

Joint Programming Initiative

Healthy and Productive Seas and Oceans

Why the JPI Oceans ?

Productive Seas and Oceans

The seas and oceans present a grand challenge as they provide an **essential part of our wealth and well-being**. To give an example: The EU's maritime regions account for around 40% of its GDP and the maritime economy for as much as 5%. The fast growing global population will increasingly depend on marine food sources (including sustainable aquaculture). Moreover, oceans and seas offer a large unexploited potential from underexplored marine biodiversity and marine renewable energy. In addition the oceans and seas play a crucial role in developing transport modalities and tourism activities.

Healthy Seas and Oceans

Oceans and seas are under **huge pressure from human activities and climate change**. There is an increased demand for space in coastal waters and areas which leads to a growing vulnerability and the continuous deterioration of the marine environment. These challenges and the key role of the oceans in the climate system all call for a stronger focus and concerted effort on our oceans and seas.

The **need for a more coordinated approach** in marine and maritime research is clear. The field of marine and maritime research is very complex and cross-cutting in nature, involving different areas of knowledge, disciplines and sectors. The oceans grand challenges cannot be solved by a single country or discipline. It calls for an integrated long-term and coherent approach at European level as well as international cooperation.

WHAT IS

JOINT PROGRAMMING?

Joint Programming is a concept introduced by the European Commission in 2008. The concept intends to tackle the challenges that cannot be solved solely at the national level and allows Member States and Associated Countries to participate in joint initiatives on a voluntarily basis.

OBJECTIVE:

To increase the value of relevant national and EU R&D and infrastructure investments by concerted and joint planning, implementation and evaluation of national research programmes.

HOW:

Member States and Associated Countries are expected to coordinate national research activities in the broadest sense, group resources, benefit from complementarities and develop common research and innovation agendas, as a basis for long-term cooperation in order to face grand societal challenges.

JPI
OCEANS

www.jpi-oceans.eu
Phone: +32 2 549 09 93 | Email: ka@rcn.no
JPI Oceans secretariat – RCN
Rue du Trône 98,
1050 Brussels



What is the Joint Programming Initiative Healthy and Productive Seas and Oceans?

JPI OCEANS TARGET GROUPS



The Joint Programming Initiative Healthy and Productive Seas and Oceans (JPI Oceans) is a **coordinating and integrating long-term platform**, open to all EU Member States and Associated Countries who invest in marine and maritime research. While bringing together the interested Member States and Associated Countries the JPI Oceans aims to add value by:

- avoiding fragmentation and unnecessary duplication
- planning common and flexible initiatives
- facilitating cooperation and foresighting
- establishing efficient mechanisms for interaction and knowledge transfer between the scientific community, industry & services, and policy makers at high level to more effectively solve the grand challenges.

In its role as a coordination platform, the JPI will focus on the so-called institutionalised money within national research budgets which represent 85% of the EU marine funding. One of the JPI's goals is to **develop joint research programs** in which countries can be involved on a voluntarily basis (variable geometry). Participating countries will also decide what contribution to make: this may include institutional, project-related or new funds.

By providing an integrated knowledge and technology base for our seas and oceans, the JPI Oceans will consolidate and integrate knowledge across all marine - maritime sectors and research areas. To conquer this new frontier the JPI will:

- Enable the advent of a knowledge based maritime economy, maximising its value in a sustainable way
- Ensure Good Environmental Status of the seas and optimise planning of activities in the marine space
- Optimise the response to climate change and mitigate human impacts on the marine environment

EXAMPLE:
CLIMATE CHANGE
IMPACT ON
OCEANS



MARINE SYSTEM

MARINE ENVIRONMENT

CLIMATE CHANGE

OCEAN OBSERVATION
RESEARCH & DATA
INFRASTRUCTURE

MARITIME
ECONOMY AND
HUMAN ACTIVITIES

HUMAN CAPACITIES
CROSSCUTTING
TECHNOLOGIES

EXAMPLE:
HEALTHY
SEAFOOD



EXAMPLE:
CLIMATE CHANGE
IMPACT ON
COASTAL AREAS



Implementation of JPI Oceans



AREAS AND EXAMPLES OF INTERACTIONS,

to identify the issues to be tackled and selected by the participating countries.

Figure above

As illustrated above, the JPI Oceans depends on human capacities and infrastructure. The JPI will focus on cross cutting issues to:

- Foster enabling cross-cutting marine technologies across the maritime sectors
- Foster the marine bio economy in relation to new products, services and jobs
- Create the best enabling environment to maximise the development of marine renewable energies
- Develop the necessary knowledge and technologies to conquer the new deep-sea frontier
- Understand and mitigate the impact of climate change and pressure from human activities on the marine environment, to reach GES (Good Environmental Status) of our seas by 2020
- Improve understanding of marine ecosystems and their processes, in particular delivery of ecosystem services and the impacts of human activities
- Understand climate change impact on coastal areas and the design of marine and maritime structures and activities, to optimise mitigation and significantly reduce costly damages
- Develop and sustain infrastructure to support an integrated data and information base enabling industrial development and supporting maritime governance
- Develop a research-to-policy mechanism, in particular to support the marine strategy framework directive and marine spatial planning and management
- Foster the inter-disciplinary human capacities that are necessary to fulfil the JPI's goals

The JPI Healthy and Productive Seas and Oceans will be run by a high-level **Management Board** with two representatives from each country with sufficient authority to agree on joint action plans and potential funding initiatives across Europe.

The Management Board will put in place a **Strategic Advisory Board** of high-ranked scientists, technologists, economists and representatives of industry. They will be tasked with developing a strategic research and innovation agenda (SRIA) and advising on the implementation tools needed. The Management Board will adopt the SRIA which will be used to produce an implementation plan.

The JPI Oceans will be built on the principle of **variable geometry**. Participating countries will decide which actions to participate in and which contributions to provide. In doing so the JPI will seek to use the broadest range of funding and instruments available for research, infrastructure and innovation at national, regional and European level:

- additional funds, in-kind capacities (human resources, infrastructure and institutionalised money),
- Structural and Cohesion funds,
- grants,
- foster networking and research alliances (across the innovation chain), and
- mechanisms to foster open access to knowledge, data and information.