens. 2 binocular magnifying glasses. 1 optical microscope. 1 freezer. 1 hotte.
Histology and Sclerochronology	Histology of gonads. Preparation of otoliths. Reproduction and growth of commercial species.	2 drying and 2 vacuum ovens; microtome; hot bath systems; automatic tissue processor (histology); hotte. saw and sander hard parts
Oceanographic Instrumentation	Maintenance of electronic equipment	Miscellaneous electronic maintenance and repair equipment
Microscopy laboratory (I, II)	Biological microscopy	2 reversing optical microscopes with imaging system (video and photography). 2 binocular magnifier. 2 optical microscopes

Infrastructures

DeepSeaLab experimental facility

A mesocosmos experimental facility to study impacts of climate change, deep-sea mining, fisheries, microplastics, etc. and biological studies (feeding, respiration, growth, etc.) and hyperbaric studies, using cold-water corals, sponges, hydrothermal fauna and other invertebrates as model organisms.

- A 12ºC cold room with 5 independent chilled experimental aquarium systems (1* 2 aquariums, 200 l; 2 * 8 aquariums, 35 l and 1 * 170 l sump; 2 * 2 aquariums, 25 l and 1 * 170 l sump).
- Temperature and pH control. Dissolved oxygen, pH and salinity portable meters. High precision fibre optic oxygen meter (respiration rates); profilux CO2 system. Precision underwater weighing scale.
- 100 l tanks with particles dosing pumps.
- Supply: continuous flow system of oceanic, oligotrophic seawater, pumped at 5 m deep. Water filter and UV sterilizer. Refrigerated controlled storage tank (410 l).
- IPOCAMP hyperbaric chamber (4000 m depth).

A new experimental DeepSeaLab facility is being constructed at the technopole MARTEC.

AquaLab experimental facility

An experimental aquaculture system for cultivation of marine invertebrates (recruitment, feeding, growth, reproduction, etc.). Production of micro and macroalgae.

- Three cold rooms with 2 independent open circulation systems each (3 * 8 tanks 130 l)
- One cold room with 2 independent open circulation systems (2 * 9 tanks 50 l)
- Three refrigerated storage tanks (350 l) with water filter and UV sterilizer.
- Two cold rooms for microalgae production: Beckers to 5 l; Sleeves to 75 l; 3 * 4 tanks 130 l).
- Covered outside tanks (open circulation): 18 * 60 l + 12 * 500 l.
- Supply: open continuous flow system with water filter and UV sterilizer.

A new experimental aquaculture facility is being constructed at the technopole MARTEC. The AquaLab needs improvements.

Scientific SCUBA diving facility

The facility includes compressors, tanks and other diving and safety equipment. SCUBA is instrumental technique to explore, study and monitor the marine coastal bottoms and the epipelagic waters. The facility while in use needs improvements.

Research Vessels

OKEANOS have access to the RV *Arquipélago*, a 25 m regional research vessel, and to the RV *Águas-Vivas*, a 13 m vessel. Both were built in 1993. These multipurpose equipment are used in fisheries monitoring programs and sea-going research. The vessels are owned by the Regional Government of the Azores and managed by IMAR. The IMAR also owns rigid inflatable boats (RIBs) and one fiberglass vessel for coastal research.

The RV *Arquipélago* is an old ship that is at the limit of its operational capacity. A new public 56 m multipurpose research vessel, equipped with ROV, is expected to be operational in the Azores in 2026.

COLETA

COLETA is the OKEANOS marine biological reference collection. It includes a historical collection of marine fauna of the Azores (mainly fish, crustaceans, cephalopods, among other invertebrates) and a collection of more than 15000 samples of deep-sea fauna collected during the last 15 years, in the Azores Exclusive Economic Zone (EEZ). The repository preserves frozen, dry and fluid preserved vouchers and tissue samples, mainly of cold-water corals, sponges and associated invertebrate faunas. The COLETA database (updated from 2010), besides the taxonomic identification includes photographs of the specimen, and metadata (geographic location, depth, and the collection method) associated with each specimen. That database is compatible with other databases that include historical records of deep sea faunas such as cold-water coral occurrences in the Azores (e.g. Prince Albert of Monaco Campaigns). The COLETA has been instrumental for taxonomic, population genetics, life history, geographic distribution and biodiversity studies of deep-water faunas and communities in the Azores.

OKEANOS also holds a collection of bacteria associated with deep-sea hydrothermal sediments and a considerable amount of -80ºC preserved tissue samples of an assortment species of Azores marine fauna.

The UAç buildings at Horta campus

DOP-MAR was the former DOP headquarters at the Horta Harbour, until 2010. Now it accommodates the Aqualab, the DeepSeaLab, the SCUBA diving facility and it is used to store equipment to support sea-going research and vessels operation. The building also houses the older part of COLETA, the collection of marine fauna preserved in ethanol.

The facility needs serious improvements. It has a main old concrete building and three wooden prefabricated buildings. Expectedly, in a few years, the Aqualab and the DeepSeaLab will be shut down, as the new facilities at MARTEC will be operational. Due to its location at Horta Harbour it is a strategic asset to support OKEANOS sea missions; it would play a more relevant role in a more bluetech harbour.

Since 2010, OKEANOS headquarters are in a historic building transformed into a modern infrastructure. It holds eight laboratories, a library and archives, administrative and research offices, co-workspaces, a meeting room, a classroom, an auditorium and a cafeteria. It houses the modern COLETA deep sea fauna collection.

It is a relatively small facility and the expected growth of OKEANOS activity during the next years, will demand more classrooms, meeting rooms, offices and workspaces. A building contiguous to the main building will be soon available to adapt for the needed proposals.

A new student and visitor residence is being built and will be available by 2026. It has the capacity to lodge 50 people. Those beds will sum to the 24 already available in 6 terraced houses. The new facilities will be important to support OKEANOS activities.

3. Teams

In 2024 the Institute OKEANOS included 46 integrated PhD members (professors and researchers) and 128 collaborators, including 27 technical staff. Of the integrated members, only six had permanent positions at UAz and from those 3 retired. The remaining are in a precarious labour situation and are supported by FCT and FRCT funding contracts and by national and international research grants, tenders, projects, and services.

In 2024, OKEANOS has: 5 principal researchers (3 permanent positions, but 2 retired); 16 auxiliar researchers (0 permanent positions); 14 Early Career Researchers (0 permanent positions); 7 short term research grants; 37 senior technicians (4 permanent positions); 16 (7 permanent positions) technicians; and 16 crew.

The association of individual scientific team leaders to specific research areas is present above on the section listing the main research areas.

Recently, the University hired a lecturer in blue biotechnology for the DOP/FCT and expectedly this year 3 research permanent positions under the FCT-Tenure program will be approved and one for a lecturer in marine fisheries. More research vacancies to rejuvenate the OKEANOS scientific team are expected in the next years. The new expected permanent contracts are pivotal to ensure stability, allowing the development of long-term research programs at OKEANOS and increase its role and visibility in marine science research in the Atlantic.

These self-funded researchers lead most core research areas in OKEANOS' R&D plan, raise funding, attract students, teach and maintain a world-wide network of collaborations. Thus, the challenge is to secure this and attract more critical mass of skilled human resources necessary to address current and future opportunities for OKEANOS to foster excellence in ocean sciences and innovation, adopting the highest international standards through national and international synergies.

It is expected in the future some OKEANOS collaborators and students may use the MARTEC facilities.

Advanced training

PhD program

The DOP/FCT also holds a PhD program in Marine Sciences at Institute OKEANOS. In 2024, 34 students, in different stages (12 starting their first year) were attending the program. Of those 56% were Portuguese, 18% Spanish and the remaining from Brazil, Germany, India and France. They are mentored by researchers in most of the scientific areas OKEANOS is specialized; about 50% are studying open ocean issues related to cetaceans, turtles, seabirds and sharks; some investigate fisheries, the deep-sea faunas and responses to global changes; biotechnology

Master programs

Professors and researchers of OKEANOS coordinate and collaborate on the DOP/FCT master program MEIO - Integrated Studies of the Oceans. They also lectured in other three UAz master programs and on the Erasmus Mundus MSc in Marine Environment and Resources (MER+) at the UAz. In 2024, the OKEANOS researchers were supervising 43 master thesis. The students were from MEIO, but also from the ERASMUS IMBRSea (6), and others from Portuguese, Spanish, French, Danish and Belgium

universities (Alveiro, Algarve, Las Palmas de Gran Canaria, Barcelona, Sorbonne Paris Nord, Gante). In 2024 6 MEIO master students finished their thesis.

In 2024 the Institute hosted undergraduate from ERAMUS+ (7), Eurodyssey (2), Estagiar L, 3, and other student internships (as the Azores) program and voluntary programs.

4. Participation in Horizon projects

The table compiles only H2020 and Horizon Europe projects that were active in 2024

Acronym	Title	Programme (H2020 or Horizon Europe)	Pillar/Cluster	Organization Budget	Role
MEESO	Ecologically and economically sustainable mesopelagic fisheries.	H2020.	SOCIETAL CHALLENGES	€ 297 451,25	Participant
SUMMER	Sustainable management of mesopelagic resources	H2020 RIA	BG-2018-2020	€ 331 721,25	Participant
MISSION ATLANTIC	Mapping and assessing the present and future status of Atlantic marine ecosystems under the influence of climate change and exploitation	H2020	SOCIETAL CHALLENGES	€ 297 627,50	Participant
NAUTILUS	New Approach to Underwater Technologies for Innovatve, Low-cost Ocean observation.	H2020 IA	BG-2018-2020	€ 198 250,00	Participant

MarinePlan	Improved transdisciplinary science for effective ecosystem-based maritime spatial planning and conservation in European Seas.	H2020	SOCIETAL CHALLENGES	€ 250 010,00	Participant
OCEAN	Operator-Centered Enhancement of Awareness in Navigation.	Horizon Europe	CL5-2022	€ 419 386,00	Participant
OceanICU	Improving Carbon Understanding.	Horizon Europe RIA	CL6-2022-CLIMATE-01	€ 156 562,50	Participant
NECCTON	New Copernicus capability for trophic ocean networks.	Horizon Europe RIA	CL4-2022-SPACE-01	€ 109 312,50	Participant
REMORA	Small fish in a big pond. Horizon Europe CSA	HORIZON-WIDERA	2023-ACCESS-04-01	€ 171 700,00	Participant
MarineBeacon	Monitoring and elimination of bycatch of endangered and conserved species in the NE and high seas Atlantic region.	Horizon Europe RIA	CL6-2023-BIODIV-01	€ 859 441,00	Participant
REDRESS	Restoration of deep-sea habitats to rebuild European Seas.	Horizon Europe IA	CL6-2023-BIODIV-01	€ 256 950,00	Participant

BioProtect	Co-creating area-based management solutions to protect and restore marine ecosystems and biodiversity across the Atlantic and Artic Sea Basins.	Horizon Europe		€ 424 917,00	Participant

5. Key international collaborations

International collaboration was a priority of this institution since its foundation. The OKEANOS network of collaboration is structured on the participation in project consortia, international and national organizations and collaborative initiatives. The network includes universities and research centers, NGOs and private companies. The collaboration extends to governmental departments assigned to marine science-policy management and to associations of local marine stakeholders (fisheries, maritime tourism, conservation, etc.)

At a national level, the Institute OKEANOS has stable and productive partnerships with the major research entities dedicated to marine science, namely the prominent research centers (i.e., CIBIO / Biopolis, CIIMAR, CCMAR, CIMA, FCUL, CESAM) associated to Portuguese universities (Porto, Algarve, Lisboa, Aveiro). Often, those collaborations deepen and consolidate under mutual participation in HE projects and others. OKEANOS also has strong scientific collaborations with national state laboratories (IPMA, IH) and public task force group and research centers (EMEPC; Air Centre). The linkages with scientific institutions from Madeira Island (OOM-ARDITI; MARE- Universidade da Madeira, Museu da Baleia, Museu Municipal do Funchal) are also well established. Partnerships include deep sea mapping, coastal ecology, marine conservation, taxonomy, animal behaviour and ecology, habitat restoration, fisheries, among other scientific subjects.

Across the Atlantic Ocean, in 2024, the OKEANOS active network included mainly research centres of universities (23) and state institutes (16) in Europe and USA. However, the numbers presented don't consider all partners involved in projects OKEANOS participate. The network involves at least 23 universities across 9 countries in Europe, North and South America. Major partnerships are established with institutions from the EU (8 universities in France, Spain, Netherlands, and Denmark), USA (7), Brazil (4), UK (3), Canada (1) and Cabo-Verde (1) . Most of the 11 state institutes for marine research in the network are also from EU countries (10 institutes in Spain, France, Germany, Belgium, Netherlands, Greece and Italy), but the partnerships extend to the major institutional research centers in UK, Norway, USA, and New Zealand. OKEANOS has also active collaboration with a few of the major natural history museums in Europe (MNHN Muséum national d'Histoire naturelle) and in the USA (Smithsonian National Museum of Natural History; AMNH American Museum of Natural History), mainly related to biodiversity and taxonomy studies, including of deep-sea faunas.

The transfer of knowledge and consultancy to the Azores and Portuguese governmental departments related to marine affairs is part of the OKEANOS mission. On a regional and European scale, the regular participation of researchers from OKEANOS in expert groups at regional organizations (ICES, OSPAR)

or to implement European marine policies (MSFD, JRC) facilitates networking with relevant partners. This is also valid for the participation of OKEANOS scientists in several working groups and advisory board of UN agencies (ISA, IUCN, COI – UNESCO, FAO, CBD, GESAMP, UNDOSSD) and the involvement on international scientific networking initiatives (i.e. OTN, Interridge, DOSI, Challenger 150, DOOS).

The research center also collaborates with international and national foundations (e.g. OceanX, Mission Blue, Upwell, Save our Oceans, FOA) and environmental NGOs (WWW, Sciaena, SPEA, OMA) in ocean exploration, conservation and literacy.

IMAR and the OKEANOS are members of the EMBRC-PT and EMSO-PT, two European infrastructures part of the ESFRI, the European Strategy Forum on Research Infrastructures and aiming the scientific integration of Europe and strengthening its international outreach.

Universities

Europe: 10 [IEO Instituto Español de Oceanografía; AZTI-Tecnalia; IFREMER L'Institut Français de Recherche pour l'Exploitation de la Mer; IRD: Institute por L´Recherche et Development: GEOMAR Helmholtz Centre for Ocean Research Kiel; Senckenberg Research Institute; VLIZ Flanders Marine Institute; NIOZ Royal Netherlands Institute for Sea Research; HCMR; Hellenic Centre for Marine Research; Stazione Zoologica Anton Dohrn di Napoli]; UK: 1 [e.g. NOC National Oceanography Centre USA: 3 [NOOA National Oceanic and Atmospheric Administration; WHOI Woods Hole Oceanographic Institution; HIMB Hawaii Institute of Marine Biology]: Norway: 1 [IMR Institute of Marine Research]; New Zealand: NIWA National Institute of Water and Atmospheric Research]

Institutes

Europe: 8 [e.g. Universitat de Barcelona; Université de La Rochelle; Technical University of Denmark]; USA: 7 [e.g. University of Florida, University of California Santa Cruz; Duke University; SCRIPPS, University California San Diego]; Brazil: 4 [e.g. Universitat de Barcelona; Université de La Rochelle; Technical University of Denmark]; Brazil: 4 [e.g. Universidade Federal de Santa Catarina; Universidade Federal do Espírito Santo; Universidade Federal de S Paulo]; UK: 3 [University of Edinburgh; University of Exeter; University of St. Andrewsa]

B. SELF-ASSESSMENT GLOBAL RESULTS

1. Self-assessment on 4 dimensions

A self-assessment tool was designed to help evaluate how the organization is positioned concerning the main factors that influence its competitiveness in the European Research AREA and successful participation in Horizon Europe.

Using scientific publications, institutional reports and existing instruments, this tool focuses on four key dimensions:

- Human resources: *How to attract and retain international talents to reach a critical mass of researchers and improve scientific productivity and reputation through an adequate human resources strategy and better working conditions?*
- Responsible Research and Innovation: *How to maximize the impacts of your research activities through the incorporation of advanced R&I management standards (such as open science, ethics, public engagement, etc.) ?*
- Pro-Horizon Europe strategy: *How to intensify transnational collaborations and participation in Horizon Europe through the creation of favorable environment and institutional policy that encourages and supports researchers to submit highly competitive applications ?*
- Funding synergies: *How to effectively mobilize existing assets (such as infrastructures and equipment) and the resources provided by structural funds (such as ERDF) to intensify international collaborations notably with Horizon Europe "champions" (the organizations and networks that constitute the core of the European Research Area and monopolize coordination positions), through greater synergies ?*

2. Results

Dimensions	Subdimensions	Score	
1. Human resources	Ethical and Professional Aspects	3,00	2,25
	Recruitment and Selection	3,00	
	Training and Development	1,00	
	Working Conditions and Social Security	2,00	
2. Responsible R&I	Ethics	2,33	2,22
	Gender dimension	1,75	
	Governance	2,00	
	Open access	3,00	
	Public engagement	2,00	
	Science education	2,50	
3. Horizon Europe	Connection to EU clubs	3,33	2,36
	Organization characteristics	1,90	
	Individual decision	1,86	
4. Synergies	Capacities	0,67	1,03
	Infrastructures	1,00	
	Networking	1,25	
	Strategic orientation	1,20	

OKEANOS shows strong scientific output, international visibility, and engagement with regional stakeholders. It adheres to ethical standards, promotes open science, and contributes meaningfully to public awareness and education on marine issues.

However, its ability to grow and compete internationally is severely constrained by structural weaknesses—particularly in its administrative and financial framework, staff capacity, and strategic planning. Without a dedicated effort to build internal infrastructure and human resource support systems, OKEANOS risks limiting its future scientific potential and funding opportunities.

Key Strengths

1. **Scientific Excellence and International Reputation**
   - OKEANOS has strong expertise in oceanic open-ocean and deep-sea ecosystems.
   - Increasing number of scientific publications, participation in scientific events and growing involvement in international networks and research projects.
   - Attracts international PhD students and interns; approx. 40% of researchers are non-Portuguese.
2. **Compliance with Ethical and Legal Standards**
   - The University of the Azores' ethical code and national legislation (e.g., Nagoya Protocol, animal welfare laws) are followed.
   - Equality in salaries and contract conditions; gender-balanced teams and committees.
   - Research projects managed transparently with oversight from central services and partner institutions.

3. **Strong Regional and Stakeholder Engagement**
    - Active collaboration with regional sectors (e.g., fisheries, maritime tourism, maritime transportations).
    - Active contribution to science-policy development, collaboration with policymakers.
    - Regular organization and participation in public outreach events, and education activities in partnerships with schools and NGOs.
4. **Commitment to Open Access and Societal Impact**
    - Open access formally included in the scientific strategy.
    - Knowledge is shared using various media (exhibitions, TV programs, publications, social networks).
    - Recognized locally and internationally as a reference institution in oceanic and marine research applied to conservation and to sustainable management of marine ecosystems and human activities.

Key Challenges

1. **Administrative and Organizational Weakness**
    - Aging technical staff with insufficient training in science administration.
    - University central services are overburdened and slow to respond efficiently to the science administration performance needed.
    - Lack of an internal science support unit and minimal technical capacity to manage international projects.
2. **Structural Precarity and Limited Human Resources**
    - Researchers face precarious contracts and low salaries, which hinder the recruitment and retention of senior and international talent.
    - Limited internal capacity to absorb new projects or respond to emerging funding opportunities.
    - Institutional reliance on short-term funding cycles limits long-term planning and staff stability.
3. **Gaps in Strategy and Planning**
    - No efficient evaluation system for researchers or a structured training program.
    - Absence of a comprehensive internationalization strategy or a critical review process for scientific partnerships.
    - Science education and outreach activities remain somewhat ad-hoc and lack impact evaluation.
4. **Underutilization of Funding Instruments**
    - European Structural and Investment Funds (ESIF) have not been used to improve OKEANOS's organizational or administrative capacity.
    - Participation in Horizon Europe is hindered by lack of internal administrative support and strategic alignment with calls.
    - No clear SMART strategy to enhance funding competitiveness.

C. HUMAN RESOURCES ANALYSIS

1. Self-assessment results

1. Human resources	Ethical and Professional Aspects	3,00	2,25
	Recruitment and Selection	3,00	
	Training and Development	1,00	
	Working Conditions and Social Security	2,00	

This dimension reveals a clear alignment with national and institutional ethical and legal frameworks. OKEANOS operates under the ethical code of the University of the Azores, ensuring adherence to principles such as research freedom and non-discrimination. Strategic goals are relatively well-communicated internally, and the institute maintains a strong focus on regulatory compliance (e.g., Nagoya Protocol, animal welfare laws).
However, significant challenges persist in the implementation of core human resource related practices. The absence of a structured researcher evaluation system and the limited promotion of key principles (items 1 to 4) reduce transparency and potentially affect motivation and career development. Recruitment processes, while legally compliant, are constrained by precarious working conditions, low salaries, and the high cost of living on the island, limiting the institute's ability to attract and retain top talent.
Training and career development support is mostly ad hoc and dependent on individual initiative, lacking a consistent, structured institutional offering. Furthermore, the overall precarity of employment due to the lack of financial autonomy is a major obstacle to long-term HR sustainability.

2. Factors identified during interviews

Current Conditions and Challenges:

- Researchers face precarious employment, limited recruitment opportunities, and unclear merit-based hiring.
- Lack of administrative and financial support for project management hinders researcher effectiveness.
- The University of the Azores (UAc) relies heavily on temporary contracts, which leads to instability and impacts talent retention.
- High cost of housing in Horta and the remote location of OKEANOS are also deterrents to attracting talent.

Needs and Recommendations:

- Establishment of permanent positions for technical staff (instrumentation, project management, data management and IT, communication) and researchers at all career levels.
- Inclusion of qualified science managers in institutional frameworks (e.g., through FCT-CEEC, Teaming projects).
- Implementation of supportive policies and long-term HR strategies to promote research careers and infrastructure operation.

3. **Factors identified during internal workshop**

	Human Resources		
	Main Problem Lack of solid administrative/HR management structure		
	Root Cause 1 Lack of structure planning strategy	Root Cause 2 Lack of financial resources	Root Cause 3 UAç centralism / lack of autonomy
Subcauses	Lack of recognition of the importance of strategy and planning	Lack of efficiency and motivation among technicians	Lack of participation and influence in the central structures of the UAç
	Lack of motivation	Regional and national lobbying	Lack of decentralization of UAç services
	Overlapping egocentric vs. consensual approaches	Application of Overheads in the structure	
	Lack of inclusive meritocracy culture		

D. RESPONSIBLE RESEARCH AND INNOVATION ANALYSIS

1. **Self-assessment results**

2. Responsible R&I	Ethics	2,33	2,22
	Gender dimension	1,75	
	Governance	2,00	
	Open access	3,00	
	Public engagement	2,00	
	Science education	2,50	

OKEANOS demonstrates a strong commitment to integrating ethical principles, stakeholder engagement, and knowledge dissemination into its mission. It adheres to the University of the Azores' ethical code of conduct and gender equality policies, and it actively engages in science-society and science-policy interactions through various outreach, education, and stakeholder initiatives. Gender balance in teams and management is commendable, and collaborations with external researchers and key economic sectors enhance the institute's interdisciplinary and applied research relevance.

However, important gaps remain. The European Code of Conduct for Research Integrity is not yet explicitly adopted, and gender equality actions, though formally supported, lack dedicated structures or evaluative mechanisms. Communication and outreach efforts are robust but largely ad hoc and unmeasured in terms of impact. Science education efforts are scattered and would benefit from greater inter institutional collaboration and involvement. Additionally, open access policies, while endorsed, need clearer implementation across the full research process.

2. **Factors identified during interviews**

Integration and Gaps:

- RRI principles are partially integrated: open access and stakeholder engagement are progressing, especially in conservation, maritime tourism and fisheries-related projects.
- However, ethical training, gender equality, public engagement, and governance remain underdeveloped or treated as formalities.
- Researchers lack awareness and training in key RRI areas, with institutional governance and bureaucracy impeding broader adoption.

Proposed Actions:

- Implement internal and external communication strategies to foster internal collaboration, transparency, sense of belonging, and scientific literacy.
- Promote informal peer discussions and formal training sessions to increase RRI awareness.
- Encourage open and transparent research governance, ethical experimentation, and gender-inclusive practices.

3. **Factors identified during internal workshop**

	Responsible reasearch and innovation analysis		
	Main Problem Lack of support for science management		
	Root Cause 1 Lack of internal organization	Root Cause 2 Lack of specific financing	Root Cause 3 Lack of proximity management office
Subcauses	Outdated administrative procedures	Lack of training	Lack of decision-making capacity on procedures
	Improvement of administrative platforms	Lack of strategy	Distance between managers and researchers
	Lack of support secretariat	Low-skilled human resources	Lack of definition of administrative autonomy
	Lack of identification of problems	Impossibility of long-term hiring	

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E. PRO-HORIZON EUROPE STRATEGY ANALYSIS

1. Self-assessment results

3. Horizon Europe	Connection to EU clubs	3,33	2,36
	Organization characteristics	1,90	
	Individual decision	1,86	

OKEANOS has built and maintained a strong international reputation in marine sciences, particularly in deep-sea and open-ocean ecosystems, with long-standing partnerships in Europe, North America, and Brazil. Its increasing scientific output, international visibility through joint publications, participation in international events, and attraction of foreign researchers and students underscore this recognition.

Nonetheless, key strategic and structural challenges undermine the institution's full internationalization potential. The institute lacks a formal, actionable plan to expand its research intensity and international engagement. Administrative and financial weaknesses, combined with limited support services, hinder efficient participation in competitive international funding schemes like Horizon Europe (HE). Despite a shared understanding among researchers of the importance of HE projects, limited institutional capacity, lack of specialized staff, and scientific misalignment with some funding calls restrict participation and success rates.

The increase in researcher numbers and the pursuit of philanthropic and high-tech partnerships are positive signs of growth. However, researcher precarity, low salaries, and geographic remoteness make it difficult to attract and retain senior international researchers. Additionally, there is no systematic review process for partnerships to ensure alignment with evolving strategic goals.

2. Factors identified during interviews

Benefits and Motivations:

- Horizon Europe is seen as key to internationalization, network building, research robustness, visibility, and funding.
- OKEANOS and IMAR researchers have a proven scientific capacity to participate.

Obstacles:

- Absence of dedicated administrative and financial support for proposal writing and project management.
- Heavy bureaucratic burden falls on researchers, making it unrealistic to lead large-scale Horizon Europe proposals.
- No dedicated Horizon Europe strategy currently exists at the institutional level; participation is often due to individual efforts.

Strategic Objectives Suggested:

- Create a project management office and hire European project specialists to support researchers.

- Promote successful projects internally to inspire others.
- Ensure flexibility in choosing financial management institutions to reduce demotivation.

3. Factors identified during internal workshop

	Horizon Europe		
	Main Problem Invisibility/competitiveness of the Institution		
	Root Cause 1 Lack of international and national lobbying	Root Cause 2 Strategy	Root Cause 3 Internal Competitiveness
Subcauses	Lack of strong leadership	Lack of technical resources including financial	Human resources instability
	Lack of motivation and complacency	Need for technical professional training	Lack of leadership
	Lack of scientific and communication strategy	Lack of project management office	Institutional strategy
	Need to distribute skills	Lack of availability of researchers	Lack of teambuilding
	Lack of administrative, financial and legal management capacity	Need to value researchers	Lack of internal communication
	Horinzon Europe Bureaucracy	Mismatch between temporary contracts and project execution	Skill building
		Lack of autonomy in the application of overheads	Lack of training in project management
			Lack of experience and ambition
			Lack of incentives
			The notices do not reflect the needs of the RAA

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F. FUNDING SYNERGIES ANALYSIS

1. Self-assessment results

4. Synergies	Capacities	0,67	1,03
	Infrastructures	1,00	
	Networking	1,25	
	Strategic orientation	1,20	

The organizational and technical support structure at OKEANOS presents significant limitations that constrain its capacity to sustain and expand its scientific activities, particularly in the context of competitive international funding frameworks such as Horizon Europe (HE). A key vulnerability lies in the outdated technical staff profile, with most personnel lacking specific training in research support functions. Additionally, the central services of the University of the Azores are unable to respond to more and increasingly complex and time-sensitive demands of modern research project administration.

No European Structural and Investment Funds (ESIF) have been strategically allocated to improve OKEANOS's administrative or networking capabilities, recently. While some infrastructure has been funded through ESIF, these investments have been generic rather than targeted, failing to specifically enhance OKEANOS's research competitiveness or Horizon Europe readiness. Despite its growing scientific reputation, OKEANOS has not kept pace with the necessary organizational development, which now represents a critical bottleneck.

2. Factors identified during interviews

Current Status:

Structural funds and Horizon Europe are used separately; no strategic coordination currently exists.
Use of structural funds is politically defined and bureaucratically complex under the programming period.
Researchers individually try to combine various funding sources, but without institutional support.

Challenges:

- No specific public policies linking structural fund access to Horizon Europe participation.
- Internal institutional support is lacking in identifying potential synergies and integrating funding mechanisms.

Recommendations:

- Lobbying the competent authorities to understand the need to use structural funds to leverage the organizational capacity.
- Appoint research managers to help align and optimize the use of different funding sources.
- Improve institutional strategy to leverage structural funds for capacity-building and proposal preparation.
- Recognize structural funds as tools to support participation in global R&I frameworks like Horizon Europe.

3. Factors identified during internal workshop

	Funding Synergies analysis		
	Main Problem Communication Gaps and Bureaucratic Hurdles Within OKEANOS, IMAR, and UAc		
	Root Cause 1 Lack of autonomy and common strategic vision	Root Cause 2 Existence of several institutions	Root Cause 3 Complexity of procedures
Subcauses	Concentration of power in the Rectory	Obsolete management	Lack of process optimization
	Conflict of interest	Lack of mandatory communication channels	Lack of training on various platforms
	Lack of democracy and transparency	Lack of meetings between institutions	
	Overlapping centers	Need for reconciliation of common interests	
	Lack of staff	Lack of communication between poles and internally	
		Lack of clarification of procedures	
		Lack of qualified human resources	
		Lack of clarity about who is responsible for a given task	
		Geographical distance between the different UAç hubs	
		Centralist vision	
		System complexity	
		Lack of connection with interests and desires	
		Lack of confidence	
		Imposed institutional system	

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G. OKEANOS KEY ASSETS & CHALLENGES

HUMAN RESOURCES	Key assets - Ethical & Legal Compliance: ethical code (Despacho n.º 9795/2015) in place, promoting values like non-discrimination and research freedom. - Transparency in Contracting: researchers have formal contracts (vs. grants), ensuring basic rights like pensions and social security. - Strategic Awareness: researchers are aware of and aligned with OKEANOS strategic goals and national/international regulations. - Scientific Engagement: research is strongly aligned with policy support (e.g., fisheries, marine conservation, maritime activities). - Outreach & Visibility: active public communication through website and social media channels, TV and press. - Support for Development: encouragement for researchers (especially juniors) to attend external training and conferences.
	Key challenges - Strategic Planning & Structure: lack of institutional HR planning, absence of inclusive meritocracy, no researcher evaluation system. - Financial & Administrative: no financial autonomy, insufficient funding for staff stability and training, overhead not reinvested in HR. - Institutional Governance: lack of decentralization and UAç management policy limit the autonomy and influence of OKEANOS in decision-making. Low participation on the University management and decision bodies. - Recruitment & Retention: precarity of contracts (short-term, low pay), difficulty attracting foreign researchers due to high cost of living and isolation. - Motivation & Culture: low morale among staff and technical teams, lack of structured support for researcher development. - Communication & Integration: limited internal promotion of ethical and strategic values, disconnection between central services and research teams.

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RESPONSIBLE RESEARCH AND INNOVATION	Key assets - Stakeholder Engagement: strong collaboration with stakeholders (e.g., fisheries, tourism), participation in local, national, and global forums. - Education & Outreach: frequent engagement with schools, NGOs, and citizens, recognized as a regional authority in marine science. - Scientific Flexibility: ability to adapt services to contractor needs, response capacity to emerging ecological challenges. - Open Access Commitment: formal promotion of open access in scientific strategy, many outputs shared publicly. - Knowledge Transfer: active communication with policymakers, use of diverse media to reach different audiences. - Ethical & Gender Frameworks: ethical Code of the University of the Azores applies, gender balance in teams, management, and salaries.
	Key challenges - Internal Organization: outdated administrative procedures, lack of secretarial support, absence of problem identification. - Financing: no specific funding for RRI actions, impossibility of long-term hiring, lack of training. - Proximity & Governance: no local management office, distance between researchers and decision-makers, lack of defined administrative and financial autonomy. - Strategic & Human Resources: lack of strategy for RRI, low-skilled administrative staff, weak decision-making capacity. - Science Education: programs need to be updated profiting from the specilization of the institution; no measurement of impact, need for a structured communication and education tratégy. - Open Access: policy on open access is unclear in parts of the scientific process.

PRO-HORIZON EUROPE STRATEGY ANALYSIS	Key assets - International Partnerships: strong, long-standing networks in Europe, USA, Canada, and Brazil, high reputation in deep-sea and open-ocean ecosystems. - Global Engagement: participation in international campaigns, congresses, and collaborative meetings, notable co-authorship in international publications. - Talent Attraction: increasing number of researchers, including ~40% non-Portuguese PhD and post-doc candidates, international internships and student mobility. - Scientific Productivity: rising number of publications and funded projects, active informal efforts (e.g., engagement with philanthropic organizations for high-tech collaboration).

	- Awareness of HE Importance: strong researcher understanding of the strategic value of Horizon Europe, ongoing pursuit of funding opportunities (HE, ERDF, FCT, etc.). - Potential of REMORA Project: REMORA is seen as a possible turning point to mitigate current structural weaknesses and enhance HE competitiveness.
	Key challenges - Lobbying & Visibility: weak international and national lobbying, lack of strong leadership, complacency and low motivation. - Strategy & Planning: absence of a comprehensive scientific and communication strategy, no project management office, weak institutional strategy. - Human Resources: instability due to temporary contracts, lack of leadership and team building, limited availability and engagement of researchers. - Training & Capacity Building: lack of training in project management and technical skills, low experience and ambition, insufficient incentives. - Administrative & Financial Structure: lack of capacity in administrative, legal, and financial management, no autonomy in applying overheads, structural inefficiencies at UAç, IMAR, and FGF. - Alignment with HE Calls: Horizon Europe bureaucracy, calls often misaligned with regional scientific priorities and realities (RAA). - Internal Communication: weak internal communication, fragmented knowledge sharing and collaboration.

FUNDING SYNERGIES	Key assets - Institutional Internationalization: existing infrastructures (partially ESIF-supported) aid in broader scientific and international engagement, including Horizon Europe activities. - ESIF-Funded Infrastructure: though not specifically targeted at HE, ESIF has supported core institutional infrastructure that enables HE participation indirectly. - Awareness of Gaps: recognition within OKEANOS of the need to redirect ERDF/ESIF funds strategically to build internal scientific and administrative capacity. - Potential for Strategic Alignment: the growing relevance of OKEANOS in international science provides a strong case for aligning funding streams with institutional needs.
	Key challenges - Governance & Autonomy: lack of institutional autonomy and unified strategic vision, power concentrated in the UAç Rectory, centralist and imposed systems.

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	- Organizational Fragmentation: multiple overlapping institutions (OKEANOS, IMAR, FGF, UAc), no coordinated meetings between them, conflicting interests and poor internal communication. - Procedural Complexity: complex and non-optimized administrative processes, lack of clarity in roles, responsibilities, and procedures. - Human Resources Limitations: aged technical staff with insufficient training, lack of qualified personnel for financial/administrative support, shortage of staff overall. - Communication Deficiencies: no mandatory internal communication protocols, poor connection between UAç hubs due to geography and limited coordination. - Lack of Confidence & Transparency: absence of democratic processes and transparency, weak internal trust and engagement with institutional needs. - Systemic Barriers: institutional inertia and outdated management culture, no staff incentives or mechanisms to build confidence or responsibility.

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II. AMBITION AND ACTION PLAN

A. BECOMING EU CHAMPIONS

AMBITION IN RESEARCH & INNOVATION

Upgrade OKEANOS into an international hub on deep-sea and open-ocean fostering collaborative ocean research, technology and innovation.

HORIZON EUROPE PARTICIPATION AMBITION

Organizational Capacity Building – Increased Competitiveness and Visibility.

B. ACTION PLAN

The structure of the Action plan is based on 1) the results of the self-assessment tool; 2) the interviews ; 3) workshops; 4) the proposal project SynEra
The Action Plan was designed to accommodate and address the ambition, strategic objectives, limitations and problems, operational objectives and solutions identified in the workshops. However, as often the operational objectives reported for the pillars under discussion (human resources, responsible research and innovation, Horizon Europe and synergies, including financial) were recurrently centered on the need of an efficient, inclusive and transparent operational strategy, organizational structure and research management capacity, the attempt was to cut redundancies in many of the Operational Objectives (OO) defined during the workshop and build a better structured and coherent Action Plan.
This roadmap focuses on the key steps to reach research and scientific excellence, by the definition of a strategic framework and its implementation. The roadmap does not deal with the strategic action to promote the spillovers impacts of an empowered OKEANOS to the blue economy and the society, (a structural pillar of the institution), since those aspects were not clearly discussed in the workshops.

The Roadmap has 2 Strategic Objectives and 3 + 4 Operational Objectives

The solution trees developed during the workshop are presented here as valuable reference material; however, they will not be used in a literal or exhaustive manner. Instead, the Action Plan has been carefully constructed by synthesizing inputs from multiple sources referred before.

	RESPONSIBLE RESEARCH AND INNOVATION		
	CORE OBJECTIVE EFFECTIVE SUPPORT FOR SCIENCE MANAGEMENT		
	OPERATIONAL OBJECTIVE 1	**OPERATIONAL OBJECTIVE 2**	**OPERATIONAL OBJECTIVE 3**
	OUTLINE A SCIENCE MANAGEMENT STRATEGY	SPECIALIZED HUMAN RESOURCES	DECENTRALIZED VISION OF UAç
ACTIONS	Create a supporting administrative structure.	Training of existing HR.	Optimization of procedures.
	Promote transparent and inclusive communication.	HR hiring in short supply.	Decentralize services.
	Promote periodic information and clarification actions.	Pressure for the use of OH in the hiring of personnel trained in science management.	Creation of a science management support office at OKEANOS.
	Prospecting for financing sources aligned with the strategy.	Identify new sources of financing.	

	HUMAN RESOURCES		
	CORE OBJECTIVE CREATE A SOLID PROJECT MANAGEMENT AND ADMINISTRATION STRUCTURE		
	OPERATIONAL OBJECTIVE 1	**OPERATIONAL OBJECTIVE 2**	**OPERATIONAL OBJECTIVE 3**
	DEFINE A STRATEGY AND PLAN THE MANAGEMENT STRUCTURE	SECURE FINANCIAL RESOURCES	DECENTRALIZE AND INCREASE THE AUTONOMY OF OKEANOS
ACTIONS	Participatory workshop to define strategy and plan in order to lead to the creation of a committee.	Agree with the management structure a % of OH to support the OKEANOS management structure.	Create an office in Faial for the university's management bodies.
	Create a system to value researchers and technicians.	Lobby so that a % of the GR tripolarity funds come to Faial.	Strengthen the participation of OKEANOS members in the university’s central management bodies.
	Create a transparent task sharing system.	More opportunities to attract funds through Summer Schools and service provision.	Create formal representation of students from the Horta campus that coordinates with UAç PDL.
	Fostering a community culture through Team Building actions	Provide additional training and capacity building for technicians.	Compete for funds from the PRR and Europe to modernize and decentralize the administration.

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	HORIZON EUROPE		
	CORE OBJECTIVE ORGANIZATIONAL CAPACITY BUILDING - INCREASED COMPETITIVENESS AND VISIBILITY		
	OPERATIONAL OBJECTIVE 1	**OPERATIONAL OBJECTIVE 2**	**OPERATIONAL OBJECTIVE 3**
	QUALIFIED HUMAN RESOURCES	DEFINE STRATEGY	ORGANIZATIONAL STRUCTURE
ACTIONS	Longterm employment.	Promote networking.	Creation of support offices: legal, data management, accounting, communication, project management and science.
	Training continues.	Review and update the current roadmap.	Promote diversification in leadership.
	Teambuilding events.	Improve communication in order to increase competitiveness.	Promote interdisciplinarity.
	Creation of a physical space for interaction between people in the institution.	Define strategy and its quality control.	Lighthouses Promotion.
	Boost the proactivity of young researchers.	Coordination sessions to respond to "calls".	Promote internationalization.
		International and national lobbying.	
		Provide the means to recruit the diplomat.	
		External advisor reports and implementation of suggestions.	

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	SYNERGIES BETWEEN FINANCING AND STRATEGIC USE OF INFRASTRUCTURE AND EQUIPMENT		
	CORE OBJECTIVE IMPROVED COMMUNICATION BETWEEN RESPONSIBLE INSTITUTIONS (OKEANOS/IMAR/UAÇ/FGF/DOP) + INTERNAL PROCEDURES		
	OPERATIONAL OBJECTIVE 1	OPERATIONAL OBJECTIVE 2	OPERATIONAL OBJECTIVE 3
	DEFINING A STRATEGY FOR COORDINATED MANAGEMENT BETWEEN INSTITUTIONS	RESTRUCTURING TO SIMPLIFY THE INSTITUTIONAL SYSTEM AND PROCEDURES	INCREASE TRANSPARENCY BETWEEN INSTITUTIONS
ACTIONS	Define a common vision to revitalize the institution.	Office for cross-cutting management.	Clear objectives and functions.
	Working group within the institution to define strategies.	Study a more efficient management model.	Technical and financial reports presented periodically by different institutions.
	Periodic high-level meetings to focus strategies.	Creation of a working group to modernize transversal management.	Ice cream on Friday + SUPER DOP.
	Creation of an office with the power to coordinate between entities in Horta.	Diagnosis of the current situation and harmonization.	
	Strengthening administrative and financial autonomy.	Creation of an organizational chart of responsible and operational personnel.	
		Continuous training on various platforms.	
		Creation of guidelines.	
		Computer optimization.	

1. Strategic objective n°1 : Create and implement high-end standards to support OKEANOS sustainable growth

The aim of this strategic objective is to establish a decentralized operational model at OKEANOS that enhances autonomy, aiming to leverage this research center of the University of the Azores, to scientific excellence aligned to the European Research Area (ERA) policy framework and principles.
The ambition demands a mutual agreement, in terms and conditions, with UAç governance bodies. The governance model to be adopted should comply with the University's statutory rules and applicable legislation. Governance to coordinate action should also include OKEANO’s strategic institutional partners, such as IMAR, FGF, DOP-FCT.

The reform sought the design of a strategy and action plan to advance research and science, grounded on a sustainable financial model, by creating a local science management office, supported by a team of specialized human resources, able to optimize internal procedures, including institutional coordination and communication flow.

The objective is to empower OKEANOS to respond more efficiently to scientific, administrative, and funding burdens that limit the ambition of the institute research and staff.

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The following operational objectives were developed:

a) Develop a governance and science management strategy plan to foster the excellence in ERA
b) Implement OKEANOS’ governance and strategic roadmap & action.
c) Establish an economic model and Secure financial resources

Expected Changes / Results Over the Next Five Years

1. **Structural Improvements:**
   a. Clear scientific and governance strategic program and procedural frameworks for integrating OKEANOS in ERA agenda and RRI and principles.
   b. Implementation of a fully functioning research management office established at OKEANOS.
   c. Establish a business plan and financial sustainability model
2. **Human Resources Development:**
   a. At least 10 specialized staff (in projects, legal and financial and human resources management, communication, data management) are involved in OKEANOS research management offices.
   b. Implementation of a regular staff training program in best management practices.
3. **Cultural and Strategic Shift:**
   a. Transparent and inclusive governance, institutional decision-making, procedural processes and internal communication channels are in place.
   b. Increased the sense of belonging to the institution, internal cohesion and interdisciplinary collaboration.
   c. Empowerment of young researchers to lead initiatives and participate in proposal development.
4. **Enhanced External Perception and Partnerships:**
   a. OKEANOS is recognized regionally and internationally for best-practices in research management.

5. **Strategic Positioning**
   a. Design and implement an institutional strategy and action plan aligned with ERA policy framework and Horizon Europe priorities.
   b. Increased participation in strategic networks and initiatives, expert coordinated groups, and lobbying efforts for visibility and competitiveness.
   c. Promote science diplomacy in national and international forums.

Main Outcome Indicators

Indicator	Target
OKEANOS R&I agenda addresses EU & UN challenges and objectives (y/n)	M12 (SpO1)

Monitoring system for EU/UN goals impact (y/n)	M12 (SpO1)
R&I activities aligned with EU/UN frameworks	75% - M60 (SpO1)
CoE strategic roadmap & action plan	M12 (Sp02)
Governance/administrative/financial frameworks approved by the International Adv. Board	M12 (Sp02)
CoE Management board in place	M18 (Sp02)
Technicians (support offices, IT, sea missions recruited)	10 - M18 (Sp02)
Fully operational R&I & Grants support teams meeting EU standards with satisfaction	80% - M12 (Sp02)
Increase in external funding success rates vs 2025	20% - M72 (Sp02)
Adoption HRS4R label	M24 (Sp03)
Staff members upskilled	100% - M60 (Sp03)
Increase in permanent positions vs 2015-2024 period	100% - M60 (Sp03)
Retention rate of researchers over a 6-year period	50% - M72 (Sp03)
Publication of a catalog detailing the provided services: expertise, technologies prototyping/testing, access to infrastructures (etc.)	(M12), actualized every year (Sp04)

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Increase in HEU applications	50% (Sp04)
HEU revenue	50% - M60 (Sp04)
Iconic examples of funding synergies	10 - M48 (Sp04)
Total research budget obtained from EU-funded projects, Research contracts, Consultancy services	60% - M60 (Sp04)

Dedicated Resources

1. **Human Resources:**
   - Recruitment of at least 10 specialized professionals (science manager, communication officer, admin/financial officer, ethics liaison, etc.)
     i. 1 science/project manager and 1 support staff.
     ii. 1 financial admin expert and 1 support staff.
     iii. 1 jurist
     iv. 1 human resources manager and 1 support staff.
     v. 1 communication officer and 1 support staff
     vi. 2 IT data management staff
   - External consultants to co-develop the strategy and the action plan.
   - Trainers for upskilling programs for administrative and research staff

2. **Financial Resources (estimates):**
   - To hire 10 staff: €1 400 000 over five years (280 000 / year)
   - To contract external consultants for strategy and action plan development and conclusion: €70 000.
   - To contract external trainers for upskilling programs for administrative: € 100 000 over five years (20 000 / year)
   - To acquire and run IT equipment and management platforms: € 300 000
3. **Infrastructure and Tools:**
   - Physical office space within OKEANOS support teams
   - and internal collaboration
   - Administrative software and digital platforms to manage, monitoring, administration financing, projects, training, communications, etc.; and documentation
   - IT tools for data management performance monitoring

4. **Governance and Policy Frameworks:**
   - Development and adoption of internal guidelines and codes aligned with European RRI standards
   - Integration of monitoring and evaluation tools to track progress on RRI goals

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a) OO 1. Design an OKEANOS’ governance and science management strategy

The Institute OKEANOS has well-defined areas of scientific activity . The main programmatic lines for the next 5 years are expressed in a strategic document, which has been assessed as *excellent* by the FCT-IP. The strategy to support the action plan toward the operationalisation of the institution's governance vision and management model, should include:

- An institutional agreement between the OKEANOS Institute and the University of the Azores decision bodies, namely the rector office;
- An institutional and operational agreement between OKEANOS and its structural partners, namely DOP-FCT, IMAR and FGF;
- The governance structure to improves coordination, decision-making flows and transversal internal communication;
- The research, administrative and financial management models (including human resources and procurement) and internal procedures guidelines;
- The communication plan with guidelines for internal and external communication ;
- The ethical principles in recruitment and hiring technical resources, according to RRI principles;
- The continuous training program for staff and researchers;
- A monitoring and reporting model related to institutional activity and performance to quality control and evaluation mechanisms.

The strategy and action plan should respond to a shared vision of institutional ambitions and should be operational, comprehensive, dynamic, transparent, with SMART objectives and achievement indicators that can be communicated and monitored. It should consider a process of regular evaluation and review of the action plans to align it with the evolving strategic goals.
The design of the strategy and action plan should be followed by a board of representatives of the entities and stakeholders involved.

Content – What Will Be Achieved

- Strategy and action plan toward a CoE approved.
- Creation of a consultant board of representatives of the entities involved in the process (OKEANOS, UAz, DOP-FCT, IMAR) and stakeholders (directorate, researchers, staff, students)

Resources Needed

- **Human Resources (**for the definition of the CoE strategy and action plan**):**
    - External consultants for strategy and action plan development and conclusion.
- **Financial Resources:**
    - Estimated budget: €50,000 for contracting external consultants for strategy design
- **Infrastructure:**
    - Physical office space at OKEANOS
    - Digital tools for workflow management, document sharing, and communication
    - Access to shared governance platforms at UAz
    - Meeting space (physical or virtual) and collaborative platforms

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Responsible Team

Lead: OKEANOS Directorate representative in close coordination with UAz Rectoral and Administration Offices representatives.

People Involved

- **Internal Stakeholders:**
  - OKEANOS, IMAR, DOP-FCT administrative staff
  - OKEANOS, IMAR, DOP-FCT researchers, professors and science technicians
  - Project leaders and group coordinators
  - Internal communication, outreach and RRI officers
  - Students (PhD and masters)
  - UAz central administrative representatives and staff (finance, HR, legal)

- **External Stakeholders:**
  - Azores Government representatives of science (DRCID, FRCT) and sea affairs departments (SRMP) and representatives of other relevant public investments (MAR-TEC, Azores Sea School, research vessel) in an advisory role.

b) OO 2. Implement OKEANOS’ governance and CoE strategic roadmap & action plan

This operational objective supports the core goal of building organizational capacity to increase OKEANOS competitiveness and visibility in Horizon Europe.
The strategy and action plan will drive the implementation of all support offices through dedicated procedures guidelines. The model demands strong operational partnership and secure communication channels with the University decision bodies and technical offices. It also requires strong and transparent leadership commitment and the involvement of advisory bodies.
The aim is to build a qualified structure, based on specialized human resources and clear guidelines for procedures. The process demands recruitment, training, and integration of new specialized professionals and training of existing staff in science and project management, legal support, financial accountability, human resources management, communication and data management.
The technical staff should provide the operational backbone necessary to implement the science strategy, relieving researchers from administrative burdens, ensuring compliance with the dynamic regulations and standards of research projects financing programs, like the Horizon Europe. Specialized staff also play a key role in embedding RRI principles into daily operations, making them essential drivers of institutional transformation.
The procedural guidelines and staff roles within the organization should be taken into institutional workflows and decision-making processes.

The Content – What Will Be Achieved

- Creation of Specialized Support Offices, each with a dedicated team:
  - Project & Science Management Office – Support in proposal development, coordination, compliance, and reporting.

  - Legal & Financial Office – Contract negotiation, budgeting, cost justification, and audit preparation.
  - Human resources manager - contracts, work regulations, etc.
  - Communication & Outreach Office – Internal and external visibility, dissemination, and public engagement.
  - IT and data management and open science - project databases, monitoring procedures and indicators, reporting,

- Implementation of a continuous training plan for both the newly hired staff and existing personnel, focusing on:
  - Horizon Europe rules and procedures.
  - RRI principles.
  - Interdisciplinary and intercultural competencies.
  - Soft skills (e.g., leadership, teamwork, public speaking).
  - Onboarding and mentoring processes to ensure full integration and retention of new hires.
  - Teambuilding and internal engagement activities, including dedicated spaces and informal exchange moments, to foster a collaborative culture.

- A clear career description, recognition and development pathways, aligned with institutional goals.
  - Open science and data management
  - Gender equality and ethics support

- Optimization and streamlining of internal procedures, reducing reliance on central UAç services. procedural toolkit to ensure.

- Regular internal coordination and communication actions to strengthen the link between OKEANOS staff and UAç units.

- Mutual learning with DTU Aqua, BioSustain, Space, Electro (Highlevel dialogue between directors, strategic workshops, staff exchanges, site visits)

Resources Needed

- **Human Resources:**

To ensure the attraction, recruitment, and long-term retention of high-quality talent, OKEANOS will adopt and implement human resources practices that are open, transparent, merit-based, and gender-sensitive, in full alignment with the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers. These practices will be part of a broader institutional commitment to achieving and upholding the HRS4R label.

Recruitment of at least 10 professionals in key areas:

1 science/project manager and 1 support staff.
1 financial admin expert and 1 support staff.
1 jurist
1 human resources manager and 1 support staff.
1 communication officer and 1 support staff
2 IT data management staff

Financial Resources:

- To hire 10 staff: €1 400 000 over five years (280 000 / year)
- Trainers for upskilling programs: €100 000.

- **Infrastructure:**
  - Office space, equipment for new staff.
  - Digital tools/platforms
  - Progress monitoring, knowledge-sharing
  - Communication and integration tools (e.g., onboarding manuals, team-building events)

Responsible Team

- **Lead:** OKEANOS Directorate and UAç Human Resources Department
- **HR Development Coordinator:** Senior administrator or delegated research manager
- **Support:** Finance Office, Communication Office, Project Office (once in place**)**

People Involved

- **Internal Stakeholders:**
  - OKEANOS, IMAR, DOP-FCT administrative staff
  - OKEANOS, IMAR, DOP-FCT researchers, professors and science technicians
  - Project leaders and group coordinators
  - Internal communication, outreach and RRI officers
  - Students (PhD and masters)

- **External Stakeholders:**
  - Specialized recruitment agencies or consultants; external HR consultants
  - Training providers with expertise in EU research management, RRI, and science communication
  - Institutional partners for staff exchanges or mentoring; and networks for potential staff exchanges

c) OO 3. Establish an economic model and secure financial resources

To ensure the long-term financial sustainability and strategic growth of OKEANOS, we will develop and implement a robust, flexible economic model.

OKEANOS participates in 26+ projects of different typologies and financing sources, provides services to the Azores administration and benefits from pluriannual institutional financial programs. Presently, the financial management of OKEANOS activities is shared between the University central management office, the IMAR and the FGF. Therefore, the definition of the financial model and plan to establish the financial management office require agreements with, and the collaboration of all entities involved in OKEANOS’s scientific activities.

Developing a solid economic model is critical to predict economic perspectives and foster scientific and economic opportunities for OKEANOS to sustain the transformation ambition. At the heart of this model lies a diverse and clearly articulated catalog of services, including a comprehensive listing of the

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existing expertise, infrastructure access, and testing services. That will enhance visibility and value proposition to stakeholders and potential partners and monetize OKEANOS’s unique capabilities.

The financial plan should outline OKEANOS financial goals and needs, expected income and expenses, define procedural rules, roles and workflows. It should guide a fully operational financial management office at OKEANOS. The development of those strategic documents should be outsourced to external consultants and accompanied by a designated institutional task force and advisory body. The economic model and financial plan should align with and contribute to the completion of OKEANOS’s ambition.

Content – What Will Be Achieved

The model will be designed to integrate and optimize a variety of funding sources enabling OKEANOS to operate with agility and resilience in a competitive research environment. To secure OKEANOS’s budget the institute needs to foster a blend of funding synergies between regional, national, structural and Horizon Europe funds, along with funding from foundations, and from consultancy services, and direct research contracts. To amplify the scientific and economic impact, OKEANOS aims to increase the participation in Horizon Europe calls. Financial resources rely on the scientific capacity, international visibility and competitiveness of the institute among the European, Atlantic and global consortiums, networks and initiatives (see below strategic objective 2 and therein operational objectives).

Resources Needed

- **Human Resources (**for the definition of the CoE strategy and action plan)**:**
    - External consultants for strategy and action plan conclusion.
- **Financial Resources:**
    - Estimated budget: €20,000 for contracting external consultants for strategy conclusion.
- **Infrastructure:**
    - Physical office space at OKEANOS
    - Digital tools for workflow management, document sharing, and communication
    - Access to shared governance platforms at UAz
    - Meeting space (physical or virtual) and collaborative platforms

Responsible Team

Lead: OKEANOS Financial Strategy Unit (to be established under the Directorate).
Support:

- Project Management Office (PMO)
- Communication and Outreach Team
- Data and Monitoring Team

External support: Strategy and finance consultants; EU financial mechanism experts.

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People Involved

Internal Stakeholders:

- OKEANOS, IMAR, DOP-FCT administrative staff
- Project leaders and group coordinators
- UAz central administrative representatives and staff (finance, HR, legal)

External Stakeholders:

- Azores Government representatives of science (DRCID, FRCT) and sea affairs departments (SRMP) and other representatives of relevant public investments (MAR-TEC, Azores Sea School) in an advisory role.

- Peer institutions for best-practice inspiration and sharing (e.g., DTU)

2. Strategic objective n°2 : Turn OKEANOS into a deep sea & open ocean global science, education & innovation hub

As a result of Internal Workshop, OKEANOS has defined an ambition to reinforce its capacity to participate in and lead Horizon Europe (HE) projects. This ambition acknowledges existing limitations in organizational capacity, human resources, and strategic alignment, and seeks to transform these challenges into actionable goals for institutional development.

OKEANOS is recognized internationally as an important center for deep sea & open ocean science by their assets, involvement in key networks, and scientific production. However, it is also recognized that there is an opportunity to position OKEANOS as a leader in innovative, sustainable research and technological development across Europe and beyond. It is expected OKEANOS will be a key infrastructure to positively impact the EU investments that are being made in Horta, Azores: the technopole MARTEC, a new research vessel, the Azores Sea School, and the free technological (oceanic) zone.

Concretizing this objective is the core of the scientific strategy. The institutionalized alignment with Horizon Europe and EU policies, raises as a pillar of the CoE strategy and action plan. Participation in Horizon Europe projects amplifies the scientific impact of OKEANOS and is rewarded by its high economic impact. However, it demands staff commitment, a high-standard robust and synergetic organizational structure and a sustainable economic model.

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OKEANOS aims to increase its institutional participation in Horizon Europe projects, investing and diversifying in its scientific competence and leadership, which gives visibility and competitiveness at the European and international level. A synergetic application of financial resources to capacity-building is needed to leverage this strategic objective.

To reach the goal, and reinforce leadership, notably as coordinators in Horizon Europe projects, OKEANOS should promote scientific synergies with major EU and international networks to reveal its scientific distinctive added value, increasing the opportunity to participate in projects, and intensify its scientific productivity.

The internationalization challenge includes increasing human scientific capacities, attracting students, and retaining researchers and lecturers to turn DOP-FCT and OKEANOS into an international training center in deep-sea and open ocean science. It implies maintaining and investing in new long-term data collection in line with open science policy, namely monitoring programs and continuous sensing and technological developments. The aim is to develop a digital ocean twin to the central North Atlantic.

The success of the strategy requires the implementation of the *Responsible Research and Innovation (RRI)* principles into every aspect of research. It ensures the alignment of foundational principles such as ethics, gender equality, open access, and public engagement. Dedicated ongoing training and mentoring programs will upskill researchers and current staff in those principles.

Expected Changes / Results Over the Next Five Years

- To increase scientific visibility and competitiveness in the framework of ERA agenda, and expand human scientific capacities to raise excellence at European and international levels.
- To increase participation in and coordination of Horizon Europe projects.
- To position DOP-FCT and OKEANOS as an attractive international centre of deep-sea and open ocean graduate studies (PhD and Master’s programs)
- To secure and increase the effective participation of OKEANOS in scientific and science-policy networks, advisory organizations, consultancy and other collaborative initiatives.

Main Outcome Indicators

Indicator	Target
New researchers at OKEANOS	20 - M72 (Sp05)
No. of outstanding researchers contracted	M72 (Sp05)
Share of foreign staff members	50% (Sp05)

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Researchers involved in national, European, international ocean-related organizations (ICES, UN Agendas)	25% - M36 (Sp05)
Increase in high-impact publications	50% – M72 (Sp05)
MasterPhd candidates recruited	60/40 - M60 - (Sp06)
International summer schools	3 - M36 (SpO6)
New post graduation curricula	2 - M72 (SpO6)
International training programs on OKEANOS & partners’ facilities	3 - M72 (SpO6)
Infrastructure roadmap incl. funding synergies, integration EU R&I infrastructures (EMSO, EMBRC) & transnational access to facilities/data	M36 - (SpO7)
Long-term monitoring programs (6 maintained/2 created), 100% Data Sets published Open & Fair	8 - M36 (SpO7)
Complementary investment for infrastructure upgrades & new facilities	0,5M€ - M24 (SpO7)
No of new partnerships for transnational access to infrastructure	M60 (SpO7)
Partnerships with EU and global marine sciences-policy leading institutions and initiatives	10 - M36 - (SpO8)
Collaborative agreements including joint R&I agenda signed with leading EU/Atlantic institutions	5 - M48 (SpO8)
HorizonEU Coordination attempts	6 - M72 (SpO8)
HorizonEU funded projects/y (×2)	4 - M72 (SpO8)

Dedicated Resources

Human Resources:

- Recruitment at least more than 10 researchers with expertise in deep-sea and open ocean science.
- Professionals for support offices already hired
    - Science/project manager
    - Communication and outreach officers
    - Legal/financial expert

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    - Data management and open science officers
- Trainers and mentors for onboarding, soft skills, and RRI capacity building.
- Coordination team for postgraduate curricula and training programs.

Financial Resources:

- €4M over five years for 10 researchers :
    - Horizon Europe overheads and capacity-building instruments
    - Structural and regional development funds (ERDF, Azorean Government)
    - Research contracts, consultancy services, foundations, and private sector

- Funding dedicated to:
    - Salaries, training, infrastructure, program development
    - Scientific equipment and field missions
    - Communication, networking, and internationalization activities
- 200.000€ for external consultants.
- 150.000€ for training, infrastructure, program development.
- 100.000€ for scientific equipment and field missions.
- 150.000€ Communication, networking and internalization activities

Infrastructure and Tools:

- Modernized research infrastructure and laboratories for ocean science.
- Dedicated spaces for international training center and postgraduate programs.
- Digital platforms for open science, data sharing, and project management.
- Equipment for virtual engagement (e.g., hybrid classrooms, webinars).
- Career development and mentoring spaces.

Governance and Policy Frameworks:

- Adoption of internal policies aligned with European RRI and ERA standards.
- Integration of monitoring and evaluation frameworks to assess RRI compliance.
- Establishment of a Science Diplomacy and Internationalization Strategy.
- Defined job roles, recruitment criteria, and career progression paths.
- Institutional alignment with Ocean Mission, UN Ocean Decade, and SDG 14.

a) OO 4. Increase and internationalize human scientific capacities

OKEANOS has established an international scientific team. However, its capacity to attract and retain more scientific talents is limited due to conjectural constraints such as high level of precarity, difficult accessibility, low salaries vs. living cost and limited competitiveness. To overcome those difficulties OKEANOS will invest to fully integrate the Horizon Europe ecosystems. The first step is to develop, validate, and implement a dedicated Horizon Europe participation roadmap. That implies coordination mechanisms across the organizational structure, and international networking actions, co-created with at least 20 internal stakeholders and aligned with the institution's scientific priorities. A clear and shared strategy is essential for achieving the core objective of increasing visibility and competitiveness within Horizon Europe. A dedicated budget to contract new researchers must be secured through financial synergies between projects funded by different financial sources, services provisions, partnerships and public institutional science financing programs.

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An efficient communication and outreach plan including a institucional and scientific portfolio is essential to promote OKEANOS unique scientific assets and attract talent. Recruitment should follow the RRI principles.

The OKEANOS is a member of the Portuguese node of EMBRC and EMSO European infrastructures (ESFRI). The participation of OKEANOS in those programs is actually constrained by organizational and accreditation burdens and limited engagement. To open the infrastructure to the international scientific community through those infrastructure initiatives contributes to expanding the attractiveness of the institute.

Content – What Will Be Achieved

A dedicated Horizon Europe roadmap to increase scientific capacity through the participation and coordination of innovative projects.

A well-established human resources pipeline, built on recruitment and retention of high-level and diversified talent, empowering early-career researchers in leadership and proposal development.

An institutional tailored onboarding, mentoring, and training programs fostering internal staff exchange opportunities with international partners, to build dynamic and informed workforce.

An efficient research communication plan dedicated to improving visibility and outreach OKEANOS scientific achievements and opportunities.

A clear definition of roles and career development pathways based on legal regulation in force and RRI principles.

Resources Needed

Human Resources:

- Recruitment of:
  - Senior, mid-career, and early-stage researchers
  - Onboarding/HR support staff
  - Mentors and peer coaches
- Creation of a Human Resources Committee or lead officer for international recruitment and retention.
- Access to external HR consultants to align hiring with HRS4R and EU Code of Conduct for Researchers.

Financial Resources:

4.150.000€ over five years, covering:

Salaries and employment packages (competitive for international staff)
Relocation support
Training programs (RRI, interdisciplinary skills, EU project participation)
Exchange programs and mobility grants

Funded by:

Horizon Europe overheads
FCT and regional/national science employment schemes
ERDF and institutional co-funding

Infrastructure and Tools:

- Dedicated office and lab spaces for new researchers.
- Onboarding tools (manuals, digital platforms, mentoring portals).
- Training facilities and resources (online and in-person).
- Collaborative workspaces and informal community-building areas.
- Systems to track staff engagement, satisfaction, and career progression.

Governance and Policy Frameworks:

- Alignment with EU Mission "Restore our Ocean and Waters", the HRS4R and EU Charter for Researchers.
- Adoption of open, transparent, merit-based, gender-sensitive recruitment practices.
- Internal policy updates to ensure permanent positions and career progression.
- Institutional communication on the EU-added value of OKEANOS careers to attract top talent.
- Development of institutional job profiles and career tracks.

Responsible Team

Lead: OKEANOS Directorate and UAç Human Resources Department
HR Development Coordinator: Senior administrator or delegated research manager
Support: Finance Office, Communication Office, Project Office (once in place)

People Involved

- **Internal Stakeholders:**
  - OKEANOS, IMAR, DOP-FCT administrative staff
  - OKEANOS, IMAR, DOP-FCT researchers, professors and science technicians
  - Project leaders and group coordinators
  - Internal communication, outreach and RRI officers
  - Students (PhD and masters)
  - UAz central administrative representatives and staff (finance, HR, legal)

- **External Stakeholders:**
  - Azores Government representatives of science (DRCID, FRCT) and sea affairs departments (SRMP) and other relevant public investments (MAR-TEC, Azores Sea School) in an advisory role
  - Specialized recruitment agencies or HR consultants with experience in research talent acquisition.
  - International institutional partners for staff exchanges, co-hosting of researchers, or secondments.

- Training providers specialized in EU research programs, RRI, intercultural communication, and team building.

b) OO 5. Establish an international training center in Deep-sea & Open ocean Science

Content – What Will Be Achieved

The DOP-FCT at OKEANOS headquarters has a master and a Phd program in marine sciences. The researchers and professors also lecture to other UAz and external graduate programs, some European. Recently OKEANOS became an attraction for European international students and early-carrier researchers, under ERASMUS+ and Eurodisey programs. The PhD program has more than 30 students, many international and is continuously increasing. The master’s degree is moderately attractive and needs improvement.

Based on a critical revision of the existing training offer, DOP-FCT and OKEANOS will establish an internationally recognized training center focused on deep-sea and open-ocean science, positioning itself as a reference hub for postgraduate education and advanced scientific training. This initiative will strengthen DOP-FCT and OKEANOS's educational mission by offering new structured MSc and PhD programs, co-developed with international academic and research partners.

The center will deliver a range of innovative programs, including summer schools, interdisciplinary training modules, and hands-on technical experiences using OKEANOS's research infrastructure and partner facilities. It will support the development of new accredited postgraduate curricula, integrating Responsible Research and Innovation (RRI) principles such as ethics, open science, and gender equality.

To ensure the successful integration and retention of new students and early-career researchers, the center will implement structured onboarding and mentoring processes. These will be complemented by team-building activities and informal engagement initiatives aimed at fostering a collaborative, inclusive, and supportive research culture. The training center will promote knowledge exchange, local and international collaboration, and increased institutional visibility, contributing to OKEANOS’s long-term strategic goal of becoming a global leader in marine science education and innovation.

Resources Needed

Human Resources:

- Academic staff (internal and visiting lecturers)
- Training program coordinators
- Onboarding and mentoring facilitators
- Tutors, supervisors, and research mentors
- Communication staff for outreach and program promotion
- Administrative staff to manage admissions, mobility, and logistics

Financial Resources:

- Estimated 66.666€ over five years, covering external consultants.

- Funding sources:
    - Erasmus+, Horizon Europe MSCA-COFUND, ERDF
    - Regional government support and institutional co-funding
    - Private foundations or bilateral scholarships

Infrastructure:

- Dedicated teaching and training spaces at OKEANOS (classrooms, labs)
- Student/staff housing and mobility facilities
- Digital learning and collaboration platforms (for hybrid programs)
- Access to vessels, remote equipment, and marine research infrastructure
- Lounge or informal spaces for community-building and mentoring

Responsible Team

Lead: OKEANOS Directorate in partnership with the UAç Vice-Rectorate for Education and Training

Academic Program Coordinator: A designated senior academic or training lead

Support Teams:

- Human Resources (onboarding, contracts, mobility)
- Communication Office (promotion and recruitment)
- International Office (mobility and partnerships)
- IT and digital learning support

People Involved

- **Internal Stakeholders:**
    - OKEANOS, IMAR, DOP-FCT administrative staff
    - OKEANOS, IMAR, DOP-FCT researchers, professors and science technicians
    - Project leaders and group coordinators
    - Internal communication, outreach and RRI officers
    - UAz central administrative representatives and staff (finance, HR, legal)

- **External Stakeholders:**
    - Azores Government representatives of science (DRCID, FRCT) and sea affairs departments (SRMP) and other relevant public investments (MAR-TEC, Azores Sea School) in an advisory role

    - International universities and marine research institutions (for joint curricula and mobility)
    - European Commission/Erasmus+ and Horizon Europe training frameworks
    - NGOs or industry partners for applied training modules

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c) OO 6. Provide open infrastructures and long-term data collections in line with Open science policy

Content – What Will Be Achieved

OKEANOS will develop and implement a comprehensive infrastructure roadmap aligned with Open Science principles and European Research Area (ERA) goals. This roadmap will detail the integration of OKEANOS facilities into major EU Research and Innovation infrastructures such as EMSO and EMBRC, enabling transnational access and fostering international collaboration. A core component of this strategy will involve enhancing the availability and interoperability of research infrastructure and long-term environmental monitoring systems.

To support scientific excellence and data-driven innovation, OKEANOS will maintain six existing long-term monitoring programs and establish at least two new ones. All resulting datasets will be curated, standardized, and made openly accessible in line with FAIR (Findable, Accessible, Interoperable, Reusable) data principles. In parallel, OKEANOS will pursue funding synergies and commit in investments to modernize and expand its infrastructure.

This initiative will not only improve the quality and transparency of scientific output but also increase OKEANOS’s capacity to host and support international researchers. It will open pathways for new partnerships focused on transnational access to infrastructure, contributing to a more inclusive and collaborative European marine research landscape.

Resources Needed

Human Resources:

- Infrastructure Coordinator and Data Steward
- IT specialists and database managers
- Technicians for instrument maintenance and field deployment
- Researchers overseeing monitoring program design and data interpretation
- External consultants or advisors on Open Science and FAIR data

Financial Resources:

- Approx. €166,000 in scientific equipment and field missions and external consultants.
- Ongoing funding for system upgrades, maintenance, and data processing
- Support from:
    - Structural Funds (ERDF)
    - Horizon Europe infrastructure instruments
    - Institutional and regional co-funding

Infrastructure:

- Physical upgrades and modernization of labs, monitoring stations, and storage systems
- Cloud-based data repositories and digital collaboration tools
- Integration with EMSO/EMBRC and other EU data portals

- Remote access technologies for transnational users
- Instruments and sensors for environmental data collection

Responsible Team

Lead: OKEANOS Infrastructure and Data Management Unit

Support:

- UAç IT and Data Governance Office
- Project & Science Management Office
- Legal/Compliance Office (for data and access agreements)

External support (optional):

- Open science advisors and infrastructure experts
- EMSO/EMBRC coordination teams

People Involved

- **Internal Stakeholders:**
  - OKEANOS, IMAR, DOP-FCT administrative staff
  - OKEANOS, IMAR, DOP-FCT researchers, professors and science technicians
  - Project leaders and group coordinators
  - Internal communication, outreach and RRI officers
  - UAz central administrative representatives and staff (finance, HR, legal)
  - IT and data management personnel

- **External Stakeholders:**
  - Azores Government representatives of science (DRCID, FRCT) and sea affairs departments (SRMP) and other relevant public investments (MAR-TEC, Azores Sea School) in an advisory role
  - EMSO, EMBRC, and related European infrastructure platforms
  - EU-funded project partners
  - National and international institutions seeking transnational access
  - Policy-makers and regional authorities interested in environmental monitoring outcomes

d) OO 7. Increase OKEANOSs’ participation & leadership in collaborative networks (Euromarine, Eurocean, AAORIA, ICES, OSPAR, DOOS) a and synergies with international projects at EU/Atlantic levels.

Scientific synergies with major EU networks and initiatives to reveal OKEANOS’ distinctive added value, increase talent’s attraction and retention, bring marine science beyond the state of the art, intensify scientific productivity and reinforce leadership positions, notably as coordinators in HorizonEU projects.

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Content – What Will Be Achieved

OKEANOS will strategically expand its presence and leadership in high-level European and Atlantic collaborative networks such as Euromarine, Eurocean, AAORIA, ICES, OSPAR, and DOOS. Through proactive participation and targeted partnerships, OKEANOS aims to enhance its scientific visibility, reinforce its leadership in Horizon Europe projects, and foster synergies that elevate its role in shaping regional and global marine research agendas.

The initiative will focus on leveraging OKEANOS's scientific strengths to build impactful collaborations with policy-leading institutions and major research infrastructures. By co-developing joint research and innovation agendas, engaging in EU/Atlantic-level initiatives, and coordinating HorizonEU proposals, OKEANOS will position itself as a preferred partner in international consortia.

These efforts will contribute to long-term talent attraction, knowledge exchange, and institutional influence. The ultimate goal is not only to secure project funding but to strengthen OKEANOS’s reputation as a driving force in advancing marine science beyond the current state of the art.

Resources Needed

Human Resources:

- International Relations/Partnerships Coordinator
- Horizon Europe Project Coordinators
- Senior researchers for networking and advocacy
- Support staff for proposal writing, administration, and event coordination
- Communication officer for visibility and branding

Financial Resources:

- Estimated €216.666 over five years to cover:
    - External consultants.
    - Communication, networking and internalization activities.

- Funding sources:
    - Horizon Europe (Widening, CSA, and RIA/IA proposals)
    - Regional support programs
    - Structural funds and institutional OH reinvestment

Infrastructure:

- Digital platforms for collaboration, project coordination, and proposal development
- Virtual and physical meeting spaces for international partner engagement
- Communication channels and tools for international visibility (web, social media, PR)
- Access to shared EU infrastructures for joint research activities

Responsible Team

Lead: OKEANOS Directorate and Project Office

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Internationalization and Partnerships Coordinator: Appointed researcher or administrator with experience in EU networks

Support Teams:

- Communication Office (visibility and branding)
- Legal and Finance Office (collaborative agreement support)
- Science Diplomacy and Strategic Positioning Team

Advisory Role: Representatives from IMAR, UAç Vice-Rectorate for International Affairs

People Involved

- **Internal Stakeholders:**
  - OKEANOS, IMAR, DOP-FCT administrative staff
  - OKEANOS, IMAR, DOP-FCT researchers, professors and science technicians
  - Project leaders and group coordinators
  - Internal communication, outreach and RRI officers
  - Students (PhD and masters)
  - UAz central administrative representatives and staff (finance, HR, legal)

- **External Stakeholders:**
  - Azores Government representatives of science (DRCID, FRCT) and sea affairs departments (SRMP) and other relevant public investments (MAR-TEC, Azores Sea School) in an advisory role
  - EU and Atlantic marine research networks (e.g., Euromarine, Eurocean)
  - Policy-shaping institutions (e.g., ICES, OSPAR)
  - International marine science consortia and HorizonEU coordination teams
  - Global funding bodies or international donors

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RESOURCES SUMMARY

Strategic objective n°1 : Create and implement high-end standards to support OKEANOS sustainable growth		**TOTAL BUDGET**	**Operational Objectives Distribution**
Human Resources		**1.570.000€**	
10 specialized professionals		1.400.000€	1.400.000€ OO2
i. science/project manager	1		
ii. financial admin expert	1		
iii. jurist	1		
iv. human resources manager	1		
v. communication officer	1		
vi. IT data management staff	2		
vii. support staff	4		
External consultants to co-develop the strategy and action plan.		70.000€	50.000€ OO1 20.000€ OO3
Trainers for upskilling programs.		100.000€	20.000€ x 5 OO2
Equipment and other services		**300.000€**	OO2
Acquire and run IT equipment and management platforms		300.000€	
Strategic objective n°2 : Turn OKEANOS into a deep sea & open ocean global science, education & innovation hub		**TOTAL BUDGET**	**Operational Objectives Distribution**
Human Resources		**4M€**	4.150.000€ OO4 + 66.666M€ OO5 + 166.666€ OO6 + 216.666€ OO7
≥ 10 Researchers		4M€	
Equipment and other services		**600.000€**	
External consultants		200.000€	
Training, infrastructure, program development		150.000€	
Scientific equipment and field missions		100.000€	

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Communication, networking and internalization activities	150.000€	

C. ACTION PLAN MONITORING

1. Create and implement high-end standards to support OKEANOS sustainable growth	
Responsible people/team : OKEANOS Directorate	**Expected results :** *1. Structural improvements.* *2. HR Development.* *3. Cultural and Strategic Shift.* *4. Enhanced external perception and partnerships.* *5. Strategic positioning.* **Outcome indicator(s) :** 1. OKEANOS R&I agenda addresses EU & UN challenges and objectives (y/n) 2. Monitoring system for EU/UN goals impact (y/n) 3. R&I activities aligned with EU/UN frameworks 4. CoE strategic roadmap & action plan 5. Governance/administrative/financial frameworks approved by the International Adv. Board 6. CoE Management board in place 7. Technicians (support offices, IT, sea missions recruited) 8. Fully operational R&I & Grants support teams meeting EU standards with satisfaction 9. Increase in external funding success rates vs 2025 10. Adoption HRS4R label 11. Staff members upskilled 12. Increase in permanent positions vs 2015-2024 period 13. Retention rate of researchers over a 6-year period 14. Publication of a catalog detailing the provided services: expertise, technologies
Op objective a - <u>OO 1. Design an OKEANOS’ governance and science management strategy</u> ➢ *Responsible :* OKEANOS Directorate representative in close coordination with UAz Rectoral and Administration Offices representatives. ➢ *Target groups :* OKEANOS, IMAR, DOP-FCT administrative staff, OKEANOS, IMAR, DOP-FCT researchers, professors and science technicians, Project leaders and group coordinators, Internal communication, outreach and RRI officers, Students (PhD and masters), UAz central administrative representatives and staff (finance, HR, legal) ➢ *Implementation indicator(s)* o 1, 2, 3, 10, 11, 13.	
Op objective b - <u>OO 2. Implement OKEANOS’ governance and CoE strategic roadmap & action plan</u> ➢ *Responsible :* OKEANOS Directorate and UAç Human Resources Department ➢ *Target groups :* OKEANOS, IMAR, DOP-FCT administrative staff, OKEANOS, IMAR, DOP-FCT researchers, professors and science technicians, Project leaders and group coordinators, Internal communication, outreach and RRI officers, Students (PhD and masters) ➢ *Implementation indicator(s)* o 4, 5, 6, 7, 8, 14.	
Op objective c - <u>OO 3. Establish an economic model and secure financial resources</u> ➢ *Responsible :* OKEANOS Financial Strategy Unit (to be established under the Directorate). ➢ *Target groups :* OKEANOS, IMAR, DOP-FCT administrative staff, Project leaders and group coordinators, UAz central administrative representatives and staff (finance, HR, legal) ➢ *Implementation indicator(s)* o 9, 12, 15, 16, 17, 18.	

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	prototyping/testing, access to infrastructures (etc.) 15. Increase in HEU applications 16. HEU revenue 17. Iconic examples of funding synergies 18. Total research budget obtained from EU-funded projects, Research contracts, Consultancy services **Dedicated resources :** ● Human resources: Recruitment of at least 10 specialized professionals ● Financial resources ● To hire 10 staff: €1 400 000 over five years (280 000 / year) ● To contract external consultants for strategy and action plan development and conclusion: €50 000. ● To contract external trainers for upskilling programs for administrative: € 100 000 over five years (20 000 / year) ● To acquire and run IT equipment and management platforms: € 300 000

2. Turn OKEANOS into a deep sea & open ocean global science, education & innovation hub	
Responsible people/team : OKEANOS Directorate	**Expected results :** - *Increase scientific visibility and competitiveness* - *Increase participation in and coordination of Horizon Europe projects.* - *To position DOP-FCT and OKEANOS as an attractive international centre of deep-sea and*
Op objective a - <u>OO 4. Increase and internationalize human scientific capacities</u> ➢ *Responsible :* OKEANOS Directorate and UAç Human Resources Department ➢ *Target groups :* OKEANOS, IMAR, DOP-FCT administrative staff, OKEANOS, IMAR, DOP-FCT researchers, professors and science technicians, Project leaders and group coordinators, Internal communication,	

outreach and RRI officers, Students (PhD and masters), UAz central administrative representatives and staff (finance, HR, legal) ➢ *Implementation indicator(s)* o 1, 2, 3, 4, 5, 6.	*open ocean graduate studies* - *Secure and increase the effective participation of OKEANOS in scientific and science-policy networks, advisory organizations, consultancy and other collaborative initiatives.*
Op objective b - <u>OO 5. Establish an international training center in Deep-sea & Open ocean Science</u> ➢ *Responsible :* OKEANOS Directorate in partnership with the UAç Vice-Rectorate for Education and Training ➢ *Target groups :* OKEANOS, IMAR, DOP-FCT administrative staff, OKEANOS, IMAR, DOP-FCT researchers, professors and science technicians, Project leaders and group coordinators, Internal communication, outreach and RRI officers, UAz central administrative representatives and staff (finance, HR, legal). ➢ *Implementation indicator(s*) o 7, 8, 9.	**Outcome indicator(s) :** 1. New researchers at OKEANOS 2. No. of outstanding researchers contracted 3. Share of foreign staff members 4. Researchers involved in national, European, international ocean-related organizations (ICES, UN Agendas) 5. Increase in high-impact publications 6. MasterPhd candidates recruited 7. International summer schools 8. New post graduation curricula 9. International training programs on OKEANOS & partners’ facilities 10. Infrastructure roadmap incl. funding synergies, integration EU R&I infrastructures (EMSO, EMBRC) & transnational access to facilities/data 11. Long-term monitoring programs (6 maintained/2 created), 100% Data Sets published Open & Fair 12. Complementary investment for infrastructure upgrades & new facilities 13. No of new partnerships for transnational access to infrastructure 14. Partnerships with EU and global marine sciences-policy leading institutions and initiatives
Op objective c - <u>OO 6. Provide open infrastructures and long-term data collections in line with Open science policy</u> ➢ *Responsible :* OKEANOS Infrastructure and Data Management Unit ➢ *Target groups :* OKEANOS, IMAR, DOP-FCT administrative staff, OKEANOS, IMAR, DOP-FCT researchers, professors and science technicians, Project leaders and group coordinators, Internal communication, outreach and RRI officers, UAz central administrative representatives and staff (finance, HR, legal), IT and data management personnel ➢ *Implementation indicator(s)* o 10, 11, 12, 13.	
Op objective d - <u>OO 7. Increase OKEANOSs’ participation & leadership in collaborative networks (Euromarine, Eurocean, AAORIA, ICES, OSPAR, DOOS) a and synergies with international projects at EU/Atlantic levels.</u> ➢ *Responsible :* OKEANOS Directorate and Project Office ➢ *Target groups :* OKEANOS, IMAR, DOP-FCT administrative staff, OKEANOS, IMAR, DOP-FCT researchers, professors and science technicians, Project leaders and group coordinators, Internal communication, outreach and RRI officers, Students (PhD and masters), UAz central administrative representatives and staff (finance, HR, legal) ➢ *Implementation indicator(s)* o 14, 15, 16, 17.	

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	15. Collaborative agreements including joint R&I agenda signed with leading EU/Atlantic institutions 16. HorizonEU Coordination attempts 17. HorizonEU funded projects/y (×2) **Dedicated resources :** ● Human resources: ● Recruitment at least more than 10 researchers with expertise in deep-sea and open ocean science. ● Professionals for support offices already hired ○ Science/project manager ○ Communication and outreach officers ○ Legal/financial expert ○ Data management and open science officers ● Financial resources €4M over five years for 10 researchers Funding dedicated to: Salaries, training, infrastructure, program development, Scientific equipment and field missions, Communication, networking, and internationalization activities.

Funded by the European Union

ANNEXES

1. Self-assessment sheets
2. Interviews results
3. List of attendees to workshops n°1 and 2
4. Workshop n°1 and 2 Satisfaction survey results

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ANNEX 1: Self Assessment Tool

The next pages provide an overview of the conclusions from the self-assessment tools, for detailed results, please contact Dr. Filipe Porteiro (filipe.jm.porteiro@uac.pt)

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Dimension 1 : Human resources	How to attract and retain international talents to reach a critical mass of researchers and improve scientific productivity and reputation through an adequate human resources strategy and better working conditions?

Measurement of the State of implementation	Measurement options	Explanation
	Not considered (No action taken or planned)	
	Initial steps taken (some actions in place) but limited progress	
	Mostly implemented with room for improvement	
	Continous implementation and optimization	

The assessment of this dimension is adapted from the HRS4R (Human Resources Strategy for

Sub-dimension 1 : Ethical and Professional Aspects		Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
Principles	Definition according to the European Charter for Researchers	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation ? Initiatives undertaken/new
Research freedom	Researchers should focus their research for the good of mankind and for expanding the frontiers of scientific knowledge, while enjoying the freedom of thought and expression, and the freedom to identify methods by which problems are solved, according to recognised ethical principles and practices. Researchers should, however, recognise the limitations to this freedom that could arise as a result of particular research circumstances (including supervision/guidance/management) or operational constraints, e.g. for budgetary or infrastructural reasons or, especially in the industrial sector, for reasons of intellectual property protection. Such limitations should not, however, contravene	Mostly implemented with room for improvement	3	
Professional attitude	Researchers should be familiar with the strategic goals governing their research environment and funding mechanisms, and should seek all necessary approvals before starting their research or accessing the resources provided. They should inform their employers, funders or supervisor when their research project is delayed, redefined or completed, or give notice if it is to be terminated earlier or suspended for whatever reason.	Mostly implemented with room for improvement	3	
Dissemination, exploitation of results	All researchers should ensure, in compliance with their contractual arrangements, that the results of their research are disseminated and exploited, e.g. communicated, transferred into other research settings or, if appropriate, commercialised. Senior researchers, in particular, are expected to take a lead in ensuring that research is fruitful and that results are either exploited commercially or made accessible to the public (or both) whenever the opportunity arises	Mostly implemented with room for improvement	3	
Public engagement	Researchers should ensure that their research activities are made known to society at large in such a way that they can be understood by non-specialists, thereby improving the public's understanding of science. Direct engagement with the public will help researchers to better understand public interest in priorities for science and technology and also the public's concerns.	Continous implementation and optimization	4	
Non discrimination	Employers and/or funders of researchers will not discriminate against researchers in any way on the basis of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition.	Continous implementation and optimization	4	
Evaluation/ appraisal systems	Employers and/or funders should introduce for all researchers, including senior researchers, evaluation/appraisal systems for assessing their professional performance on a regular basis and in a transparent manner by an independent (and, in the case of senior researchers, preferably international) committee. Such evaluation and appraisal procedures should take due account of their overall research creativity and research results, e.g. publications, patents, management of research, teaching/lecturing, supervision, mentoring, national or international collaboration, administrative	Initial steps taken (some actions in place) but limited progress	1	Só pessoal do quadro. Distinção de investigadores com m

Comments & Feedbacks :

The ethical code of the University of the Azores (Despacho n.º 97952015, Diário da República, 2.ª série, Agosto 2015) applies to the Institute OKEANOS. The code target some principles analysed in this subdimension, for example on the research freedom, non-discrimination, etc.
The strategic goals of the OKEANOS are known by all the researchers (i.e., detailed on the OKEANOS strategic plan developed in 2018 for the Portuguese Science Technology Foundation and also the action plan by the OKEANOS directorate).
Researchers also comply with national and regional rules related to sampling biological resources (i.e., Nagoya protocol), animal welfare on experimentation, etc. The research projects are managed by the University central services and by two entities associated to the University and therefore researchers communicate any problem related to the implementation of their projects. Many research lines on OKEANOS aims to provide data and information to support Azores administration on sea affairs policies at regional, national and European scales, in marine conservation, resource management and human activities at the sea (i.e., fisheries).
The OKEANOS through its website and social media publicize extensively its activities to the society.
Items 1 to 4 should be more explicitly promoted among scientists.
OKEANOS has not an implemented researcher evaluation system.

Dimension 2 : Responsible Research and Innovation	How to maximime the impacts of your research activities throuhg the incorporation of advanced R&I management standards (such as open science, ethics, public engagement, etc.) ?

Measurement of the State of implementation	Measurement options	Explanation
	Not considered (No action taken or planned)	
	Initial steps taken (some actions in place) but limited progres	
	Mostly implemented with room for improvement	
	Continous implementation and optimization	

The assessment of this dimension is adapted from the "RRI self-reflection tool" designed by H2020 RRI Tools project

Sub-dimension 1 : Ethics		Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
Principles	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation ? Initiatives undertaken/new proposals to improve the situation
Ensuring the integrity of R&I practices	All research and innovation practices adhere to ethical guidelines and to the Code of Conduct for Research Integrity (for instance by encouraging peer review, consulting ethics experts, promoting internal discussions, etc.)	Mostly implemented with room for improvement	3	
Preventing potentially harmful impacts on the public or the environment	Taking proactive measures to anticipate and minimize risks to society or the environment, while ensuring that the outcomes of research are responsibly used even after the project's conclusion.	Initial steps taken (some actions in place) but limited progres	1	
What are possible ethical considerations for your R&I practices?	Environmental impacts Human and animal health impacts Local economic and development impacts Social justice Education Data management	≥ 4	3	

Comments & feedbacks :

The UAç ethical code of conduct apply to OKEANOS, but an explicitly discussion and adoption of the European Code of Conduct for Research Integrity should be envisaged.

Total for subdimension 1 Ethics	2,333333333

Dimension 3 : Horizon Europe	How to intensify transnational collaborations and participation in Horizon Europe through the creation of favourable environment and institutional policy that encourages and supports researchers to submit highly competitive applications ?

Measurement of the State of implementation	Measurement options	Explanation
	Not considered (No action taken or planned)	
	Initial steps taken (some actions in place) but limited progr	
	Mostly implemented with room for improvement	
	Continous implementation and optimization	

Sub-dimension 1 : Connection to EU clubs		Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
Factors	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation ?
Exploiting collaborations with Horizon Europe champions	My organization builds on previous collaborations with organizations and networks active in Horizon Europe to develop new proposals and integrate new networks	Mostly implemented with room for improvement	3	
Implementing an effective networking strategy	My organization has mappped out key organizations and networks to connect with and engages in effective networking activities to strenghten our relationships with EU champions and enhance our international reputation	Mostly implemented with room for improvement	3	
Defining clear added-value and value proposition	My organization has identified its unique, distinctive assets (i.e. infrastructures, equipments, know-how, expertise, networks) at EU level	Continous implementation and optimization	4	

Comments & feedbacks :

OKEANOS has a strong network of scientific partners in Europe but also on the USA and Canada and Brazil. This process builds on a strategy started in the 90's last century. Strength those partnerships (and other that are weak) and the integration in new networks is desirable but constrained by the limited number of proactive senior researchers. OKEANOS work mainly with establish partnerships, but a critical review of important partners is recognised as fundamental to support future perspectives. OKEANOS is well known by its specialization on oceanic open-ocean and deep-sea ecosystems.

Total for Sub-dimension 1 : Connection to EU clubs	3,333333333

Sub-dimension 2 : Organization characteristics		Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
Factors	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation ?
International openess	My organization actively promotes the recruitment of foreign students, PhD candidates and researchers and has developped a strategy to reinforce international research collaborations leading to co-publications and/or projects	Mostly implemented with room for improvement	3	
Scientific productivity and impact	My organization implements a comprehensive action plan to increase its research intensity, scientific productivity (expressed in number of publications per full time equivalent) and publications impacts (average number of citations)	Mostly implemented with room for improvement	3	
Size	My organizations follows a strategy and/or takes actions to grow and reach a critical mass, notably in terms of researchers	Mostly implemented with room for improvement	3	
Reputation	My organization allocates resources to increase its international reputation	Continous implementation and optimization	4	
Orientation of R&I activities	My organization's R&I activities are closely aligned with Horizon Europe calls and the targeted calls fully support our vision and mission.	Mostly implemented with room for improvement	3	
Administrative and financial procedures	My organization has established well-defined policies and procedures and provides strong administrative support for research activities	nitial steps taken (some actions in place) but limited progres	1	
Institutional strategy	My organization has designed and implements a SMART strategy with clear objectives and dedicated resources to increase its participation in Horizon Europe	nitial steps taken (some actions in place) but limited progres	1	
Horizon Europe capacity-building	My organization regularly organizes capacity building activities, such as training sessions and individual coaching to encourage and enhance the willingness and capacity of staff members to engage in Horizon Europe	Not considered (No action taken or planned)	0	
Horizon Europe support services	My organization hosts or provides access to expert Horizon Europe support services that offer professional assistance in identifying relevant calls, establishing or joining consortia and	nitial steps taken (some actions in place) but limited progres	1	

Dimension 4 : Funding synergies	How to effectively mobilize existing assets (such as infrastructures and equipment) and the resources provided by structural funds (such as ERDF) to intensify international collaborations notably with Horizon Europe “champions” (the organizations and networks that constitute the core of the European Research Area and monopolize coordination positions), through greater synergies ?

Measurement of the State of implementation	Measurement options	Explanation
	Not considered (No action taken or planned)	
	Initial steps taken (some actions in place) but limited progress	
	Mostly implemented with room for improvement	
	Continous implementation and optimization	

Sub-dimension 1 : Capacities			Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
	Factors	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation ? Initiatives undertaken/new proposals to improve the situation
	Supportive administrative and financial team	Staff members responsible for administrative and financial aspects are trained on synergies and have developed internal guidelines to support their implementation.	itial steps taken (some actions in place) but limited progre	1	
	Knowledge of the policy context	Staff members are well-informed about the policy frameworks of both Horizon Europe and structural funds, as well as the synergy opportunities available within these regulations.	itial steps taken (some actions in place) but limited progre	1	
	Horizon Europe capacities	Structural funds are used to conduct capacity building interventions related to Horizon Europe (such as training sessions on proposal writing)	Not considered (No action taken or planned)	0	The DRCT should popen call with that objective

Comments & feedbacks :

The majority of the institution's technical staff is aged and has not been trained to carry out administrative or financial tasks related to supporting scientific development. The technical capacity installed in the University's central services also fails to provide an adequate and timely response to needs. This is a critical issue that will have to be resolved by hiring qualified technical staff and waiting for the existing technical staff to be renewed.

Total for Sub-dimension 1 : Capacities	0,666666667

Sub-dimension 2 : Infrastructures			Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
	Factors	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation ? Initiatives undertaken/new proposals to improve the situation
Infrastructures	Strategic development plan	ESIF-funded infrastructures and equipments are equipped with a multi-year development plan that integrates Horizon Europe objectives and resources.	Not considered (No action taken or planned)	0	
Infrastructures	Pro-Horizon Europe policy	ESIF-funded infrastructures and equipments have a dedicated Horizon Europe engagement roadmap featuring SMART objectives, adequate resources and a monitoring system	Not considered (No action taken or planned)	0	
Infrastructures	Openness to European stakeholders	ESIF-funded infrastructures are utilized to host European colleagues	al steps taken (some actions in place) but limited progr	1	
Infrastructures	Asset	ESIF-funded infrastructures are promoted as assets to partner with strategic European organizations and to integrate promising Horizon Europe consortia and applications	al steps taken (some actions in place) but limited progr	1	
Infrastructures	Participation in infrastructure networks	ESIF-funded infrastructures are part of established European Infrastructure Networks	Mostly implemented with room for improvement	3	

Comments & feedbacks :

No infrastructure supported by the ESIF were specifically designed to support and improve the participation of OKEANOS in the HE. Nevertheless, the existing infrastructures were supported by ESIF to support the functioning of the institution and therefore all its activities including the participation on HE projects.

ANNEX 2: Interview results

See next page

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PROTOCOLO 1 : INVESTIGADOR SÉNIOR

Introdução

O REMORA é um projeto Horizonte Europa, que ambiciona transformar 3 instituições de ciências marinhas da Reunião, Madeira e Açores em campeãs do Horizonte Europa: CITEB, OKEANOS e OOM. Para o efeito, o REMORA reforçará a sua competitividade (nomeadamente recursos humanos, transferência de conhecimentos e capacidades de inovação), o posicionamento estratégico e as ligações com as principais redes da UE através de uma estratégia conjunta de internacionalização. O REMORA utilizará então a transformação bem-sucedida destes 3 modelos para liderar outras organizações e decisores políticos nas regiões ultraperiféricas e em expansão a estabelecer mais sinergias entre os fundos estruturais (como o FEDER/ERDF) e o Horizonte Europa.

Objetivo da entrevista :

O principal objetivo do pacote de trabalho 1 (WP1) da REMORA é ultrapassar dois grandes pontos de bloqueio que contribuem para a dependência da CITEB, OKEANOS e OOM dos fundos estruturais e inibem a sua participação no Horizonte Europa: a ausência de estratégia organizacional e a falta de motivação e capacidades individuais. Para o efeito, o WP1 analisará os obstáculos internos, desenhará roteiros de "Excelência para o EEI" e implementará atividades de capacitação de recursos humanos para aumentar a competitividade das organizações parceiras no Horizonte Europa.

Os roteiros de «excelência para o EEI» são programas de transformação institucional destinados a aumentar as capacidades de investigação e inovação e a sua mobilização efetiva através da adoção de normas avançadas (tais como investigação e inovação responsáveis), bem como a reforçar a vontade e a competitividade para se candidatarem com êxito ao Horizonte Europa, nomeadamente como coordenadores.

Esta entrevista tem como objetivo investigar, a nível institucional e individual, as práticas atuais e os obstáculos enfrentados em termos de

- Estratégia de recursos humanos
- Investigação Responsável e Princípios de Inovação
- Participação no Horizonte Europa
- Sinergias entre os fundos estruturais e o Horizonte Europa.

Espera-se que cada parceiro organize três entrevistas bilaterais (de uma hora cada) com:

- um investigador sénior
- um diretor ou gestor financeiro

- um membro da governação (diretor, presidente, membro do conselho de administração, etc.)

e. Recursos humanos

Em 2023, a União Europeia publicou a Carta Europeia do Investigador, uma lista de 20 princípios que as organizações devem respeitar para atrair e reter investigadores, organizada em 4 dimensões: recrutamento aberto e baseado no mérito, condições de trabalho adaptadas e respeitosas, formação contínua e desenvolvimento profissional, respeito pela ética e princípios profissionais.

Como descreveria as atuais condições de trabalho dos investigadores na sua organização? Existem fatores específicos que apoiam ou dificultam particularmente o seu trabalho? *How would you describe the current working conditions for researchers within your organization? Are there specific factors that particularly support or hinder your work?*	Em relação às 4 dimensões mencionadas, identifico o recrutamento como uma questão fundamental que tem dificultado a atração e retenção de investigadores. Na verdade, não só tem havido falta de oportunidades de recrutamento, como as poucas que têm existido é questionável se se têm sido baseadas no mérito. A ausência de recrutamento eficaz é uma das dificuldades principais desta instituição. Em termos de condições estruturais e de equipamentos acho que o OKEANOS está relativamente bem e os os investigadores sentem-se apoiados neste aspeto para desenvolverem a sua investigação. No entanto, uma das das grandes falhas do OKEANOS é a falta de apoio em termos de gestão administrativa e financeira; não temos pessoas que efetivamente apoiem na identificação de concursos e na elaboração de candidaturas, sejam elas de que tipo forem, na na execução e gestão diária de projetos. Relativamente à formação contínua e desenvolvimento profissional do pessoal, o OKEANOS efetivamente não está organizado para oferecer formação de fomra regular. A formação profissional que é disponibilizada é relativamente pobre, ou seja, embora haja intenção e iniciativas da parte do OKEANOS, na verdade ao longo destes anos todos não tem havido uma aposta institucional na formação nem dos investigadores nem dos técnicos nem dos estudantes. Relativamete ao desenvolvimento de investigação em respeito pela ética e por princípios profissionais, penso que falta informação, tanto do lado da direção como dos investigadores. Penso que também falta formação sibre a equidade de géneros, pois esta dimensão não tem sido verdadeiramente apresentada e discutida

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Na sua perspetiva, quais são os desafios mais prementes para atrair e reter investigadores talentosos? *From your perspective, what are the most pressing challenges in attracting and retaining talented researchers?*	Financiamento; obviamente não tem havido por parte da UAç estratégia clara de financiamento, nem para a investigação nem para o ensinona na área das ciências do mar. Na verdade, não se tem visto investimento nesta área e penso que a Universidade dos Açores ainda não compreendeu verdadeiramente o potencial desta área de investigação em ciências do mar, não só para alicerçar uma vertente de ensino, mas também na ligação à indústria, nomeadamente nas áreas da tecnologia e da biotecnologia. Esta falha e compreensão relativamente ao potencial de investigação que aqui existe traduz-se na falta de oportunidades de recrutamento, sendo um entrave para atrair investigadores estrangeiros que têm mais e melhores oportunidades noutras universidades lá fora, mas também até no nosso país. Também a questão que falei antes da falta de apoio para a gestão de projectos de investigação, a falta de capacidade para um investigador liderar projetos de investigação internacionais de grande dimensão, nomeadamente projectos europeus Horizon Europe e até Interreg, é um aspeto que não promove propriamente a atracção de investigadores externos. Os investigadores do OKEANOS vêem-se muitas vezes condicionados a liderarem projetos de pequena dimensão, pouco competitivos, ou prestações de serviços de investigação contratadas pelo Governo Regional etc., porque não conseguem ter apoio efetivo para liderarem uma proposta a uma call Europeia; atualmente é absolutamente impossível e impensável para um investigador do OKEANOS, por mais talento que tenha, encabeçar um proposta para um projeto grande, porque não tem apoio administrativo nem de gstão financeira.
Quais são os principais objetivos que, na sua opinião, uma estratégia eficaz de recursos humanos deve abordar nos próximos cinco anos para apoiar os investigadores? *What are the primary objectives you believe an effective human resources strategy should address in the next five years to support researchers?*	Lá está uma estratégia de recursos humanos deveria apostar no recrutamento e na contratação de técnicos de gestão de ciência, para dar apoio à gestão administrativa e financeira a projectos. Essa é uma componente absolutamente essencial. Também necessitamos de ter em permanência técnicos de instrumentação capazes de operacionalizar, manter e até fazerem desenvolvimento tecnológico de equipamentos e instrumentação essencial para a investigação quer do mar profundo quer do oceano aberto (de transmissores, sensores, câmeras, instrumentos oceanográficos etc). Aolongo dos anos o OKEANOS têm tentado colmatar essas falhas fazendo contratações temporárias com fundos próprios, mas era essencial garantir que esses técnicos ficassem alocados aqui, no quadro da Universidade dos Açores.

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	Falta-nos também recursos humanos para operacionalizar infraestruturas de investigação nomeadamente navios e pequenas embarcações, pois esse tipo de apoio é fundamental. Esta estratégia deveria também considerar obviamente técnicos de comunicação; temos tentado colmatar essas falhas com contratos e bolsas de curto prazo, mas isso não é suficiente; é preciso aqui uma estratégia a longo prazo em que se garanta uma estratégia de comunicação eficaz essencial para promover a investigação da casa, para criar parcerias, para melhorar e fortalecer a capacidade de networking que vai sendo feita pelos investigadores. Por último, obviamente é fundamental que a uma estratégia de recursos humanos teria de incidir na contratação de investigadores, tanto de investigadores principais, que liderem equipas e que consolidem e garantam a continuidade de determinadas linhas de investigação ao longo do tempo, mas também de investigadores de categorias mais baixas, como investigadores auxiliartes e juniores. Falta capacidade de recrutamento em todos os níveis da carreira de investigação para permitir que determinadas linhas de investigação que ao longo dos anos têm vindo a ser construídas, não só não caiam como se fortaleçam, para que continuemos a ser líderes destas áreas em termos mundiais.

f. Investigação e Inovação Responsável

A Investigação e Inovação Responsável (RRI) é uma norma europeia concebida para aumentar os impactos das atividades de investigação através da integração de 6 dimensões na sua conceção e implementação: envolvimento público, ética, educação científica, igualdade de género, acesso aberto (open access) e governação.

Em que medida integra estas dimensões nas suas atividades diárias de investigação e inovação (I&I)?	Hoje em dia a maioria dos projetos europeus obriga ao cumprimento de uma série de regras que estão incluídas nestas 6 dimensões, mas na verdade, mesmo nos projetos europeus em curso penso que essa obrigatoriedade é mais uma intenção do que uma realidade, uma preocupação efetiva real, concreta, na execução dos projetos. Portanto, eu arrisco-me a dizer em tom de autocrítica, que provavelmente algumas destas dimensões não são propriamente uma preocupação dos investigadores nas suas atividades diárias de investigação. Por outro lado, penso que muitos dos nossos projectos têm um défice de comunicação pública e de envolvimento público efetivo, para além daquilo que somos obrigados a fazer,

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To what extent do you integrate these dimensions in your daily research and innovation (R&I) activities?	de alguma forma, enquanto exigências dos mecanismos de financiamento, isto é comunicar alguma informação para o público através de palestras, de publicações, em site etc. Mas efetivamente ter a preocupação de procurar feedback público e de integrar essa informação na nossa investigação e na interpretação e conclusões da investigação, penso que ainda estamos muito aquém daquilo que seria desejável. Eu não conheço a norma RRI, mas embora hoje as pessoas estejam mais despertas para as questões de igualdade de género, eu inclusive, mas mesmo assim ainda existe alguma falta de consciência sobre este assunto e na prática diária de investigação falta alguma integração da igualdade de género e se se falar com as mulheres desta casa isso será obviamente mencionado. Realtivamente às questões de acesso aberto, estamos efetivamente muito melhor; por exemplo, o meu grupo de investigação tem a preocupação de pôr em *open access* muitos dos nossos dados de telemetria e de investigação, em termos de análises tróficas, por exemplo. Hoje, temos quase tudo em *open access* e, portanto, penso que eventualmente esta dimensão do RRI é aquela que está mais implementada, porque os investigadores, como eu, estão mais conscientes da sua importância. Relativamene às questões de ética na investigação, eu diria que o nosso instituto de investigação não tem tido a preocupação de promover formação dos investigadores e dos estudantes para estas questões e, por isso, seria importante tomarem-se inciativas nesse âmbito no futuro.
Quais são os principais desafios que enfrenta na aplicação de investigação e inovação responsáveis nas suas atividades diárias de I&I? *What are the main challenges you face in applying responsible research and innovation in your daily R&I activities ?*	Há falta de consciência, falta de conhecimento sobre muitas destas questões que eventualmente poderiam ser colmatadas com formação. Hoje existem determinados princípios de investigação e inovação responsáveis que grande parte dos investigadores desconhecem e a formação nesta área poderia ajudar a colmatar e ultrapassar estes desafios. A existência de um gestor de ciência acho que poderia ajudar neste assunto, nomeadamente na organização de formação, na aquisição de conhecimentos aprofundados nestes princípios e poderia ajudar a balizar algumas das atividades dos investigadores no âmbito destas dimensões e ir alertando para alguns atropelos que pudessem ocorrer.

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Que objetivos você e outros investigadores poderiam estabelecer para integrar melhor os princípios de Pesquisa e Inovação Responsável (RRI) nos próximos cinco anos? *What objectives could you and other researchers set to better integrate Responsible Research and Innovation (RRI) principles over the next five years?*	Organizar um plano de formação nesta área penso que era fundamental, como primeiro passo. Depois seria importante organizar conversas informais internas entre investigadores, estudantes e técnicos, para partilhar opiniões, experiências, etc., em relação a algumas destas dimensões. Penso que muitas vezes os investigadores por não terem consciência e não estarem alerta para algumas destas questões, não se apercebem de determinados atropelos que eles próprios ou seu grupo ou a instituição cometem. Até em termos organizacionais talvez se comentam alguns atropelos a estes princípios, com alguma frequência. Penso que se nos ouvirmos uns aos outros e partilharmos experiências uns com os outros talvez começamos a ter também melhor consciência e estar mais alerta para determinadas situações que se têm passado e que se passam no presente e que constituem atropelos a estes princípios.

g. Horizonte Europa

Sente que a sua organização proporciona um ambiente favorável à participação no Horizonte Europa? Quais são os principais obstáculos internos (administrativos, técnicos, financeiros) com que se depara e os seus colegas quando se candidatam a financiamento do Horizonte Europa? *Do you feel that your organization provides a supportive environment for participation in Horizon Europe? What are the main internal obstacles (administrative, technical, financial) you and your colleagues encounter when applying for Horizon Europe funding?*	Com já disse, o principal obstáculo à participação no Horizonte Europa é a ausência de apoio na gestão administrativa e financeira de projetos de grandes dimensões. Não tenho dúvida nenhuma que existe na casa capacidade para liderar em termos científicos e em termos de networking construída um projeto Horizonte Europa. Os investigadores não avançam porque sabem por experiência própria que não há capacidade instalada para apoiar em termos de gestão, a liderança de projeto deste tipo. Para tal, é preciso conhecer profundamente todos os meandros e regras administrativas deste tipo de projetos, ter acesso a gabinetes da União Europeia que apoiam a gestão deste tipo de projetos, etc. Nem o OKEANOS, nem a Universidade dos Açores, nem o IMAR ou a Fundação Gaspar Frutuoso, as nossas entidades de gestão, tem recursos humanos qualificados para fazer a gestão administrativa e financeira de um projeto desta dimensão que queiramos liderar. Faltam técnicos com conhecimentos profundos e especializados das regras financeiras que nregem estes programas e que tenham linhas abertas para contactar gabinetes europeus relevantes que apoiam este tipo de projetos. Estas questões colocam-se mesmo que participemos em projetos não como líderes; só a participação nestes projetos é já de si difícil e a maior parte das vezes os investigadores acabam por perder mais de 50% do seu tempo a resolver questões administrativas e financeiras, como preencher justificações de aquisições de equipamento, fazer editais dos concursos para bolsas e contratos, fazer até a própria administração financeira dos centros de custos dos projetos em que participam, etc. Portanto neste contexto considero que é impossível um investigador conseguir liderar e coordenar do ponto de vista

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	científico um projeto com 20 outras instituições e simultaneamente andar a preencher worksheets e a justificar saídas de mar, etc.
Alguns investigadores podem decidir não se candidatar aos convites à apresentação de propostas do Horizonte Europa por considerarem que não dispõem das capacidades adequadas, do apoio ou por considerarem o programa demasiado competitivo e dispendioso de aceder. Em que medida este fenómeno de "autosseleção" se aplica a si e aos seus colegas? *Some researchers may decide not to apply to Horizon Europe calls because they feel they lack the proper capacities, support, or consider the program as too competitive and costly to access. To what extent does this “self-selection” phenomenon apply to you and your colleagues ?*	A decisão de não participar em preojetos do Horizonte Europa não é de forma nenhuma porque os investigadores consideram que o programa é demasiado competitivo e dispendioso de aceder. Penso que existe capacidade científica e de liderança de networking dos investigadores desta casa para concorrer e liderar projetos Horizonte Europa. Agora o grande entrave para se avançar, como já foi referido, é a falta de apoio administrativo e financeiro. Não tenho dúvida nenhuma que isso já foi e é o maior problema para investigadores desta casa avançarem com propostas concretas e ideias concretas para liderarem projetos Horizon Europe. Isso já foi mencionado várias vezes já foi discutido várias vezes entre os líderes dos grupos de investigação do OKEANOS. Portanto, sem dúvida que os investigadores não se autoexcluem de participarem em projetos deste tipo, mas de liderarem propostas.
Que nível de ambição e objetivos para os projetos do Horizonte Europa parecem alcançáveis para si e para os seus colegas investigadores nos próximos cinco anos? *What level of ambition and objectives for Horizon Europe projects seem achievable for you and your fellow researchers in the coming five years?*	Penso que os investigadores desta casa, como pode ser visto, continuam a concorrer ao Horizonte Europa enquanto parceiros. Penso também que enquanto a questão da falta de apoio administrativo e financeiro não for resolvida no OKEANOS vejo com muita dificuldade que se possa passar para o próximo nível que é efetivamente liderar a propostas. Dito isto, nos últimos anos tem havido da parte do OKEANOS a vontade de colmatar esta falha o que indica que há uma consciência deste problema. Tem-se tentado contratar o tal gestor de ciência para dar este apoio, mas o problema não se resolve contratando gestores ou oferecendo posições de curto prazo ou de muitíssimo curto prazo e com remunerações baixas. A Universidade dos Açores deveria ser ambiciosa e efetivamente assegurar um contrato permanente para um gestor que faça parte do staff desta instituição, alguém com contrato permanente e bem remunerado de forma que se consiga atrair um gestor de ciência profissional e talentoso.

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h. Sinergias entre os fundos estruturais (FEDER, FEAMP, FSE, etc.) e o Horizonte Europa

Já utilizou os fundos estruturais como meio para participar em projetos do Horizonte Europa? Em caso afirmativo, como? *Have you previously used structural funds as a means to participate in Horizon Europe projects? If so, how?*	Não diretamente, mas sim indiretamente na medida em que já solicitei e utilizei apoio do nosso centro de investigação proveiente de fundos estruturais para a participar em reuniões de preparação de projetos Horizonte Europa. Mas nunca como apoio para escrever uma proposta ou para fazer um draft de um projeto etc.
Até que ponto o apoio interno ou externo o ajuda a navegar ou combinar fontes de financiamento para a sua investigação? *How well does internal or external support help you navigate or combine funding sources for your research?*	Não há apoio nesse sentido, mas alguns investigadores individualmente tentam obviamente combinar fontes de financiamento. Ou seja, os investigadores desta casa que lideram grupos de investigação, para a gestão financeira da atividade de investigação do seu grupo, são obrigados a identificar e compatibilizar da melhor forma diferentes fontes de financiamento, para conseguirem financiar os recursos humanos e a sua atividade de investigação no mar, por exemplo, a aquisição de equipamentos, a participação em reuniões, o apoio às publicações etc. Esta conjugação de fundos é uma coisa que fazemos na nossa prática diária enquanto líderes dos grupos de investigação. Agora, reprito mais uma vez, que não existe um apoio institucional que nos ajude a perceber que outros fundos para além daqueles que nós habitualmente utilizamos poderiam estar disponíveis para financiar determinadas componentes da nossa atividade de investigação diária. Isso poderia ser outra das funções, penso eu, de um gestor de ciência, de um gabinete desse tipo.

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Como aproveitar melhor as infraestruturas existentes para promover projetos do Horizonte Europa? *How might existing infrastructure be better leveraged to foster Horizon Europe projects?*	Para mim esta questão não é absolutamente óbvia. Que tipo de infraestruturas é que estamos aqui a falar? Estamos a falar das infraestruturas de apoio da União Europeia? Com as quais não temos contatos por falta de gestores de ciência que façam as pontes necessárias. Estamos a falar de infraestruturas do próprio instituto OKEANOS? Como o tal gabinete de gestão de ciência que não existe. Ou de infraestruturas em termos de equipamentos, de edifícios etc.? que temos com alguma qualkiadde embora possam aproveitar melhor. Talvez alguns investigadores e algumas instituições europeias não estão completamente a par da nossa capacidade de investigação em termos de infraestruturas, embora isto não parece ser o principal problema porque a rede de contactos dos nossos investigadores e a investigação científica e em termos de produção de papers acaba por publicitar as infraestruturas aqui existentes. Efetivamente não sei muito bem qual o pinto relevante desta questão.

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PROTOCOLO 3 : MEMBRO DO CONSELHO DE ADMINISTRAÇÃO

Introdução

O REMORA é um projeto Horizonte Europa, que ambiciona transformar 3 instituições de ciências marinhas da Reunião, Madeira e Açores em campeãs do Horizonte Europa: CITEB, OKEANOS e OOM. Para o efeito, o REMORA reforçará a sua competitividade (nomeadamente recursos humanos, transferência de conhecimentos e capacidades de inovação), o posicionamento estratégico e as ligações com as principais redes da UE através de uma estratégia conjunta de internacionalização. O REMORA utilizará então a transformação bem-sucedida destes 3 modelos para liderar outras organizações e decisores políticos nas regiões ultraperiféricas e em expansão a estabelecer mais sinergias entre os fundos estruturais (como o FEDER/FEDER) e o Horizonte Europa.

Objetivo da entrevista :

O principal objetivo do pacote de trabalho 1 (WP1) da REMORA é ultrapassar dois grandes pontos de bloqueio que contribuem para a dependência da CITEB, OKEANOS e OOM dos fundos estruturais e inibem a sua participação no Horizonte Europa: a ausência de estratégia organizacional e a falta de motivação e capacidades individuais. Para o efeito, o WP1 analisará os obstáculos internos, desenhará roteiros de "Excelência para o EEI" e implementará atividades de capacitação de recursos humanos para aumentar a competitividade das organizações parceiras no Horizonte Europa.

Os roteiros de «excelência para o EEI» são programas de transformação institucional destinados a aumentar as capacidades de investigação e inovação e a sua mobilização efetiva através da adoção de normas avançadas (tais como investigação e inovação responsáveis), bem como a reforçar a vontade e a competitividade para se candidatarem com êxito ao Horizonte Europa, nomeadamente como coordenadores.

Esta entrevista tem como objetivo investigar, a nível institucional e individual, as práticas atuais e os obstáculos enfrentados em termos de

- Estratégia de recursos humanos
- Investigação Responsável e Princípios de Inovação
- Participação no Horizonte Europa
- Sinergias entre os fundos estruturais e o Horizonte Europa.

Espera-se que cada parceiro organize três entrevistas bilaterais (de uma hora cada) com:

- um investigador sénior
- um diretor ou gestor financeiro
- um membro da governação (diretor, presidente, membro do conselho de administração, etc.)

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a. Recursos humanos

Em 2023, a União Europeia publicou a Carta Europeia do Investigador, uma lista de 20 princípios que as organizações devem respeitar para atrair e reter investigadores, organizada em 4 dimensões: recrutamento aberto e baseado no mérito, condições de trabalho adaptadas e respeitosas, formação contínua e desenvolvimento profissional, respeito pela ética e princípios profissionais.

Qual é a centralidade dos recursos humanos na estratégia global da sua organização? ***How central is human resources within your organization's overall strategy?***	**A organização depende fortemente da existência de Recursos Humanos qualificados e devidamente habilitados com vista a concretizar de forma plena os objetivos da organização nas suas várias áreas de atuação. É por certo um dos aspectos mais relevantes para a organização.**
Quais são os desafios mais críticos na atração e retenção de talentos? ***What are the most critical challenges in attracting and retaining talent?***	Os desafios residem essencialmente na precariedade subjacente às políticas públicas relacionadas com o recrutamento de pessoal. O número de vagas permitidas não preenche as lacunas necessárias e as condições impostas nos concursos, por exemplo, no que concerne a investigação não privilegiam de todo a estabilidade. Esses fatores associados à condição geográfica dos Açores condicionam a retenção de talentos.
Que objetivos ambiciosos, mas realistas, podem ajudar a melhorar a sua estratégia de recursos humanos nos próximos cinco anos?	Implementação de políticas públicas mais atrativas que contemplem condições de estabilidade dos Recursos Humanos.

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What ambitious yet realistic goals could help improve your human resources strategy over the next five years?	

b. Investigação e Inovação Responsável

A Investigação e Inovação Responsável (RRI) é uma norma europeia concebida para aumentar os impactos das atividades de investigação através da integração de 6 dimensões na sua conceção e implementação: envolvimento público, ética, educação científica, igualdade de género, acesso aberto e governação.

Como é que a organização incorpora a investigação e inovação responsável (RRI) na sua estratégia global de investigação? ***How does the organization embed responsible research and innovation (RRI) within its overarching research strategy?***	**A UAc procura seguir aquelas que são as diretrizes comunitárias a esse respeito. Percebe-se igualmente da parte dos membros das UIDs da UAc uma grande abertura para a inclusão nos seus projetos de membros da quadruple hélice.**
Que obstáculos ao nível da governação impedem uma implementação mais ampla das práticas de RRI?	Condicionantes burocráticas exigidas por Lei, e por isso intransponíveis, que não se coadunam muitas vezes com as dinâmicas inerentes aos projetos de investigação. Por forma a amenizar essa situação, tem sido gerado algum suporte legal que facilita os processos, como é o caso do DL 60/2018, de 3 de agosto

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What governance-level obstacles hinder the broader implementation of RRI practices?	
Que objetivos poderia a governação definir para melhorar a implementação das normas RRI nos próximos cinco anos? ***What objectives could the governance set to enhance the implementation of RRI standards over the next five years?***	Implementação de um plano de comunicacao interno e externo com vista à promoção da literacia científica.

c. Horizonte Europa

Na sua opinião, quais são os principais benefícios do Horizonte Europa para a sua organização? ***In your view, what are the main benefits of Horizon Europe for your organization?***	**Interrnacionalização da investigação que se desenvolve na RAA.** **Integração em redes.** **Robustez da investigação.** **Reconhecimento.** **Atratividade.**

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A organização tem uma estratégia dedicada ao Horizonte Europa? Em caso negativo, quais são as principais razões? ***Does the organization have a dedicated Horizon Europe strategy? If not, what are the primary reasons?***	A UAc dispõe de um Serviço dedicado exclusivamente ao apoio da investigação em todas as suas vertentes. O Serviço está dotado de Recursos Humanos habilitados a prestarem todos o apoio e esclarecimento necessários à submissão de candidaturas a vários programas, incluindo ao HORIZONTE EUROPA.
Quais são os obstáculos internos mais prementes que dificultam a participação da sua organização no Horizonte Europa[1]? ***What are the most pressing internal obstacles that hinder your organization’s participation in Horizon Europe?***	A submissão de candidaturas é da responsabilidade dos investigadores. A instituição acolhe todas as candidaturas e através do SVCT ou da FGF procura-se dar aos investigadores as respostas mais eficientes para o sucesso das propostas.
Que objetivos poderá a governação definir nos próximos cinco anos para reforçar a participação no Horizonte Europa? ***What objectives could the governance set over the next five years to strengthen Horizon Europe participation?***	Pasará eventualmente por uma boa estratégia de comunicação, que procure evidenciar os casos de sucesso, promovendo-se uma espécie de “contágio“ positivo a outras áreas de investigação e a outros investigadores.

[1] What are the most pressing internal obstacles that hinder your participation in HE?

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d. Sinergias entre os fundos estruturais (FEDER, FEAMP, FSE, etc.) e o Horizonte Europa

Como caracterizaria a relação atual entre os fundos estruturais e o Horizonte Europa na sua organização? ***How would you characterize the current relationship between structural funds and Horizon Europe within your organization?***	**Pouco desenvolvida**
A sua autoridade de financiamento exige políticas favoráveis ao Horizonte Europa ou estabelece objetivos de participação como condição de acesso aos fundos estruturais? ***Does your funding authority require any pro-Horizon Europe policies or set participation objectives as a condition for accessing structural funds?***	Não aplicável

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Que objetivos poderia a governação definir para utilizar os fundos estruturais como um ativo estratégico para aumentar a participação no Horizonte Europa? ***What objectives could governance set to use structural funds as a strategic asset to increase Horizon Europe participation?***	A autonomia científica dos investigadores está consagrada nos estatutos da instituição, e a decisão de participação em deternminado programa de financiamento é autónoma.

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PROTOCOLO 3 : MEMBRO DO CONSELHO DE ADMINISTRAÇÃO

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e. Recursos humanos

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Qual é a centralidade dos recursos humanos na estratégia global da sua organização? ***How central is human resources within your organization’s overall strategy?***	**Os recursos humanos são para a Direcção o mais importante do OKEANOS. Sem eles não é possível manter e desenvolver as nossas atividades de investigação. Os RH constituem um apreocupação permanente uma vez que a grande maioria não tem um contrato de trabalho permanente e por isso existe sempre a eminência de desistirem, de caírem, nem que seja temporariamente no desemprego, de irem embora, e de em consequência disso acabarem determinadas linhas de investigação por eles coordenada.**
Quais são os desafios mais críticos na atração e retenção de talentos? ***What are the most critical challenges in attracting and retaining talent?***	Os Açores como zona remotra que é e a Horta um meio pequeno, já tem dificuldade em recrutar boms investigadores. A acrescentgar a isso temos a permanente precaridade cioentífica que limita muito o desenvolvimento das carreiras e a estabilidade dos investigadores. Por outro lado, o valor dos alugueres de habitação e a pouca oferta que existe também começam a ser um problema.
Que objetivos ambiciosos, mas realistas, podem ajudar a melhorar a sua estratégia de recursos humanos nos próximos cinco anos?	O objectivo é conseguir incluir nos quadros permanentes da Universidade um conjunto de investigadores tendo em conta os colegas que se reformaram e tamb+em aproveitando os programas FCT Tenure de modo a confianciar esses contratos. Em 2025 contamos ganhar mais alguns lugares FCT Tenure e em simultâneo cocorrer ao programa a um Teaming que permita contratar mais recursos humanos. Por outro lado manter ujma política de apoio aos investigadores naquilo que tem a ver com publicações open acess, participação em conferências e reuniões de preparação de e projectos ações de formação, são outros incentivos à sua fixação.

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What ambitious yet realistic goals could help improve your human resources strategy over the next five years?	

f. Investigação e Inovação Responsável

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Como é que a organização incorpora a investigação e inovação responsável (RRI) na sua estratégia global de investigação? ***How does the organization embed responsible research and innovation (RRI) within its overarching research strategy?***	**O OKEANOS mantém práticas de investigação abertas e com grande envolvimento dos stakeholders sejam eles decisores políticos sejam eles utilizadores finais como pescadores e armadores por exemplo. Em termos de investigação responsável, promovemos e incentivamos boas práticas laboratoriais, de gestão de resíduos, de experimentação científica com animais vivos seguindo as melhores práticas tendo em conta o bem-estar animal.** **No OKEANOS não parece existir qualquer tipo de discriminação tendo em conta o género ou a posição hierárquica dos seus membros.** **O OKEANOS tem uma prática de gestão aberta e transparente e cultiva a liberdade de opinião interna.**
Que obstáculos ao nível da governação impedem uma implementação mais ampla das práticas de RRI?	Os maiores obstáculos serão ao nível da gestão de projetos ou à gestão de recursos humanos uma vez que o OKEANOS não tem autonomia em muitas destas áreas. A obrigatoriedade e a precaridade científica são uma condição que impede muitas vezes outros membros de acederem a cargos dirigentes por imposição das normas da Universidade.

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What governance-level obstacles hinder the broader implementation of RRI practices?	
Que objetivos poderia a governação definir para melhorar a implementação das normas RRI nos próximos cinco anos? ***What objectives could the governance set to enhance the implementation of RRI standards over the next five years?***	Continuar a promover a comunicação intgerna será um via importante para a promoção da educação científica ou o acesso aberto. A integração plena de alguns membros que possam vir a adquirir contyratos permanentes poderá contribuir para atenuar algumas dificuldades ao nível da gorvernação, promovendo um maior envolvimento e mais tempo dedicado à instituição e não ao desenvolvimento infdividual das carreiras.

g. Horizonte Europa

Na sua opinião, quais são os principais benefícios do Horizonte Europa para a sua organização? ***In your view, what are the main benefits of Horizon Europe for your organization?***	**Os benefícios são o fortalecimento da rede científica da instituição, ao aumento da notoriedade e reconhecimento do valor científico da instituição e dos seus membros e finalmente o apoio financeiro para o desenvolvimento das linhas de investigação que temos e o impacto que tem na resolução de determinadops dasafios societais.**

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A organização tem uma estratégia dedicada ao Horizonte Europa? Em caso negativo, quais são as principais razões? ***Does the organization have a dedicated Horizon Europe strategy? If not, what are the primary reasons?***	Não temos. Muitos dos projectos existentes do Horiezonte Europa devem-se aos esforços individuais dos seus membros. A instituição necessita de um apoio específico de especialiastas ou um gabinete de gestão de projectos transversal de modo a libertar os investigadores para aquilo que melhor sabem fazer e toda a componente da procura de financiamentos e gestão de projectos seja gerida por esse eventual gabinete. A única estratégia que existe é a promoção de contactos, e apoios para o alargamento das nossas redes científicas.
Quais são os obstáculos internos mais prementes que dificultam a participação da sua organização no Horizonte Europa[2]? ***What are the most pressing internal obstacles that hinder your organization’s participation in Horizon Europe?***	O apoio aos investigadores na gestão dos projectos é o maior obstáculo. A ausência de autonomia na gestão financeira de projectos e os obstáculos borucráticos dificultam muito a participação da instituição.
Que objetivos poderá a governação definir nos próximos cinco anos para reforçar a participação no Horizonte Europa? ***What objectives could the governance set over the next five years to strengthen Horizon Europe participation?***	A constituição de um gabinete de gestão de projectos e a contratação de um bom especialista em projectos europeus poderá uma solução para muitos dos constrangimentos que hoje enfrentamos. Também uma maior liberdade dos investigadores atualmente escolherem a instituição de gestão financeira dos sesu projectos deverá ser prosseguida para que isso não seja motivo de problemas e de desmoticação na elaboração e participação em projetos.

[2] What are the most pressing internal obstacles that hinder your participation in HE?

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h. Sinergias entre os fundos estruturais (FEDER, FEAMP, FSE, etc.) e o Horizonte Europa

Como caracterizaria a relação atual entre os fundos estruturais e o Horizonte Europa na sua organização? ***How would you characterize the current relationship between structural funds and Horizon Europe within your organization?***	**Atualmente está mais confuso. As regras de submissão de projectos no âmbito do FEDER complexizaram-se, tornaram-se mais borucráticvas e desmotivam a submissão de propostas. De momento não existem muitos projectos financiados pelos fundos estruturais devido ao atraso que existe na implementação deste novo quadro de apoio. Por outro lado, ambos são importantes na medida que os fundos estruturais estrãop mais virados para a resolução e estudo ede problemas mais locias enquanto o Horizointe Europa se dirige a uma investigação que procura resposnder a problemas mais globais.**
A sua autoridade de financiamento exige políticas favoráveis ao Horizonte Europa ou estabelece objetivos de participação como condição de acesso aos fundos estruturais? ***Does your funding authority require any pro-Horizon Europe policies or set participation objectives as a condition for accessing structural funds?***	Não é formalmente exsigido embora no processo de avaliação existam alguns critérios que majoram essa experiência de participação da equipa ou do investigador responsável no Horizonte Europa.

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Que objetivos poderia a governação definir para utilizar os fundos estruturais como um ativo estratégico para aumentar a participação no Horizonte Europa? ***What objectives could governance set to use structural funds as a strategic asset to increase Horizon Europe participation?***	O OKEANOS não impõe regras ou objectivos para a participação dos sesu investigadores nos programas financiados pelo Horizonte Europa, nem tem utilizado esse meio para aumentar a participação no Horizonte Europa. Cabe sempre aos PI’s a decisão de submissão ou não de projetos e de encontrarem as melhores formas de financiamento em cada momento.

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ANNEX 3: List of attendees to workshops n°1 and n°2

Paula Lourinho
Inês martins
Andrea Herguedas
Cláudia Oliveira
Pedro Afonso
Gui Menezes
Diya Das
Féredéric Vandeperre
Filipe Porteiro
Catharina Pieper
Teresa Cerqueira
Sandra Silva
Eva Giacomello
Maria Colaço
Diana Catarino
Morgan Ribeiro
Clara Loureiro
Sérgi Pérez-Jorge
Jorge Fontes
Daphne Cuvelier
Raúl Bettencourt
Inês Gomes
Guilherme Sampaio
Christopher Pham
Marina Carreiro e Silva
Marisa Gomes
Amparo
Telmo Morato
David Milla
João Moreira

ANNEX 4: Workshops Satisfaction survey results

Carimbo de data/hor	1. OVERALL SATISFACTION How satisfied were you with the workshop overall?	2. CONTENT RELEVANCE Was the workshop content relevant to your needs or goals?	3. PRESENTER EFFECTIVENESS: How would you rate the presenter(s) regarding knowledge, communication, and engagement?	4. WORKSHOP STRUCTURE Was the workshop well-organized and appropriately paced?	5. PRACTICAL APPLICATION: Do you feel you can apply what you learned in your work?	6. INTERACTION AND ENGAGEMENT: Were there enough opportunities for participation and interaction?	7. Do you feel the workshop help reach the objective of defining a common EU ambition and sharing/adjusting the diagnosis?	8. Has the workshop fostered your engagement in REMORA?	9. Has the workshop fostered your willingness to participate (more) in Horizon Europe projects?	10. Suggestions for Improvement: What could be improved for future workshops?
2025/05/20 12:25:04 da	4	3	5	5	3	5	3	4	3	-
2025/05/20 12:25:58 da	4	4	3	3	4	5	4	5	4	More active and firm facilitation. A
2025/05/20 12:37:19 da	4	4	4	4	4	4	4	4	4	To discuss in further detail the
2025/05/20 12:38:11 da	4	4	4	4	4	4	4	4	4	I believe the workshops could start by
2025/05/20 12:56:05 da	4	4	5	5	4	5	5	4	4	NA
2025/05/20 1:05:59 da ta	4	4	4	4	4	4	4	4	4	
2025/05/20 1:51:04 da ta	3	3	4	4	3	4	4	3	3	Not much, I think
2025/05/20 2:28:23 da ta	4	4	5	5	2	4	3	2	2	more diversified groups (but it
2025/05/20 2:42:16 da ta	4	5	4	4	3	4	3	4	4	The annual repeating of these kind of
2025/05/20 3:02:38 da ta	5	4	4	5	5	5	5	4	2	Nothing in particular
2025/05/20 4:25:25 da ta	5	4	4	5	4	5	4	4	4	no sugestion
2025/05/20 4:54:39 da ta	4	4	3	4	3	4	3	3	4	Soem exchanges were confusing, and
2025/05/21 9:06:59 da m	5	5	5	5	4	4	4	5	5	Nothing to add

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REMORA
Small fishes in a big pond

« Excellence for ERA » roadmap

Oceanic Observatory of Madeira - OOM

Observatório Oceânico da Madeira

May 2025

Madeira Regional Directorate of Fisheries and Sea

Information

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Document revision history

Version	Date	Description
0.1	14-02-2025	Initial draft of the document
0.2	24-04-2025	Updated draft of the document
0.3	14-05-2025	Reviewed by WP Leader (project coordinator)
0.4	23-05-2025	Reviewed by project partners
0.5	23-05-2025	Integration of final remarks
1.0	27-05-2025	Validated by SC members

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EXECUTIVE SUMMARY

This roadmap presents a comprehensive strategic plan developed by the Oceanic Observatory of Madeira (OOM), under ARDITI, to elevate its institutional excellence and increase its competitiveness within the European Research Area (ERA), particularly through Horizon Europe (HEU) engagement. The roadmap was produced within the framework of the REMORA project (Horizon Europe n°101159246) and represents the culmination of extensive self-assessment, stakeholder engagement, and forward planning.

Organizational Context and Strategic Vision

OOM, founded in 2014, is a marine science and ocean observation platform dedicated to providing high-quality data and promoting sustainable development within the Madeira EEZ. The organization has evolved into a reference institution with advanced research infrastructure, multidisciplinary teams, and a broad engagement in monitoring, education, and innovation.

The roadmap outlines a vision for OOM to become a national and international competitive stakeholder in marine research over the next five years, specifically aiming to:

- **Enhance its role in European research** through increased Horizon Europe participation.
- **Improve human resource strategies**, career stability, and researcher development.
- **Implement responsible research and innovation (RRI) standards** across all operations.
- **Foster synergies between structural and European funding mechanisms.**

Key Diagnostic Findings

1. Human Resources

- Strengths: Transparent recruitment, initial steps in training and development, gender balance awareness.
- Challenges: Career instability, suboptimal salaries, and limited structured career progression.
- Goal: Improve researcher retention and attractiveness through better contracts, training, and working conditions.

2. Responsible Research and Innovation (RRI)

- Strengths: Commitment to open science, some public engagement and educational outreach.
- Challenges: Lack of formal ethical governance, fragmented stakeholder engagement strategies, and insufficient integration of RRI principles in projects.
- Goal: Achieve full integration of RRI principles, promote inclusivity, and strengthen public engagement.

3. Horizon Europe Participation

- Strengths: Recognized importance of EU collaboration, existing but informal HEU networks.
- Challenges: Lack of a dedicated HEU strategy, limited proposal coordination experience, and insufficient incentives for participation.
- Goal: Establish structured support for HEU proposals, engage with HEU champions, and build internal capacity.

4. Funding Synergies

- Strengths: Effective use of structural funds for infrastructure, internal expertise on funding mechanisms.
- Challenges: Lack of alignment between structural funds and HEU goals, limited networking strategy.
- Goal: Mobilize €2M+ in combined funding, enhance infrastructure, and promote strategic collaborations.

Action Plan Overview

The roadmap presents a detailed action plan with **SMART objectives**, key performance indicators, and dedicated resource plans across four dimensions:

1. **Human Resources** – Stabilize employment, enhance training, and improve researcher conditions.
2. **RRI Implementation** – Formalize ethical and inclusive governance and increase stakeholder integration.
3. **Horizon Europe Participation** – Expand partnerships, improve proposal quality, and develop internal expertise.
4. **Funding Synergies** – Align institutional strategies with funding opportunities and promote infrastructure visibility.

Monitoring and Evaluation

A robust monitoring framework ensures continuous assessment and accountability through measurable indicators such as:

- Researcher retention rate,
- Number of HEU applications and secured projects,
- Stakeholder engagement frequency,
- RRI adoption across research projects.

Conclusion

This roadmap is both a strategic vision and an operational guide. By addressing current weaknesses and capitalizing on its strengths, OOM aims to position itself as a leading institution in marine sciences and a competitive player within the Horizon Europe landscape. Its successful implementation depends on coordinated institutional effort, strategic investment, and continuous engagement with national and European stakeholders.

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TABLE

I. ORGANIZATIONAL DIAGNOSIS AND KEY CHALLENGES

A. PRESENTATION OF OCEANIC OBSERVATORY OF MADEIRA (OOM)

1. Vision, Mission, and Strategic Objectives

The Oceanic Observatory of Madeira (OOM) is an interface platform that aims to **provide high-resolution, high-quality scientific data from Madeira EEZ (exclusive economic zone) for the public and private sectors, the scientific community and society**. It is hosted inside ARDITI (Regional Agency for the Development of Research, Technology and Innovation) and is responsible for the IDL Madeira (Instituto Dom Luiz) branch.

OOM began in 2014 with a project of the same name through ERDF funds within ARDITI, with the aim of bringing together organizations, people, and data on a common platform dedicated to the Madeira Island Sea. Until the end of 2021, the consortium published more than 200 scientific papers on ocean studies in several areas of knowledge. Subsequently, OOM transitioned into an interface platform supported by local government funds and European projects, hired specialized technicians, and acquired state-of-the-art equipment to promote the sustainable development of the Blue Economy.

Taking advantage of the knowledge and expertise acquired during the first years, currently, **OOM has an operational, high-resolution (300 m) weather and ocean forecast system using a coupled model; it is performing regular monitoring plans (carbon dioxide, ocean currents, marine biodiversity, mesoscale eddies, seismic and water quality); and operates several types of equipment to assist local public and private entities to answer European directives regarding marine affairs.** OOM also provides mobile apps and databases to distribute the information being produced and collected in an easy and accessible way.

In pair with the described activities, OOM is also focused on **bridging the gap between science and general knowledge,** hosting internships, master's and PhD students from local and abroad, providing high-quality training to its collaborators, and participating in science fairs to promote its work. Finally, it is also gathering international interest from companies and research centers due to its new **equipment and developed activities, mainly regarding ocean physics**.

2. Research Fields, Facilities, and Resources

The Oceanic Observatory of Madeira - OOM is a R&I center led by ARDITI. Launched in January 2014, OOM gathered 15 regional partners operating in the common field of Ocean Sciences and Blue Economy. OOM is dedicated to research and permanent monitoring of the ocean, which aims to provide the region with marine resource evaluation and management and adequate means for sustainable development. To do so, OOM develops consolidated historical data, observations, and forecasts in a common platform and will soon provide a global ocean observing system able to deliver ocean forecasts and early warnings, climate projections, and assessments, contributing to monitoring and protecting the ocean health, creating a Madeira Digital Ocean space.

Primary Research Fields and Specializations

OOM's research is structured around four thematic pillars:

- **The implementation of maritime monitoring plans, from the surface to the deep sea.**
- **Creation of time series of data for environmental analysis.**

- **In-depth analysis and interpretation of scientific data to understand ocean dynamics.**
- **Active participation in R&D+I activities.**

Key Facilities and Infrastructure

OOM benefits from several key resources that support its research activities:

The OOM has been acquiring and using a variety of state-of-the-art equipment to map the ocean. Hydrographic data are collected by **DriX, an autonomous surface vehicle with a multibeam probe capable of measuring the seabed up to 2000m** and by the "**Observatory-I", a 10m rigid equipped with two side-mounted poles** that attach **acoustic sensors for measuring currents**, sediments and biomass of Platonic organisms, as well as schools of pelagic fish.

The study of Ocean physics can also be carried out by anchored systems, such as the "**WireWalker", an autonomous (drifting) oceanographic platform** that uses the wave to profile the water column vertically. It contains **conductivity**, temperature and carbon dioxide sensors. In the lower atmosphere, it measures parameters such as air temperature, wind speed and direction, and carbon dioxide. **Drifting buoys and radiosonde** are used to study surface currents and atmosphere-ocean interaction.

In biogeochemical mapping, the OOM has **a system to collect water samples (rosette),** which are then processed in the **autoanalyzer** to determine concentrations of nitrate, nitrite, phosphate and silicate. A **continuous surface water analysis system (ferrybox),** which allows the measurement of temperature, conductivity, dissolved oxygen, chlorophyll-a and the partial pressure of carbon dioxide, along a route taken by the vessel where it is installed. In addition to this equipment, an OptoDAS is also in use**, a digital detector** that when connected to a submarine fiber optic cable (ELLA-Link managed by EMACOM) allows the detection of earthquakes, waves and marine mammals.

A new energy-efficient **multipurpose research vessel** is under construction for shallow water and high seas research. This new vessel will become operational in 2027.

Infrastructure in detail:

Operational Center
This space is located in Funchal Marina and serves not only as a warehouse but also as a laboratory and workshop for preparing and maintaining the various pieces of equipment. The space has several areas: a control room, for monitoring the Drix and other equipment with real-time data transmission; a laboratory with two workbenches (a dry area and a wet area, two bench magnifiers, a precision scale, an oven/muffle and a vertical freezer (-20ºC) for temporary storage of samples); a small workshop to facilitate the repair and maintenance of the various pieces of equipment, and various storage spaces.

RHIB
The Observatorio I is a 10-meter semi-rigid boat with two high-powered outboard engines for towing equipment. It is equipped with two side-poles for installing equipment below the waterline, a GPS position correction system, 12V/24V/220V sockets, a weather station and an information recording system integrated into an ethernet network for sharing information between equipment.

Drix
The Observatório II is a Unmanned Surface Vehicle, capable of collecting hydrographic and oceanographic data. It is equipped with a Konsgberg EM712 multi-beam, an ADCP, winch with CTD and a location and communication system (GAPS). It also has a high-precision inertial navigation system (Phins), a weather station and 4G and satellite communications to ensure a constant connection with the command center.

Ferrybox
Portable oceanographic equipment consisting of a system that collects water samples at the surface (about 1 meter deep) and a series of sensors to monitor several key water-quality parameters: temperature, conductivity/salinity, dissolved oxygen, nitrate, chlorophyll-a and partial pressure of carbon dioxide. In addition, it also includes meteorological sensors to measure atmospheric pressure and air temperature.

Auto-sampler
A compact and easy to transport laboratory equipment (QuAAtro39) that can automatically and simultaneously determine the concentrations of four types of nutrients: nitrate, nitrite, phosphate and silicate. It has several benefits such as low reagent consumption, ultra-low detection limits, and can be used in seawater, freshwater and wastewater, with the capacity to process around 60 samples per hour.

CTD (Conductivity Temperature Depth)
The CTD is an oceanographic device for monitoring water quality through vertical profiles along the water column. This equipment contains several sensors for monitoring the water column up to 500m depth, namely temperature, conductivity/salinity, pressure, dissolved oxygen, pH, turbidity, chlorophyll-a and PAR (photosynthetic active radiation). This equipment is operated by a winch with 800m of electro-conductive cable allowing access to the measured data in real time.

Acoustic profilers (Signature 250, 500, 500VM e 1000)
Acoustic current profilers (ADCP - Acoustic Doppler Current Profiler) with different operating frequencies that allow data to be collected at various depths, with different vertical resolutions. This equipment, installed on structures on the bottom or on moorings in the water column, allows long-term studies of ocean currents.

Side-scan sonar
The 3DSS is a side-scan sonar capable of perform bathymetric surveys at depths of up to 80 meters, presenting the data collected in real time. Also noteworthy are the customization features on the probe's parameters to suit all situations (range, transmission, gain, etc.). Its portability (50 cm and approximately 20 kgs) means that it can be easily and quickly installed in the side-poles of a vessel and bathymetric surveys can be carried out in real time.

Wirewalker
A platform that makes vertical profiles in the water column. Using a buoy on the surface, the system transforms wave energy into upward and downward movements along a cable, while the different sensors take measurements. The sensors available for installation on this platform include an ADCP, a CTD (conductivity, temperature and depth meter), a pCO2 meter and a meteorological station. Data is transmitted to an online server using satellite services or 4G connection.

YODA profiler
The YODA (Yoing Ocean Data Acquisition Profiler) is an oceanographic device that monitors water quality through continuous vertical profiles throughout the water column (up to a depth of around 40 meters). This equipment contains various sensors for coastal monitoring, namely temperature, conductivity/salinity, pressure, dissolved oxygen, turbidity and chlorophyll-a. It can be operated from small boats and during operation it moves up and down, which allows data to be collected with high spatial resolution.

Rosette
Equipment for taking water samples at different depths, with capacity for 10 bottles (2L or 5L), and can be pre-programmed to take samples at predetermined depths. It includes a CTD with temperature, conductivity/salinity, pressure, dissolved oxygen, turbidity and chlorophyll-a sensors. This equipment complements the data acquired by the YODA and ferrybox, as the samples collected can be analyzed

by the laboratory auto-analyser to characterize the environmental quality of the water.

EK80 echo sounder
The EK80 is a high-precision echo sounder designed for studying marine ecosystems. This modular system makes it possible to have different transducers operating at different frequencies (OOM has 120 and 200 kHz transducers) at the same station. This equipment makes it possible to carry out studies on fish stocks (abundance), fish and shoal detection, habitat mapping and oceanographic studies.

Sub-bottom profiler
Equipment to survey beneath the seafloor (up to 80 meters in clay and 6 in sand), using sound pulses. This system generates high-resolution images (between 6 and 10 cm of vertical resolution) of sub-bottom stratigraphy in oceans, at various bottom types.

Vibrocorer
The vibrocorer collects sediment samples using a vibrating top, which causes the equipment to penetrate the seabed. This equipment has the capacity to collect samples with a length of 2 meters.

Hydrophones
The SYLENCE-LP hydrophones (long duration up to 180 days and short duration up to 35 days) are used to carry out studies on cetacean ecology, environmental noise monitoring and noise monitoring from external sources (e.g. ships). These devices are passive recorders that can be placed on a mooring, a buoy or attached to the seabed in their own structures, and the data is collected after the study period for further processing.

Acoustic interrogator optoDAS
The optoDAS (Distributed Acoustic Sensing) system from Alcatel Submarine Networks makes it possible to extract various types of data over distances of up to 125 km by monitoring a fibre-optic submarine cable. At the moment, optoDAS is at EMACOM, connected to a submarine cable that is not in use, to extract oceanographic (e.g. waves) and seismic data, with a resolution of meters, by measuring phase differences in the signal.

Thermistors
Thermistors are small sensors (around 20cm) that measure pressure and temperature at a maximum frequency of 1Hz (1 measurement per second) and have an average autonomy of 7 months underwater (depending on the sampling frequency). These devices can be deployed on moorings up to 1000 meters deep and the data collected can be used in various studies of the water column.

Radiosondes
Radiosondes are devices that make it possible to take atmospheric measurements using meteorological balloons that can reach high altitudes, transmitting the data to receivers on the ground. Among the parameters these devices measure are wind (direction and intensity), temperature, humidity and pressure. This data can then be assimilated into models or to carry out atmospheric studies.

Acoustic systems for moorings
To ensure the safety and location of oceanographic equipment placed underwater, OOM has several pieces of equipment at its disposal: acoustic releasers are placed on moorings and release the mooring when receiving an acoustic signal; beacons make it possible to see if the equipment is where it was left by triangulating an acoustic signal; acoustic communication modems make it possible to communicate with the equipment and obtain small pieces of data to ensure that the equipment is working properly; the combination of these pieces of equipment makes it possible to guarantee the safety and recovery of the equipment.

Teams

OOM's Interdisciplinary Team

Name	Role	Domain
Rui Caldeira	Director / Researcher	Physical Oceanography
Afonso Loureiro	Collaborator	Geophysics
Alexandra Rosa	Technician	Chemical Oceanography
Aracelis Rajnauth	Technician / PhD Student	Chemical Oceanography
Carlos Lucas	Researcher	Informatics Engineering
Caroline Ferreira	Researcher	Physical Oceanography
Cátia Azevedo	Technician / PhD Student	Physical Oceanography
Cláudio Cardoso	Technician / PhD Student	Physical Oceanography
Gonçalo Barros	Technician	Marine Machinery Engineering
Jesus Reis	Technician / PhD Student	Physical Oceanography
João Martins	Technician	Informatics Engineering
Pedro Gois	Technician	Electronics Engineering
Ricardo José	Technician	Marine Biology
Rita Ferreira	Technician	Marine Biology
Rui Vieira	Technician	Electrical Engineering
José Alves	Collaborator	Physical Oceanography
Martinho Almeida	Collaborator	Physics of the Atmosphere
Liliana Freitas	Technician / MsC Student	Chemical Oceanography

3. Participation in Horizon projects

ACRONYM	TITLE	FP	Pillar/Cluster	Organization Budget	Role
Remora https://remora.arditi.pt	Small fishes in a big pond	HEU	Widera	€355.262,50	Coordinator
SUBMERSE https://submerse.eu/	SUBMarine cablEs for ReSearch and Exploration	HEU	Research infrastructures	0€	Contributor / Pilot region
MCIS https://oom.arditi.pt/	Madeira Coastal Insight Service	Copernicus Marine Service (CMS)	CMS MERCATOR OCEAN	€160.000	Demonstration Region

4. Key international collaborations

Copernicus Marine Service (CMS) - with the project «Madeira Coastal Insight Service»

Hydrographic Institute of the Portuguese Navy – for oceanographic data processing, data, and expertise exchange.

Aquaculture companies – to install and recover moored equipment for ocean monitoring.

B. SELF-ASSESSMENT GLOBAL RESULTS

1. Self-assessment on 4 dimensions

A self-assessment tool was designed to help evaluate how the organization is positioned in relation to the main factors that influence organization's competitiveness in the European Research AREA and successful participation in Horizon Europe.

Using scientific publications, institutional reports and existing instruments, this tool focuses on four key dimensions:

- Human resources : *How to attract and retain international talents to reach a critical mass of researchers and improve scientific productivity and reputation through an adequate human resources strategy and better working conditions?*
- Responsible Research and Innovation: *How to maximize the impacts of your research activities through the incorporation of advanced R&I management standards (such as open science, ethics, public engagement, etc.) ?*
- Pro-Horizon Europe strategy : *How to intensify transnational collaborations and participation in Horizon Europe through the creation of favorable environment and institutional policy that encourages and supports researchers to submit highly competitive applications ?*
- Funding synergies : *How to effectively mobilize existing assets (such as infrastructures and equipment) and the resources provided by structural funds (such as ERDF) to intensify international collaborations notably with Horizon Europe "champions" (the organizations and networks that constitute the core of the European Research Area and monopolize coordination positions), through greater synergies ?*

2. Results

The answers to the questionnaire were as follows: for each dimension and sub-dimension, the related factors/principles have been evaluated by persons from four profiles (the director of OOM/ARDITI – profile p1; one member of the board – profile p2; two senior researchers – profile p3 and a financial manager – profile p4) according to the state of implementation of each factor or principle using the following scale with four levels/scores (0,1,3,4):

- 0, meaning Not considered (No action taken or planned).
- 1, meaning Initial steps taken (some actions in place) but limited progress.
- 3, meaning Mostly implemented with room for improvement.
- 4, meaning Continuous implementation and optimization.

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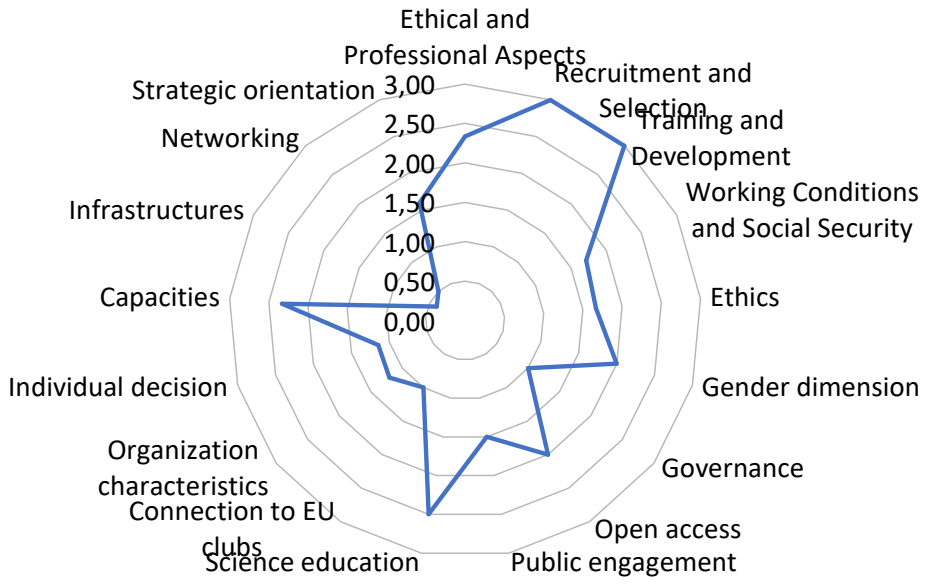
Dimensions	Subdimensions	Score	
1. Human resources	Ethical and Professional Aspects	2,33	**2,51**
	Recruitment and Selection	3,00	
	Training and Development	3,00	
	Working Conditions and Social Security	1,71	
2. Responsible R&I	Ethics	1,67	**1,63**
	Gender dimension	2,00	
	Governance	1,00	
	Open access	2,00	
	Public engagement	1,50	
	Science education	2,50	
3. Horizon Europe	Connection to EU clubs	1,00	**1,11**
	Organization characteristics	1,20	
	Individual decision	1,14	
4. Synergies	Capacities	2,33	**1,21**
	Infrastructures	0,40	
	Networking	0,50	
	Strategic orientation	1,60	



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Overall conclusion, considering the scores:

- **Key weaknesses (No action taken/planned OR Initial steps taken (some actions in place) but limited progress):**
    - Governance, public engagement, and infrastructure readiness
    - Networking and collaboration with EU champions
    - Open access and strategic alignment for Horizon Europe
- **“Strengths” (Mostly implemented with room for improvement):**
    - Recruitment and training processes
    - Ethical considerations and gender equality plans
    - Administrative capacities for funding synergies

In the following sections C, D, E and F each sub-dimension is evaluated and commented taking into account the scores obtained with the questionnaire.

C. HUMAN RESOURCES ANALYSIS

1. Self-assessment results

Dimensions	Subdimensions	Score	
1. Human resources	Ethical and Professional Aspects	2,33	2,51
	Recruitment and Selection	3,00	
	Training and Development	3,00	
	Working Conditions and Social Security	1,71	

Short analysis and comments for each subdimension

Ethical and Professional Aspects: The score of 2.33 suggests that OOM has made progress in implementing ethical and professional aspects, but the implementation is uneven, and there is room for improvement across its principles (Research freedom; Professional attitude; Dissemination, exploitation of results; Public engagement; Non discrimination; Evaluation/appraisal systems).

Recruitment and Selection: The score of 3.00 reflects that this sub-dimension is mostly implemented at OOM, with room for improvement. Thus, Recruitment and Selection is a strong sub-dimension within the organization's human resources strategy. Its established processes form a solid foundation for attracting and retaining talent, but ongoing optimization and a focus on inclusivity will further enhance its effectiveness.

Training and Development: The score of 3.00 reflects that this sub-dimension is mostly implemented at OOM, with room for improvement. Thus, Training and Development is a strong sub-dimension that supports the organization's human resources strategy. Its training programs are mostly effective, contributing positively to talent retention and productivity. However, opportunities exist to optimize these initiatives, including better customization and enhanced evaluation, to maximize their impact.

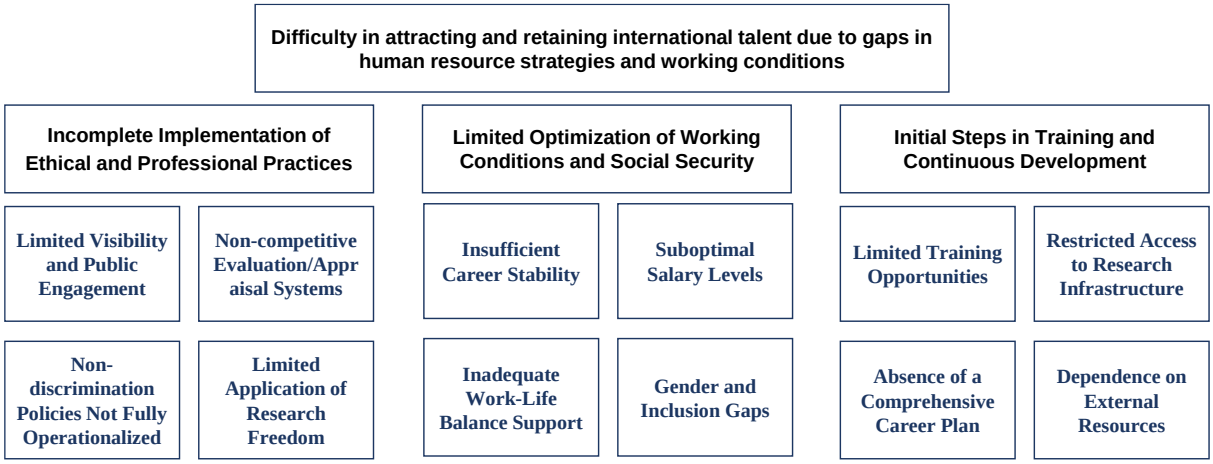
Working Conditions & Social Security: The score of 1.71 reflects that the sub-dimension is in the initial stages of implementation, with significant room for improvement. Working Conditions & Social Security is a weaker sub-dimension within the human resources strategy, indicating critical gaps that must be addressed to improve OOM's attractiveness and competitiveness. Prioritizing stability, funding, career development, and inclusivity will significantly enhance its performance in this area. Those conditions impact talent retention and the overall research environment. Pressing factors include: Funding and salaries, Stability and permanence of employment, Career development.

2. Factors identified during interviews

Underlying question for Human Resources for OOM: How to attract and retain international talents to reach a critical mass of researchers and improve scientific productivity and reputation through an adequate human resources strategy and better working conditions?

Initial Problem tree for Human Resources

(version produced from the questionnaires and interviews)



Factors are identified under each sub-cause:

Considering that root causes, sub-causes and associated factors didn't change significantly from the problem tree obtained from the questionnaires and interviews to the updated/revised problem tree during the internal workshop, the resulting factors are presented together with the final problem tree. The differences are:

- Rephrased root cause 3 title from "Initial Steps in Training and Continuous Development" to "Training and Continuous Development not optimized" since initial steps have already been taken.
- Removing from root cause 2 the "Gender and Inclusion Gaps" since participants considered that it is already properly addressed by ARDITI/OOM.
- Rephrasing sub-cause "Inadequate Work-Life Balance Support" to "Relocation challenges for families" since work-life balance support is considered reasonable in general at ARDITI/OOM (e.g. 10 days telework allowed per month and relatively flexible working hours).
- Removing sub-causes "Absence of a Comprehensive Career Plan" and "Restricted Access to Research Infrastructure" considering that: i) in January 2025 a Career Plan Regulation was approved at ARDITI/OOM; ii) Research Infrastructure is expanding, with the construction of the new research vessel and new facilities for ARDITI/OOM.

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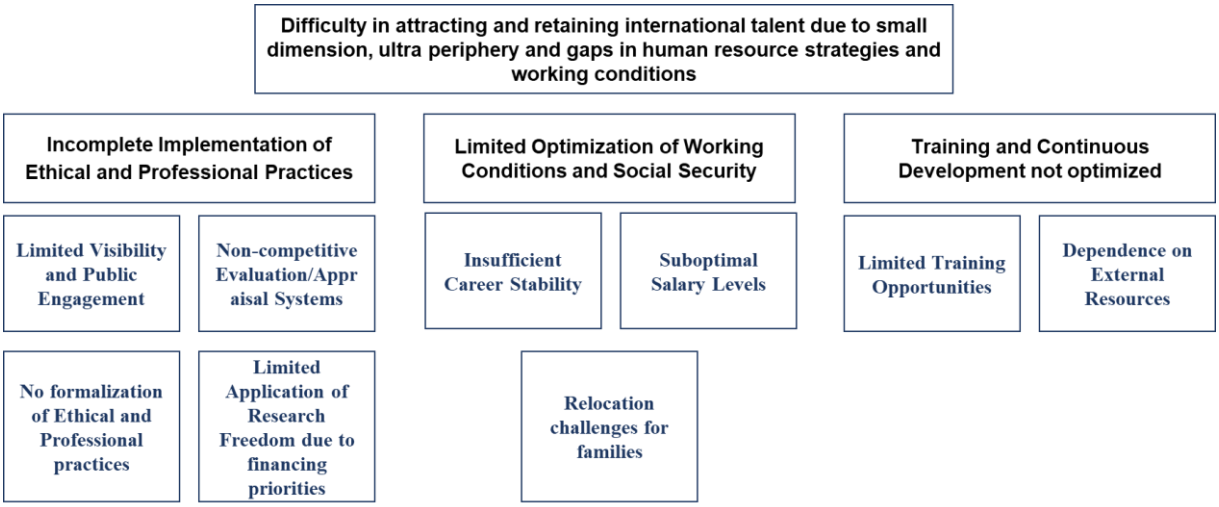
3. Factors identified during internal workshop

Final Problem tree for Human Resources

(version produced after the internal workshop)



Root Cause 1: Incomplete Implementation of Ethical and Professional Practices

1. **Limited Visibility and Public Engagement**
    - Insufficient dissemination of research outputs reduces visibility.
    - Minimal engagement with local and international communities weakens the institution's reputation.
2. **Non-competitive Evaluation/Appraisal Systems**
    - Career progression is hindered by inconsistent or unclear evaluation processes.
    - Pressure to secure funding overemphasizes research outputs (e.g., publications), detracting from professional growth and work satisfaction.
3. **Non-discrimination Policies Not Fully Operationalized**
    - Insufficient mechanisms to ensure inclusivity in hiring.
    - Challenges in accommodating diverse needs, such as family considerations for researchers.
4. **Limited Application of Research Freedom**
    - Overreliance on project-specific funding limits researchers' flexibility to pursue independent or innovative projects.
    - Researchers are constrained by funding priorities instead of long-term institutional goals.

Root Cause 2: Limited Optimization of Working Conditions and Social Security

1. **Insufficient Career Stability**
    - Short-term contracts tied to external funding increase uncertainty and researcher turnover.
    - A lack of career stability discourages long-term commitments.
2. **Suboptimal Salary Levels**
    - Salaries are uncompetitive compared to European standards, largely due to budget constraints and regional wage restrictions.
    - This bottleneck significantly impacts recruitment and retention of top talent.
3. **Inadequate Work-Life Balance Support**
    - Relocation challenges (e.g., spouse employment, schooling) in Madeira make it difficult to attract international talent.

Root Cause 3: Initial Steps in Training and Continuous Development

1. **Limited Training Opportunities**
    - Training programs are inconsistent, as they depend heavily on external project funding.
    - There is a lack of specialized training for advanced research methodologies, impacting innovation potential.
2. **Dependence on External Resources**
    - Internal funding for training and development is limited, leading to reliance on external funding sources.
    - Structural and regional funding delays the timely implementation of critical training programs.

D. RESPONSIBLE RESEARCH AND INNOVATION ANALYSIS

1. Results

Dimensions	Subdimensions	Score	
2. Responsible R&I	Ethics	1,67	1,63
	Gender dimension	2,00	
	Governance	1,00	
	Open access	2,00	
	Public engagement	1,50	
	Science education	2,50	

Short analysis and comments for each subdimension

Ethics: The score of 1.67 indicates that efforts in this sub-dimension are in initial stages of implementation, with significant room for improvement. Ethics is in the initial stages of implementation, with foundational elements in place but lacking comprehensive action. Improvements in ethical training, monitoring, and integration into R&I processes are necessary to enhance OOM's impact and alignment with responsible research and innovation standards. The low score suggests a need for improved ethical standards and prevention measures to ensure that research aligns with societal and environmental expectations. Pressing principles include: Ensuring the integrity of R&I practices, Preventing potentially harmful impacts.

Gender Dimension: The score 2.00 indicates that the sub-dimension is in the initial to moderate stages of implementation, with noticeable progress but significant room for improvement. Gender Dimension reflects early progress in integrating gender equality into organizational practices and R&I. However, more consistent implementation, better evaluation, and a stronger emphasis on gender considerations in research design are required to maximize its impact and fully align with responsible research and innovation standards.

Governance: The score of 1.00 indicates that governance efforts are minimal, with only initial steps taken and limited progress observed. It demonstrates limited implementation and requires significant effort to improve inclusivity and adaptability in R&I governance. Establishing formal engagement mechanisms and fostering flexibility in research practices are essential for aligning governance with responsible research and innovation principles. Governance is crucial for ensuring that research processes are inclusive, adaptable, and responsive to emerging challenges and stakeholder needs. Pressing principles include: Inclusion of diverse societal views in R&I governance, Adaptability of R&I practices to unforeseen results.

Open Access: The score of 2.00 indicates that open access practices are moderately implemented, with noticeable progress, though room for improvement remains. Open Access reflects moderate implementation but needs more robust policies, infrastructure, and researcher engagement to fully realize the benefits of open access. Strengthening these areas will enhance OOM's ability to disseminate

research effectively and meet responsible research and innovation goals.

Public Engagement: The score 1.50 indicates limited implementation, with only initial steps taken and significant room for improvement. It shows limited progress, with early steps taken but significant gaps in systematic implementation and inclusivity. To align with RRI principles, OOM should prioritize creating a robust engagement framework, enhancing inclusivity, and embedding public engagement into its core research processes. Public engagement and ensuring inclusive participation are critical for achieving responsible research practices that reflect societal needs and concerns. Pressing principles include involving stakeholders and the public in our work and tailoring R&I processes to include diverse stakeholders. Pressing principles include: Involving stakeholders and the public in our work, Tailoring R&I processes to include diverse stakeholders.

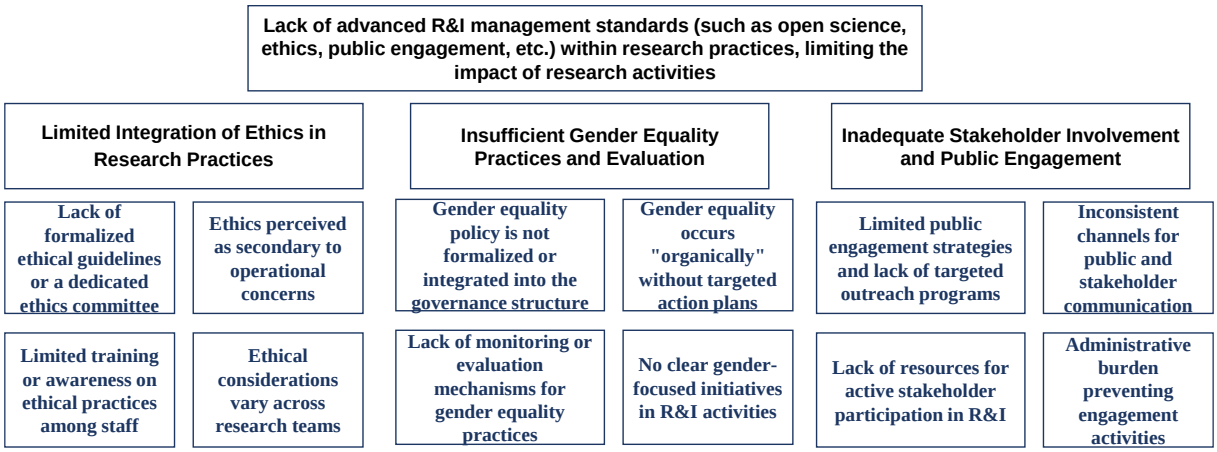
Science Education: The score 2.50 indicates that science education efforts are moderately implemented, with significant progress made, but there is still room for improvement. It reflects moderate progress, with some successes in providing tailored educational resources and raising awareness of R&I impacts. However, to fully embrace the principles of responsible research and innovation, OOM should expand its efforts in science education, engage a broader range of stakeholders, and ensure deeper, more reflective discussions on the societal implications of research.

2. Factors identified during interviews

Underlying question for Responsible Research and Innovation for OOM: How to maximize the impacts of your research activities throuhg the incorporation of advanced R&I management standards (such as open science, ethics, public engagement, etc.)?

Initial Problem tree for Responsible Research and Innovation

(version produced from the questionnaires and interviews)



Factors are identified under each sub-cause:

Considering that root causes, sub-causes and associated factors didn't change significantly from the problem tree obtained from the questionnaires and interviews to the updated/revised problem tree during

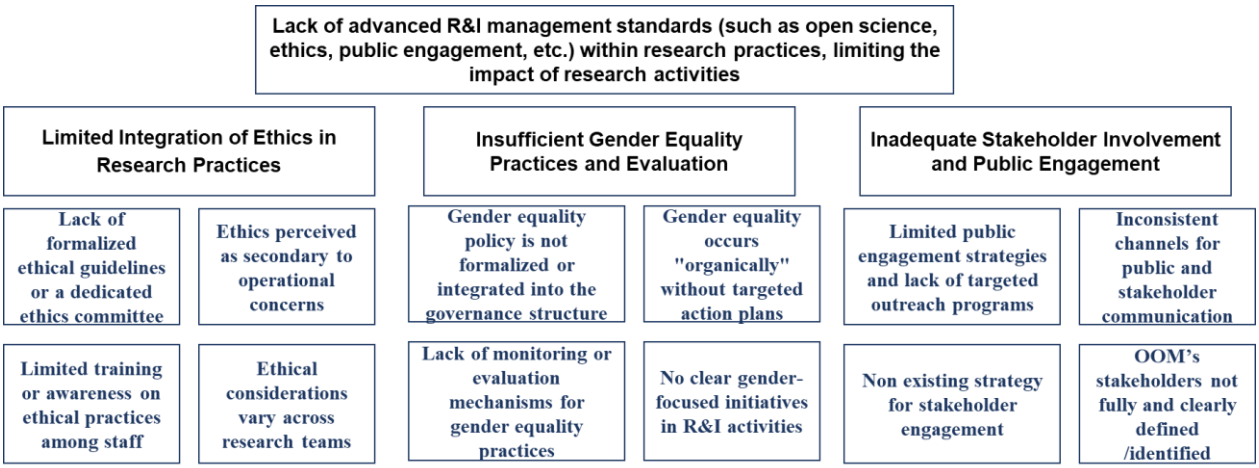
the internal workshop, the resulting factors are presented together with the final problem tree. The differences are:

- Rephrased sub-cause in root cause 3 from “Lack of resources for active stakeholder participation in R&I” to “Non existing strategy for stakeholder engagement” and removed sub-cause “Administrative burden preventing engagement activities” since the first step to take shall be the definition of a strategy for stakeholder engagement.
- Added sub-cause " OOM’s stakeholders not fully and clearly defined /identified”, for the same reason.

3. Factors identified during internal workshop

Final Problem tree for Responsible Research and Innovation

(version produced after the internal workshop)



Root Cause 1: Limited Integration of Ethics in Research Practices

Sub causes:

1. **Lack of formalized ethical guidelines or a dedicated ethics committee**
    - OOM lacks a dedicated ethics group or formal guidelines due to limited human resources and time constraints.
    - This absence results in unclear ethical standards across research practices.
2. **Ethics perceived as secondary to operational concerns**
    - Ethical governance is not integrated into OOM’s central strategy, with autonomy prioritized over centralized ethical frameworks.
    - Ethics remains a lower priority compared to operational and research outcomes.
3. **Limited training or awareness on ethical practices among staff**
    - While there is interest in ethics training, resource and time limitations prevent its implementation.
    - A lack of regular workshops or training results in inconsistent awareness among staff.

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4. **Ethical considerations vary across research teams**
    - Teams operate autonomously, and ethical practices depend on individual discretion.
    - This autonomy creates inconsistency in adhering to Responsible Research and Innovation (RRI) principles.

Root Cause 2: Insufficient Gender Equality Practices and Evaluation
Sub causes:

1. **Gender equality policy is not formalized or integrated into the governance structure**
    - OOM's gender equality policy is underdeveloped and not fully embedded in the organizational governance framework.
    - Implementation remains inconsistent and lacks strategic integration.
2. **Gender equality occurs "organically" without targeted action plans**
    - Gender balance relies on organic progression rather than proactive initiatives.
    - This lack of structured measures may fail to address underlying inequalities or biases.
3. **Lack of monitoring or evaluation mechanisms for gender equality practices**
    - Absence of a monitoring or evaluation system prevents OOM from identifying and addressing gender imbalances.
    - Without data, strategic action plans cannot be developed or implemented effectively.
4. **No clear gender-focused initiatives in R&I activities**
    - While there is general awareness of gender equality, specific R&I projects do not prioritize or incorporate gender-focused measures.
    - This gap reduces the visibility and impact of gender equality efforts within research.

Root Cause 3: Inadequate Stakeholder Involvement and Public Engagement
Sub causes:

1. **Limited public engagement strategies and lack of targeted outreach programs**
    - While some public engagement occurs (e.g., educational programs), these initiatives are inconsistently developed and executed.
    - There is no strategic outreach plan for engaging stakeholders effectively.
2. **Inconsistent channels for public and stakeholder communication**
    - Communication with stakeholders is informal and voluntary, lacking a centralized and coherent approach.
    - This inconsistency reduces OOM's ability to build strong relationships with stakeholders.
3. **Non existing strategy for stakeholder engagement**
    - Workshops and training programs for science communication and public engagement are not well-supported due to time and resource constraints.

- This limits researchers' ability to involve external stakeholders in their work.

4. **OOM's stakeholders not fully and clearly defined /identified**
    - Heavy administrative workloads leave researchers with insufficient time and capacity to engage stakeholders and the public.
    - The lack of human resources exacerbates this issue, reducing engagement opportunities.

E. PRO-HORIZON EUROPE STRATEGY ANALYSIS

1. Results

Dimensions	Subdimensions	Score	
3. Horizon Europe	Connection to EU clubs	1,00	1,11
	Organization characteristics	1,20	
	Individual decision	1,14	

Short analysis and comments for each subdimension

Connection to EU Clubs: A score of 1.00 indicates that connections to EU clubs and collaborations with Horizon Europe champions are in the early stages of development, with limited progress made so far and significant room for improvement. Pressing factors include: Exploiting collaborations with Horizon Europe champions and Implementing an effective networking strategy. There is a critical need to strengthen collaborations with Horizon Europe champions and improve networking strategies to foster competitive applications. To enhance participation in Horizon Europe and increase competitiveness, OOM should develop a strategic networking plan, foster collaborations with key European players, and clearly articulate its value proposition within the EU research community.

Organization Characteristics: The score of 1.20 indicates early stages of development, with limited progress and significant areas that require improvement to foster a more competitive and collaborative environment for Horizon Europe participation. It reflects limited progress, with significant challenges in areas like institutional strategy, capacity-building, and establishing a strong Horizon Europe-supportive environment. Pressing factors include: International openness and Horizon Europe capacity-building. To enhance competitiveness and foster transnational collaboration, OOM should invest in strategic planning, strengthen its support infrastructure, and align its R&I activities more closely with Horizon Europe's priorities.

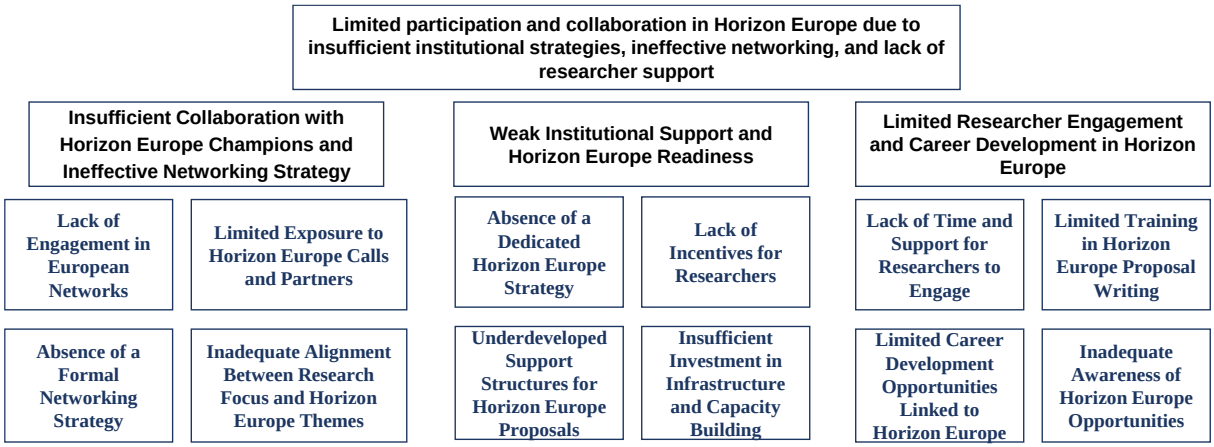
Individual Decision: The score of 1.14 suggests that there is limited development in the factors related to individual decision-making, with significant room for improvement in terms of supporting researchers to make informed, motivated decisions regarding Horizon Europe participation. Pressing factors include Horizon Europe intelligence and Self-selection for application preparation. Individual Decision reflects early-stage development, with substantial gaps in supporting researchers to make informed and motivated decisions about participating in Horizon Europe. To increase competitiveness and participation, OOM should focus on improving Horizon Europe intelligence, offering career development tailored to Horizon Europe, and providing strong institutional support to ease the application process for researchers.

2. Factors identified during interviews

Underlying question in Horizon Europe for OOM: How to intensify transnational collaborations and participation in Horizon Europe through the creation of favourable environment and institutional policy

that encourages and supports researchers to submit highly competitive applications?

Initial Problem tree for Horizon Europe
(version produced from the questionnaires and interviews)



Factors are identified under each sub-cause:

Considering that root causes, sub-causes and associated factors didn't change significantly from the problem tree obtained from the questionnaires and interviews to the updated/revised problem tree during the internal workshop, the resulting factors are presented together with the final problem tree. The differences are:

- Rephrased sub-causes in root cause 1: i) from "Lack of Engagement in European Networks" to "Lack of Engagement in European Networks and Events" and, ii) from "Inadequate Alignment Between Research Focus and Horizon Europe Themes" to "Alignment Between Research Focus and Horizon Europe Themes not optimized" considering that: i) participants considered the need to highlight the importance of participating in European events and, ii) because there's already a degree of alignment between OOM's research focus and Horizon Europe themes.
- Added sub-cause "Insufficient inter-departmental collaboration" because the level of expertise, experience and leadership varies across departments, with research groups working often autonomously.
- Added sub-cause "Lack of leadership / leaders for proposal development" considering the importance of leaders in such undertaking.

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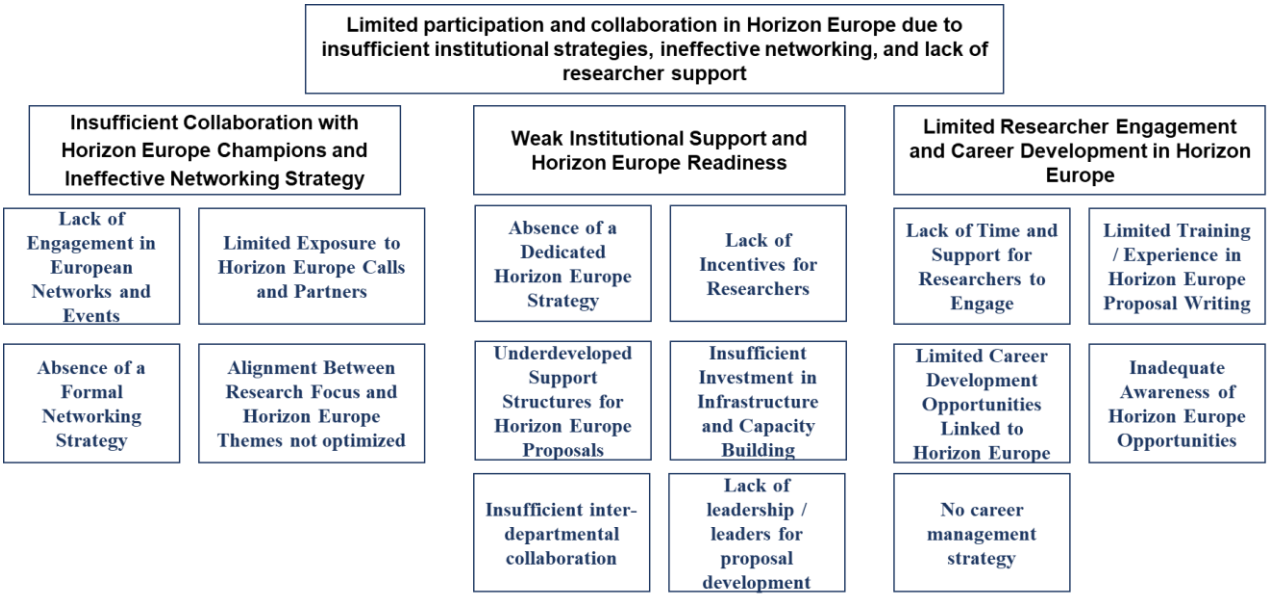
3. Factors identified during internal workshop

Final Problem tree for Horizon Europe

(version produced after the internal workshop)



Root Cause 1: Insufficient Collaboration with Horizon Europe Champions and Ineffective Networking Strategy

Sub causes:

1. **Lack of Engagement in European Networks and Events**
    - Limited participation in European networks restricts access to key stakeholders, project champions, and partnership opportunities.
    - Researchers are not actively connecting with experienced Horizon Europe institutions, which weakens OOM's ability to secure collaborative projects.
2. **Limited Exposure to Horizon Europe Calls and Partners**
    - Insufficient knowledge and dissemination of Horizon Europe calls result in missed opportunities for relevant funding and collaborations.
    - Researchers lack proactive engagement with Horizon Europe partners who could facilitate entry into consortia.
3. **Absence of a Formal Networking Strategy**
    - OOM does not have a formalized networking strategy targeting Horizon Europe opportunities. This prevents systematic efforts to build connections and showcase value propositions.
    - Networking activities are ad hoc and decentralized, reducing their effectiveness.

4. **Inadequate Alignment Between Research Focus and Horizon Europe Themes not Optimized**
    - The institution's research areas often do not align with Horizon Europe priorities or themes, which limits its ability to participate in targeted calls.
    - There is a gap in strategically identifying and prioritizing research topics that match Horizon Europe objectives while leveraging institutional strengths.

Root Cause 2: Weak Institutional Support and Horizon Europe Readiness

Sub causes:

1. **Absence of a Dedicated Horizon Europe Strategy**
    - OOM lacks a centralized, strategic framework for Horizon Europe participation, leading to fragmented and uncoordinated efforts.
    - Individual research units adopt their own approaches, which weakens the institution's overall competitiveness.
2. **Lack of Incentives for Researchers**
    - The absence of formal incentives (e.g., financial rewards, career development opportunities) reduces researchers' motivation to engage with Horizon Europe calls.
    - Researchers may prioritize other tasks or funding opportunities over Horizon Europe participation.
3. **Underdeveloped Support Structures for Horizon Europe Proposals**
    - Limited administrative support and insufficient personnel for proposal writing, risk management, and project administration hinder the ability to prepare competitive applications.
    - Without dedicated support staff, researchers face significant challenges in managing the complex requirements of Horizon Europe proposals.
4. **Insufficient Investment in Infrastructure and Capacity Building**
    - The institution lacks the necessary infrastructure, such as scientific equipment, facilities, and critical mass of expertise, to make it an attractive partner for international collaborations.
    - Insufficient investment in human resources further weakens the organization's ability to build capacity for Horizon Europe participation.
5. **Insufficient inter-departmental collaboration**
    - Within ARDITI there's still considerable gaps among research groups / centres related to project proposal development capacities, namely in EU priojects. Focused / purposed collaboration among groups may mitigate the situation.

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6. **Lack of leadership / leaders for proposal development**

    - While some research groups include in their team people/researchers with that profile, that is not transversal to all teams. Most researchers are focused on their daily research activities.

Root Cause 3: Limited Researcher Engagement and Career Development in Horizon Europe

Sub causes:

1. **Lack of Time and Support for Researchers to Engage**

    - Researchers are often overburdened with administrative and non-research tasks, leaving them with little time to focus on Horizon Europe proposal development.
    - Limited administrative support exacerbates this issue, as researchers lack assistance to reduce their workload and allocate time to competitive proposals.

2. **Limited Training / Experience in Horizon Europe Proposal Writing**

    - While some training opportunities exist, they are not sufficiently specialized to address the complexities of Horizon Europe proposal writing.
    - Researchers require advanced, targeted training to enhance their ability to develop high-quality proposals and navigate Horizon Europe mechanisms.

3. **Limited Career Development Opportunities Linked to Horizon Europe**

    - Career progression and professional recognition within OOM are not clearly tied to Horizon Europe participation.
    - Researchers lack clear incentives or structured pathways that reward engagement in Horizon Europe projects.

4. **Inadequate Awareness of Horizon Europe Opportunities**

    - Researchers are often unaware of relevant calls, funding opportunities, or how to approach potential Horizon Europe consortia.
    - Insufficient internal communication and support limit researchers' ability to identify and pursue suitable Horizon Europe opportunities.

5. **No career management strategy**

    - Many researchers don't integrate/consider EU projects proposal development and participation as part of their career progress priorities.

F. FUNDING SYNERGIES ANALYSIS

1. Results

Dimensions	Subdimensions	Score	
4. Synergies	Capacities	2,33	1,21
	Infrastructures	0,40	
	Networking	0,50	
	Strategic orientation	1,60	

Short analysis and comments for each subdimension

Capacities: The score 2.33 indicates that OOM is in a moderately advanced stage of development with respect to its administrative and financial capacities, but there is still room for improvement in mobilizing resources effectively for Horizon Europe synergies. Pressing Factors include: Supportive administrative and financial team; Knowledge of the policy context; Horizon Europe capacities. Despite a moderately positive score, there is significant room for improvement in building robust administrative and financial teams to manage funding effectively. A deeper understanding of the European policy landscape is critical to navigating opportunities and challenges related to Horizon Europe and structural funds. Lastly, expanding dedicated capacities for Horizon Europe projects is necessary to enhance competitiveness and improve outcomes in accessing and managing European funding streams.

Infrastructures: The score of 0.4 reflects that very limited progress has been made regarding infrastructures, indicating a critical need for improvement in this area to enhance participation in Horizon Europe and align with broader European research priorities. Pressing factors include: Strategic development plan; Openness to European stakeholders and Participation in infrastructure networks.
The score of 0.4 for the "Infrastructures" subdimension reflects critical gaps not in the technological quality of OOM's assets—such as advanced oceanographic equipment and a new research vessel under construction—but in their strategic alignment with Horizon Europe objectives. Despite significant investments using structural funds, OOM lacks a clear development plan that connects its infrastructure to European research priorities and infrastructure networks. The institution has limited participation in EU-level infrastructure platforms (e.g., ESFRI), insufficient international visibility, and no formal policies promoting openness to European stakeholders. As a result, these resources remain underutilized in the context of EU collaboration, significantly reducing their potential for funding synergies and integration into Horizon Europe consortia. Strengthening the strategic approach to infrastructure development and enhancing institutional policies around Horizon Europe will be essential for making effective use of assets and participating in Horizon Europe consortia.

Networking: The score 0.5 indicates minimal progress in networking, suggesting that networking efforts are currently at an initial or exploratory stage but need significant development to improve participation in Horizon Europe collaborations and to fully leverage resources. Pressing factors include International promotion; Critical mass and Hop-on (mobilizing structural funds). Networking shows limited progress, with a score of 0.50 indicating that there are early or foundational steps in place, but much more needs to be done. While there is some recognition of the importance of networking,

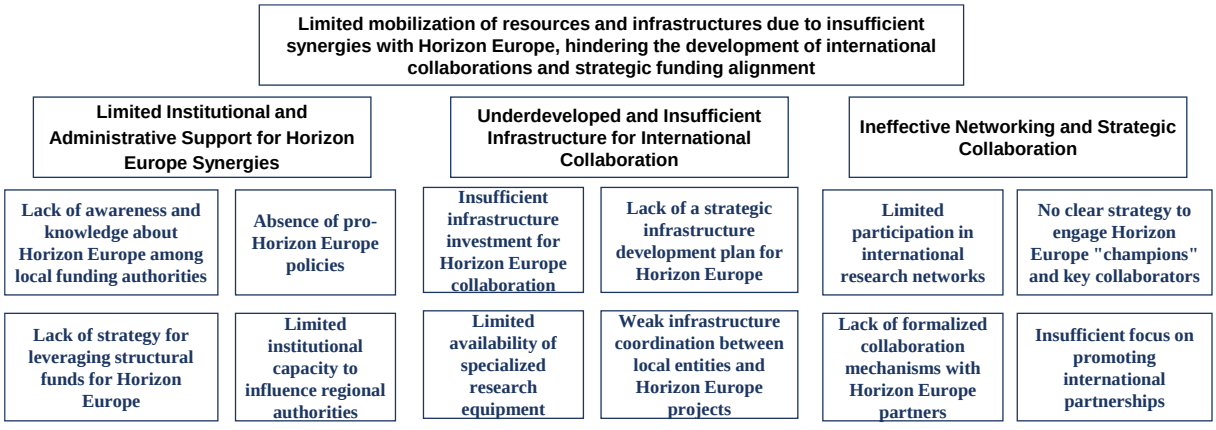
international promotion, and mobility, these activities require more structure and strategy to effectively capitalize on Horizon Europe opportunities. Strengthening networking efforts, increasing visibility, and improving the integration of structural funds and mobility into Horizon Europe projects will be key to fostering meaningful international collaborations and enhancing the institution's role in European research networks.

Strategic Orientation: The score 1.6 indicates moderate progress, but still significant gaps exist. It suggests that OOM has made initial steps towards aligning its strategies with Horizon Europe objectives, but further development and alignment are needed for full integration and optimization. Pressing factors include Effective development strategy; Synergy development plan and Pro-Horizon Europe environment. Strategic Orientation shows moderate progress, with an average score of 1.60 indicating that the organization is in the early stages of aligning its strategy with Horizon Europe but still has significant work ahead. The strengths lie in some initial alignment of R&I activities with European goals and a recognition of the importance of European added value. However, the lack of a clear development strategy, weak synergy development, and underdeveloped pro-Horizon Europe environment highlight key areas for improvement. Developing a comprehensive development strategy, fostering stronger synergies, and fully integrating Horizon Europe into strategic planning will be crucial to enhance participation and competitiveness in Horizon Europe projects.

2. Factors identified during interviews

Underlying question for Funding synergies for OOM: How to effectively mobilize existing assets (such as infrastructures and equipment) and the resources provided by structural funds (such as ERDF) to intensify international collaborations notably with Horizon Europe "champions" (the organizations and networks that constitute the core of the European Research Area and monopolize coordination positions), through greater synergies?

Initial Problem tree for Funding Synergies
(version produced from the questionnaires and interviews)



Factors are identified under each sub-cause:

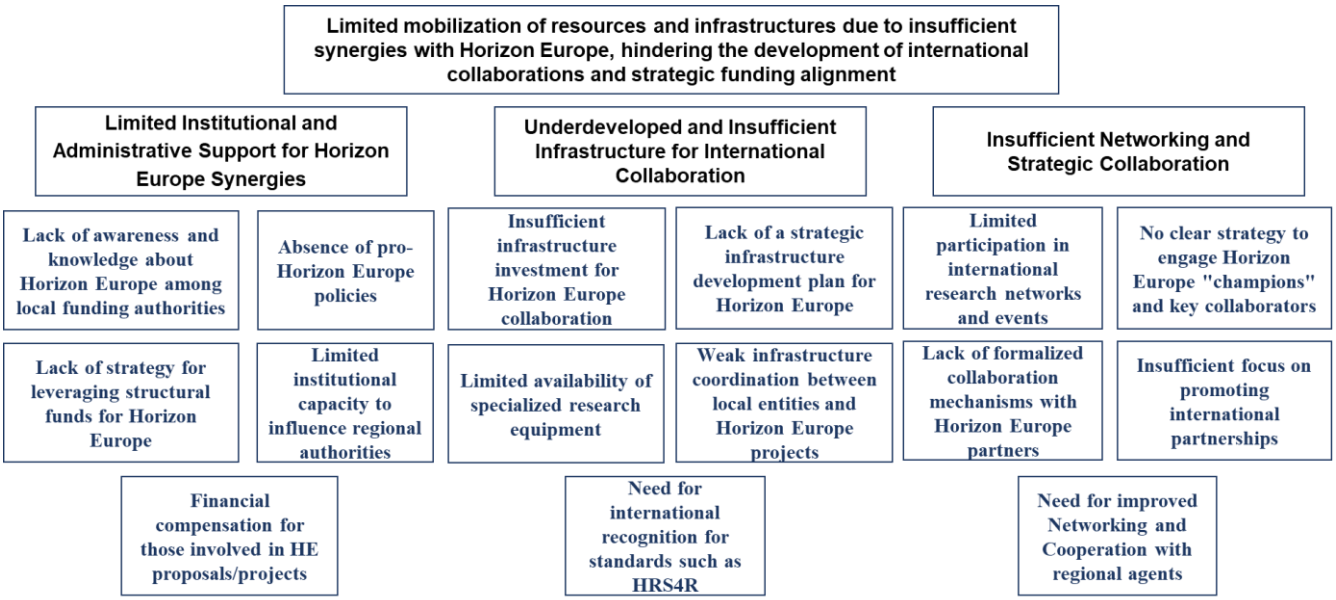
Considering that root causes, sub-causes and associated factors didn't change significantly from the problem tree obtained from the questionnaires and interviews to the updated/revised problem tree during the internal workshop, the resulting factors are presented together with the final problem tree. The differences are:

- Title of root cause 3 updated from "Ineffective Networking and Strategic Collaboration" to "Insufficient Networking and Strategic Collaboration" as this reflects better the reality at OOM.
- Under root 1 added sub-cause "Financial compensation for those involved in HE proposals/projects" as this was referred as an important incentive by participants and there are no direct financial incentives for researchers to get involved in European projects proposal development.
- Under root 2 added sub-cause "Need for international recognition for standards such as HRS4R" considering that adherence/recognition to/from standards related to oceanographic research will improve OOM's profile.
- Under root 3, updated the title of sub-cause "Limited participation in international research networks" to "Limited participation in international research networks and events" to highlight the importance of participation in European level events.
- Under root 3, added sub-cause "Need for improved Networking and Cooperation with regional agents" as this is recognized as being currently limited but crucial for synergies.

3. Factors identified during internal workshop

Final Problem tree for Funding Synergies

(version produced after the internal workshop)



Root Cause 1: Limited Institutional and Administrative Support for Horizon Europe Synergies

Sub-causes:

1. **Lack of awareness and knowledge about Horizon Europe among local funding authorities**
    - Regional funding authorities have limited understanding of Horizon Europe's goals, preventing synergies between local funding and European priorities.
    - OOM lacks mechanisms to educate and influence these authorities to align their funding decisions with Horizon Europe's strategic themes.

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2. **Absence of pro-Horizon Europe policies**
    - There are no policies at the regional or institutional levels to incentivize the strategic use of structural funds to support Horizon Europe participation.
    - The lack of a policy framework leaves Horizon Europe as a secondary consideration in funding decisions.
3. **Lack of strategy for leveraging structural funds for Horizon Europe**
    - OOM does not have a clear strategy for aligning regional structural funds with Horizon Europe objectives, missing opportunities to create funding synergies.
    - This misalignment limits the potential to strategically combine resources for larger-scale projects.
4. **Limited institutional capacity to influence regional authorities**
    - Regional authorities are reluctant to incorporate Horizon Europe priorities into their funding decisions, and OOM lacks the institutional influence to advocate for this alignment.
    - This weakens efforts to effectively use structural funds as a stepping stone for Horizon Europe projects.
5. **Financial compensation for those involved in HE proposals/projects**
    - There are no direct financial incentives for researchers to get involved in European projects proposal development.

Root Cause 2: Underdeveloped and Insufficient Infrastructure for International Collaboration

Sub-causes:

1. **Insufficient infrastructure investment for Horizon Europe collaboration**
    - While structural funds have been used to develop infrastructures like the OOM, these are not yet fully optimized for Horizon Europe participation.
    - Insufficient investment in targeted infrastructure upgrades limits collaboration opportunities.
2. **Lack of a strategic infrastructure development plan for Horizon Europe**
    - There is no comprehensive plan to align infrastructure development with Horizon Europe requirements, resulting in missed opportunities for integration.
    - Structural funds were not strategically leveraged to support Horizon Europe participation.
3. **Limited availability of specialized research equipment**
    - OOM lacks a comprehensive database of existing research equipment and resources, making it difficult to attract European collaborators.
    - Improved visibility and utilization of current infrastructure could enhance OOM's role in Horizon Europe projects.

4. **Weak infrastructure coordination between local entities and Horizon Europe projects**
    - There is no strategy to align local infrastructure efforts with Horizon Europe priorities, which hinders joint utilization of resources.
    - Poor coordination between local entities and European initiatives restricts opportunities for synergies.

5. **Need for international recognition for standards such as HRS4R**
    - Adherence/recognition to/from standards related to oceanographic research will improve OOM's profile (e.g. UNESCO-IOC Criteria for Marine Scientific Research; ISO 19901-1: Marine Operations; Global Ocean Observing System (GOOS) Essential Ocean Variables (EOVs); UNESCO-IOC Guidelines for the Transfer of Marine Technology)

Root Cause 3: Insufficient Networking and Strategic Collaboration

Sub-causes:

1. **Limited participation in international research networks and events**
    - OOM's limited involvement in European and international networks reduces opportunities to build relationships with key Horizon Europe stakeholders.
    - This lack of participation restricts OOM's access to project consortia and competitive collaborations.
2. **No clear strategy to engage Horizon Europe "champions" and key collaborators**
    - There is no targeted strategy to engage experienced Horizon Europe institutions ("champions"), who could provide mentorship and collaboration opportunities.
    - Without proactive efforts, OOM misses out on strategic partnerships that could improve proposal success rates.
3. **Lack of formalized collaboration mechanisms with Horizon Europe partners**
    - OOM does not have formal mechanisms in place to foster collaboration with key international research groups or institutions.
    - This absence limits the ability to align research efforts with Horizon Europe's thematic areas and priorities.
4. **Insufficient focus on promoting international partnerships**
    - While infrastructures have been publicized locally, efforts to promote them to international partners remain insufficient.
    - This lack of promotion reduces OOM's visibility and attractiveness as a partner for Horizon Europe projects.
5. **Need for improved Networking and Cooperation with regional agents**
    - Synergies with local entities can be improved considerably.

G. Oceanic Observatory of Madeira (OOM) KEY ASSETS & CHALLENGES

HUMAN RESOURCES	**Key Organizational Assets:** 1. **Commitment to Growth:** Leadership is focused on expanding researcher numbers and improving infrastructure through available funding mechanisms (e.g., RRP and structural funds). 2. **Proactive Steps in HR Strategy:** Current efforts to formalize career development plans (aligned with HRS4R) and move toward stable contracts. 3. **Strong Recruitment Practices:** The organization's open and merit-based recruitment approach ensures transparency and fairness. **Detailed analysis by sub-dimension:** **Strengths in Ethical and Professional Aspects:** • Elements such as ethical and professional aspects, particularly in research freedom, non-discrimination, and professional attitude are likely integrated into OOM's policies but require refinement and formalization. **Strengths in Recruitment and Selection:** 1. **Clear and Structured Processes:** Recruitment and selection principles are well-established, ensuring transparency and fairness. 2. **Fair Merit Judgments:** Principles for assessing and recognizing candidate qualifications are adequately applied, supporting equitable recruitment decisions. 3. **International Talent Attraction:** Recruitment efforts already demonstrate some capacity to draw qualified candidates from diverse backgrounds.

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	Strengths in Training and Development: 1. **Support for Continuous Learning:** OOM is commitment to fostering a culture of lifelong learning, which helps retain talent and enhance productivity. 2. **Alignment with Researcher Needs:** Existing training and development initiatives are aligned with the needs of researchers, contributing to scientific productivity and career satisfaction. **Strengths in Working conditions & social security:** 1. **Awareness of Key Issues:** OOM recognizes the importance of working conditions and social security in attracting and retaining talent. 2. **Basic Framework in Place:** Efforts are in progress to address stability, mobility, and other critical areas, albeit at an initial level.
	Key Organizational Challenges: 1. **Remoteness:** Geographic isolation impacts talent attraction, particularly for experienced researchers with families. 2. **Financial and Career Instability:** Limited salaries, reliance on short-term grants, and insufficient career paths reduce the organization's competitiveness. 3. **Capacity Constraints:** Growing research activities outpace infrastructure, resulting in cramped spaces and overloaded equipment. **Detailed analysis by sub-dimension:** **Weaknesses/Areas for improvement in Ethical and Professional Aspects:** 1. **Low integration of ethical principles across all practices**: Insufficient focus on embedding ethics, such as research freedom and professional attitude, into the organizational culture and operations.

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2. **Limited engagement in dissemination and public engagement**: Efforts to exploit research results and involve the public in research activities are not robust, limiting the impact and societal reach of research outputs.
3. **Gaps in appraisal and evaluation systems**: Existing systems for assessing research performance and professional development lack standardization and alignment with best practices, leading to inconsistent evaluations.
4. **Underdeveloped strategies for non-discrimination**: Policies and practices addressing diversity, equity, and inclusion need further strengthening to ensure fair opportunities and treatment for all researchers.

Weaknesses/Areas for Improvement in Recruitment and Selection:

1. **Optimization Needed for Full Implementation:** While several principles are in place, there may still be opportunities to refine or enhance these systems to maximize efficiency and inclusivity.
2. **Focus on Diversity:** Efforts could be expanded to ensure inclusivity across underrepresented groups, including gender, ethnicity, and other factors.
3. **Monitoring and Feedback Systems:** Strengthen mechanisms for ongoing evaluation and improvement of recruitment and selection practices.

Weaknesses/Areas for Improvement in Training and Development:

1. **Limited Optimization of Current Programs:** While mostly implemented, some training programs may lack refinement or fail to address all relevant competencies.
2. **Customizing Development Plans:** Training initiatives might not fully consider individual career trajectories or research-specific needs, leading to missed opportunities for tailored development.
3. **Monitoring Effectiveness:** There's still a lack of robust evaluation mechanisms to assess the impact of training programs on researcher performance and satisfaction.

Weaknesses/Challenges in Working conditions & social security:

1. **Instability in Employment:** Lack of stable and permanent employment opportunities hinders researchers' sense of security and career progression.

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	2. **Inadequate Funding and Salaries:** Compensation may not align with international standards, reducing competitiveness in attracting top-tier talent. 3. **Gender Imbalances:** Efforts toward achieving gender balance in recruitment and workplace practices require more formalization. 4. **Limited Career Development Opportunities:** Researchers do not have yet access to well-defined career progression pathways. 5. **Mobility Challenges:** Mobility programs and incentives are not fully optimized to attract international researchers or support current staff. 6. **Unclear Intellectual Property Rights (IPR):** Ambiguities in IPR policies may discourage innovation and collaboration.

RESPONSIBLE RESEARCH AND INNOVATION	**Key Organizational Assets:** 1. **Existing Efforts in Public Engagement and Education:** Educational outreach programs target schools and young audiences, with active dissemination of scientific findings. 2. **Support for Open Access:** Agreements with FCCN for access to scientific databases demonstrate a commitment to supporting researchers' publication needs. 3. **Gender Balance:** While not enforced through formal policies, OOM/ARDITI has achieved a strong gender balance among researchers. 4. **Commitment to Improvement:** Leadership recognizes gaps in RRI practices and has articulated actionable objectives, such as creating a scientific ethics group and improving open access support.

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Detailed analysis by sub-dimension:

Strengths in Ethics:

1. **Ethics Awareness Exists:** OOM demonstrates a basic understanding of the importance of ethics in research and innovation practices.

Strengths in Gender dimension:

1. **Existing Gender Equality Awareness:** OOM recognizes the importance of gender equality in staff and working conditions and has taken steps to address it.
2. **Some Action on Gender Equality Plans:** Preliminary measures or policies, such as a gender equality plan, are in place.
3. **Integration of Gender Dimensions in R&I:** Some research activities consider gender dimensions, reflecting an awareness of its significance in R&I outcomes.

Strengths in Governance:

1. **Awareness of the Need for Governance Improvements:** Some recognition exists regarding the importance of inclusive and adaptive governance structures in R&I activities.

Strengths in Open access:

1. **Recognition of Open Access Importance:** OOM acknowledges the value of open access in promoting transparency and wider dissemination of research outcomes.
2. **Some Research Outputs Available as Open Access:** Efforts have been made to make certain research outputs accessible to the public and stakeholders, indicating early success in adopting open access policies, particularly in EU projects.
3. **Alignment with RRI Standards:** Open access policies align with the principles of responsible research and innovation, demonstrating a commitment to ethical and inclusive research dissemination.

Strengths in Public engagement:

1. **Recognition of Stakeholder Engagement Value:** OOM recognizes the need to involve stakeholders and the public, which is an essential step toward RRI practices.

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	Strengths in Science education: 1. **Commitment to Science Education:** By promoting programs with schools, OOM demonstrates a clear interest in using science education as a means to engage the public and disseminate research outcomes. 2. **Some Tailored Education Resources:** Efforts have been made to provide tailored education resources that suit the needs of different stakeholders, which indicates progress in addressing diverse audiences. 3. **Awareness of R&I Impacts in Education:** There is recognition of the importance of discussing the ethical, legal, economic, and social impacts of research within education activities, which aligns with responsible research practices.
	Key Organizational Challenges: 1. **Resource Constraints:** Across all profiles involved, limited human resources, time, and funding were cited as significant barriers to implementing and scaling RRI practices. 2. **Lack of Formalized Governance:** There isn't yet a centralized ethics regulation or structured approach to RRI, leading to scattered and informal efforts. 3. **Cost of Open Access:** High publishing costs and inadequate financial support for open access, when not in European EC funded projects, hinder compliance with funder requirements. 4. **Time and Workload Issues:** Researchers are often overburdened with administrative and technical tasks, leaving limited time for RRI-related activities.

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Detailed analysis by sub-dimension:

Weaknesses/Challenges in Ethics:

1. **Limited Ethical Framework Implementation:** While awareness exists, practical steps to institutionalize ethical guidelines and practices are necessary.
2. **Low Prioritization of Ethical Considerations in R&I:** Ethical evaluations are not systematically embedded in research project planning and execution.
3. **Lack of Training and Resources:** Limited resources and training opportunities to raise awareness and capacity for ethical decision-making among researchers.

Weaknesses/Challenges in Gender dimension:

1. **Limited Implementation of Gender Equality Plans:** While a plan exists, its application may be inconsistent or incomplete across organizational levels.
2. **Inconsistent Evaluation of Gender Practices:** Gender equality evaluation mechanisms are not systematically applied.

Weaknesses/Challenges in Governance:

1. **Limited Stakeholder Inclusion in R&I Governance:** Mechanisms to include views from societal or external research groups are not systematically implemented.
2. **Insufficient Engagement Structures:** No robust processes for integrating diverse perspectives, which hinders comprehensive decision-making.

Weaknesses/Challenges in Open access:

1. **Limited Scope of Open Access Policy:** Existing policies/fundings does not comprehensively cover all aspects of research work or consistently mandates open access across projects.
2. **Barriers to Implementation:** Challenges such as publication costs, copyright restrictions, or a lack of infrastructure to support open access may limit effectiveness.
3.

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	Weaknesses/Challenges in Public engagement: 1. **Fragmented Engagement Practices:** Efforts to engage the public and stakeholders are inconsistent and not systematically embedded into R&I processes. 2. **Limited Channels for Participation:** Lack of robust, well-defined channels or platforms for stakeholders to participate effectively in R&I activities. 3. **Low Awareness of Public Engagement Benefits:** Researchers and staff may not fully appreciate the value of public engagement, leading to reduced effort in this area. **Weaknesses/Challenges in Science education:** 1. **Limited Scope of Science Education Activities:** The scope of science education efforts may be narrow, possibly targeting only specific audiences or limited topics. 2. **Insufficient Resources for Tailored Education:** Tailored information and educational resources may be insufficient to meet the varied needs of different stakeholders, limiting their impact.

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PRO-HORIZON EUROPE STRATEGY ANALYSIS	**Key assets.**
	
	Key Organizational Assets:
	
	1. **Existing Expertise and Infrastructure:**
	  o ARDITI, where OOM is integrated, has some knowledgeable staff and experience with European projects, providing a foundation to build upon.
	2. **Recognition of Horizon Europe's Benefits:**
	  o Leadership and staff acknowledge the visibility, funding, and collaboration opportunities that Horizon Europe provides.
	3. **Ambition to Improve:**
	  o There is a clear organizational desire to strengthen participation in Horizon Europe through infrastructure investment, capacity building, and strategic alignment.
	
	Detailed analysis by sub-dimension:
	
	Strengths in Connection to EU clubs:
	
	1. **Recognition of EU Collaboration Importance:** There is an understanding of the value of collaboration with Horizon Europe "champions" (leading institutions and networks in the European Research Area), which is crucial for boosting competitiveness.
	2. **Initial Networking Steps Taken:** Some networking efforts have been initiated, indicating a start to building connections with relevant European research groups and stakeholders.
	
	Strengths in Organization characteristics:
	
	1. **Some International Openness:** OOM demonstrates an openness to international collaboration, which is crucial for expanding its role in European research networks.

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	2. **Recognition of Horizon Europe Needs:** There is an acknowledgment of the need for capacity-building and support services related to Horizon Europe, which indicates awareness of the challenges and requirements for successful participation. 3. **Commitment to Scientific Productivity:** OOM recognizes the importance of scientific productivity and its impact on its reputation and competitiveness within the Horizon Europe context. **Strengths in Individual decision:** 1. **Recognition of Career Development:** OOM recognizes the importance of career development in Horizon Europe, which can be motivating for researchers and contribute to greater engagement in European funding opportunities. 2. **Awareness of Horizon Europe Opportunities (to some extent):** Some level of awareness regarding Horizon Europe opportunities exists, even though it may not be fully integrated into the daily decision-making process. **Notably regarding Coordination:** OOM isn't coordinating any EU project or WP within an EU project.

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	Key challenges. **Key Organizational Challenges:** 1. **Lack of Strategic Coordination:** o OOM/ARDITI does not have a dedicated Horizon Europe strategy, leading to fragmented efforts across research units. 2. **Insufficient Research Capacity:** o A lack of senior researchers, combined with time and resource constraints, hinders the ability to lead or actively participate in projects. 3. **Geographic and Economic Barriers:** o Madeira's peripheral location and below European average incomes limit OOM/ARDITI's attractiveness to experienced researchers and project consortia. 4. **Limited Internal Incentives:** o Researchers are not provided with strong incentives or support systems to pursue Horizon Europe funding opportunities. **Detailed analysis by sub-dimension:** **Weaknesses/Challenges in Connection to EU clubs:** 1. **Limited Exploitation of Horizon Europe Champions:** OOM is not yet fully capitalizing on collaborations with Horizon Europe champions, potentially missing out on valuable networking opportunities and expertise. 2. **Lack of Clear Networking Strategy:** There isn't yet a comprehensive or well-defined networking strategy to facilitate connections with key European research groups or institutions. 3. **Unclear Value Proposition in EU Collaborations:** The added value and unique contributions OOM can bring to EU collaborations need to be better defined and communicated, in order to facilitate establishing strong partnerships.

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4. **Limited Engagement in Transnational Research Networks:** OOM isn't yet actively participating in existing transnational research networks or EU-driven research consortia, limiting visibility and influence within the European research landscape.

Weaknesses/Challenges in Organization characteristics:

1. **Limited International Engagement:** While there is openness to international collaboration, OOM is not sufficiently engaged with a broad range of international partners, limiting access to transnational research opportunities.
2. **Weak Institutional Strategy for Horizon Europe:** The institution doesn't have a well-defined, structured strategy to support Horizon Europe participation. A clearer focus on aligning R&I activities with Horizon Europe priorities is necessary.
3. **Lack of Comprehensive Capacity-Building:** Horizon Europe capacity-building efforts may be insufficient, meaning OOM is not fully prepared to meet the demands of Horizon Europe projects, especially in terms of administrative and financial procedures.
4. **Unclear Pro-Horizon Europe Environment:** OOM doesn't have yet a strong, pro-Horizon Europe environment in place, which is crucial for fostering a culture of competitiveness and supporting the submission of high-quality proposals.
5. **Insufficient Horizon Europe Support Services:** Support services dedicated to Horizon Europe applications and collaborations are not well-established, limiting the ability of researchers to submit highly competitive proposals.

Weaknesses/Challenges in Individual decision:

1. **Limited Horizon Europe Intelligence:** Although there's a monthly distribution of upcoming calls in domains related to ARDITI's research departments, OOM itself lacks a comprehensive/professional system for gathering and disseminating more focused Horizon Europe intelligence (e.g., upcoming calls, research trends, and priorities), which is vital for guiding researchers to participate in relevant programs.
2. **Inadequate Career Development Opportunities Related to Horizon Europe:** There are insufficient career development opportunities directly linked to Horizon Europe, which can deter researchers from pursuing Horizon Europe projects due to perceived barriers to career advancement (e.g. when compared to the need/importance of publishing).
3. **Low Motivation and Self-Selection:** The factors that drive individual researchers to self-select and apply to Horizon Europe (such as motivation and awareness of benefits) may not be well-supported, resulting in lower participation. Financial incentives for those engaging in proposal writing was referred during the internal workshop.

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	4. **Lack of Institutional Support for Horizon Europe Proposals:** Researchers do not yet receive complete institutional support when deciding to engage with Horizon Europe, such as mentoring, proposal writing assistance, or access to resources that make participation easier and more competitive. **Notably regarding Coordination:** OOM isn't coordinating any EU project or WP within an EU project.

FUNDING SYNERGIES	**Key assets.** **Key Organizational Assets:** 1. **Foundational Success with Structural Funds:** o OOM/ARDITI has successfully used structural funds to create critical infrastructure and human resources (e.g., OOM, MARE), which can now serve as a base for Horizon Europe participation. 2. **Internal Expertise:** o The project office has considerable knowledge of financing mechanisms and provides valuable support to researchers navigating funding opportunities. 3. **Proposals for Strategic Improvements:** o Leadership and staff suggest actionable objectives, including: ▪ Aligning regional calls with Horizon Europe criteria. ▪ Using structural funds for doctoral training and junior researcher recruitment. ▪ Improving infrastructure visibility to attract collaborations.

Detailed analysis by sub-dimension:

Strengths in Capacities:

1. **Knowledge of the Policy Context:** OOM has some knowledge of the policy context, which is essential for aligning its activities with European funding priorities and maximizing synergies. This also indicates a foundational understanding of funding mechanisms, including Horizon Europe.

Strengths in Infrastructures:

1. **Commitment to Openness to European Stakeholders:** There is openness to European stakeholders, which is an essential aspect of fostering cross-border collaborations. This will help OOM to establish connections within larger European research networks and infrastructure initiatives.

Strengths in Networking:

1. **Critical Mass Potential:** OOM is working to achieve a critical mass in terms of HRs and infrastructures that can be leveraged for larger international collaborations. This will be a foundation for building stronger connections with Horizon Europe consortia, provided that efforts to increase the scale and visibility of these activities are implemented.
2. **Opportunities for Mobility:** OOM recognizes the importance of mobility, which is an essential factor for building international research networks. Encouraging researcher mobility will foster new collaborations and open up access to Horizon Europe funding and international consortia.

Strengths in Strategic orientation:

1. **Strategic Alignment of R&I Activities:** There is already some alignment between OOM's research and innovation activities and the broader European goals. This is important for ensuring that the institution's research priorities are in sync with Horizon Europe's strategic areas, which will enhance competitiveness for Horizon Europe funding.
2. **European Added Value:** OOM recognizes the importance of contributing to European added value. This means that it understands the need to ensure its research has an impact that benefits the wider European community, which is a key requirement for Horizon Europe projects.

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	Notably regarding Research infrastructures: Research infrastructures have been consistently improved and expanded in recent years (see previous part "Key Facilities and Infrastructure" in section "2.Research Fields, Facilities, and Resources section"). A new energy-efficient multipurpose research vessel is under construction for shallow water and high seas research. This new vessel will become operational in 2027. New facilities for ARDITI/OOM are planned and approved for construction in the coming years.
	Key challenges. **Key Organizational Challenges:** 1. **Lack of Strategic Alignment:** o OOM does not currently have a formal strategy to align structural funds with Horizon Europe opportunities, resulting in fragmented efforts and missed synergies. 2. **Weak Regional Support:** o Regional managing authorities lack awareness of Horizon Europe and do not prioritize synergies, often requiring external influence to align policies with European research goals. 3. **Inconsistent Documentation and Training:** o Researchers and administrative staff lack comprehensive guidelines and training on combining funding sources effectively. 4. **Limited Dissemination of Resources:** o Insufficient visibility and utilization of OOM's infrastructure and equipment reduce opportunities for collaborations and broader funding engagement.

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Detailed analysis by sub-dimension:

Weaknesses/Challenges in Capacities:

1. **Limited Horizon Europe Capacity Utilization:** While there is awareness of Horizon Europe capacities, the full potential of existing capacities is not being leveraged optimally. This includes underutilized research infrastructure or not fully tapping into Horizon Europe's support services and collaborative networks.
2. **Inconsistent Mobilization of Resources:** There are still gaps in how existing resources (e.g., structural funds, institutional infrastructures) are mobilized for Horizon Europe projects. Without a strategic approach to resource allocation, OOM may miss opportunities for collaboration and impact in European research networks.
3. **Underdeveloped Synergies with Horizon Europe Champions:** There's a very limited/initial development of synergies with Horizon Europe "champions" (leading institutions or networks within the European Research Area). Collaborations with such organizations are critical for positioning the institution as a key player in Horizon Europe consortia.
4. **Need for More Targeted Capacity Building for Horizon Europe:** Although there are some resources in place, targeted capacity-building efforts related to Horizon Europe (including Horizon Europe-specific training, project management, and networking skills) may be insufficient.

Weaknesses/Challenges in Infrastructures:

1. **Limited Pro-Horizon Europe Policy:** OOM needs to develop a/its pro-Horizon Europe policy that supports the integration of research infrastructures with Horizon Europe funding schemes. Such a policy will help align the institution's infrastructure investments with the requirements of Horizon Europe, ensuring increased compatibility and access to funding opportunities.
2. **Limited Participation in Infrastructure Networks:** OOM's participation in infrastructure networks is still incomplete. Strong involvement in European infrastructure networks is crucial for positioning the institution as an active participant in Horizon Europe projects, as these networks provide access to key collaborations, expertise, and infrastructure sharing.

Weaknesses/Challenges in Networking:

1. **Limited International Promotion:** There is a need for more active and structured international promotion. Networking within the European Research Area and the global research community requires visibility, and without a focused promotion strategy, the institution may remain relatively unknown or underrepresented in key international research networks.

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2. **Weak Integration of Structural Funds for Horizon Europe Projects:** OOM needs to increase its capacity in utilizing structural funds to join Horizon Europe projects (Hop-on). Maximizing the use of these funds will enhance the institution's ability to participate in Horizon Europe consortia, making it more competitive and better positioned for collaborative opportunities.
3. **Underdeveloped Networking Strategy:** There isn't still a clear, structured networking strategy. Without an explicit approach to identify potential partners, promote the institution's capabilities, or engage in EU-funded research networks, OOM may miss out on key collaborative opportunities that would enhance its profile in Horizon Europe.
4. **Limited Collaboration Mobility:** Mobility, while acknowledged, is not yet fully integrated into OOM's networking strategy. There is a need for more structured mobility programs to ensure that researchers can actively participate in international research activities, foster cross-border collaborations, and increase institutional visibility in European consortia.

Weaknesses/Challenges in Strategic orientation:

1. **Lack of a Clear Development Strategy:** OOM still lacks a comprehensive and clearly articulated development strategy. Without a coherent long-term strategy to guide its participation in Horizon Europe and related funding schemes, the institution risks missing key opportunities and not fully optimizing its assets and capabilities in alignment with Horizon Europe.
2. **Weak Synergy Development Plan:** While there is some awareness of the need for synergy development, OOM still lacks a detailed and actionable synergy plan. Such a plan should outline how synergies with other European research organizations and Horizon Europe champions will be established, developed, and sustained.
3. **Underdeveloped Pro-Horizon Europe Environment:** The institution has not fully established a pro-Horizon Europe environment, meaning that there aren't sufficient internal policies or structures to actively promote and support participation in Horizon Europe projects. OOM needs to fully leverage available resources and support services related to Horizon Europe.
4. **Limited Integration of Horizon Europe Goals into Strategic Plans:** There's still a limited integration of Horizon Europe-specific goals into the overall strategic orientation of OOM. A more explicit focus on Horizon Europe will help the institution to identify priority funding areas and better align its research and infrastructure with Horizon Europe's requirements.

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	Notably regarding Research infrastructures: Research infrastructures have been consistently improved and expanded in recent years (see previous part "Key Facilities and Infrastructure" in section "2. Research Fields, Facilities, and Resources section"). A new energy-efficient multipurpose research vessel is under construction for shallow water and high seas research. This new vessel will become operational in 2027. New facilities for ARDITI/OOM are planned and approved for construction in the coming years.

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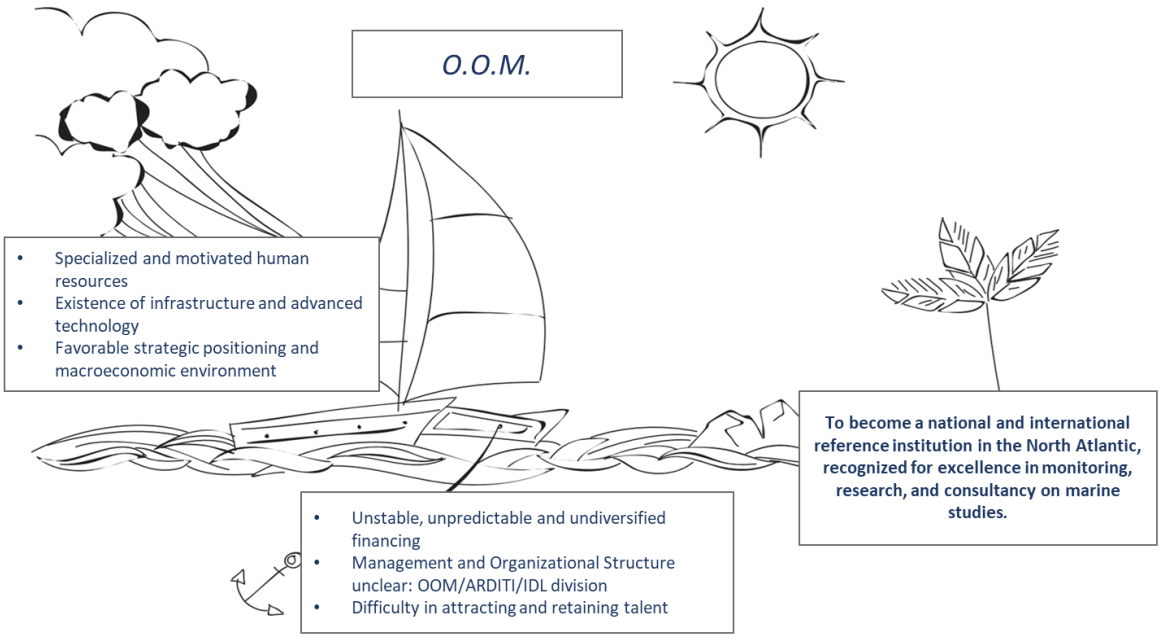
AMBITION AND ACTION PLAN

A. BECOMING EU CHAMPIONS

1. AMBITION IN RESEARCH & INNOVATION

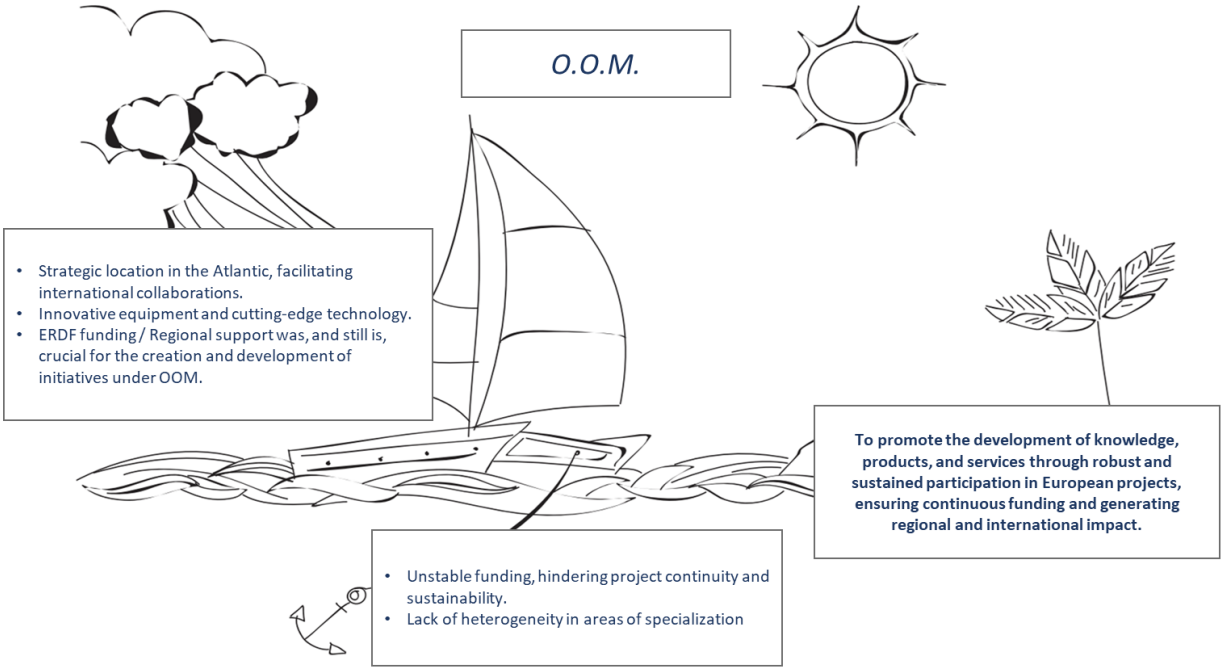
Ambition in R&I for OOM for the next 5 years is: To become a national and international reference institution in the North Atlantic, recognized for excellence in monitoring, research, and consultancy on marine studies.



(R&I related speedboat poster constructed during OOM's first workshop)

2. HORIZON EUROPE PARTICIPATION AMBITION

HE participation ambition for the next 5 years for OOM is: To promote the development of knowledge, products, and services through robust and sustained participation in European projects, ensuring continuous funding and generating regional and international impact.



(HE participation related speedboat poster constructed during OOM’s first workshop)

3. Prioritized list of 10 Key Actions to Enhance OOM's R&I Performance and Horizon Europe Participation

This final selection focuses on high-impact, feasible measures that enhance OOM’s R&I performance and Horizon Europe participation. This Selection is balanced across all dimensions; Addresses key barriers to growth (combines talent retention, institutional development, ethics, training, and strategic funding mechanisms); Enhances Horizon Europe competitiveness (ensures better proposal success rates, stronger networking, and improved researcher incentives); Balances immediate & long-term impact with a mix of quick wins (e.g., financial incentives, training) and structural changes (e.g., HR stability, mentorship programs).

Priority	Action	Dimension	Why It’s a Priority?
1	Support research in Madeira through career stability and salary optimization.	**Human Resources**	Enhances researcher retention and makes OOM competitive for international talent.
2	Create attractive technical career paths to retain specialized talent in operations and research.	**Horizon Europe Participation**	Provides growth opportunities for technical staff, improving long-term retention.
3	Recruit additional human resources and invest in infrastructure for Horizon Europe participation.	**Horizon Europe Participation**	Expands OOM’s capacity to manage and execute European projects.
4	Invest in staff training by allocating a dedicated budget for each individual.	**Human Resources**	Improves researcher skills and career development, boosting institutional capabilities.

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Priority	Action	Dimension	Why It’s a Priority?
5	Promote an annual training session on Horizon Europe applications and professionalize project management.	**Funding Synergies**	Enhances institutional readiness and competitiveness in securing EU funding.
6	Promote OOM’s unique research capabilities at international events and conferences.	**Funding Synergies**	Enhances visibility and fosters collaboration opportunities.
7	Identify OOM stakeholders and formalize partnerships to align research with societal and funding needs.	**Responsible Research and Innovation**	Expands research impact and funding potential by engaging with key partners.
8	Participating in international events once a year, involving different employees with tailored strategies (fairs, conferences, etc.).	**Funding Synergies**	Diversifies networking opportunities and strengthens OOM’s international presence.
9	Define a collaboration strategy with Horizon Europe Champion partners, aligning with their best practices.	**Funding Synergies**	Strengthens international partnerships and increases OOM’s credibility in EU projects.
10	Establish financial incentives for researchers involved in Horizon Europe proposal writing and management.	**Funding Synergies**	Ensures more competitive proposals and motivates researcher engagement in HE applications.

Resources needed and operationalization steps

Action	Resources Needed	Operational Steps
1-Support research in Madeira through career stability and salary optimization	Regional government support, policy framework, legal adjustments.	(1) Engage policymakers → (2) Secure funding → (3) Implement salary optimization plan.
2-Create attractive technical career paths	HR planning, salary framework, skill development programs.	(1) Define pathways → (2) Align with funding opportunities → (3) Implement career plans.
3-Recruit additional HR and invest in infrastructure for HE projects	Hiring budget, facility upgrades, workspace expansion.	(1) Identify key roles → (2) Secure funding → (3) Implement phased hiring & expansion.

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Action	Resources Needed	Operational Steps
4-Invest in staff training by allocating a dedicated budget for each individual	Institutional budget, external training providers.	(1) Define budget per researcher → (2) Establish training fund → (3) Monitor impact.
5-Promote annual training on HE applications & professionalize project management	Training budget, external consultants, internal trainers.	(1) Design training → (2) Schedule sessions → (3) Evaluate impact.
6-Promote OOM’s research at international events	Travel budget, marketing strategy, conference materials.	(1) Select target events → (2) Prepare materials → (3) Track engagement.
7-Identify OOM stakeholders and formalize partnerships	Stakeholder database, engagement strategy, partnership manager.	(1) Map stakeholders → (2) Establish formal collaboration processes.
8-Participate in international events with tailored strategies	Travel funds, researcher participation schedule, strategic focus.	(1) Identify key events → (2) Define goals for participation → (3) Execute and evaluate impact.
9-Define collaboration strategy with 3 HE Champion partners	Networking funds, institutional liaisons, travel budget.	(1) Identify partners → (2) Engage in strategic meetings → (3) Formalize agreements.
10-Establish financial incentives for Horizon Europe proposals	Budget reallocation, HR policy update, financial planning.	(1) Define criteria → (2) Secure funds → (3) Implement reward system.

Actions proposed in this list have been considered / distributed across the four Action Plans presented next.

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B. ACTION PLAN

1. Human Resources (HR) dimension

Revised solution tree for “Human Resources”, highlighting the strategic objective, operational objectives and related actions

Strategic objective: Attract and retain international and national talent and define a strategy for human resources and working conditions

Introduction

Over the next five years, the goal is to enhance working conditions, secure long-term contracts, optimize social benefits, and strengthen career development initiatives. These efforts will result in a highly skilled and stable research workforce, improving scientific output, institutional reputation, and funding success. By increasing international recruitment, retention rates, and leadership in Horizon Europe projects, OOM may establish itself as a key player in European marine research.

This action plan outlines the expected changes, benefits, key outcome indicators, and necessary resources required to achieve this transformation. Through a combination of government support, EU funding, and strategic partnerships, OOM will create a sustainable, attractive, and globally competitive research environment.

Expected Changes/Results in the next 5 years (SMART approach)

OOM will implement structured measures to attract, retain, and develop top-tier national and international researchers by offering competitive working conditions, long-term contracts, optimized salaries, clear career pathways, and continuous training. Success will be measured through improved researcher retention, increased international recruitment, higher employee satisfaction, greater Horizon Europe participation, and training program engagement. This goal is achievable through support from regional authorities, external funding sources like ERDF and Horizon Europe, and institutional investment. These efforts are highly relevant to positioning OOM as an international leader in marine sciences and a strong Horizon Europe contributor by cultivating a stable, skilled, and motivated research workforce.

Within the next **five years**, OOM aims to:

- Achieve **a 20% increase in high-quality researcher recruitment**.
- Ensure **50% of research staff hold long-term contracts**.

How these changes will benefit OOM?

A stable and skilled research workforce at OOM will lead to stronger scientific output and innovation, enhancing the institution's reputation. Well-supported and experienced researchers will improve the quality of Horizon Europe proposals, increasing funding success. Expanding the talent pool will also boost OOM's international visibility and influence within EU research networks, reinforcing its leadership in marine sciences. Furthermore, reduced staff turnover and structured career development will contribute to long-term institutional sustainability and continuous growth.

Key Outcome Indicators

Indicator	Baseline	Target in 5 years
Retention rate of researchers	20%	>80%
% of talented researchers in OOM via long term contracts	0 %	>20%
% of researchers benefiting from training & mentorship, in particular on HE proposal writing	0%	>50%

Necessary dedicated resources

Resource	Purpose	Funding Source
Government-backed research contracts	Ensure long-term job stability for researchers.	Regional Government, ERDF
Competitive salary packages	Retain top talent and compensate for geographical challenges.	Institutional Budget, EU Structural Funds
Annual Training & Career Development Fund	Provide continuous professional growth opportunities, namely HE proposal writing, budgeting, and project management.	Horizon Europe (MSCA, Erasmus+), ERDF, Institutional budget

1st Operational objective: **Establish ethical and professional practices, ensuring fair and transparent career development.**

Time-Bound:

- **Adhere to and contribute to good practices in implementing HRS4R e** within **36 months**, featuring actions like:
  - Fair and transparent recruitment process
  - Clear Appraisal and Career progression criteria for researchers based on merit and impact
  - Improved Working Conditions and Career Development
  - Stronger Collaboration and Research Impact

Funded by the European Union

What will be achieved?

- Attracts high-quality researchers by offering fair, transparent, and supportive working conditions.
- Clear career progression paths and personal development support.
- A structured feedback system enabling continuous professional and institutional improvements.

Resources needed:

Resource	Purpose
Regional government funding & ERDF support	To finance long-term contracts.

Responsible team

Senior researchers + ARDITI RH

People involved

Senior researchers + ARDITI RH

2nd Operational objective: **Optimize working conditions and social benefits to make OOM a more attractive research environment.**

Time-Bound:

- **Improvement of shared workspaces**, fostering collaboration and integration **within 5 years,** following the extension plan already approved by the regional government**;**
- **Continuous improvement of working arrangements and protecting researchers' rights** within **24 months.**

What will be achieved?

- More and better spaces for work, both in the office and for field work.
- Clear career progression paths and personal development support.

Resources needed:

Resource	Purpose
Facility development budget	To create shared spaces and improve workplace environments.

Responsible team

Seniors Researchers + Board ARDITI

People involved

Seniors Researchers + Board ARDITI

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3rd Operational objective: **Strengthen training and career development opportunities for researchers.**

Time-Bound:

- **Ensure the continuous researchers career development by providing both internal and external opportunities for training and knowledge update** within **24 months;**
- **Provide internal funding mechanisms** when needed within **the next 24 months**.

What will be achieved?

- Funding for internal training programs focused on technical skills, leadership, and project management.
- Support for participation in international workshops, training programs, and networking opportunities.

Resources needed:

Resource	Purpose
Institutional budget & ERDF support	To fund annual training programs and career development initiatives.
Travel budget & external grants (e.g., Horizon Europe MSCA, Erasmus+)	To support international training and mobility opportunities.

Responsible team

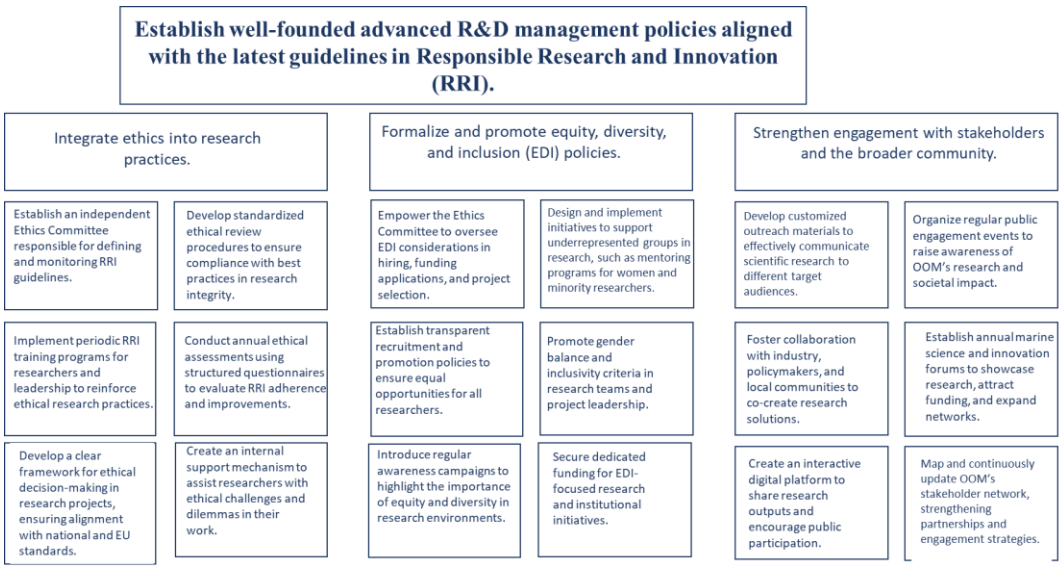
OOM Senior Researchers + ARDITI HR

People involved

OOM researchers

2. Responsible Research and Innovation (RRI) dimension

Revised solution tree for "Responsible Research and Innovation", highlighting the strategic objective, operational objectives and related actions.



Strategic objective: Establish well-founded advanced R&D management policies aligned with the latest guidelines in Responsible Research and Innovation (RRI)

Introduction

To establish itself as a national and international reference in marine sciences and a leading participant in Horizon Europe, OOM must integrate advanced R&D management policies aligned with Responsible Research and Innovation (RRI) principles. Ensuring ethical governance, inclusivity, stakeholder engagement, and open science is essential for maintaining research integrity, increasing societal impact, and securing competitive funding.

Over the next five years, OOM aims to strengthen ethical and professional standards, improve stakeholder collaboration, and integrate RRI into all research activities. This will be mainly implemented with the involvement of OOM in the «**HR Excellence in Research**» award process (formerly HRS4R - Human Resources Strategy for Researchers) within ARDITI, endorsing the 20 principles of the European Charter for Researchers.

By embedding responsible practices in its operations, OOM will increase its credibility, improve research quality, and enhance its competitiveness in European funding programs.

This document outlines the expected changes, benefits, key outcome indicators, and necessary resources required to achieve these goals.

Expected Changes/Results in the next 5 years (SMART approach)

Funded by the European Union

OOM is committed to implementing advanced R&D management policies aligned with Responsible Research and Innovation (RRI) principles, ensuring best practices in ethics, inclusivity, stakeholder engagement, open science, and governance, as outlined in the 20 principles of the European Charter for Researchers. Success will be measured by the percentage of research projects integrating RRI principles, increased participation in open science initiatives, and higher levels of researcher and stakeholder engagement. This objective is achievable through institutional commitment, policy development, and the integration of RRI practices into OOM’s research processes. It is highly relevant to strengthening OOM’s reputation as a responsible and innovative research institution, enhancing funding opportunities, researcher retention, and societal impact, while supporting its ambition to become a top marine research organization and strong Horizon Europe participant.

Within the next **five years**, OOM aims to:

- Achieve full compliance with the principles of the European Charter for Researchers within **5 years.**
- Integrate RRI principles into all new research projects within **3 years.**
- Ensure **80% of OOM researchers** complete RRI training within 5 years.

How these changes will benefit OOM?

Strengthening RRI policies at OOM will enhance research quality and integrity by promoting scientific credibility, transparency, and ethical compliance, thereby increasing trust in its research. It will also boost OOM’s competitiveness in Horizon Europe by aligning projects with EU priorities, improving funding prospects and positioning in international consortia. Enhanced stakeholder engagement will expand OOM’s societal impact and policy influence, while a supportive and inclusive research environment will improve researcher satisfaction, reduce turnover, and attract top talent. These efforts will ultimately elevate OOM’s visibility and international recognition as a leader in ethical, innovative, and sustainable marine research.

Key Outcome Indicators

Indicator	Baseline	Target in 5 years
% of projects integrating RRI principles	20%	100%
% of researchers trained in RRI	20%	>=80%
Annual stakeholder engagement events held	1	At least 1 per year
Number of OOM projects contributing to open science, governance and public initiatives	Limited	70% of projects involved

Necessary dedicated resources

Resource	Purpose	Funding Source
Training programs on RRI & ethics (internal)	Equip researchers with knowledge of open science, ethics, and responsible innovation.	Internal resources, ERDF, EU research funding.
Stakeholder engagement and public outreach budget	Organize workshops, networking events, and science communication initiatives.	Horizon Europe, government support.

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Legal & policy advisors	Assist in integrating RRI principles into OOM’s policies and funding applications.	Institutional budget, policy grants.

a) 1st Operational objective: **Integrate ethics into research practices.**

Time-Bound:

- Establish the «HR Excellence in Research» /HRS4R implementation Action Plan within **12 months.**
- Obtain the «HR Excellence in Research» Award within **12 months.**

How it contributes to the core objective:

By ensuring ethical compliance, standardized decision-making, and ongoing supervising, this objective strengthens OOM’s research governance, making it more credible, responsible, and attractive for international collaborations and funding opportunities.

What Will Be Achieved?

- **A structured ethical decision-making framework**, ensuring research compliance with national and EU regulations (European Charter for Researchers - Ethical and Professional Aspects).

Resources needed:

Resource	Purpose
Institutional budget & policy development support	To fund the implementation and assessments.

Responsible team and People involved: To be defined by board and OOM’s senior researchers in synergy with ARDITI’s HR management team.

b) 2nd Operational objective: **Formalize and promote Equity, Diversity, and Inclusion (EDI) policies.**

Time-Bound:

- Implement OTM-R (Open, Transparent and Merit-Based Recruitment) policies within **3 years**.

How it contributes to the core objective:

By embedding equity, diversity, and inclusion policies into its governance, OOM will enhance its attractiveness to top researchers, improve institutional integrity, and increase research excellence. A fair and inclusive research environment boosts collaboration, reduces biases, and aligns OOM with European R&I standards.

What will be achieved?

- **Transparent recruitment and promotion policies**, ensuring equal opportunities.
- **Inclusion criteria in research projects**, promoting diversity in leadership and teams.
- **EDI-focused research and institutional initiatives,** securing long-term sustainability.

Resources needed:

Resource	Purpose
Institutional funding & Horizon Europe support	To finance EDI-focused research and mentoring initiatives.

Responsible team and People involved: To be defined by OOM’s board and senior researchers in synergy with ARDITI’s HR management team.

c) 3rd Operational objective: **Strengthen engagement with stakeholders and the broader community.**

Time-Bound:

- Map stakeholders within **12 months.**
- Ensure **25%** of participants in OOM’s marine science and other regular public events represent stakeholders and the broader community.

How it contributes to the core objective:

By strengthening stakeholder and community engagement, OOM will increase visibility, expand its research network, secure funding opportunities, and enhance its role as a knowledge hub in marine science. A well-established engagement strategy ensures continuous collaboration with key actors, driving innovation, policy impact, and public trust in research.

What will be achieved?

- **Regular public engagement events,** increasing awareness and societal impact.
- **Stronger collaboration with** policymakers, and communities, fostering innovation-driven research.
- **Annual marine science and innovation forums,** showcasing OOM’s expertise and attracting funding.
- **A continuously updated stakeholder network,** strengthening partnerships and strategic engagement.

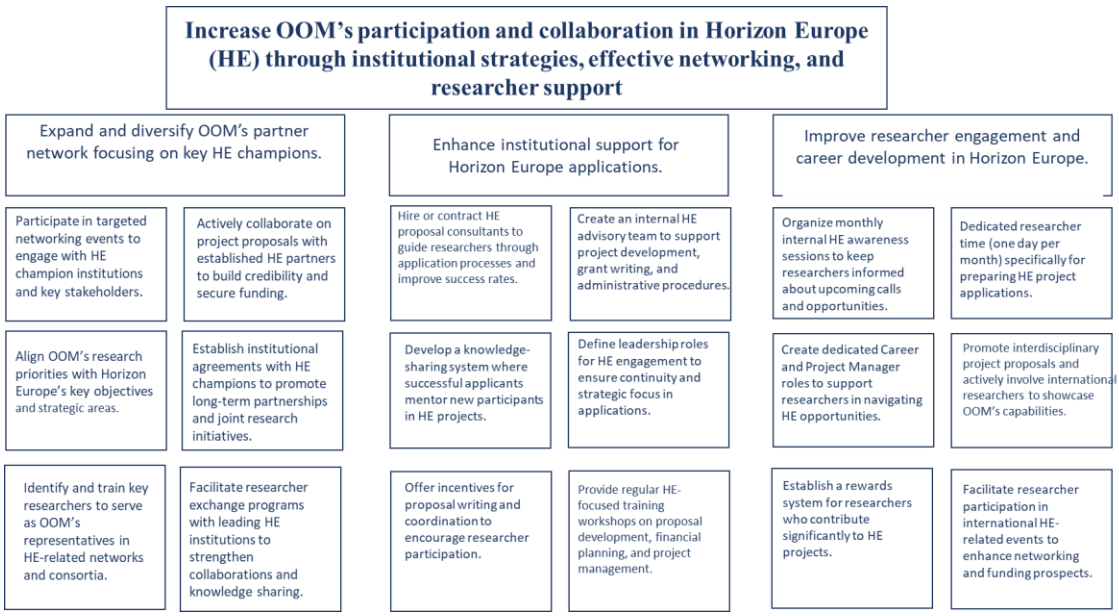
Resources needed:

Resource	Purpose
Institutional budget & Horizon Europe funding	To support outreach initiatives, public engagement events.
Communication specialists & content creators	To develop accessible and impactful outreach materials.
Event planning & logistics support	To organize marine science forums and public engagement activities.

Responsible team and People involved: To be defined by OOM’s board and senior researchers in synergy with ARDITI’s HR management team.

3. Horizon Europe (HE) Participation dimension

Revised solution tree for “Horizon Europe Participation”, highlighting the strategic objective, operational objectives and related actions.



Strategic objective: Increase OOM’s participation and collaboration in Horizon Europe (HE) through institutional strategies, effective networking, and researcher support

Introduction

To establish itself as a leading research institution in the North Atlantic and a key player in Horizon Europe (HE) projects, OOM must enhance its participation in European funding programs through strategic institutional policies, stronger international networking, and targeted researcher support. Horizon Europe presents a crucial opportunity for OOM to increase research funding, strengthen collaborations, and enhance its global impact in marine sciences.

Over the next five years, OOM aims to significantly expand its involvement in HE projects, ensuring more competitive proposals, increased researcher engagement, and leadership roles in European

consortia. This will require capacity-building initiatives, strategic partnerships with HE champions, and investments in research infrastructure and proposal development support. OOM will increase its funding sustainability and research excellence by aligning its research agenda with HE priorities and enhancing proposal success rates.

This document outlines the expected changes, benefits, key performance indicators, and necessary resources to achieve this objective. By implementing targeted recruitment, training, and international collaboration strategies, OOM will position itself as a top-tier research institution capable of leading and participating in high-impact, EU-funded projects.

Expected Changes/Results in the next 5 years (SMART approach)

OOM aims to increase its participation in Horizon Europe (HE) projects by implementing targeted institutional strategies, enhancing networking with key HE partners, and offering dedicated support to researchers, including recruiting experienced project leaders and aligning research priorities with HE objectives. Progress will be measured by the number of HE projects secured, researcher participation rates, funding obtained, and partnerships formed with established HE players. This objective is achievable through institutional investment in proposal preparation, staff training, and inter-departmental collaboration, supported by researcher development programs linked to the HR Action Plan. The initiative is highly relevant, as it will boost OOM’s international visibility, secure long-term funding, and reinforce its research excellence in line with its goal of becoming a leading EU research institution.

Within the next **five years**, OOM aims to:

- Achieve a **400% increase** in HE project applications within **5 years**.
- Secure at least **1-3 HE-funded projects** within five years, including leadership roles in consortia.
- Establish strategic collaborations with **at least 5 Horizon Europe “champion**” institutions within **5** years.

How these changes will benefit OOM?

Increased participation in Horizon Europe will provide OOM with more stable and continuous external research funding, reducing reliance on local or regional sources. It will also foster stronger international collaborations with leading European institutions, enhancing OOM’s influence in marine sciences. Through involvement in HE projects, OOM will boost research excellence, facilitate knowledge exchange, and drive technological innovation. This will create more opportunities for researcher development and retention by supporting career progression. Additionally, aligning with European research priorities will ensure OOM remains competitive and relevant within the EU research landscape.

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Key Outcome Indicators

Indicator	Baseline	Target in 5 years
Number of Horizon Europe projects secured / Nr of leadership or co-leadership	2	3
Annual HE projects applications submitted	1	2
Percentage of researchers involved in HE applications	10%	50%
Number of formal partnerships with HE champions	Few informal collaborations	At least 5 structured partnerships
Total HE funding secured	€381.568,00	1M

Necessary dedicated resources

Resource	Purpose	Funding Source
Dedicated HE project management staff	To support proposal writing, application processes, and project administration.	Institutional budget, Horizon Europe (CSA, MSCA)
Strategic networking budget	To support participation in HE matchmaking events, consortia meetings, and international conferences.	Horizon Europe (WIDERA), institutional funds

a) 1st Operational objective: **Expand and diversify OOM’s partner network focusing on key HE champions.**

Time-Bound:

- Participate in at least **2 HE networking events per year** to build strategic connections, within **five years**.
- Ensure that **25% of OOM researchers are engaged in HE collaborations** within **five years**.

How it contributes to the core objective:

By expanding its Horizon Europe partnerships, OOM will increase project participation, enhance proposal success rates, and improve funding acquisition. A strong network of HE champions will open opportunities for leadership in consortia, increase institutional visibility, and drive long-term research collaborations.

What Will Be Achieved?

- **Participation in high-impact networking events**, connecting with key HE stakeholders.
- **Increased collaboration in HE-funded project proposals**, strengthening credibility.
- **Strategic alignment of OOM’s research agenda** with HE priorities.

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- **Development of OOM representatives for HE networks and consortia**, improving institutional engagement.

Resources needed:

Resource	Purpose
Institutional travel & networking budget	To support participation in HE events and consortia meetings.
Strategic partnership team	To identify and formalize collaborations with HE champions.
Dedicated HE project liaison staff (within ARDITI PMO)	To coordinate networking, proposal writing, and partnership management.
Training programs for HE representatives, both internal and external when necessary	To equip researchers with the skills to engage in HE networks.

Responsible team

Senior Researchers + ARDITI PMO

People involved

OOM Senior Researchers

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b) 2nd Operational objective: **Enhance institutional support for Horizon Europe applications.**

Time-Bound:

- **Work with ARDITI Project Management Office or external project consultants** to guide researchers working on application processes in order to improve success rates, as needed.
- Establish mentorship programs and leadership roles for HE engagement within **12 months**, aligned with ARDITI’s PMO.
- Launch and implement incentives for successful project management and execution within **5 years**.

What will be achieved:

- Increase the number of researchers with HE experience and knowledge;
- Increase in the number of HE project applications

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Resources needed:

Resource	Purpose
Budget for hiring HE proposal consultants when needed	To provide expert guidance on application processes.
Training programs & mentorship provided by ARDITI PMO	To facilitate knowledge-sharing and build internal expertise.

Responsible team

Senior Researchers + ARDITI PMO

People involved

Senior Researchers + ARDITI PMO

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c) 3rd Operational objective: **Improve researcher engagement and career development in Horizon Europe.**

Time-Bound:

- Participate in periodic HE awareness sessions aligned with the launch of the new work programmes, within **24 months**, promoted by ARDITI PMO;
- Ensure dedicated researcher time for HE applications within **36 months**, through the recruitment of new staff.
- Increase researcher participation in international HE events **by 25%** within **36 months**.

What will be achieved?

- **Regular internal awareness sessions** for upcoming calls, keeping researchers informed about HE opportunities.
- **Promotion of interdisciplinary and international collaborations**, increasing project competitiveness.
- **Greater researcher participation in international networking events**, enhancing funding prospects.

Resources needed:

Resource	Purpose
Recruitment of new staff to alleviate workload	To allow researchers to focus on project proposals.
Internal Training and support for Grant writing and travel funding if necessary	To support international participation in HE-related events.
Communication and outreach resources aligned with the PMO	To conduct awareness sessions and promote HE calls.

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Responsible team

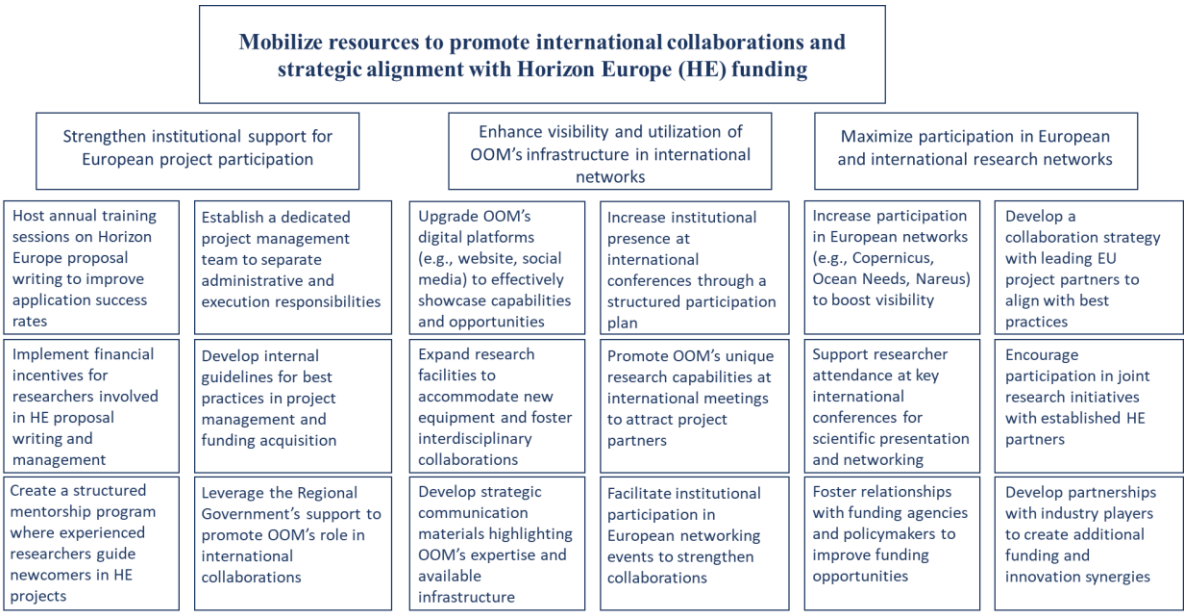
Senior Researchers + ARDITI PMO

People involved

Senior Researchers + ARDITI PMO

4. Funding Synergies dimension

Revised solution tree for “Funding Synergies”, highlighting the strategic objective, operational objectives and related actions.



Strategic objective: Mobilize resources to promote international collaborations and strategic alignment with Horizon Europe (HE) funding

Introduction

To achieve its ambition of becoming a leading research institution in the North Atlantic and a key player in Horizon Europe (HE) projects, OOM must develop a sustainable and diversified funding strategy. By mobilizing resources and leveraging synergies between structural funds (e.g., ERDF) and Horizon Europe, OOM can strengthen its financial sustainability, expand research capacity, and increase participation in high-impact international collaborations.

Over the next five years, OOM aims to streamline its funding model by securing co-financing mechanisms, enhancing research infrastructure, and aligning institutional priorities with EU funding opportunities. This will involve coordinated resource mobilization, formalized agreements with funding agencies, and increased institutional support for securing competitive grants. By reinforcing its financial

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foundation, OOM will improve its success rate in HE applications, reduce financial uncertainty, and enhance its long-term research impact.

This document outlines the expected changes, benefits, key performance indicators, and required resources for achieving this objective. Through a strategic funding approach, strong international partnerships, and targeted investment in research capacity, OOM will position itself as a financially resilient and globally competitive research institution.

Expected Changes/Results in the next 5 years (SMART approach)

OOM will strengthen its international collaborations and alignment with Horizon Europe (HE) by mobilizing financial and infrastructure resources, leveraging synergies between structural funds (e.g., ERDF) and HE, optimizing infrastructure use, securing co-financing mechanisms, and expanding participation in international networks. Progress will be measured by the amount of external funding obtained, the number of HE projects co-financed with structural funds, infrastructure enhancements, and partnerships with international research institutions. This goal is achievable through institutional and regional support, enhanced administrative capacity, and a structured strategy to align OOM’s funding model with EU priorities. These efforts are highly relevant to ensuring OOM’s long-term financial sustainability, boosting its competitiveness in HE funding, and amplifying its international research impact.

Within the next **five years**, OOM aims to:

- Develop and implement a structured strategy for aligning HE and structural funds within **36 months**.
- Secure at least **€2M** in additional funding through combined HE and ERDF resources within **3** years.
- Upgrade key research infrastructure using structural funds within **5** years.

How these changes will benefit OOM?

Better coordination of funding will enhance OOM’s research capacity by enabling infrastructure upgrades, acquisition of advanced equipment, and expansion of technical capabilities. Aligning Horizon Europe and ERDF resources will improve financial sustainability, reducing reliance on short-term project grants. With more support for proposal preparation and co-financing, OOM will increase its success rate in Horizon Europe applications. These synergies will also facilitate participation in larger international consortia, boosting OOM’s global visibility. Ultimately, diversified and stable funding will strengthen institutional autonomy and support more effective long-term strategic planning.

Key Outcome Indicators

Indicator	Baseline	Target in 5 years
Total funding secured through HE and structural fund synergies	Limited coordination	€2M+ secured
Investment in research infrastructure using ERDF & HE funds	Sufficient	Robotics lab & equipment upgrades, namely with a new research vessel and expanded control center
Increase in participation in international research networks	Low engagement	At least 5 formalized partnerships (in 5 years)

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Necessary dedicated resources

Resource	Purpose	Funding Source
Financial and administrative experts on EU funding	To develop and implement strategies for integrating HE and structural funds.	Institutional budget, Horizon Europe (WIDERA), ERDF
Investment in research infrastructure & digital platforms	To enhance OOM’s capabilities and competitiveness in international projects.	ERDF, Horizon Europe, Regional support
Budget for international networking and capacity-building	To strengthen OOM’s role in EU research consortia and funding networks.	Horizon Europe, Erasmus+, institutional funds

a) 1st Operational objective: **Strengthen institutional support for European project participation.**

Time-Bound:

- Host at least one HE proposal writing training session bi-annually (within ARDITI’s PMO – Project Management Office, being created), reaching **80+%** of researchers within **3** years (this objective is shared with HE Action Plan objectives).

How it contributes to the core objective:

By reducing administrative barriers, increasing researcher preparedness, and securing external support, this objective will significantly improve OOM’s capacity to win and manage HE projects. A more efficient support structure will ensure financial sustainability, enhance international collaborations, and reinforce OOM’s leadership in European marine research.

What Will Be Achieved?

- **Financial incentives for researchers involved in HE project coordination**, motivating engagement.
- **Internal best-practice guidelines for funding acquisition and project execution**, standardizing procedures (within ARDITI’s PMO).
- **Stronger government-backed promotion of OOM’s international research collaborations**, increasing institutional visibility.

Resources needed:

Resource	Purpose
Institutional funding for training and mentorship programs	To build researcher capacity for HE applications.
Internal policy and best-practice development (through ARDITI’s PMO)	To standardize and optimize HE project management.
Regional government partnerships	To promote OOM’s international collaboration efforts and increase institutional support.

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Responsible team and People involved: To be defined by OOM's board and senior researchers in synergy with ARDITI's HR management team.

b) 2nd Operational objective: **Enhance visibility and utilization of OOM's infrastructure in international networks.**

Time-Bound:

- Increase institutional presence at international conferences by **50%** within **3 years**.
- Ensure OOM's participation in at least **3-5** major European networking events **annually**.

How it contributes to the core objective:

By improving infrastructure visibility and engagement with international research networks, this objective will increase OOM's attractiveness as a research partner, facilitate new funding opportunities, and strengthen collaborations in Horizon Europe projects.

What will be achieved?

- **A structured international conference participation plan**, ensuring consistent global presence.
- **Targeted promotion of OOM's unique research strengths**, attracting new project partners.
- **Strategic communication materials**, highlighting OOM's expertise and available resources.
- **Stronger institutional presence in European networking events**, facilitating new research collaborations.

Resources needed:

Resource	Purpose
Institutional budget & involvement of Communications team	To enhance OOM's outreach tools, create high-impact promotional materials and engagement strategies.
Travel and participation funding for international conferences	To increase OOM's visibility in global research communities.

Responsible team and People involved: To be defined by OOM's board and senior researchers in synergy with ARDITI's HR management team.

c) 3rd Operational objective: **Maximize participation in European and international research networks.**

Time-Bound:

- Ensure that OOM researchers participate in **3 to 5** international conferences annually.

How it contributes to the core objective:

By strengthening participation in research networks and fostering high-value partnerships, this objective will increase OOM's competitiveness in Horizon Europe, improve funding opportunities, and facilitate knowledge exchange with global research leaders.

What will be achieved?

- **Increased representation in major European research networks**, enhancing institutional visibility.
- **A structured collaboration strategy**, aligning OOM with best practices in Horizon Europe projects.
- **Higher researcher participation in international conferences**, improving networking and funding potential.
- **More joint research initiatives with Horizon Europe partners**, driving collaborative innovation.

Resources needed:

Resource	Purpose
Budget for researcher mobility and conference participation	To support networking and engagement in international events.
Institutional strategy for network engagement	To align OOM’s collaborations with Horizon Europe objectives.
Funding from Horizon Europe & ERDF	To facilitate participation in research networks and joint initiatives.

Responsible team and People involved: To be defined by OOM’s board and senior researchers in synergy with ARDITI’s HR management team.

5. R&I Infrastructure Synergy Development for OOM

In pursuit of becoming a national and international reference in ocean and climate research, and aligning with Horizon Europe ambitions, the Oceanic Observatory of Madeira (OOM) must maximize the value of its distinctive assets and infrastructures. Positioned at the crossroads of the Atlantic, Madeira provides unique access to deep-sea environments and serves as a natural platform for research on biodiversity, climate, and marine technologies. OOM's integration of modular technologies, robust monitoring systems, and a multidisciplinary scientific team offers a powerful springboard for strategic collaboration. To elevate its role in Horizon Europe and broader international R&I ecosystems, OOM must integrate its infrastructure into collaborative research design and strategically align future investments with European funding mechanisms, especially those that promote synergies between structural funds and HE frameworks.

Proposed key orientations and actions

1. Alignment of Infrastructure Upgrades with Horizon Europe Objectives

- Direct future infrastructure investments (e.g. the new multipurpose vessel) toward interoperability with European data standards and marine research protocols.
- Prioritize funding proposals aligned with HE themes: ocean resilience, green transition, marine biodiversity, autonomous sensing, and digital twins of the ocean.
- Embed co-creation principles by consulting HE consortia partners on infrastructure specs to increase joint usage in proposals.

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2. Capitalize on Field Campaign Experience for Joint European Missions

- Position OOM as a regional coordination hub for EU-wide observation campaigns in the North Atlantic.
- Offer OOM’s autonomous platforms (e.g. DriX, ROVs, WireWalker) for pilot missions in coordination with All-Atlantic Ocean Research Alliance or Horizon Europe Mission Oceans.
- Use modularity to support test-bed projects and Proof-of-Concept trials for EU marine tech innovations.

3. Institutional Participation in EU Infrastructure Roadmaps

- Engage with ESFRI-related initiatives (European Strategy Forum on Research Infrastructures) and Joint Programming Initiatives (JPIs) on oceans and climate.
- Seek OOM’s inclusion as a research infrastructure partner in Horizon Europe Infrastructure calls and Marie Skłodowska-Curie Staff Exchange schemes.

4. Strategic Promotion of OOM’s Infrastructure in European Research Agendas

- Integrate infrastructure capabilities into Horizon Europe calls, particularly under clusters like Climate, Oceans, Digital & Industry, and WIDERA.
- Develop digital content packages (short videos, facility fact sheets, visual maps) tailored for consortia engagement.

5. Integration of Infrastructure in European Digital Ecosystems

- Enhance data sharing through interoperability with platforms like Copernicus Marine Service, EMODnet (European Marine Observation and Data Network), and EOSC (European Open Science Cloud).

6. Visibility at Strategic Events and Platforms

- Present OOM infrastructure assets at high-level EU events (e.g., European Maritime Day, Sea Tech Week, Horizon Europe Brokerage events).
- Organize guided tours, demos, and test-bed access sessions for visiting consortia and policymakers.

Expected Results

- Enhanced integration of OOM’s infrastructure in EU-funded research initiatives.
- Increased funding through successful participation in Horizon Europe and structural fund programs.
- Stronger position of OOM as a central node in EU marine research and innovation networks.
- Long-term sustainability of OOM’s infrastructure and data services through international use.

C. ACTION PLAN MONITORING

1. Human Resources

<table>
<tr><th colspan="2">Strategic objective (HR): Attract and retain international and national talent and define a strategy for human resources and working conditions</th></tr>
<tr><td>Responsible people/team: Senior researchers + ARDITI RH</td><td rowspan="4">Expected results:
In five years, OOM will offer improved working conditions, long-term contracts, optimized benefits, and structured career development, leading to higher researcher retention, increased international recruitment, and stronger engagement in EU projects.

Outcome indicator(s) :
• Researcher retention rate: from 20% to >80%
• Long-term contracts for researchers: from 0% to >20%
• Training & mentorship participation: from 0% to >50%
• New or improved office and field-work spaces

Dedicated resources:

Human resources: Senior researchers + ARDITI RH

Financial resources: Regional Government, ERDF, Horizon Europe, Institutional Budget</td></tr>
<tr><td>Op objective a - Establish ethical and professional practices, ensuring fair and transparent career development.
➢ Responsible: Senior Researchers + ARDITI RH
➢ Target groups: OOM Researchers
➢ Implementation indicator(s) (within 36 months)
○ Fair and transparent recruitment process
○ Clear Appraisal and Career progression criteria for researchers based on merit and impact
○ Improved Working Conditions and Career Development
○ Stronger Collaboration and Research Impact</td></tr>
<tr><td>Op objective b - Optimize working conditions and social benefits to make OOM a more attractive research environment.
➢ Responsible: Senior Researchers + ARDITI RH
➢ Target groups: OOM Researchers
➢ Implementation indicator(s)
○ Improvement of shared workspaces, fostering collaboration and integration within 5 years, following the extension plan already approved by the regional government;
○ Continuous improvement of working arrangements and protecting researchers’ rights within 24 months.</td></tr>
<tr><td>Op objective c - Strengthen training and career development opportunities
➢ Responsible: Senior Researchers + ARDITI RH
➢ Target groups: OOM Researchers
➢ Implementation indicator(s)
○ Ensure the continuous researchers career development by providing both internal and external opportunities for training and knowledge update within 24 months;
○ Provide internal funding mechanisms when needed within the next 24 months.</td></tr>
</table>

2. Responsible Research and Innovation

<table>
<tr><th colspan="2">Strategic objective (RRI): Establish well-founded advanced R&D management policies aligned with the latest guidelines in Responsible Research and Innovation (RRI)</th></tr>
<tr><td>Responsible people/team : To be defined by OOM’s board and senior researchers in synergy with ARDITI’s HR management team.</td><td rowspan="2">Expected results :
OOM is committed to implementing advanced R&D management policies aligned with Responsible Research and Innovation (RRI) principles, ensuring best practices in ethics, inclusivity, stakeholder engagement, open science, and governance, as outlined in the 20 principles of the European Charter for Researchers. Success will be measured by the percentage of research projects integrating RRI principles, increased participation in open science initiatives,</td></tr>
<tr><td>Op objective a - Integrate ethics into research practices
➢ Responsible : OOM/ARDITI board + researchers
➢ Target groups : OOM researchers
➢ Implementation indicator(s)
○ Establish the «HR Excellence in Research» /HRS4R implementation Action Plan within 12 months.</td></tr>
</table>

○ Obtain the «HR Excellence in Research» Award within 12 months.	and higher levels of researcher and stakeholder engagement. **Outcome indicator(s):** • % of projects integrating RRI principles: **from** 20% **to** 100% • % of researchers trained in RRI: from 20% to >=80% • Annual stakeholder engagement events held: At least 1 per year • Number of OOM projects contributing to open science, governance and public initiatives: **from** Limited **to** 70% of projects. **Dedicated resources :** • Human resources: Training programs on RRI & ethics (internal); Stakeholder engagement and public outreach budget; Legal & policy advisors • Financial resources: Internal resources, ERDF, EU research funding; Horizon Europe, government support; Institutional budget, policy grants.
Op objective b - Formalize and promote Equity, Diversity, and Inclusion (EDI) policies ➢ ***Responsible : OOM/ARDITI board + HR dep.*** ➢ ***Target groups : OOM staff*** ➢ ***Implementation indicator(s)*** ○ Implement OTM-R (Open, Transparent and Merit-Based Recruitment) policies within 3 years	
Op objective c - Strengthen engagement with stakeholders and the broader community ➢ ***Responsible : OOM board + senior researchers + ARDITI C&D dep.*** ➢ ***Target groups : stakeholders and the broader community*** ➢ ***Implementation indicator(s)*** ○ Map stakeholders within 12 months. ○ Ensure 25% of participants in OOM's marine science and other regular public events represent stakeholders and the broader community.	

3. Horizon Europe

Strategic objective (HE): Increase OOM's participation and collaboration in Horizon Europe (HE) through institutional strategies, effective networking, and researcher support	
Responsible people/team : Senior OOM Members + ARDITI	**Expected results:** In five years, OOM will significantly expand its involvement in HE projects, increase the number of applications submitted, secure multiple HE-funded projects including leadership roles, and establish structured partnerships with leading institutions **Outcome indicator(s):** • HE projects secured: from 1 to 3 • Researchers involved in HE applications: from 10% to 50% • Structured partnerships with HE champions: from few to at least 5 Total HE funding secured: from €381,568 to €1M • Participation in at least 2 HE networking events per year **Dedicated resources:** • **Human resources:** Senior Researchers + ARDITI PMO
Op objective a - Expand and diversify OOM's partner network ➢ **Responsible: Senior Researchers + ARDITI PMO** ➢ **Target groups: OOM Researchers and Strategic Partners** ➢ **Implementation indicator(s)** ○ Participation in at least 2 HE networking events per year to build strategic connections ○ 25% of researchers engaged in HE collaborations	
Op objective b - Enhance institutional support for Horizon Europe applications ➢ **Responsible: Senior Researchers + ARDITI PMO** ➢ **Target groups: All researchers involved in HE proposal preparation** ➢ **Implementation indicator(s)** ○ Work with ARDITI Project Management Office or external project consultants to guide researchers working on application processes in order to improve success rates, as needed. ○ Establish mentorship programs and leadership roles for HE engagement within 12 months, aligned with ARDITI's PMO. ○ Launch and implement incentives for successful project management and execution within 5 years.	

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Op objective c - Improve researcher engagement and career development in Horizon Europe ➢ **Responsible: Senior Researchers + ARDITI PMO+ ARDITI RH** ➢ **Target groups: Research staff and early-career researchers** ➢ **Implementation indicator(s)** o Participate in periodic HE awareness sessions aligned with the launch of the new work programmes, within 24 months, promoted by ARDITI PMO; o Ensure dedicated researcher time for HE applications within 36 months, through the recruitment of new staff. o Increase researcher participation in international HE events by 25% within 36 months.	• **Financial resources:** Institutional Budget, Horizon Europe (CSA, MSCA, WIDERA); ERDF

4. Funding Synergies

Strategic objective (Synergies): Mobilize resources to promote international collaborations and strategic alignment with Horizon Europe (HE) funding	
Responsible people/team : **To be defined by OOM’s board and senior researchers in synergy with ARDITI’s HR management team.**	**Expected results :** OOM will strengthen its international collaborations and alignment with Horizon Europe (HE) by mobilizing financial and infrastructure resources, leveraging synergies between structural funds (e.g., ERDF) and HE, optimizing infrastructure use, securing co-financing mechanisms, and expanding participation in international networks. Progress will be measured by the amount of external funding obtained, the number of HE projects co-financed with structural funds, infrastructure enhancements, and partnerships with international research institutions. **Outcome indicator(s) :** • Total funding secured through HE and structural fund synergies: **from** Limited coordination **to** €2M+ • Investment in research infrastructure using ERDF & HE funds: **from** Sufficient **to** Robotics lab & equipment upgrades, namely with a new research vessel and expanded control centre • Increase in participation in international research networks: **from** Low engagement **to** At least 5 formalized partnerships (in 5 years) **Dedicated resources :** • Human resources: Financial and administrative experts on EU funding; • Financial resources: Investment in research infrastructure & digital platforms (via ERDF, HE, Regional
Op objective a - Strengthen institutional support for European project participation ➢ ***Responsible : OOM/ARDITI board.*** ➢ ***Target groups : OOM researchers and project managers / technicians*** ➢ ***Implementation indicator(s)*** o Host at least one HE proposal writing training session bi-annually (within ARDITI’s PMO – Project Management Office, being created), reaching 80+% of researchers within 3 years (this objective is shared with HE Action Plan objectives).	
Op objective b - Enhance visibility and utilization of OOM’s infrastructure in international networks ➢ ***Responsible : OOM board*** ➢ ***Target groups :*** **international stakeholders / networks** ➢ ***Implementation indicator(s)*** o Increase institutional presence at international conferences by 50% within 3 years. o Ensure OOM’s participation in at least 3-5 major European networking events annually.	
Op objective c - Maximize participation in European and international research networks ➢ ***Responsible : OOM board*** ➢ ***Target groups : OOM researchers and project managers / technicians*** ➢ ***Implementation indicator(s)*** o Ensure that OOM researchers participate in 3 to 5 international conferences annually.	

	support); Budget for international networking and capacity-building (via Horizon Europe, Erasmus+, institutional funds)

II. ANNEXES TO THE EXCELLENCE FOR ERA ROADMAP

1. Completed self-assessments
2. Interview results
3. List of attendees to workshop n°1
4. Workshop n°1 Satisfaction survey results
5. List of attendees to workshop n°2
6. Workshop n°2 Satisfaction survey results (not available)

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ANNEX 1: Self Assessment Tool

The next pages provide an overview of the conclusions from the self-assessment tools, for detailed results, please contact Ms. Cátia Jardim (catia.jardim@arditi.pt) or Mr. Lúcio Quintal (lucio.quintal@arditi.pt)

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Dimension 1 : Human resources	How to attract and retain international talents to reach a critical mass of researchers and improve scientific productivity and reputation through an adequate human resources strategy and better working conditions?

Measurement of the State of implementation	Measurement options	Explanation
	Not considered (No action taken or planned)	
	Initial steps taken (some actions in place) but limited progress	
	Mostly implemented with room for improvement	
	Continous implementation and optimization	

The assessment of this dimension is adapted from the HRS4R (Human

Sub-dimension 1 : Ethical and Professional Aspects			Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
	Principles	Definition according to the European Charter for Researchers	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation ? Initiatives undertaken/new proposals to improve the situation
	Research freedom	Researchers should focus their research for the good of mankind and for expanding the frontiers of scientific knowledge, while enjoying the freedom of thought and expression, and the freedom to identify methods by which problems are solved, according to recognised ethical principles and practices. Researchers should, however, recognise the limitations to this freedom that could arise as a result of particular research circumstances (including supervision/guidance/management) or operational constraints, e.g. for budgetary or infrastructural reasons or, especially in the industrial sector, for reasons of intellectual property protection. Such limitations should not, however, contravene recognised ethical principles and practices, to which researchers have to adhere	Mostly implemented with room for improvement	3	CL (3): Researchers and technicians at OOM focus their efforts on expanding scientific knowledge and contributing to the community, operating with freedom of thought and expression while adhering to ethical principles. CJ: I think this is implicit in researchers and related staff although ARDITI does not have a code of ethic.
	Professional attitude	Researchers should be familiar with the strategic goals governing their research environment and funding mechanisms, and should seek all necessary approvals before starting their research or accessing the resources provided. They should inform their employers, funders or supervisor when their research project is delayed, redefined or completed, or give notice if it is to be terminated earlier or suspended for whatever reason.	Initial steps taken (some actions in place) but limited progress	1	CL (3): Regarding the second topic, all information about the projects is communicated to the employer. As far as I know. CJ: I think most of the researchers/staff don't have a full idea of strategic goals or funding mechanisms since this is a fairly new team hired to perform specific work already pre-defined. For the senior researchers
	Dissemination, exploitation of results	All researchers should ensure, in compliance with their contractual arrangements, that the results of their research are disseminated and exploited, e.g. communicated, transferred into other research settings or, if appropriate, commercialised. Senior researchers, in particular, are expected to take a lead in ensuring that research is fruitful and that results are either exploited commercially or made accessible to the public (or both) whenever the opportunity arises	Mostly implemented with room for improvement	3	CL (4): All results from the research component, along with OOM's more technical findings, are shared through papers, reports, and presentations. CJ: Communication and educational service have been dynamizing project dissemination and communication. Exploitation and knowledge transfer are still to be implemented/developed
	Public engagement	Researchers should ensure that their research activities are made known to society at large in such a way that they can be understood by non-specialists, thereby improving the public's understanding of science. Direct engagement with the public will help researchers to better understand public interest in priorities for science and technology and also the public's concerns.	Mostly implemented with room for improvement	3	CL (1): Through the educational service's lectures (of ARDITI), we have been 'passing on information', on some topics, to a public that doesn't understand science. However, society in general doesn't know what we do and how important our work is. Knowing their opinions on certain topics (workshops?) would also be valuable.
	Non discrimination	Employers and/or funders of researchers will not discriminate against researchers in any way on the basis of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition.	Continous implementation and optimization	4	CL (4): As far as I know, there is no discrimination. CJ: CJ: I think this is implicit in researchers and related staff although ARDITI does not have a code of ethic.
	Evaluation/ appraisal systems	Employers and/or funders should introduce for all researchers, includingsenior researchers, evaluation/appraisal systems for assessing their professional performance on a regular basis and in a transparent manner by an independent (and, in the case of senior researchers, preferably international) committee. Such evaluation and appraisal procedures should take due account of their overall research creativity and research results, e.g. publications, patents, management of research, teaching/lecturing, supervision, mentoring, national or international collaboration, administrative duties, public awareness activities and mobility, and should be taken into consideration in the context of career progression.	Not considered (No action taken or planned)	0	CL (0): Internally, there is no evaluation of any kind. As far as I know. There is evaluation only when a researcher applies for a new position. Researchers always aim to do as much as possible, because they may have to apply for something. However, these internal evaluations must be very well thought out, because, for example, a researcher in oceanography will never have as many publications as in other areas such as biology. Another point to note is that (speaking only of the OOM) the researcher also sometimes works in the technical component and vice versa. This whole component of work management and organization of the OOM is being implemented and is intended to be improved and structured, of course. However, at this early stage of 'affirming the OOM', everyone is 'working on a bit of everything'.

Dimension 2 : Responsible Research and Innovation	How to maximime the impacts of your research activities throuhg the incorporation of advanced R&I management standards (such as open science, ethics, public engagement, etc.) ?

Measurement of the State of implementation	Measurement options	Explanation
	Not considered (No action taken or planned)	
	Initial steps taken (some actions in place) but limited progres	
	Mostly implemented with room for improvement	
	Continous implementation and optimization	

The assessment of this dimension is adapted from the "RRI self-reflection tool"

Sub-dimension 1 : Ethics			Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
	Principles	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation ? Initiatives undertaken/new proposals to improve the situation
	Ensuring the integrity of R&I practices	All research and innovation practices adhere to ethical guidelines and to the Code of Conduct for Research Integrity (for instance by encouraging peer review, consulting ethics experts, promoting internal discussions, etc.)	itial steps taken (some actions in place) but limited progres	1	CL (4): from what I know, yes CJ: from common sense, yes
	Preventing potentially harmful impacts on the public or the environment	Taking proactive measures to anticipate and minimize risks to society or the environment, while ensuring that the outcomes of research are responsibly used even after the project's conclusion.	itial steps taken (some actions in place) but limited progres	1	CL (4): from what I know, yes CJ: from common sense, yes
	What are possible ethical considerations for your R&I practices?	Environmental impacts Human and animal health impacts Local economic and development impacts Social justice Education Data management	≥ 4	3	

Comments & feedbacks :

Total for subdimension 1 Ethics	1,666666667

Sub-dimension 2 : Gender dimension			Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
	Principles	Definition	State of implementation (please use the drop-down	Please do not	Comments (for instance : What is the actual gap between the principle and the
	Gender equality plan	My organization has a formal strategy or framework in place to promote gender equality within its operations and decision-making processes	Mostly implemented with room for improvement	3	CL (0): Not that I know of CJ: ARDITI has a plan but has not developed any initiative to promote it. Communication dep
	What are your gender equality practices regarding staff and working conditions ?	We aim for gender-balanced teams We aim for gender-balanced management positions We have family-friendly work spaces We have equal salary guarantees We have equal contract conditions We promote awareness and support of diverse working approaches	≥ 4	3	CL (1): I'm not sure, but I think we aim for gender-balanced teams at least
	How is gender equality evaluated within your organisation ?	We have specific actions and criteria for evaluating gender equality We have a team dedicated to evaluating gender equality We evaluate gender awareness through career development activities We monitor gender balance of teams We monitor gender balance of participants to R&I activities	≤ 2	1	CL (0): Not that I know of CJ: we monitor the gender balance of teams and use this data in the yearly activity report
	Which gender dimensions are considered within your R&I practices ?	Gender-balanced teams Sex and gender considered in our chosen topics Sex and gender considered in our methodology Sex and gender considered in our data Gender-balanced publication strategies Gender considered in our dissemination activities	≤ 2	1	CL (1): I'm not sure, but I think we aim for gender-balanced teams at least

Dimension 3 : Horizon Europe	How to intensify transnational collaborations and participation in Horizon Europe through the creation of favourable environment and institutional policy that encourages and supports researchers to submit highly competitive applications ?

Measurement of the State of implementation	Measurement options	Explanation
	Not considered (No action taken or planned)	
	Initial steps taken (some actions in place) but limited progr	
	Mostly implemented with room for improvement	
	Continous implementation and optimization	

Sub-dimension 1 : Connection to EU clubs		Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
Factors	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's
Exploiting collaborations with Horizon Europe champions	My organization builds on previous collaborations with organizations and networks active in Horizon Europe to develop new proposals and integrate new networks	itial steps taken (some actions in place) but limited progres	1	CL (0): Not that I know of
Implementing an effective networking strategy	My organization has mappped out key organizations and networks to connect with and engages in effective networking activities to strenghten our relationships with EU champions and enhance our international reputation	itial steps taken (some actions in place) but limited progres	1	CL (0): Not that I know of
Defining clear added-value and value proposition	My organization has identified its unique, distinctive assets (i.e. infrastructures, equipments, know-how, expertise, networks) at EU level	itial steps taken (some actions in place) but limited progres	1	CL (4): As far as equipment, know-how and expertise are concerned, OOM's assets are much clearer.

Comments & feedbacks :

Total for Sub-dimension 1 : Connection to EU clubs	1

Sub-dimension 2 : Organization characteristics		Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
Factors	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's
International openess	My organization actively promotes the recruitment of foreign students, PhD candidates and researchers and has developped a strategy to reinforce international research collaborations leading to co-publications and/or projects	Mostly implemented with room for improvement	3	CL (1): We have been receiving some international students at OOM, but no clear strategy exists. Not even a strategy to reinforce international research, as far as I know.
Scientific productivity and impact	My organization implements a comprehensive action plan to increase its research intensity, scientific productivity (expressed in number of publications per full time equivalent) and publications impacts (average number of citations)	Not considered (No action taken or planned)	0	CL (0): Not that I know of
Size	My organizations follows a strategy and/or takes actions to grow and reach a critical mass, notably in terms of researchers	itial steps taken (some actions in place) but limited progres	1	CL (0): Not that I know of
Reputation	My organization allocates resources to increase its international reputation	itial steps taken (some actions in place) but limited progres	1	CL (0): Not that I know of
Orientation of R&I activities	My organization's R&I activities are closely aligned with Horizon Europe calls and the targeted calls fully support our vision and mission.	itial steps taken (some actions in place) but limited progres	1	
Administrative and financial procedures	My organization has established well-defined policies and procedures and provides strong administrative support for research activities	Mostly implemented with room for improvement	3	CJ: The support staff is well trained and can provide assistance in several areas
Institutional strategy	My organization has designed and implements a SMART strategy with clear objectives and dedicated resources to increase its participation in Horizon Europe	itial steps taken (some actions in place) but limited progres	1	CL (0): Not that I know of

Dimension 4 : Funding synergies	How to effectively mobilize existing assets (such as infrastructures and equipment) and the resources provided by structural funds (such as ERDF) to intensify international collaborations notably with Horizon Europe “champions” (the organizations and networks that constitute the core of the European Research Area and monopolize coordination positions), through greater synergies ?

Measurement of the State of implementation	Measurement options	Explanation
	Not considered (No action taken or planned)	
	Initial steps taken (some actions in place) but limited progress	
	Mostly implemented with room for improvement	
	Continous implementation and optimization	

Sub-dimension 1 : Capacities			Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
	Factors	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation ? Initiatives undertaken/new proposals to improve the situation
	Supportive administrative and financial team	Staff members responsible for administrative and financial aspects are trained on synergies and have developed internal guidelines to support their implementation.	Mostly implemented with room for improvement	3	CJ: no specific training but some knowledge due to experience.
	Knowledge of the policy context	Staff members are well-informed about the policy frameworks of both Horizon Europe and structural funds, as well as the synergy opportunities available within these regulations.	Mostly implemented with room for improvement	3	
	Horizon Europe capacities	Structural funds are used to conduct capacity building interventions related to Horizon Europe (such as training sessions on proposal writing)	itial steps taken (some actions in place) but limited progres	1	

Comments & feedbacks :

Total for Sub-dimension 1 : Capacities	2,333333333

Sub-dimension 2 : Infrastructures			Please indicate the state of implementation of each principle	Autmatically calculated value	Optional
	Factors	Definition	State of implementation (please use the drop-down list)	Please do not modify	Comments (for instance : What is the actual gap between the principle and the current practice in your organisation? What are the obstacles currently impeding the principle's implementation ? Initiatives undertaken/new proposals to improve the situation
Infrastructures	Strategic development plan	ESIF-funded infrastructures and equipments are equipped with a multi-year development plan that integrates Horizon Europe objectives and resources.	Not considered (No action taken or planned)	0	
Infrastructures	Pro-Horizon Europe policy	ESIF-funded infrastructures and equipments have a dedicated Horizon Europe engagement roadmap featuring SMART objectives, adequate resources and a monitoring system	Not considered (No action taken or planned)	0	
Infrastructures	Openness to European stakeholders	ESIF-funded infrastructures are utilized to host European colleagues	itial steps taken (some actions in place) but limited progres	1	
Infrastructures	Asset	ESIF-funded infrastructures are promoted as assets to partner with strategic European organizations and to integrate promising Horizon Europe consortia and applications	itial steps taken (some actions in place) but limited progres	1	
Infrastructures	Participation in infrastructure networks	ESIF-funded infrastructures are part of established European Infrastructure Networks	Not considered (No action taken or planned)	0	

Comments & feedbacks :

ANNEX 2: Interview results

1. Detailed analysis of the key challenges and bottlenecks related to Horizon Europe Participation

General Overview of Horizon Europe Participation
OOM’s limited participation in Horizon Europe stems from insufficient institutional strategies, weak researcher engagement, and a lack of structured support systems. The challenges revolve around ineffective networking, fragmented institutional readiness, and limited focus on researcher development. Addressing these issues will require building strategic collaborations, enhancing internal capacity, and providing researchers with the necessary tools and support to succeed in Horizon Europe initiatives.

Root Cause 1: Insufficient Collaboration with Horizon Europe Champions and Ineffective Networking Strategy
OOM’s ability to participate in Horizon Europe is hindered by weak partnerships, limited exposure to relevant opportunities, and the absence of a formal networking framework.

Key Challenges/Bottlenecks:

1. **Lack of Engagement in European Networks**
   - Limited participation in European networks restricts access to key stakeholder,,project champions, and partnership opportunities.
   - Researchers are not actively connecting with experienced Horizon Europe institutions, which weakens OOM’s ability to secure collaborative projects.
2. **Limited Exposure to Horizon Europe Calls and Partners**
   - Insufficient knowledge and dissemination of Horizon Europe calls result in missed opportunities for relevant funding and collaborations.
   - Researchers lack proactive engagement with Horizon Europe partners who could facilitate entry into consortia.
3. **Absence of a Formal Networking Strategy**
   - OOM does not have a formalized networking strategy targeting Horizon Europe opportunities. This prevents systematic efforts to build connections and showcase value propositions.
   - Networking activities are ad hoc and decentralized, reducing their effectiveness.
4. **Inadequate Alignment Between Research Focus and Horizon Europe Themes**
   - The institution’s research areas often do not align with Horizon Europe priorities or themes, which limits its ability to participate in targeted calls.
   - There is a gap in strategically identifying and prioritizing research topics that match Horizon Europe objectives while leveraging institutional strengths.

Root Cause 2: Weak Institutional Support and Horizon Europe Readiness
The lack of a centralized Horizon Europe strategy, insufficient support structures, and limited infrastructure undermine OOM’s capacity to engage effectively in Horizon Europe.

Key Challenges/Bottlenecks:

1. **Absence of a Dedicated Horizon Europe Strategy**
   - OOM lacks a centralized, strategic framework for Horizon Europe participation, leading to fragmented and uncoordinated efforts.
   - Individual research units adopt their own approaches, which weakens the institution’s overall competitiveness.

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2. **Lack of Incentives for Researchers**
- The absence of formal incentives (e.g., financial rewards, career development opportunities) reduces researchers’ motivation to engage with Horizon Europe calls.
- Researchers may prioritize other tasks or funding opportunities over Horizon Europe participation.

3. **Underdeveloped Support Structures for Horizon Europe Proposals**
- Limited administrative support and insufficient personnel for proposal writing, risk management, and project administration hinder the ability to prepare competitive applications.
- Without dedicated support staff, researchers face significant challenges in managing the complex requirements of Horizon Europe proposals.

4. **Insufficient Investment in Infrastructure and Capacity Building**
- The institution lacks the necessary infrastructure, such as scientific equipment, facilities, and critical mass of expertise, to make it an attractive partner for international collaborations.
- Insufficient investment in human resources further weakens the organization’s ability to build capacity for Horizon Europe participation.

Root Cause 3: Limited Researcher Engagement and Career Development in Horizon Europe
Researchers face significant challenges in terms of time, training, and career incentives, which limits their ability to engage with Horizon Europe opportunities effectively.

Key Challenges/Bottlenecks:

1. **Lack of Time and Support for Researchers to Engage**
- Researchers are often overburdened with administrative and non-research tasks, leaving them with little time to focus on Horizon Europe proposal development.
- Limited administrative support exacerbates this issue, as researchers lack assistance to reduce their workload and allocate time to competitive proposals.

2. **Limited Training in Horizon Europe Proposal Writing**
- While some training opportunities exist, they are not sufficiently specialized to address the complexities of Horizon Europe proposal writing.
- Researchers require advanced, targeted training to enhance their ability to develop high-quality proposals and navigate Horizon Europe mechanisms.

3. **Limited Career Development Opportunities Linked to Horizon Europe**
- Career progression and professional recognition within OOM are not clearly tied to Horizon Europe participation.
- Researchers lack clear incentives or structured pathways that reward engagement in Horizon Europe projects.

4. **Inadequate Awareness of Horizon Europe Opportunities**
- Researchers are often unaware of relevant calls, funding opportunities, or how to approach potential Horizon Europe consortia.
- Insufficient internal communication and support limit researchers’ ability to identify and pursue suitable Horizon Europe opportunities.

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Summary of Key Challenges

1. **Strategic Collaboration and Networking Gaps**
o Limited engagement with European networks, absence of formal strategies, and poor alignment with Horizon Europe priorities restrict access to partnerships and funding opportunities.

2. **Lack of Institutional Support Structures**
o Weak infrastructure, insufficient administrative support, and the absence of a dedicated Horizon Europe strategy limit institutional readiness and competitiveness.

3. **Low Researcher Engagement and Development**
o Researchers face time constraints, lack of specialized training, and insufficient career incentives, reducing their ability and motivation to participate in Horizon Europe calls.

Strategic Focus Areas

1. **Develop a Centralized Horizon Europe Strategy**:
o Formalize a strategic framework to align research focus areas with Horizon Europe priorities.
o Establish a centralized approach to networking and collaboration with key European institutions and Horizon Europe champions.

2. **Strengthen Institutional Support**:
o Invest in dedicated support structures, including skilled personnel for proposal writing, risk management, and project administration.
o Improve infrastructure and capacity-building to enhance OOM’s attractiveness as an international research partner.

3. **Enhance Researcher Engagement**:
o Develop formal incentive systems (e.g., career progression, financial rewards to motivate researchers to engage with Horizon Europe.
o Offer specialized training programs to build researchers’ skills in proposal writing and navigating Horizon Europe processes.

4. **Improve Communication and Awareness**:
o Implement internal communication strategies to ensure researchers are aware of Horizon Europe calls, opportunities, and processes.
o Provide targeted support to help researchers assess alignment between their research and Horizon Europe objectives.

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2. Detailed overview of the key challenges and bottlenecks in OOM’s Human Resources dimension, broken down by the main dimension and each Root Cause:

General Overview of the Human Resources Dimension
OOM faces significant challenges in attracting and retaining international talent due to shortcomings in human resource strategies and working conditions. The issues are rooted in gaps in professional practices, optimization of working conditions, and training opportunities. These gaps impact OOM’s ability to provide a competitive, inclusive, and appealing environment for international researchers. Addressing these bottlenecks requires systemic improvements in ethical practices, working conditions, career stability, and development opportunities.

Root Cause 1: Incomplete Implementation of Ethical and Professional Practices
The first root cause highlights ethical and professional gaps that hinder OOM’s ability to attract and retain international talent. Key challenges include incomplete operationalization of inclusive policies, limited institutional visibility, and non-competitive career evaluation systems.

Key Challenges/Bottlenecks:

1. **Limited Visibility and Public Engagement**
o Insufficient dissemination of research outputs reduces visibility.
o Minimal engagement with local and international communities weakens the institution’s reputation.

2. **Non-competitive Evaluation/Appraisal Systems**
o Career progression is hindered by inconsistent or unclear evaluation processes.
o Pressure to secure funding overemphasizes research outputs (e.g., publications), detracting from professional growth and work satisfaction.

3. **Non-discrimination Policies Not Fully Operationalized**
o Inclusivity gaps persist due to insufficient mechanisms for accommodating diverse needs.
o Challenges include accommodating family relocation considerations for international researchers.

4. **Limited Application of Research Freedom**
o Overreliance on project-specific funding limits researchers' flexibility to pursue independent or innovative projects.
o Researchers are constrained by funding priorities instead of long-terminstitutional goals.

Root Cause 2: Limited Optimization of Working Conditions and Social Security
The second root cause relates to the institution’s inability to provide competitive and sustainable working conditions, leading to long-term instability and reduced attractiveness for international talent.

Key Challenges/Bottlenecks:

1. **Insufficient Career Stability**
o Short-term contracts tied to external funding increase uncertainty and researcher turnover.
o A lack of career stability discourages long-term commitments.

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2. **Suboptimal Salary Levels**
o Salaries are uncompetitive compared to European standards, largely due to budget constraints and regional wage restrictions.
o This bottleneck significantly impacts recruitment and retention of top talent.

3. **Inadequate Work-Life Balance Support**
o Relocation challenges (e.g., spouse employment, schooling) in Madeiramake it difficult to attract international talent.
o Limited infrastructure for flexible work arrangements or remote workhampers work-life balance.

4. **Gender and Inclusion Gaps**
o There is an insufficient focus on promoting gender balance and diversity in leadership roles.
o Targeted policies to ensure inclusivity remain underdeveloped, reducing overall equity in the workplace.

Root Cause 3: Initial Steps in Training and Continuous Development
The third root cause identifies gaps in providing consistent and advanced training opportunities, as well as clear career development plans. These challenges limit researchers’ growth, productivity, and job satisfaction.

Key Challenges/Bottlenecks:

1. **Limited Training Opportunities**
o Training programs are inconsistent, as they depend heavily on external project funding.
o There is a lack of specialized training for advanced research methodologies, impacting innovation potential.

2. **Restricted Access to Research Infrastructure**
o Overloaded equipment and insufficient physical space reduce research efficiency.
o A lack of advanced resources (e.g., large research vessels) limits fields like oceanography.

3. **Absence of a Comprehensive Career Plan**
o Career planning processes are reactive and short-term, lacking alignment with long-term institutional goals.
o A clear, structured framework for career progression is missing for both research and administrative roles.

4. **Dependence on External Resources**
o Internal funding for training and development is limited, leading to reliance on external funding sources.
o Structural and regional funding delays the timely implementation of critical training programs.

Summary of Key Challenges

The key bottlenecks across the three root causes are:

1. **Incomplete Ethical and Professional Policies**: Gaps in inclusivity, public engagement, and research freedom limit OOM’s visibility and international appeal.

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2. **Insufficient Career Stability and Competitiveness**: Short-term contracts, suboptimal salaries, and reliance on external funding create an unstable environment that discourages retention.

3. **Lack of Comprehensive Development Frameworks**: Inconsistent training,opportunities, restricted infrastructure access, and an absence of clear career plans impede researcher growth and satisfaction.

Strategic Focus Areas:
1. Improve visibility, inclusivity, and operationalization of ethical policies.
2. Enhance working conditions by stabilizing contracts, increasing salaries, and supporting work-life balance.
3. Develop a long-term strategy for continuous researcher training, infrastructure enhancement, and career progression.

3. Detailed analysis of the key challenges and bottlenecks within the Responsible Research and Innovation (RRI) dimension at OOM

General Overview of the RRI Dimension
OOM’s research impact is hindered by a lack of advanced R&I management standards, particularly in areas such as ethics, gender equality, and public engagement. The absence of formalized structures, limited resources, and inconsistent practices across research teams are central challenges. Addressing these bottlenecks will require integrating ethical governance, strengthening gender equality policies, and enhancing stakeholder involvement strategies.

Root Cause 1: Limited Integration of Ethics in Research Practices
The insufficient formalization and prioritization of ethics across OOM limit the consistency and impact of ethical research practices.

Key Challenges/Bottlenecks:

1. **Lack of Formalized Ethical Guidelines or a Dedicated Ethics Committee**
o OOM lacks a dedicated ethics group or formal guidelines due to limited human resources and time constraints.
o This absence results in unclear ethical standards across research practices.

2. **Ethics Perceived as Secondary to Operational Concerns**
o Ethical governance is not integrated into OOM’s central strategy, with autonomy prioritized over centralized ethical frameworks.
o Ethics remains a lower priority compared to operational and research outcomes.

3. **Limited Training or Awareness on Ethical Practices Among Staff**
o While there is interest in ethics training, resource and time limitations prevent its implementation.
o A lack of regular workshops or training results in inconsistent awareness among staff.

4. **Ethical Considerations Vary Across Research Teams**
o Teams operate autonomously, and ethical practices depend on individual discretion.
o This autonomy creates inconsistency in adhering to Responsible Research and Innovation (RRI) principles.

Root Cause 2: Insufficient Gender Equality Practices and Evaluation
Gender equality within OOM is not systematically addressed, resulting in informal practices that lack structure, monitoring, and targeted action.

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Key Challenges/Bottlenecks:

1. **Gender Equality Policy Is Not Formalized or Integrated**
o OOM’s gender equality policy is underdeveloped and not fully embedded in the organizational governance framework.
o Implementation remains inconsistent and lacks strategic integration.

2. **Gender Equality Occurs "Organically" Without Targeted Action Plans**
o Gender balance relies on organic progression rather than proactive initiatives.
o This lack of structured measures may fail to address underlying inequalities or biases.

3. **Lack of Monitoring or Evaluation Mechanisms for Gender Equality**
o Absence of a monitoring or evaluation system prevents OOM from identifying and addressing gender imbalances.
o Without data, strategic action plans cannot be developed or implemented effectively.

4. **No Clear Gender-Focused Initiatives in R&I Activities**
o While there is general awareness of gender equality, specific R&I projects do not prioritize or incorporate gender-focused measures.
o This gap reduces the visibility and impact of gender equality efforts within research.

Root Cause 3: Inadequate Stakeholder Involvement and Public Engagement
The absence of formalized engagement strategies and the lack of resources limit OOM’s ability to actively involve stakeholders and the public in R&I activities.

Key Challenges/Bottlenecks:

1. **Limited Public Engagement Strategies and Targeted Outreach Programs**
o While some public engagement occurs (e.g., educational programs), these initiatives are inconsistently developed and executed.
o There is no strategic outreach plan for engaging stakeholders effectively.

2. **Inconsistent Channels for Public and Stakeholder Communication**
o Communication with stakeholders is informal and voluntary, lacking a centralized and coherent approach.
o This inconsistency reduces OOM’s ability to build strong relationships with stakeholders.

3. **Lack of Resources for Active Stakeholder Participation in R&I**
o Workshops and training programs for science communication and public engagement are not well-supported due to time and resource constraints.
o This limits researchers’ ability to involve external stakeholders in their work.

4. **Administrative Burden Preventing Engagement Activities**
o Heavy administrative workloads leave researchers with insufficient time and capacity to engage stakeholders and the public.
o The lack of human resources exacerbates this issue, reducing engagement opportunities.

Summary of Key Challenges

The main challenges in the RRI dimension can be summarized as follows:

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1. **Lack of Formalized Structures and Policies**
o Absence of formal ethical guidelines, gender equality policies, and stakeholder engagement strategies prevents systemic improvements

2. **Resource and Capacity Constraints**
o Limited time, funding, and human resources hinder the implementation of ethics training, gender equality initiatives, and engagement activities.

3. **Inconsistent Practices and Decentralized Efforts**
o Autonomy across research teams results in inconsistent application of ethical standards and RRI principles.
o Informal communication channels and reliance on voluntary efforts reduce the effectiveness of stakeholder engagement.

4. **Lack of Monitoring and Strategic Integration**
o Absence of monitoring systems for ethics and gender equality prevents the identification of gaps and development of actionable strategies.

Strategic Focus Areas

To improve RRI performance, OOM should prioritize the following areas:

1. **Formalize Structures**: Develop ethical guidelines, a dedicated ethics committee, and a robust gender equality policy integrated into governance.

2. **Strengthen Resource Allocation**: Allocate resources for ethics training, public engagement programs, and targeted outreach initiatives.

3. **Develop Monitoring Mechanisms**: Implement systems to monitor gender equality, ethical practices, and stakeholder engagement outcomes.

4. **Promote Centralized Coordination**: Establish a centralized framework for ethical governance, stakeholder communication, and public engagement strategies.

By addressing these challenges systematically, OOM can enhance its RRI practices, ensuring greater consistency, inclusivity, and research impact.

4. **Detailed analysis of the** key challenges and bottlenecks **related to** Funding Synergies **within OOM**

General Overview of Funding Synergies

The limited mobilization of resources and infrastructures stems from the absence of institutional strategies, insu>icient support for Horizon Europe synergies, underdeveloped infrastructure, and ine>ective networking. These bottlenecks restrict OOM’s ability to strategically align structural funds and local resources with Horizon Europe objectives, hindering international collaborations and funding e>iciency. Strengthening administrative support, infrastructure planning, and networking strategies will be critical to improving funding synergies and positioning OOM as a competitive international partner.

Root Cause 1: Limited Institutional and Administrative Support for Horizon Europe Synergies
The lack of institutional capacity, policies, and influence over regional funding authorities hinders the alignment of structural funds with Horizon Europe objectives.

Key Challenges/Bottlenecks:

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1. **Lack of Awareness and Knowledge About Horizon Europe Among Local Funding Authorities**
o Regional funding authorities have limited understanding of Horizon Europe’s goals, preventing synergies between local funding and European priorities.
o OOM lacks mechanisms to educate and influence these authorities to align their funding decisions with Horizon Europe’s strategic themes.

2. **Absence of Pro-Horizon Europe Policies**
o There are no policies at the regional or institutional levels to incentivize the strategic use of structural funds to support Horizon Europe participation.
o The lack of a policy framework leaves Horizon Europe as a secondary consideration in funding decisions.

3. **Lack of Strategy for Leveraging Structural Funds for Horizon Europe**
o OOM does not have a clear strategy for aligning regional structural funds with Horizon Europe objectives, missing opportunities to create funding synergies.
o This misalignment limits the potential to strategically combine resources for larger-scale projects.

4. **Limited Institutional Capacity to Influence Regional Authorities**
o Regional authorities are reluctant to incorporate Horizon Europe priorities into their funding decisions, and OOM lacks the institutional influence to advocate for this alignment.
o This weakens e>orts to e>ectively use structural funds as a stepping stone for Horizon Europe projects.

Root Cause 2: Underdeveloped and InsuNicient Infrastructure for International Collaboration
Inadequate infrastructure planning and limited coordination restrict OOM’s ability to engage effectively in Horizon Europe collaborations.

Key Challenges/Bottlenecks:

1. **Insufficient Infrastructure Investment for Horizon Europe Collaboration**
o While structural funds have been used to develop infrastructures like the OOM, these are not yet fully optimized for Horizon Europe participation.
o Insufficient investment in targeted infrastructure upgrades limits collaboration opportunities.

2. **Lack of a Strategic Infrastructure Development Plan for Horizon Europe**
o There is no comprehensive plan to align infrastructure development with Horizon Europe requirements, resulting in missed opportunities for integration.
o Structural funds were not strategically leveraged to support Horizon Europe participation.

3. **Limited Availability of Specialized Research Equipment**
o OOM lacks a comprehensive database of existing research equipment and resources, making it di>icult to attract European collaborators.
o Improved visibility and utilization of current infrastructure could enhance OOM’s role in Horizon Europe projects.

4. **Weak Infrastructure Coordination Between Local Entities and Horizon Europe Projects**
o There is no strategy to align local infrastructure e>orts with Horizon Europe priorities, which hinders joint utilization of resources.
o Poor coordination between local entities and European initiatives restricts opportunities for synergies.

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Root Cause 3: Ineffective Networking and Strategic Collaboration
Limited networking e>orts, absence of formalized mechanisms, and insu>icient promotion of international partnerships weaken OOM’s ability to engage with Horizon Europe.

Key Challenges/Bottlenecks:

1. **Limited Participation in International Research Networks**
o OOM’s limited involvement in European and international networks reduces opportunities to build relationships with key Horizon Europe stakeholders.
o This lack of participation restricts OOM’s access to project consortia and competitive collaborations.

2. **No Clear Strategy to Engage Horizon Europe "Champions" and Key Collaborators**
o There is no targeted strategy to engage experienced Horizon Europe institutions ("champions"), who could provide mentorship and collaboration opportunities.
o Without proactive e>orts, OOM misses out on strategic partnerships that could improve proposal success rates.

3. **Lack of Formalized Collaboration Mechanisms with Horizon Europe Partners**
o OOM does not have formal mechanisms in place to foster collaboration with key international research groups or institutions.
o This absence limits the ability to align research e>orts with Horizon Europe’s thematic areas and priorities

4. **Insufficient Focus on Promoting International Partnerships**
o While infrastructures have been publicized locally, e>orts to promote them to international partners remain insufficient.
o This lack of promotion reduces OOM’s visibility and attractiveness as a partner for Horizon Europe projects.

Summary of Key Challenges

1. **Lack of Institutional Policies and Strategies**
o Absence of pro-Horizon Europe policies and clear strategies for leveraging structural funds restricts funding alignment and mobilization of resources.
o Limited capacity to influence regional authorities hinders e>orts to align local funding with European priorities.

2. **Underdeveloped Infrastructure for International Collaboration**
o Insufficient infrastructure investment, lack of strategic planning, and limited coordination with local entities weaken OOM’s readiness for Horizon Europe collaborations.
o Improved visibility and utilization of existing infrastructure are necessary to attract European partners.

3. **Weak Networking and Collaboration Mechanisms**
o Limited participation in international networks, lack of engagement with
Horizon Europe champions, and absence of formalized collaboration mechanisms restrict opportunities for strategic partnerships.
o Insufficient promotion of OOM’s infrastructures and capabilities reduces international visibility and attractiveness.

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Strategic Focus Areas

1. **Strengthen Institutional Policies and Strategies**
o Develop and advocate for pro-Horizon Europe policies at the regional and institutional levels.
o Create a clear strategy to leverage structural funds for Horizon Europe participation, aligning local funding with European priorities.

2. **Enhance Infrastructure Development and Coordination**
o Develop a strategic infrastructure plan that prioritizes Horizon Europe compatibility and collaboration readiness.
o Promote existing research equipment and infrastructures through a comprehensive database and targeted outreach to European collaborators.

3. **Improve Networking and International Collaboration**
o Actively engage in European research networks and develop strategies to connect with Horizon Europe "champions" and experienced partners.
o Formalize mechanisms for collaboration with international institutions to align research e>orts with Horizon Europe priorities.
o Increase the promotion of OOM’s infrastructures and research capabilities to enhance visibility and attract strategic international partners.

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ANNEX 3: List of attendees to workshop n°1

1st Workshop Remora - 17 January 2025

Sala Ursa Menor 1

Participants:

GONÇALO Barros
IURI Ramos
Pedro GOIS
RICARDO JOSE
SANDRO
CALDEIRA
VIRGINIA
CLEMENTE
CAROL
Rui VIEIRA
José ALVES
AFONSO Loureiro
XANA
JESUS Reis
CATIA
CARLOS
Ricardo FARIA
MARTINHO Almeida
LILIANA Freitas
ARACELIS
RITA Ferreira

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ANNEX 4: Workshop n°1 Satisfaction survey results

Timestamp	1. OVERALL SATISFACTION How satisfied were you with the workshop overall?	2. CONTENT RELEVANCE Was the workshop content relevant to your needs or goals?	3. PRESENTER EFFECTIVENESS: How would you rate the presenter(s) regarding knowledge, communication, and engagement?	4. WORKSHOP STRUCTURE Was the workshop well-organized and appropriately paced?	5. PRACTICAL APPLICATION: Do you feel you can apply what you learned in your work?	6. INTERACTION AND ENGAGEMENT: Were there enough opportunities for participation and interaction?	7. Do you feel the workshop help reach the objective of defining a common EU ambition and sharing/adjusting the diagnosis?	8. Has the workshop fostered your engagement in REMORA?	9. Has the workshop fostered your willingness to participate (more) in Horizon Europe projects?	10. Suggestions for Improvement: What could be improved for future workshops?
1/23/2025 16:05:06	3	3	4	4	4	4	3	3	3	Not sure what to answer here.
1/23/2025 16:07:09	5	4	4	4	3	4	4	4	4	For the future it would be interesting to have a workshop with clearer guidelines on how to submit winning applications.
1/23/2025 16:15:15	4	4	4	4	4	3	4	5	3	Better explanation of the purposes of the exercises. More chances for debating the issues in larger groups.
1/23/2025 16:53:20	3	3	3	3	3	3	3	3	3	
1/23/2025 16:54:53	5	5	5	5	5	5	4	5	5	Overall, it was very well organized. I don't have any specific suggestions to offer
1/23/2025 17:18:10	5	5	5	5	5	5	5	5	5	Nothing of note
1/24/2025 9:42:42	4	5	4	5	5	5	4	4	4	Nothing to add
1/24/2025 11:50:52	4	4	4	5	3	5	4	4	3	distribution of person per group
1/24/2025 16:07:22	5	4	5	4	3	5	4	4	4	
1/27/2025 16:18:44	5	5	5	5	5	5	5	5	5	A intervenção/opinião de todos os presentes no workshop, sobre o tema discutido.
1/28/2025 10:11:01	5	5	5	5	5	5	5	5	5	I believe it was well
1/28/2025 11:09:49	5	5	4	4	5	5	5	5	5	I'm happy with what we have done
1/28/2025 11:42:34	4	5	5	4	4	5	5	5	5	Gostei da organização do workshop penso que não melhorava nada!
1/28/2025 11:51:25	5	4	4	5	3	5	4	5	5	This workshop was helpful in learning the actual state of OOM's involvement in Horizon Europe projects; I believe the upcoming ones will be essential in defining the new actions to enhance our involvement.
1/29/2025 18:50:17	4	3	4	5	4	5	4	4	4	Increased interaction with institutes that also participate in REMORA project.

ANNEX 4: 5.List of attendees to workshop n°2

2nd Workshop Remora - 11 February 2025

Sala Ursa Menor 1

Participants:

GONÇALO Barros
IURI Ramos
Pedro GOIS
RICARDO JOSE
SANDRO
CALDEIRA
VIRGINIA
CLEMENTE
CAROL
Rui VIEIRA
XANA
JESUS Reis
CATIA
CARLOS
Ricardo FARIA
MARTINHO Almeida
LILIANA Freitas
ARACELIS
RITA Ferreira

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