



**2021
2030** United Nations Decade
of Ocean Science
for Sustainable Development



United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Oceanographic
Commission



Sustainable
Development
Goals

Julian Barbieri, IOC/UNESCO
UN Decade Focal Point

Community of Ocean Actions
Incheon, 30-31 May 2019



INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

Fifty-first Session of the Executive Council
UNESCO, Paris, 3–6 July 2018

ROADMAP

Item 4.1 of the Revised Provisional Agenda

A Vision for the Decade

Develop scientific knowledge, build
infrastructure and foster partnerships
for a sustainable and healthy ocean

The Science We Need for the Ocean We Want



The United Nations
Decade of Ocean Science
for Sustainable Development
(2021–2030)



2021 United Nations Decade
of Ocean Science
2030 for Sustainable Development



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Sustainable
Development
Goals

Transformative nature

- Radically changing our understanding of how ocean contributes to SD
- Translating research outputs into issue driven solutions
- Adding value by Integrating social and natural science, but also traditional knowledge
- Strengthening the uptake of science by Policy-makers and citizens
- Promote partnership with the private sector
- Build on and lead to new technologies
- Enabling access to open data and information
- Targeting specific audience (early career scientists, gender, SIDS/LDCS....)
- Bringing the UN together

*We need to set principles
....not business as usual*

**Ocean science
in broad sense:
natural,
including many
disciplines, +
social, including
economy**

Where we are

- Science competent for problem diagnostic
- Observing system for climate and emerging data service
- Major knowledge gaps, weak ocean literacy
- Funding base mostly via national research agencies (except EC)
- Hugely uneven capacity, especially developing countries/SIDS

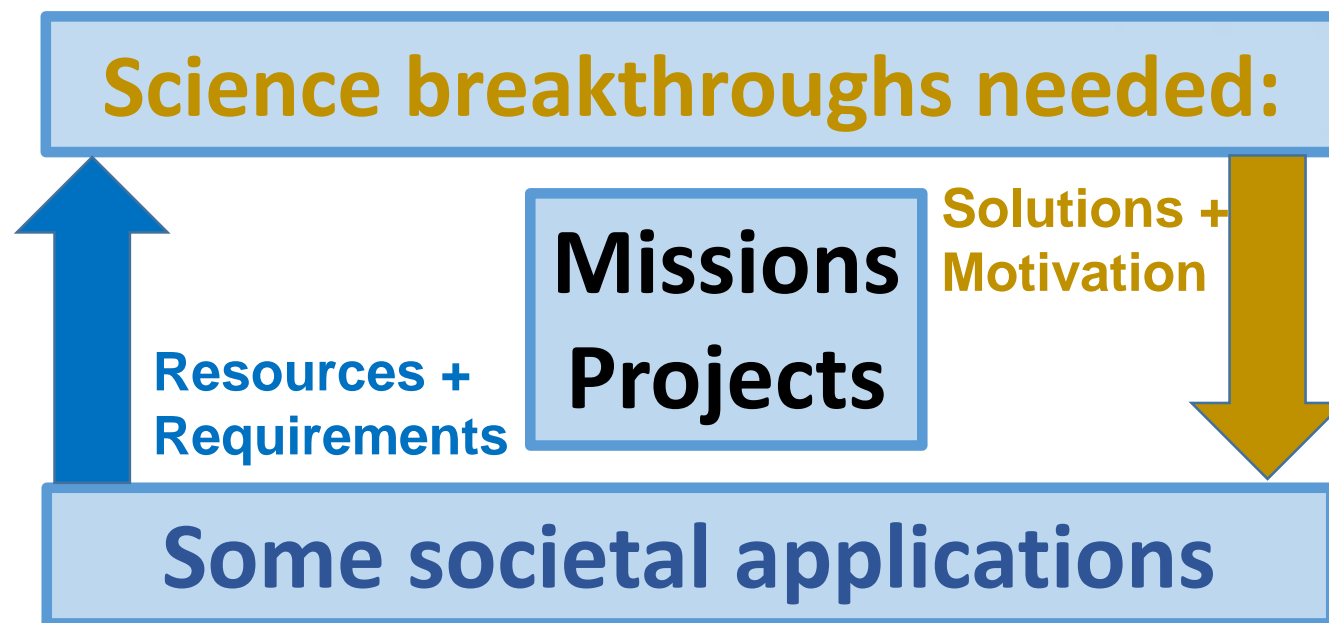
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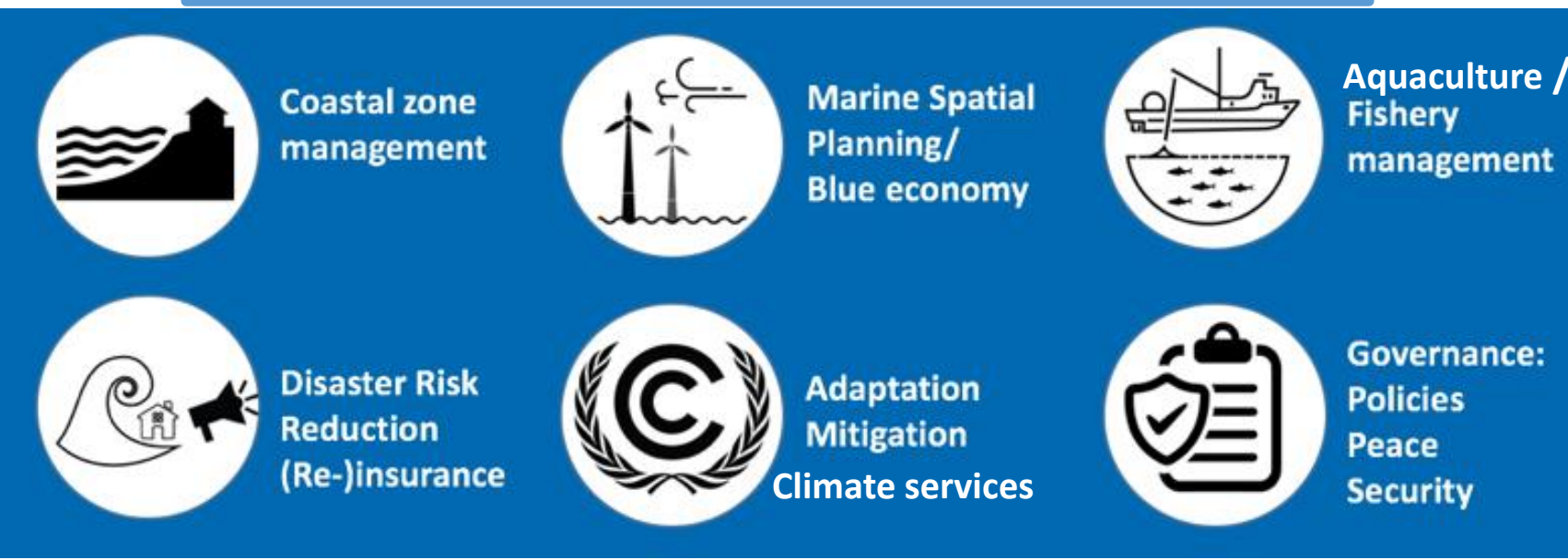
where we would like to be

- Science providing solutions and motivation for action
- Ocean data portal for past, present, and future
- Ocean literate and well-informed decisions
- Clear value chain leading to resourcing and commitment
- CD/ transfer of technology: no one remains behind

Approach: Proactive Design and Expanding Uptake



- Mapping, digital atlas
- Observing system
- Ecosystem knowledge for service
- Data and information
- Multi-Hazard warning systems
- Ocean in Earth System science
- CD, education, ocean literacy
- ???



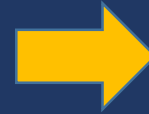
2021
2030

United Nations Decade of Ocean Science for Sustainable Development

Approach for Meeting based on 6 societal outcomes for the Ocean

“What can we do together that we cannot do separately?” – M. Leinen (EPG)

- 1) Clean Ocean
- 2) Healthy and resilient Ocean
- 3) Sustainably harvested/productive Ocean
- 4) Predicted Ocean
- 5) Safe Ocean
- 6) Transparent and accessible Ocean



- Current status/gaps;
- Objectives/outputs;
- Needed actions;
- Potential for collaboration;
- Examples of pathways from science to social impact;
- Motivation, resources, (voluntary) commitments, alignment of funding;
- Ideas on architecture, coordination, governance;
- ???

E.g., where is
“climate” here?

Views of stakeholders:

Countries (developing, SIDS),
Scientists (all disciplines),
UN agencies, IGOs/NGOs,
Private Sector, Philanthropy,
Educators, Public at large

Vision of what we are creating - 3 Pillars

Pillar 1: Quantitative, comprehensive, *multidisciplinary*, objective and authoritative characterization of the ocean state in the *past, at present, and for the future, global*, downscaled to *regional, national, local*, with identification of knowledge gaps and uncertainties

New Technologies:

Big data, fast communication, computing...

Artificial intelligence

Cloud computing, 3-D simulation by virtual reality

Technologies: RVs, AUVs, ROVs, eDNA, gliders, satellites, ...

Data Assimilation Systems, Models...

**Potential Mission:
Ocean Prediction**

Vision of what we are creating - 3 Pillars

Pillar 1: Quantitative, comprehensive, multidisciplinary, objective and authoritative characterization of the ocean state, with identification of knowledge gaps and uncertainties

Pillar 2: Means of efficient exploitation of the knowledge (Pillar 1), triggering action and good management, through people (youth/gender), resources, capacity, technology, industry, contributing to the 3 elements of sustainable development: environment, (blue) economy, and social justice



**Potential Mission:
Saving Coral Reefs**

Vision of what we are creating - 3 Pillars

Pillar 1: Quantitative, comprehensive, multidisciplinary, objective and authoritative characterization of the ocean state, with identification of knowledge gaps and uncertainties

Pillar 2: Means of efficient exploitation of the knowledge (Pillar 1), triggering action and good management, through people (youth/gender), resources, capacity, technology, industry, contributing to the 3 elements of sustainable development: environment, (blue) economy, and social equity

Pillar 3: Optimized organizational setting in the UN and Member States to govern the 2 first pillars and effective and ensure efficient functioning and delivery of ocean science at the global, regional, and national levels.

1st Global Planning Meeting, 13-15 May 2019, Copenhagen



GLOBAL MULTI-STAKEHOLDERS CONSULTATION PROCESS

220 institutional representatives

- Academia
- Science organisations (N/R)
- SD & Policy
- UN Orgs
- Youth organisations
- Ocean businesses & networks
- Communicators /Media

More to come...

Timeline and milestones

2019

2020

Global Meeting (CPH)

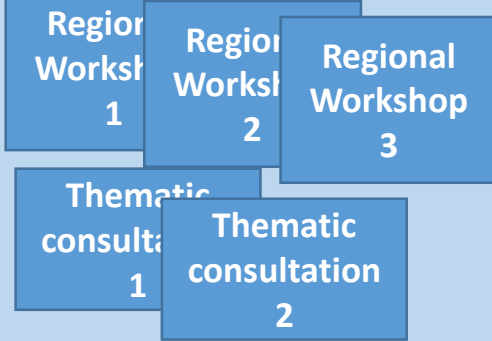
Multistakeholders

Outputs:

- Research priority areas
- Knowledge/policy gaps
- **Participants/Stakeholders engagement**
- Mapping of existing building blocks
- Crosscutting issues (CD, Technology, Data, Partnerships)
- Financing pathways

REGIONAL/THEMATIC WORKSHOPS

Multistakeholders



Outputs:

- Contextual enrichment of R&D areas
- CD needs
- Follow up arrangements
- Partnerships

Global Meeting (2020)

Multistakeholders

Outputs:

- Consolidation of results from various consultations
- Structured Implementation plan and governance arrangements
- Development of operational plans
- Formalise partnerships
- Address cross-cutting issues

DECADE IMPLEMENTATION

PLAN 1.0

- Science Plan
- Work programme 2021-2023 (Phase I)
- CD Plan
- Governance arrangement
- M & E
- Communication

EPG/UN+

Stakeholders engagement

Synthesis from GPM/Regional meetings/thematic consultations
Science plan scoping + Drafting of Implementation Plan,

2nd UN Ocean Conference

UNGA

IOC GB

What is the value proposition of the Decade?

- a. By participating in a **global, inclusive process** that contributes to the sustainable development goals through the development and application of solutions
- b. By being connected by enabling architecture** – that coordinates projects, identifies gaps in coverage, develops of a high level science plan, provides data and information sharing architecture and facilitates an exchange of technologies
- c. By being supported through an **alignment of funding priorities** at the national and international level, innovative financing and engagement of philanthropic organizations, and the private sector
- d. By stimulating **voluntary commitments by stakeholders** towards the achievement of regional or globally set goals of the Decade.
- e. By designing research missions/mega projects that are transformative** and can serve one or more societal outcomes.



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#OceanDecade

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Find out which
organizations are
contributing directly
to the Decade

The Science We Need For The Ocean We Want

PREPARATORY PHASE 2018-2020



Showcase your resources in
a multimedia library

Explore a dedicated
portal for ocean
scientists

Join an online interactive
forum to mobilize ideas
and partnerships

Available soon @ <http://oceandecade.org>