



AGÊNCIA NACIONAL
DE INOVAÇÃO

Stakeholder event: Mission Area Healthy Oceans, Seas, Coastal and Inland Waters

*Report on the first reflections &
preliminary contributions from the
Portuguese community towards
the Missions' development and
implementation*

DPI – Direção de Promoção Internacional

Background

On the 2nd of October 2020, the Portuguese National Innovation Agency (ANI) in collaboration with the Foundation for Science and Technology (FCT) and Oceano Azul Foundation held an online stakeholders' event on the European Commission's Mission Area for Healthy Oceans, Seas, Coastal and Inland Waters. This session integrates the cycle of the Mission's discussions with national stakeholders, which began with an event for the Cancer Mission that took place in ANI on 7th of January 2020, and a joint event presenting the Missions 'Adaptation to Climate Change', 'Soil Health & Food' and 'Climate Neutral and Smart Cities', held online on the 16th of June 2020. Considering the timing of the mission design, this session was focused on the mission's implementation phase.

The event was organised as a three-hour online information session held through Zoom and gathered a total of **200 participants** from a wide range of Portuguese stakeholders from the public and private sectors (companies, research and higher education institutions, regional governments, municipalities, association and other entities). The focus of the session was to introduce the main targets of the Horizon Europe "Mission Starfish 2030: Restore our oceans and waters", as well as to collect the first impressions and preliminary contributions from the Portuguese community towards the missions' development and implementation.

This report summarizes the discussion held between Margarida Ribeiro, from Unit A4 – Missions & Partnerships of DG Research & Innovation of the European Commission, Tiago Pitta e Cunha, from Oceano Azul Foundation and EU Board Member of the Healthy Oceans, Seas, Coastal & Inland Waters and Peter Heffernan, from Ocean Azul Foundation and EU Board Member of the Healthy Oceans, Seas, Coastal & Inland Waters, with the Portuguese stakeholders. The main points of discussion are detailed below.

Main discussion topics

- The concept and main goals of the Horizon Europe Missions were addressed, focusing on the role of science and innovation to accomplish the Mission's purposes. A brief explanation concerning the Horizon Europe structure was presented. The Missions will be implemented within Pillar II, however it is essential to understand that **each Mission is part of a wider objective, being crucial to examine it on a global perspective and keep in mind that its impact will have to go much further than a simple research and innovation project**. It is also necessary to align the policies and financing system to ensure that, at national and regional levels, the strategies being developed can accommodate the Missions' goals.
- The dynamics of work programs and how missions will be implemented were also referred, explaining that the Member States decide together with the European Commission on the strategic priorities. The Mission Board of the Starfish Mission 2030 proposed five main goals, which crossed over to several thematic areas. For the first work programmes, some preparatory activities are being designed to launch the process following the approval of the strategic plan. However, for this to happen it is necessary to have **interested stakeholders and that the portfolio helps the Mission to accomplish a central role and critical visibility**.
- The first set of Q&A was centred on the implementation phase of the Mission (the first objectives to be implemented, alignment between the regional authorities and the Mission, among others). **Participants from the national and regional authorities** actively contributed to the discussion, highlighting that **national priorities and strategies are aligned with the goals of the Starfish Mission 2030**.
- Succeeding this first block, the Mission and its targets were introduced. The importance of the election of the Starfish Mission as one of the five societal challenges that Europe faces in the

coming decades, underlines the **increasing importance that oceans have on the international agenda**. The bold, innovative, and disruptive vision of the Starfish Mission can be a great **opportunity to Portugal**, as it will translate into more science and literacy, more support on environmental protection and the possibility of restoring the coastal ecosystems. There is also a new philosophy in this Mission linked to the economy of the sea: the concept of a decarbonizing economy. The intervention was finalised with the following statement: “Restoring the oceans and waters is one of the most urgent and defining tasks of our time”.

- **Goal 1 (*filling the knowledge and emotional gap*) focuses on the emotional gap between the European citizens and the ocean.** For this Mission to be successful is necessary to recognize the enormous challenge, break the lack of understanding and bridge the gap of empathy and emotional attachment with the oceans. Training will be essential to the transformation, with emphasis on the actions and targets around the entire education cycle and an engagement level never achieved before. It is also important to make available and accessible to everyone a near real-time observation capacity of the entire water system through a **digital twin of the ocean** and a new level of open access data, building on supercomputing, cloud, and artificial intelligence. It is the most ambitious definition of the mission.
- **Goal 2 (*regeneration of degraded habitats*) aims to look at the protection and conservation of the ocean not as a cost but as an investment.** It is a double objective: on the one hand, the purpose is to increase the ocean's protection but on the other hand, also to care for the inland waters, whether surface or underground, always aware that water resources are relevant due to its intrinsic connection to saltwater. In the past 20 years in Portugal, no meaningful Marine Protected Area (MPA) was created, therefore a push by a new European legislation could have a significant impact. For a country like Portugal, which until recently was involved in dam development programs, the ambition to have at least 30% of rivers without dams in 2030 is also very relevant. The fishing targets for the most destructive fishing methods, trawling and ancillary fisheries could not be left out of a plan for the regeneration and restoration of oceans and water resources.
- **Goal 3 (*zero pollution*) recovers pollution as one of the main threats to the ocean**, especially in coastal zones, due to decrease of oxygen, creation of dead zones and increased eutrophication. This goal covers the four main sources of pollution: nutrients, contaminants, marine litter (including plastic) and noise. There are several relevant marks to achieve in the next decade, including the ban of single-use plastics, the halt of eutrophication, the reduction by 50% of nutrient loss and the reduction of the use of fertilisers by 20%, among others.
- **Goal 4 (*decarbonising our waters, oceans and seas*) looks for the first time to the sea economy as a decarbonising economy.** This Mission address goals and plans to several sectors of the sea economy. For the maritime transport sector there is a concern to reduce CO₂ emissions, despite it being the most carbon-efficient means of transport. It nevertheless remains part of the problem due not only to CO₂ emissions, but also to emissions of dangerous gases (NO_x and SO_x) that will have to be reduced. In the energy sector, the goal is to have a low impact offshore renewable energy footprint in, at least, 35% of the European energy mix. Another significant goal is related to food, placing the sea and aquaculture at the service of decarbonisation, investing on species of low trophic level. Another disruptive and innovative bet is to put forward Europe as the world leader in blue biotechnology by the end of 2030. This target could be relevant for a country like Portugal that has the main raw material for this industry, which is the diversity of marine biotas. There is also a bet on blue tourism with a neutral impact, an extremely relevant target for Portugal.
- **Goal 5 (*revamp governance*) starts with the recognition that, for the oceans, there is inadequate connectivity from the regional to the global level.** With the final target area, there is an attempt to recognize the challenge and develop a sensible framework to overcome the inadequateness of the current system. The report of the board calls on the European Commission to prepare, by 2022,

an Integrated Ocean and Water Plan for the European Union and a new annual European Blue Citizens' Forum. The European Council will convene a triennial European progress Ocean & Water Summit, to regularly bring a high-level political focus on the issues of oceans and waters, thus ensuring political connectivity. Also fundamental to the success of this Mission is the creation of a service-oriented Ocean & Water agency. Besides the emotional gap among citizens, it is equally important to bridge a political focus gap. Governance initiatives create the connectivity from the political-level, to the citizen-level engagement of the Member States.

- The second set of Q&A, with great participation from the audience, focused on the thematic areas of the Mission and particularly some specifications and actions of its target. **Concerns were raised on the following subjects:**

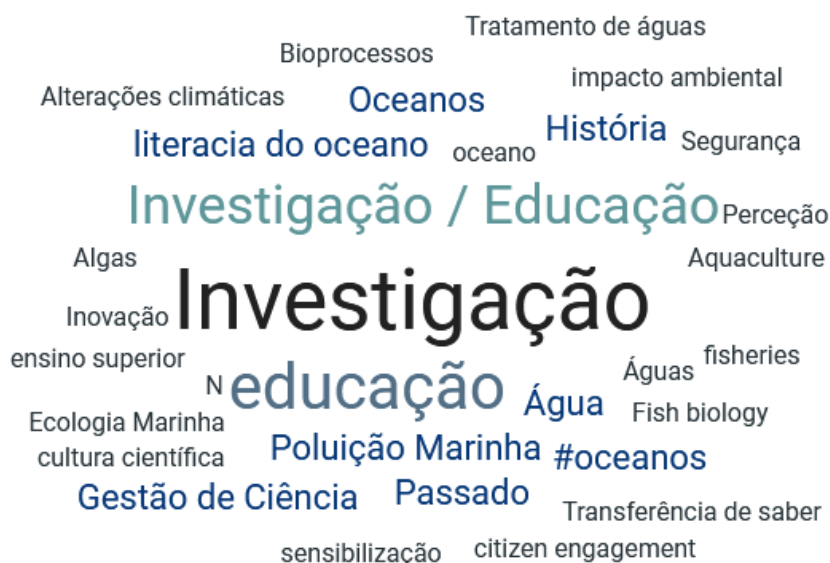
- ❖ Sharing of information/data between the Digital Twin of the Oceans with EMSA (European Maritime Safety Agency), and role in monitoring fishing activities
- ❖ The target of 30% full protection of the marine area and the concept of marine protected area: will there be binding instruments or only encouraging political goals? And connection with the Natura 2000 network.
- ❖ Strategy for the coastal tourism, ports and marinas and the inclusions of a clear strategy for the human occupation of littoral areas vi-à-vis the clear increase of Sea Level Height and extreme weather events
- ❖ Acknowledged the importance of federating ocean literacy and awareness efforts in a pan European coalition
- ❖ Importance of reducing carbon production in aquiculture and fishing
- ❖ Role of humanities/history (addressing the past of the oceans) in reducing the emotional gap
- ❖ Plan to educate consumers on the benefits of consumptions of low trophic-level species
- ❖ Possibility of STEAM (Science Technology Eng. Art and Mathematics) education approach for the engagement of the young generations
- ❖ Sea-bed mapping
- ❖ The importance of facilitating involvement from the private sector
- ❖ Guarantee and boost synergies among the different Missions
- ❖ The importance of monitoring the mission objectives and its proposed targets

- In the final block of this event, the **results of the Portuguese Online Citizen Engagement survey** were presented. The European Commission's priority of citizens' engagement as a key component of the Horizon Europe Program was highlighted. The Missions established under this program are considered to provide a unique opportunity to test and improve the mechanism for co-design and engage with citizens. The questionnaire was structured in four major areas, inspired by similar surveys undertaken by other countries: unsustainable human footprint, climate change, knowledge/understanding/connection with oceans and waters and governance.

During the session, two questions were asked to the participants to understand who the audience was and the interest on each goal of this Mission:

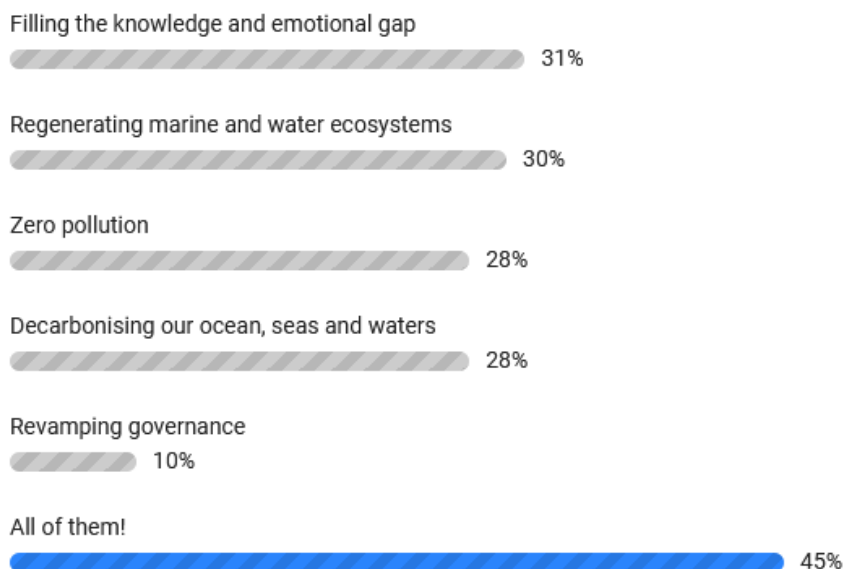
(1) What is your main area of expertise?

Research alongside with education is the dominant area of expertise, but also science management and many people linked to thematic areas of the ocean (literacy, pollution, conservation, fish biology, security, among others). The diversity of expertise made this an ideal audience for the session.



(2) Which of the 5 Starfish objectives are you most interested in?

The majority of the participants are interested in all of the Starfish objectives. Only 10% of the participants choose the revamping of governance as one of the most interesting goals. However, this could be explained by the participants’ area of expertise, since the most relevant ones are related to thematic areas of the ocean and not with governance.



Final remarks

The online information session was widely praised by participants and the majority considered of great importance learning more about the Horizon Europe Mission in the area of ‘Healthy oceans, seas, coastal and inland waters’ and what could be expected for Portugal and Portuguese stakeholders.

Looking at the number of people who registered and participated in this event, it is possible to conclude that the event was followed with interest by the 200 people participating in the session, including active participation (Q&A, contributions to the discussion, among others).

The Starfish Mission was presented as an excellent opportunity for Portugal due to its large coastline and exclusive economic zone and, although these decisions depend on the national strategy, it appears that Portugal is willing to have very active participation in this Mission, as demonstrated by the engagement of the stakeholders in this session.

Participants were encouraged to sign up for [GNAD](#) – Horizon Europe’s discussion National Support Group.

The main findings of the survey that was shared with participants after the event are:

- Around 64% of those who replied to the survey have already participated in European projects. Of this set, 81% was financed.
- Around 57% of those who replied to the survey intend to submit a proposal for a European project in the near future.
- In a scale of 1 to 5, all of those surveyed rated the speakers’ proficiency as either 5 (62%) or 4 (31%).
- Overall, all of those surveyed had a positive opinion about the event's organization and the quality of the presentations, which indicates that the event was a success.

Speakers’ presentations are available in the following links:

- [Margarida’s Ribeiro presentation](#): Horizon Europe Missions
- [Tiago Pitta e Cunha’s presentation](#): Starfish Mission (targets 2,3 and 4)
- [Peter Heffernan’s presentation](#): Starfish Mission (targets 1 and 5)
- [Maria João Fernandes’s presentation](#): Portuguese Online Citizen Engagement survey

ANNEX I: Agenda

PERIN PORTUGAL IN EUROPE RESEARCH AND INNOVATION NETWORK ANI AGÊNCIA NACIONAL DE INOVAÇÃO FCT Fundação para a Ciência e a Tecnologia OCEANO AZUL foundation

Stakeholder Event

Missions in Horizon Europe – “Mission Starfish 2030: Restore our ocean and waters”

Mission area: Healthy oceans, seas, coastal and inland waters

Online information and debate session

2nd OCTOBER 2020 | 10:00 - 13:00

[REGISTRATION HERE](#)

[MISSION REPORT HERE*](#)

*Available from 22nd September

PERIN PORTUGAL IN EUROPE RESEARCH AND INNOVATION NETWORK ANI AGÊNCIA NACIONAL DE INOVAÇÃO FCT Fundação para a Ciência e a Tecnologia OCEANO AZUL foundation

AGENDA

10:00-10:05
Welcome
Agência Nacional de Inovação (ANI)

10:05-10:10
Opening remarks
Fundação para a Ciência e a Tecnologia (FCT)

10:10-10:25
Horizon Europe and the mission concept
Directorate-General for Research and Innovation (Margarida Ribeiro, DG RTD)

10:25-10:45
Q&A

10:45-12:30
Presentation of the Starfish Mission and its Roadmap
Debate with the stakeholders

- Tiago Pitta e Cunha, Oceano Azul Foundation, *Healthy Oceans, seas, coastal and inland waters Mission Board Member*
- Peter Heffernan, *Healthy Oceans, seas, coastal and inland waters Mission Board Member*

12:30
Presentation on the online citizen consultation results a session close

[Event website](#)



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