Oceans of Opportunities, Rivers of Ideas
How to become a change agent in marine science

Jan Mees, Flanders Marine Institute - VLIZ

- About VLIZ
- (Ocean science is important, and we will need a lot of it...)
- We need one voice
- Ideas: European Marine Board
- Opportunities: UN Decade of Ocean Science for Sustainable Development
Mission of VLIZ

“to promote the accumulation of marine knowledge and the excellence of marine research in Flanders”

targets: marine research community, education, policy, blue economy, citizens
Marine research community

114 research groups, a network of 1400 marine researchers!
A new mandate

1999 - …
Facilitate and support research

2017 - …
In addition: perform and initiate research
Research principles

- Excellent, groundbreaking, hypothesis-driven
- Collaborative!
- Fill gaps, multi/inter/transdisciplinarity
- Societal aspects: informing policy, advancing the blue economy
- International research strategies
- Valorize VLIZ ‘capital’
  - Networks and collaborations
  - Infrastructures and data
Ocean Biogeographic Information System

Largest source of information on marine species distributions

Data legacy of 10-year COML

Adopted by UNESCO-IOC, project of IODE

www.iobis.org

>32 million records
>1,000 datasets
>100,000 marine species
15 regional OBIS nodes
Servers hosted by VLIZ
> 45,000 marine georeferenced places
> 25,000 polygons of geographic places
> 10 geographic regional/global classifications
Maritime Boundaries (EEZ) of the world
Marine Science funding

[US] Space Exploration Dollars Dwarf Ocean Spending,
National Geographic 2013

2017: $481 million dollars for marine vs $5.8 billion for NASA.

"we should be taking a long, hard look at how we are prioritizing our exploration dollars. If the goal of government spending is to spur growth in the private sector, entrepreneurs are far more likely to find inspiration down in the depths of the ocean than up in the heavens"

https://voices.nationalgeographic.org/2013/06/20/space-exploration-dollars-dwarf-ocean-spending/
We need to be heard....

"If we want to succeed as a team, we need to put aside our own selfish, individual interests and start doing things my way."

...Easier with a common voice
Two categories of science-related legislation requiring engagement

NGOS (+), industry (-)

Legislation dealing with a range of issues requiring scientific expertise e.g. MPAs, MSFD

decisions affecting research and the way it is conducted such as science research budgets, research regulations e.g. EU and Research funding.

Interaction between parts

Science community (+/-)

European Marine Board

European think tank for marine science: transferring knowledge to the core of marine research policy

We provide advice:
- Position Papers
- Vision Documents
- Statements
- Conferences and Forums
- Targeted Interventions

We target:
- European Commission
- European Parliament
- National Policy Makers & Programme Managers
- Science Community
- General Public

We impact:
- European Research Area
- Research Programming
- Research Investments
- Capacities & Infrastructures
- Seas & Ocean Management

Strategy, foresight, coordination, communication and engagement

32 members, 18 countries
Marine scientific foresight

- Citizen Science for coastal and ocean research
- Decommissioning of offshore installations
- Marine Biotechnology
- Marine Graduate Training
Recent Working Group activities

Biological Observations in EOOS
Marine Ecosystem Modelling
Valuing Marine Ecosystems
European Research Vessels
Big Data and Marine Science
Navigating the Future V

- Horizon scan to 2030 and beyond
- Key marine advancements, emerging fields
- Step-change science, high societal impact
- Transformative technologies
- Input to research programming post-2020
- Launch at EurOCEAN 2019 conference

Expert workshop
8-9 November 2017, Brussels
EurOCEAN 2019 conference

High-level science-policy conference co-organised by European Marine Board, the European Commission and the Intergovernmental Oceanographic Commission of UNESCO

11-12 June 2019
Paris, France

“The aim of the EurOCEAN 2019 conference is to highlight the European marine science needed for the EU Framework Programme Horizon Europe and the United Nations Decade of Ocean Science“
The United Nations Decade of Ocean Science for Sustainable Development (2021-2030)
WHY A DECADE OF OCEAN SCIENCE

GLOBAL KNOWLEDGE GAPS

99% of habitable marine areas lack basic biodiversity knowledge for their management.

1 MILLION approximate number of marine species that could still be unknown to science.

3 number of people who have explored the deepest known point of the ocean.

103 MILLION square miles of deep sea are in perpetual darkness.

ONLY 5% of the ocean floor has been mapped at high resolution.
WHAT WILL THE DECADE ACHIEVE?

The Decade will mobilise resources and technological innovation in ocean science needed to:

- **TRANSFORM** knowledge systems to support sustainable development
- **BOLSTER** ocean observing and data systems
- **MEASURE** cumulative impacts for effective solutions
- **DELIVER** best available knowledge to decision-makers
- **REDUCE** vulnerability to ocean and coastal hazards
- **ACCELERATE** transfer of marine technology, training and education
THE DECADE WILL ALSO SUPPORT KEY APPLICATIONS FOR SOCIETY INCLUDING:

- Coastal zone management and adaptation
- Marine spatial planning/blue economy
- Establishment of marine protected areas
- Fisheries management
- Nationally determined contributions to UNFCCC
- Development of national ocean policies
- Development of national R & D strategies
- Regional and national capacity development planning
- Early warning systems
The United Nations
Decade of Ocean Science
for Sustainable Development
(2021-2030)

The Science We Need for the Ocean We Want

THE DECADE WILL PROVIDE A ‘ONCE IN A LIFETIME’ OPPORTUNITY FOR NATIONS TO WORK TOGETHER TO GENERATE THE GLOBAL OCEAN SCIENCE NEEDED TO SUPPORT THE SUSTAINABLE DEVELOPMENT OF OUR SHARED OCEAN.

GET INVOLVED https://en.unesco.org/ocean-decade/get-involved
FOLLOW VLIZ!

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