



Horizon Europe – partnerships & mission

GERT VERREET

VLIZ KLANKBORDGROEP 10 DEC 2021

PRIORITY AREA

**TAKING UP TOGETHER THE CHALLENGES
POSED BY THE TWIN GREEN AND DIGITAL
TRANSITION, AND INCREASING SOCIETY'S
PARTICIPATION IN THE ERA**

ACTIONS

10 MAKE EU R&I MISSIONS AND PARTNERSHIPS KEY CONTRIBUTORS TO THE ERA

European Partnerships allow the EU to team up with public and private R&I actors to pool resources, create critical mass and align R&I agendas. Missions will develop and implement a goal-oriented approach towards solving societal challenges, with clear timelines and deliverables and a vocation to develop a coordinated approach across funding, policies and regulation. Both of these instruments will have to be implemented in a way that maximises their impact, in particular on contributing to the twin green and digital transitions.



ERA reform

Era is for YOU – The new European Research Area is for all Europeans



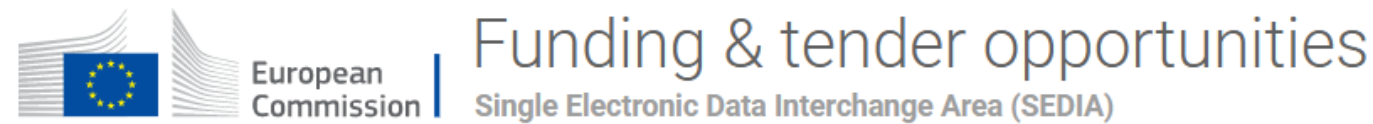
- Work with researchers in universities and businesses in different countries;
- Innovate and conduct your research using high-quality infrastructure;
- Advance your talents, skills and career across scientific sectors and disciplines;
- Openly share, use and find publications and data;
- Find business partners to get your results to the market quicker;
- Help shape research and innovation through participatory science.

The EU and Member States will shape the new European Research Area through 14 actions:

- 1 Reaffirm the **target of 3% GDP on EU research and development investment** and propose a new EU 1.25% GDP public effort target to be achieved by Member States by 2030.
- 2 Support Member States in the coordination and prioritisation of national research and innovation funding and reforms through an **European Research Area Forum for Transition**. Voluntarily commit 5% of national public research and development investments to joint programmes and European partnerships by 2030.

...

Check out Funding & tender oppt. portal



SEARCH FUNDING & TENDERS ▼

HOW TO PARTICIPATE ▼

PROJECTS & RESULTS

WORK AS AN EXPERT

SUPPORT ▼

Horizon Europe (HORIZON)

NCP Flanders is there to help

NCP Flanders

Our Services ▼

Horizon Europe ▼

Digital Europe

Horizon 2020 ▼

Other EU Funding

Contact

Sign in

Sign up

Horizon 2020 & Horizon Europe guidance

Assistance for Stakeholders in Flanders



DEPARTMENT OF
ECONOMY, SCIENCE & INNOVATION



Flanders
State of the Art

Horizon Europe – no shortage of ‘marine’ calls

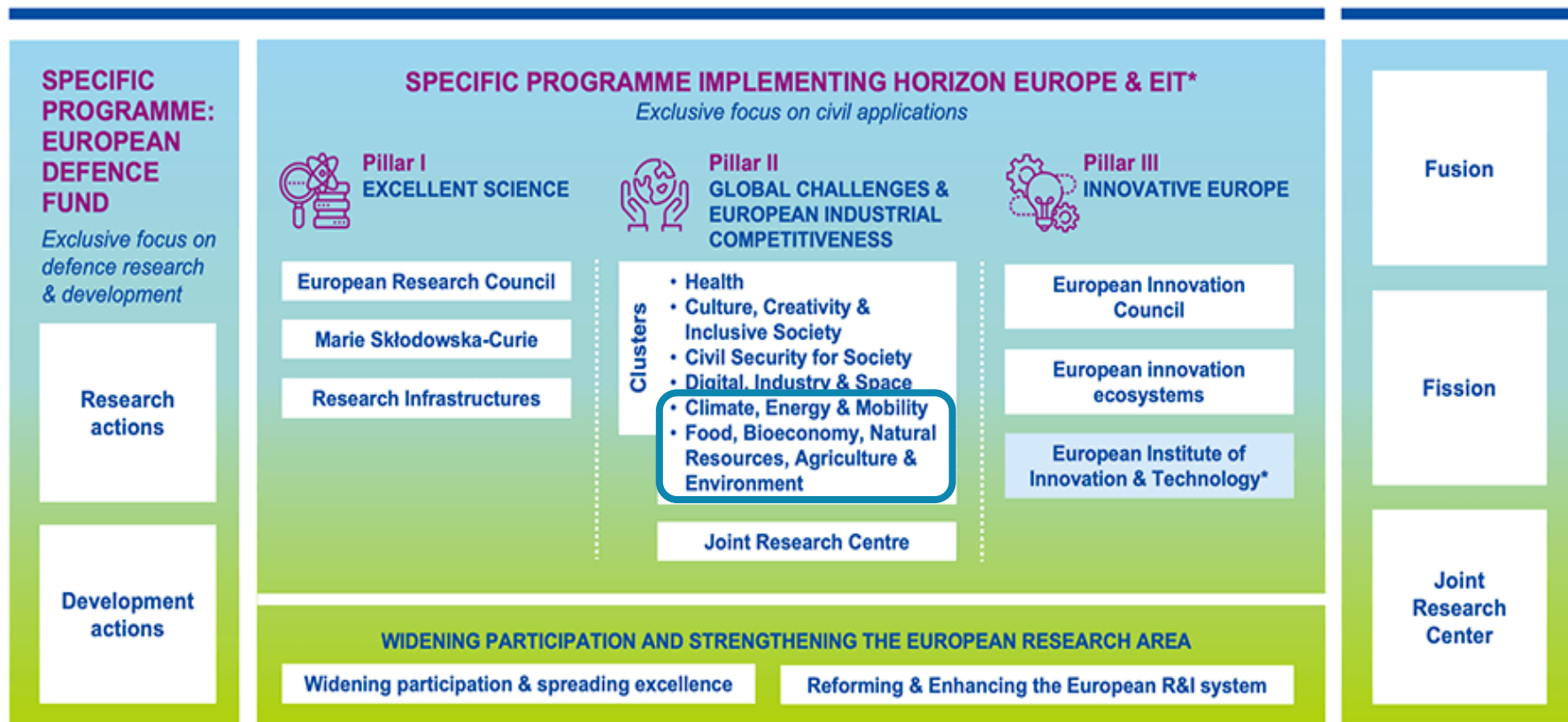
Grant

Innovative food from marine and freshwater ecosystems

Open for submission

Programme	Horizon Europe (HORIZON)	Deadline model	two-stage
ID	HORIZON-CL6-2022-FARM2FORK-02-05-two-stage	Opening date	28 October 2021
Types of action	HORIZON Innovation Actions	First stage deadline	15 February 2022 17:00:00 Brussels
		Second stage deadline	06 September 2022 17:00:00 Brussels

Horizon Europe – partnerships in Pillar II



source: <https://efmc.eu/new-role-clusters-horizon-europe/>

Pillar II – Cluster 6: ... ‘cross-’...



Pillar II

GLOBAL CHALLENGES AND EUROPEAN INDUSTRIAL COMPETITIVENESS

The pillar 'Global Challenges and European Industrial Competitiveness' is established through clusters of research and innovation activities, in order to maximise integration and synergies across the respective thematic areas while securing high and sustainable levels of impact for the Union in relation to the resources that are expended.

Horizon Europe budget allocates more than **€53 billion** for pillar II:

- Health;
- Culture, Creativity and Inclusive Society;
- Civil Security for Society;
- Digital, Industry and Space;
- Climate, Energy and Mobility;



Cluster 6 is sub-divided in seven so-called “destinations”:

- Destination 1 – Biodiversity and ecosystem services
- Destination 2 – Fair, healthy and environment-friendly food systems from primary production to consumption (“Farm2Fork”)
- Destination 3 – Circular economy and bioeconomy sectors
- Destination 4 – Clean environment and zero pollution
- Destination 5 – Land, ocean and water for climate action
- Destination 6 – Resilient, inclusive, healthy and green rural, coastal and urban communities
- Destination 7 – Innovative governance, environmental observations and digital solutions in support of the Green Deal

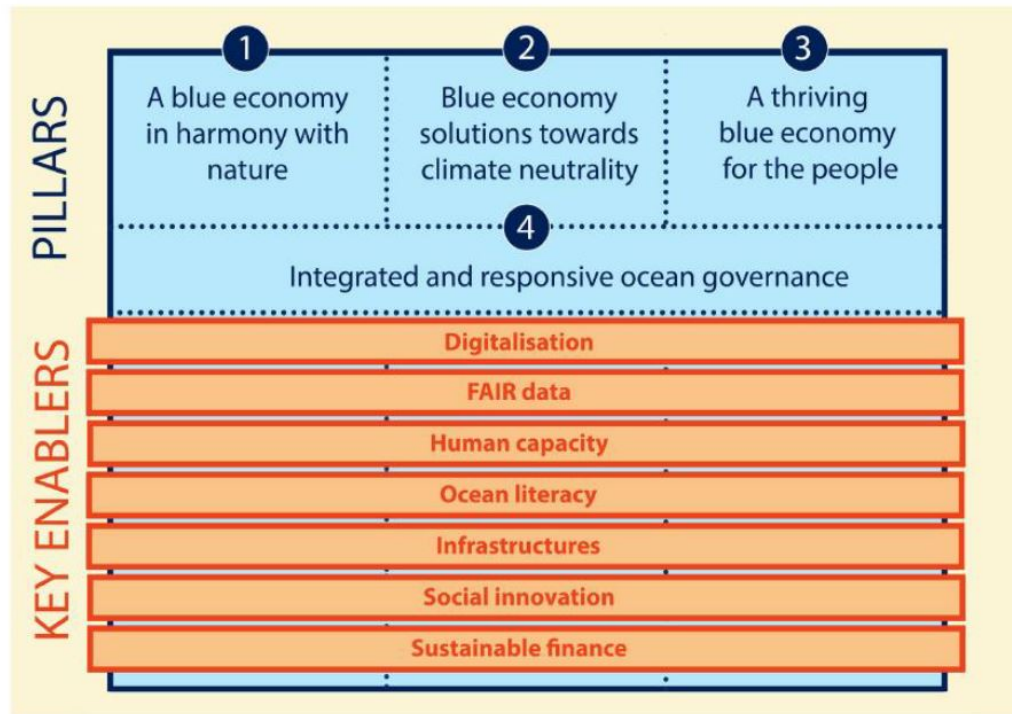
Cluster 6 co-funded partnerships in WP

Co-funded partnership	Work Programme
Rescuing biodiversity to safeguard life on Earth	2021-2022
A climate neutral, sustainable and productive Blue Economy	2021-2022
Water4All	2021-2022
Accelerating farming systems transition: agroecology, living labs and research infrastructures	2023-2024
Animal health: fighting infectious diseases	2023-2024
Environmental observations for a sustainable EU agriculture	2023-2024
Safe and sustainable food systems for people, planet and climate	2023-2024

Partnership: Blue Economy (1/5)

- ▶ Overall Budget (indicative commitments):
[492] M€ Incl. EU contribution (max. 150 M€)
- ▶ BE indicative Commitment: 15 M€ cash
 - Flanders (10,5 M€): FWO, VLAIO (cash)
 - BELSPO, FNRS (cash), Belgica Ship Time (in kind)
- ▶ SRIA: v1.0 ready (25/02/2021): builds on SRIA JPI Oceans, BANOS CSA
- ▶ Belgian participation in consortium by funding partners and possibly also as a Work Package co-lead (under discussion)
- ▶ Link 'Mission Restore our Ocean and Waters by 2030': to be defined

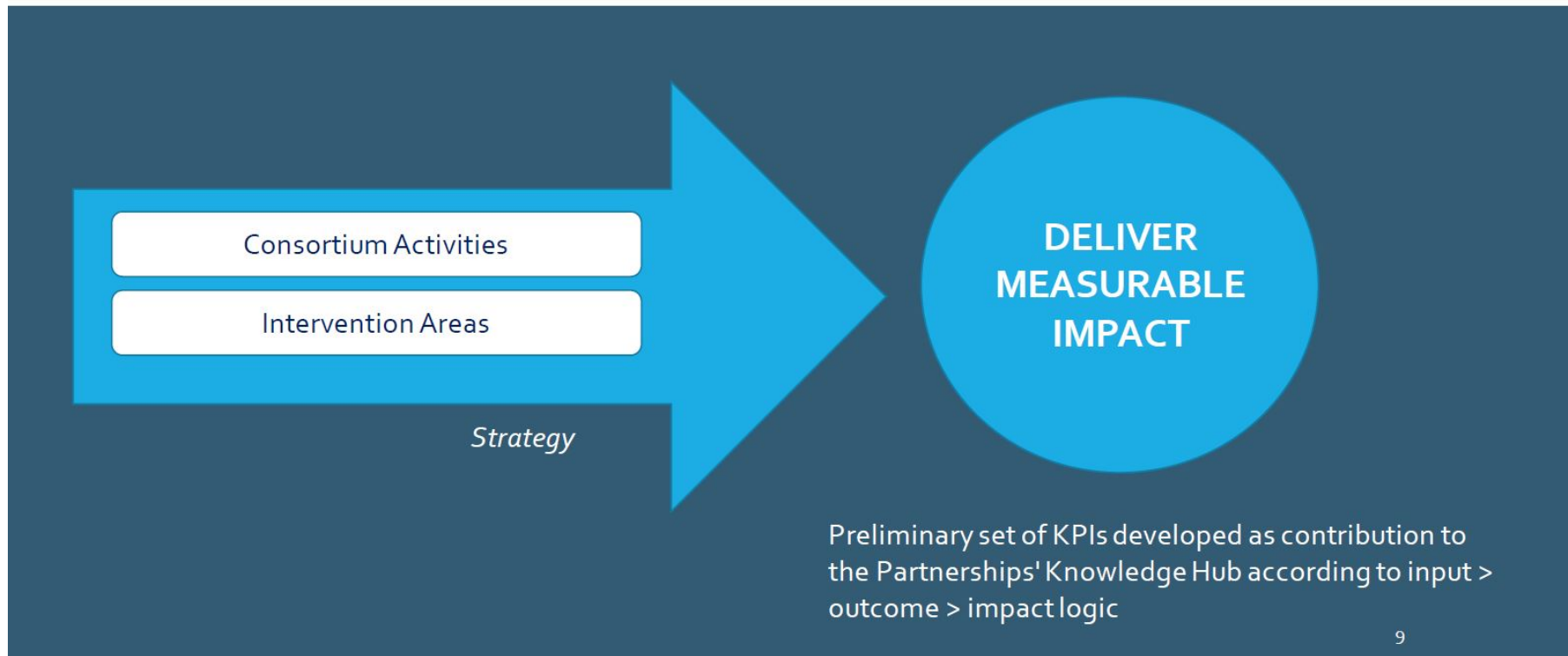
Partnership: Blue Economy (2/5)



SRIA
THEMATIC
PILLARS AND
KEY ENABLERS

Partnership: Blue Economy (3/5)

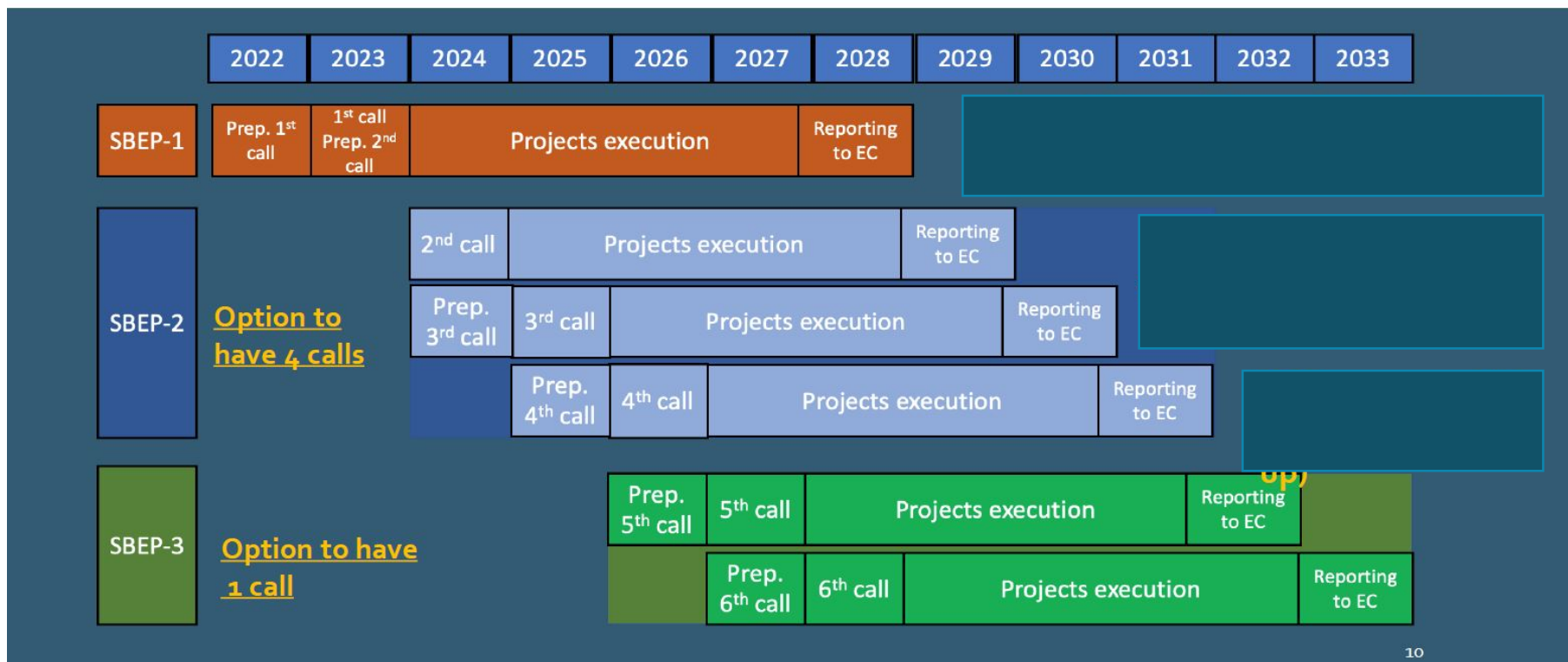
PARTNERSHIP VISION, OBJECTIVES, IMPACT



Partnership: Blue Economy (4/5)

PARTNERSHIP VISION, OBJECTIVES, IMPACT IN THE 3 GA FRAMEWORK

ADMIN: 3 GRANT AGREEMENT PERIODS



10

Partnership: Blue Economy (5/5)

Intervention area

- | | |
|--------|--|
| Area 1 | <u>Seabasins test of the Ocean Digital Twin</u> |
| Area 2 | <u>Offshore multi-uses platforms</u> |
| Area 3 | <u>Planning and managing sea-uses</u> |
| Area 4 | <u>Thriving fish and thriving fish stocks, including interlinks between fisheries, the ecosystem and aquaculture</u> |
| Area 5 | <u>Diversification and refinement of aquaculture and fisheries production systems and sustainable production processes</u> |

Start of
call
preparations...



Update Mission



European Missions



**Restore our Ocean
and Waters by 2030**

Implementation Plan

This is an internal working document of the European Commission. Therefore the budget figures mentioned are approximate and the document will be updated. It is made public for information only and does not bind the European Commission. The European Commission is not liable for any consequence stemming from the reuse of this document.

**Research and
Innovation**

Mission Implementation Plan

published

29 September 2021

“SMART” Targets ?

1.2. Mission specific objectives and targets

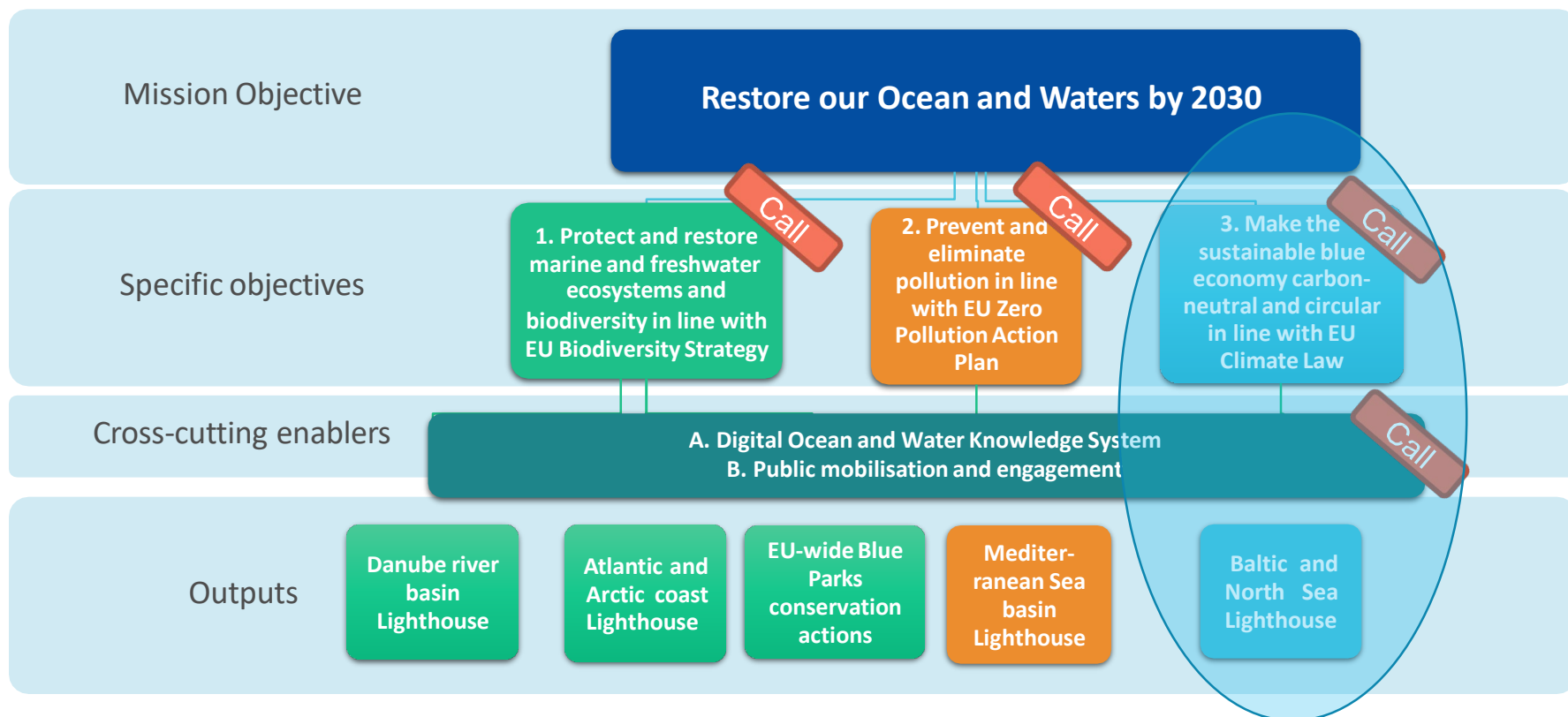
The objective of the Mission is to restore the health of the EU’s ocean and waters by 2030. Specifically, this Mission’s objective is to restore the health of our ocean and waters by reaching the European Green Deal targets for biodiversity, zero pollution and decarbonisation with greenhouse gas emissions reduction for 2030, across the ocean, seas and waters, thereby addressing the three principal drivers of degradation.

The Mission will have been accomplished if the following interlinked specific objectives and targets have been met by 2030:

1. **Protect and restore marine and freshwater ecosystems and biodiversity, in line with the EU Biodiversity Strategy 2030⁴⁵:**
 - a. Protect a minimum of 30% of the EU’s sea area and integrate ecological corridors, as part of a true Trans-European Nature Network.
 - b. Strictly protect at least 10% of the EU’s sea area.
 - c. Restore at least 25,000 km of free-flowing rivers.
 - d. Contribute to relevant upcoming marine nature restoration targets⁴⁶ including degraded seabed habitats and coastal ecosystems.⁴⁷
2. **Prevent and eliminate pollution of our ocean, seas and waters, in line with the EU Action Plan Towards Zero Pollution for Air, Water and Soil⁴⁸:**
 - a. Reduce by at least 50% plastic litter at sea.
 - b. Reduce by at least 30% microplastics released into the environment.
 - c. Reduce by at least 50% nutrient losses, the use and risk of chemical pesticides.
3. **Make the sustainable blue economy⁴⁹ carbon-neutral and circular, in line with the proposed European Climate Law⁵⁰ and the holistic vision enshrined in the Sustainable Blue Economy Strategy:**
 - a. Eliminate greenhouse gas emissions from maritime economic activities in the EU and sequester those emissions that cannot be avoided (net zero maritime emissions).
 - b. Develop zero-carbon and low-impact aquaculture, and promote circular, low-carbon multi-purpose use of marine and water space.

WP 2021 - Mission Ocean, seas and waters

... Structure is mirroring the MIP



Expected outcomes:

By 2025, the Mission will have delivered the following outcomes:

- The **lighthouse partners** (Member States, macroregions, regions, third countries, other stakeholders) will have set basin-scale emissions reduction targets for 2030 at least as ambitious as the targets set in the “Fit for 55” package under the European Green Deal **in an implementation charter that has been politically validated** by 2022.
- **Battery, hydrogen or ammonia-driven ferries** calling at ports of three different countries.
- A **digital platform** to enable sharing data, best practices and solutions for scaling up in the industry sector and with policymakers in the frame of a precursor of the ocean Digital knowledge system.
- A **Blue Forum for users of the sea**, as envisaged in the Sustainable Blue Economy Strategy, to coordinate a dialogue between offshore operators, stakeholders and scientists engaged in fisheries, aquaculture, shipping, tourism, renewable energy and other activities.
- Funding of **risk insurance for pre-commercial technologies** to alleviate the investment risk in scaling up (e.g. innovative solutions to decarbonise the shipping sector).

By 2030, the Mission will have delivered the following outcomes:

- **Deployment of zero emission (i.e. zero carbon and zero pollution, noise included) marine technologies and solutions**, devising best technological and societal innovation solutions to accompany the transition until all fleets are zero-emission, making the link to setting up Emission Control Areas.
- **Battery, hydrogen or ammonia propelled ferries** calling at ports of seven different countries.
- Emission reduction technological solutions for **renewables, ports and infrastructure** (e.g. grid connections, electricity supply for ports).
- Cost-effective solutions for setting up **fully circular, zero pollution offshore clean energy facilities** as well as solutions for **zero-carbon and toxin-free aquaculture/algae production** compatible with vulnerable marine ecosystems.
- Applied solutions for **multi-use of water space** (e.g. multi-purpose platforms and management).
- A **digital platform** integrating the ocean digital knowledge system into a Digital Twin Ocean and interoperable with digital solutions from the private sector.
- Applied solutions for **marine and freshwater carbon sinks** that sequester carbon emissions, equivalent to any remaining emissions from maritime activities.

Horizon Europe Mission Work Programme

to be published soon [22 Dec?]

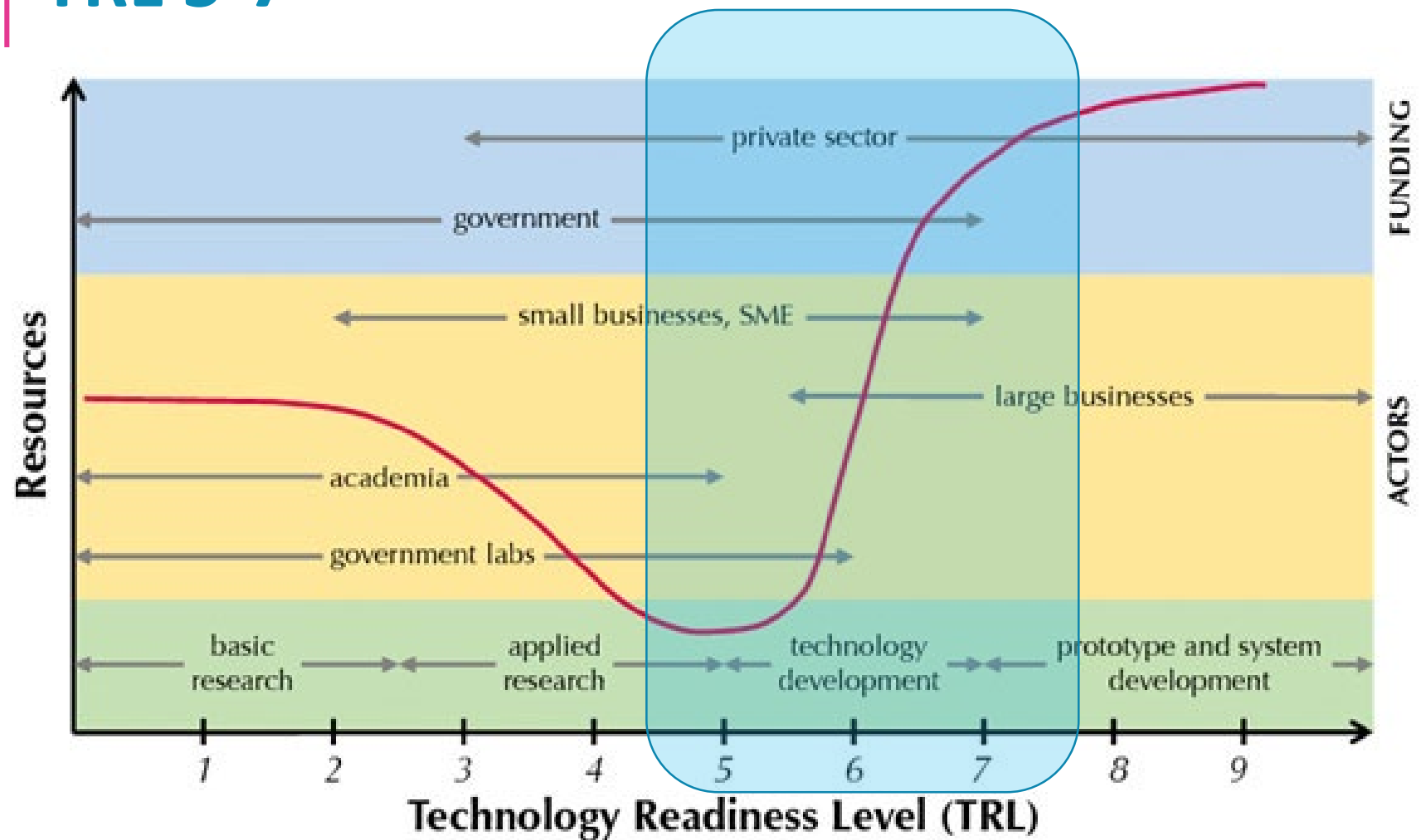
“Thirteen in a dozen”?

;-)



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TRL 5-7



Source: Hensen, Jan & Loonen, Roel & Archontiki, Maria & Kanellis, Michalis. (2015). Using building simulation for moving innovations across the "Valley of Death". REHVA Journal. 52. 58-62.

Horizon Europe Mission Work Programme

*to be published
soon [22 Dec?]*

**Generic,
not by
calls**

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Call “Mission enabling activities”



19.11.2021

The **high-level conference on civic engagement in EU Missions** will take place on March 21, 2022, as part of a series of events organized by the French Ministry of Higher Education, Research and Innovation (MESRI), in the context of the **French presidency of the Council of the European Union**.

EU Missions, which are funded by Horizon Europe, aim at providing concrete solutions to tackle some of the greatest challenges Europe and the world have to face by 2030, namely: beating cancer, adapting to climate change, protecting oceans and waters, promoting climate-neutral and smart cities, and soil health. In order to follow the new approach promoted by the European Commission and member-states, which is built on the principles of **co-design and co-implementation with European citizens**, the conference will be organised in two parts:

- A discussion of ideas, through conferences and roundtables on civic participation and engagement in research, and in particular in the realm of EU Missions;
 - A first-hand experience of the forum, during which projects and concrete solutions will be presented at stands and dedicated demonstration spaces. The selected project holders will also have the opportunity to present side events.
- To this aim, a **call for ideas** is launched, to enable the institutions interested in EU Missions, to actively participate in the civil society and research forum. Up to 20 project holders will be selected by a jury, chaired by a representative of the MESRI.

For more information and the selection criteria, please click [here](#).

[Deadline for the call: 22 November 2021](#)

NOTE: The participation in this forum does not imply any funding. Only a budget stand will be made available to selected project holders.

Expected impact – contribution of the project to policy objectives:

- Boost R&I capacities and knowledge in marine and freshwater domains
- Support observation and monitoring capacity, data use and modelling
- Support **citizen engagement and involvement**
- Provide evidence for policy-making
- Enhance cooperation among countries, regions and relevant actors to enable transformative changes needed to achieve the European green deal objectives
- Support international cooperation to address global challenges

Call “Sustainable, carbon-neutral and circular blue economy”

Call “Sustainable, carbon-neutral and circular Blue economy”

Expected impact – contribution of the project to policy objectives:

- Achieve the net-zero emissions from maritime activities
- Develop zero-carbon and low-impact aquaculture
- Promote circular, low-carbon, multi-purpose use of marine and water space
- Provide evidence for new legislation and the implementation of the existing legislation and policies
- Support international cooperation to enable global transformative changes

Call “Sustainable, carbon-neutral and circular Blue economy”

Overview of the topics proposed and main features

HORIZON-MISS-2021-OCEAN-04-01: Lighthouse in the Baltic and the North sea basins - Low impact marine aquaculture and multi-purpose use of marine space

Scope: demonstration of innovative solutions for profitable and sustainable seafood farming, spanning from engineering and robotics to breeding issues, from special planning to systemic governance of multiple maritime activities.

- **Main features:**

- ✓ Type of action: IA; TRL 5-7
- ✓ Involve at least 3 countries of the Baltic and North sea basin
- ✓ Innovative solutions expected to be scaled up and reproduced
- ✓ Citizen engagement, involvement of regional/local authorities and key stakeholders expected
- ✓ Indicative budget: 16 mio; Expected EU contribution per project: EUR 8 mio

‘Uitsmijter’ – *Mission* *morality ...*

Deep in the jungles of South America
two men bring civilization to a native tribe.

Now, after years of struggle together,
they find themselves on opposite sides in a
dramatic fight for the natives' independence.

One will trust in the power of prayer.
One will believe in the might of the sword.



— THE — MISSION

