


European Parliament - 24 January 2019

*Fit for the Future
Research and Development for
the European Waterborne sector*

Pier Francesco Moretti
JPI Oceans Secretariat - CNR

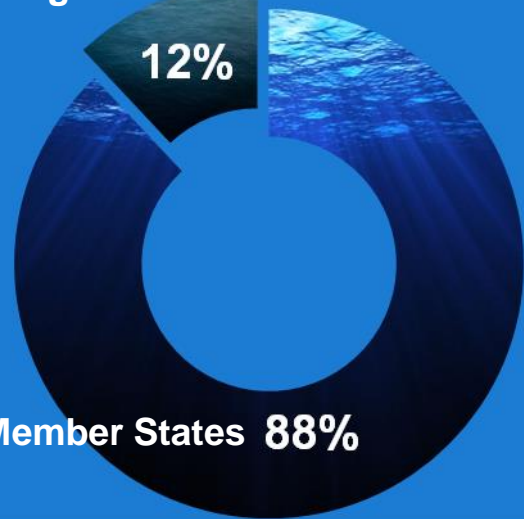
**JPI
OCEANS**





What is Joint Programming?

Intergov+EU Commissions



A Member State-driven initiative adopted by the Council

A concept to tackle challenges that can not be solved solely at national level





JPI Oceans?

**“Seas and Oceans” are a
complex global challenge**

Mission:

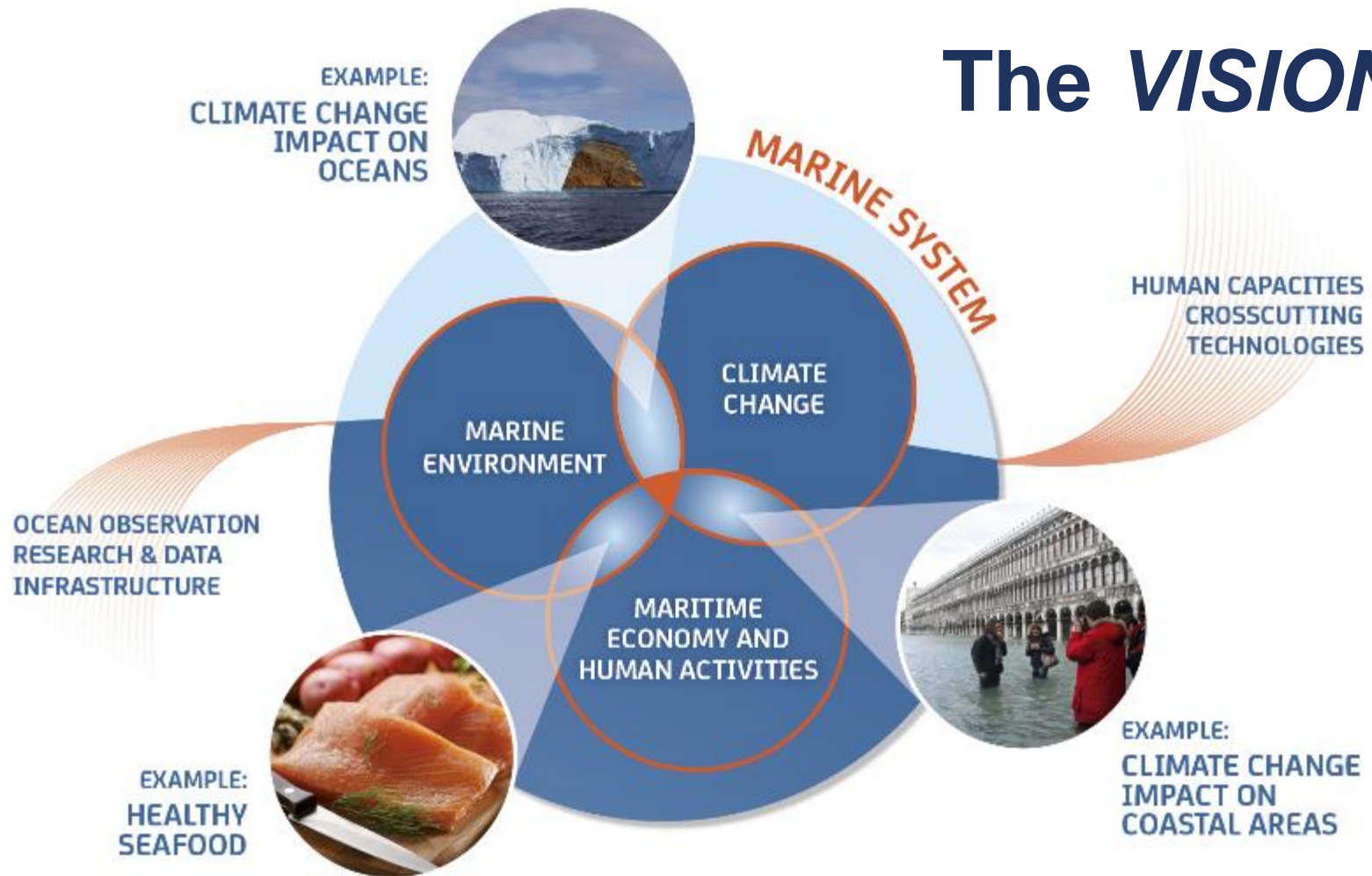
JPI O is a **strategic platform** for long-term
alignment and cooperation
in marine and maritime
research&innovation funding
to increase impact of investments

Vision:

To enable **Blue Growth and jobs**,
whilst fostering the **health and productivity** of
seas and ocean and addressing the pressures of
climate change and human impacts
on seas and oceans



The *VISION*



21 Participating countries
(+ Outermost regions)
with different Ministries

Secretariat is based in Brussels



Strategic Research and Innovation Agenda



Exploring deep sea resources



Technology and sensor developments



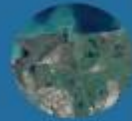
Science support to coastal and maritime planning and management



Linking oceans, human health and wellbeing



Interdisciplinary research for GES



Observing, modelling and predicting oceans state and processes



Climate change impact on physical and biological ocean processes - Oceans circulation



Effects of ocean acidification on marine ecosystems



Food security and safety driving innovation in a changing world



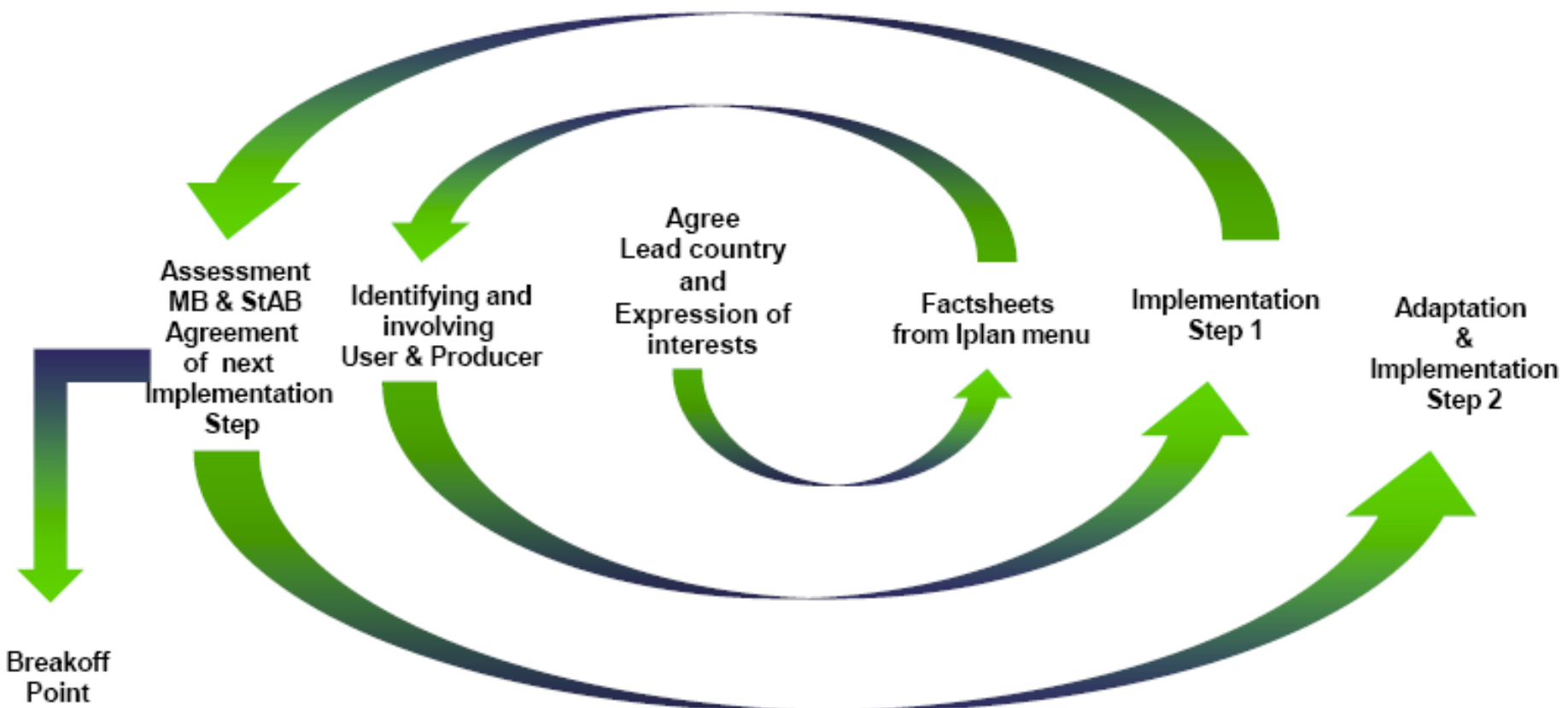
Use of marine biological resources through development and application of biotechnology

**SCIENCE-POLICY INTERFACE
HUMAN CAPACITY BUILDING
INFRASTRUCTURE – SHARED USE AND MANAGEMENT**

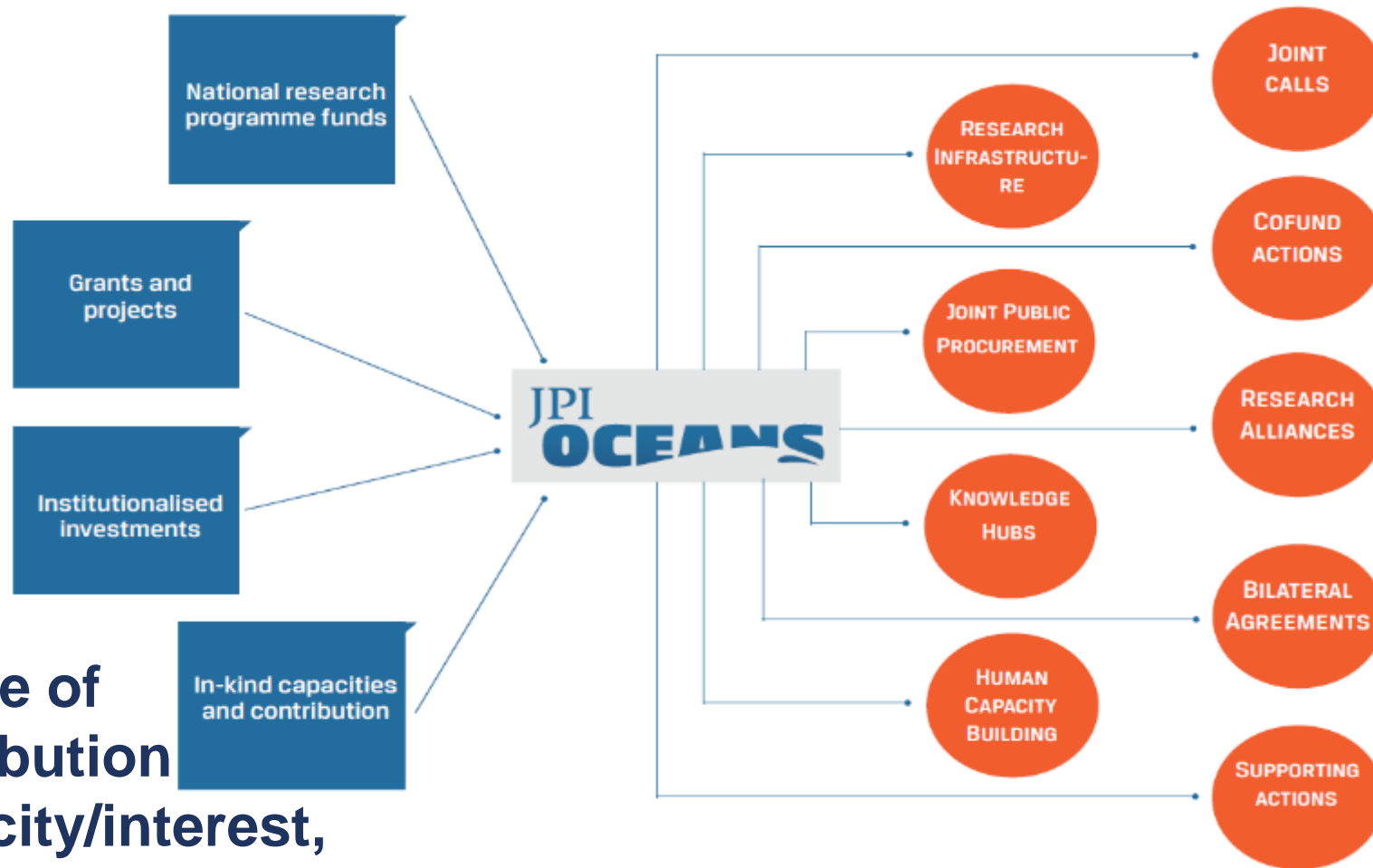


How?

Complexity in sectors, aspects, stakeholders.... requires a variable geometry and fit-to-purpose approach!



Different instruments



Source of contribution
(capacity/interest,
cost/benefit)

In practice, another challenge: many Strategic Research and Innovation Agendas from different “actors” ...to boost economy?



Shopping lists?



Common denominators?



Challenge driven enablers



How to fit for the future?

...shaping the opportunities/framework for a knowledge-intensive economy

- *Understanding and protecting seas and oceans*
- *Sustainably using of resources from seas and oceans*
- *Sustainably working and living at sea*

(Research and technological contribution) ⊗
(feasibility ⊗ timescales) ⊗
(impact ⊗ coherency)

The “convolution integrated over” fit-to-purpose instruments and actions for variable geometry cooperation and funding

Operationally? From words to facts (actions)...and others to come



Multi use of **Infrastructure** for Monitoring in the North Sea

- (1) setting up integrated monitoring surveys,
- (2) enhancing integration of monitoring efforts
- (3) promoting data sharing and integrated information systems.

Cost efficiency



Ecological Aspects of Micro-plastics

analytical method development for micro-plastic particle research (evaluation for cost-effectiveness and robustness, exploration of improvements to methods)

Knowledge gap/
Emerging issue/
Interlaboratory study

WFD Intercalibration for coastal + transitional waters

Prove comparability of different assessment methods:
(1) Joint funding from environmental authorities to reduce fragmentation
(2) target expertise towards science-policy interface output

Cost efficient scientific support to **policy**





Ecological aspects of deep-sea mining

Campaigns for on-site research on German RV Sonne (first cruise in the Pacific in early 2015) open to researchers. Coop ISA new mining code

Support to **economy**



European Marine sensors calibration network

Setting a structured hub for experts, operators and facilities
H, salinity, pCO2 and chlorophyll fluorescence
Experiments and standards definitions

Cross-cutting



Munitions in the Sea

Option assessments for emergencies
“Soft” table with operators
MSFD/MSP, NATO etc.

Structuring **complexity** and bridging **solutions/practices**



Martera,
Blue Bio-economy
ERANET COFUND

Co-funding knowledge and tech

Funding opportunities: open joint calls

**Belmont Forum, JPI
Oceans & Future
Earth**
16 million EUR
Deadline 31
January 2019

**JPI Oceans
Microplastics 2nd
Call**
10.5 million EUR
Deadline 28
February 2019

**Blue Bioeconomy
Cofund**
29.3 million EUR
Pre-proposal
Deadline 17
March 2019

**MartERA Cofund
Marine and
Maritime
Technologies**
15 million EUR
Deadline 29
March 2019

joint calls to come

**Next Generation
Climate Science in
Europe for Oceans**
Early 2019
with JPI Climate

**Food and Nutrition
Security
Knowledge Hub**
29 January 2019
with JPI HDHL
and JPI FACCE

**Aquatic Pollutants
ERA-Net Cofund**
Late 2019/early
2020
with JPIs Water &
JPI AMR

JPIO participant countries' public investments in R&I are estimated in 2 G€/year...to be used for developing framework and sustainable concepts, access to data, knowledge, expertise, etc.

Industry is part of the solutions.

*We need to ensure multiple use of technologies for science, monitoring and industry needs:
to avoid unnecessary duplications and increase impact.*

JPI OCEANS

THANK YOU

JPI Oceans secretariat

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