



2nd Southern Ocean Regional Workshop – UN Ocean Decade



2021
2030 United Nations Decade
of Ocean Science
for Sustainable Development



Southern Ocean Decade – Kick-off meeting

Southern Ocean Task Force – 9 July 2021

Agenda



2021
2030 United Nations Decade
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- **Welcome**
 - *Anton Van de Putte – SCAR Antarctic Biodiversity Portal*
- What is the UN Decade for Ocean Science for Sustainable Development ?
 - *Alison Clausen – UNESCO - Intergovernmental Oceanographic Commission*
- Why do we need an Action Plan for the Southern Ocean Region ?
 - *Deneb Karentz – Scientific Committee on Antarctic Research*
- Outcome of the 1st Southern Ocean Regional Workshop
 - *Eileen Hofmann – Southern Ocean Observation System*
- Overview of the Southern Ocean process
 - *Renuka Badhe – European Polar Board*
- Working Group meetings
 - *Annemie Janssen – SCAR Antarctic Biodiversity Portal*
- Questions

Code of conduct



2021
2030 United Nations Decade
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- We are committed to providing a safe, inclusive, welcoming, and harassment-free experience for everyone.
- We try to cultivate a community with shared values, where people are comfortable exploring ideas, asking questions, and saying things like “I don’t understand” or “Why”. Assume competence in the people you interact with. There are no stupid questions.
- Be considerate in speech and actions, and actively seek to acknowledge and respect the boundaries of fellow community members.
- <https://ropensci.org/code-of-conduct/>

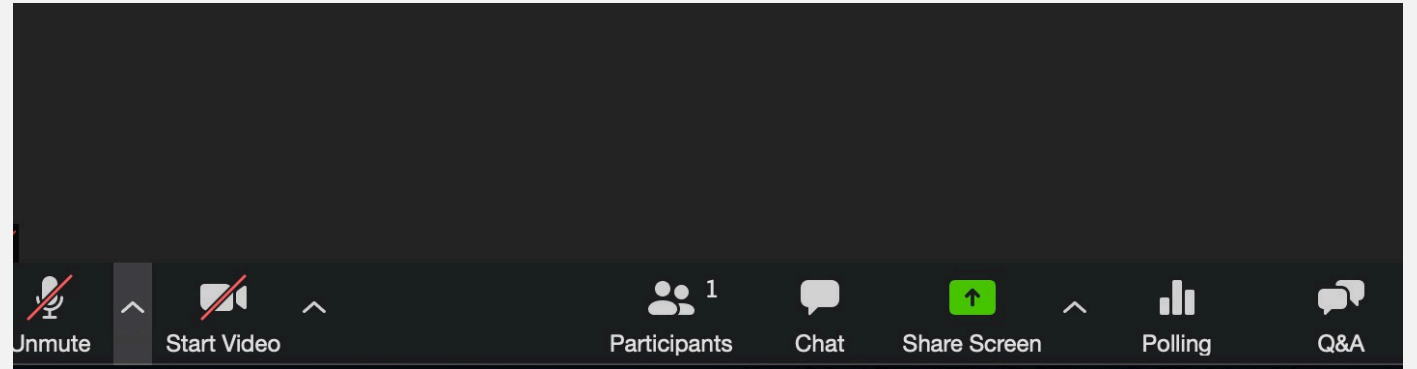
Zoom webinars: interacting

Use the chat to notify us about technical issues

Please use the Q&A for on topic question

We will try to address the questions within the Q&A and/or may return to them at the end of the meeting.

Relevant Q&As will also be added to an FAQ section to the Southern Ocean Decade



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What is the UN Decade for Ocean Science for Sustainable Development ?

Alison Clausen – UNESCO – Intergovernmental Oceanographic Commission

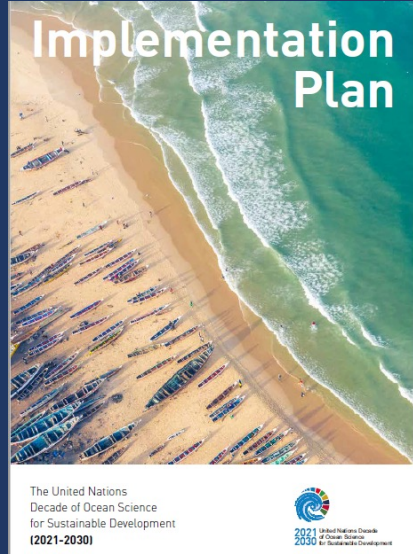
Towards the Ocean Decade: 2017 - 2021



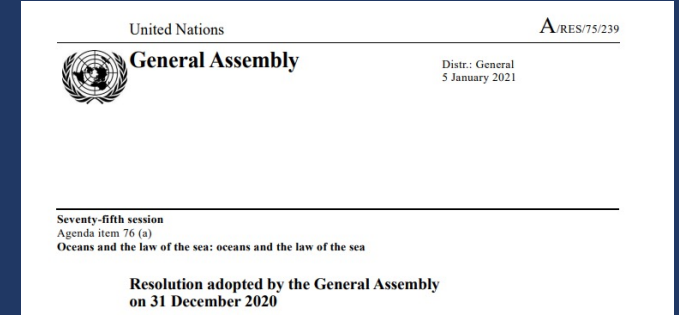
2016-2017



2020



2018-2019



304. Welcomes the steps taken by the Intergovernmental Oceanographic Commission to prepare the implementation plan for the United Nations Decade of Ocean Science for Sustainable Development (2021–2030) in consultation with Member States, specialized agencies, funds, programmes and bodies of the United Nations, as well as other intergovernmental organizations, non-governmental organizations and relevant stakeholders, and takes note with appreciation of that plan;

305. Requests that the Intergovernmental Oceanographic Commission regularly consult with, and report to, Member States on the United Nations Decade of Ocean Science for Sustainable Development and its implementation;

306. Invites the Secretary-General to inform the General Assembly on the implementation of the United Nations Decade of Ocean Science for Sustainable Development through his report on oceans and the law of the sea, on the basis of information to be provided by the Intergovernmental Oceanographic Commission;



Ocean Decade: The framework for implementation

Vision

The science we need for the ocean we want

Mission

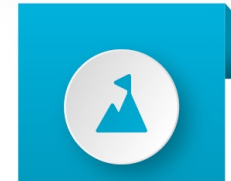
Transformative ocean science solutions for sustainable development, connecting people and our ocean.

2030 AGENDA & REGIONAL AND GLOBAL POLICY FRAMEWORKS



DECADE OUTCOMES

“THE OCEAN WE WANT”



OCEAN DECADE CHALLENGES

The most immediate and pressing needs of the Decade, Challenges may evolve throughout the Decade and new Challenges will be added. Each Challenge contributes to one or more Decade outcomes.



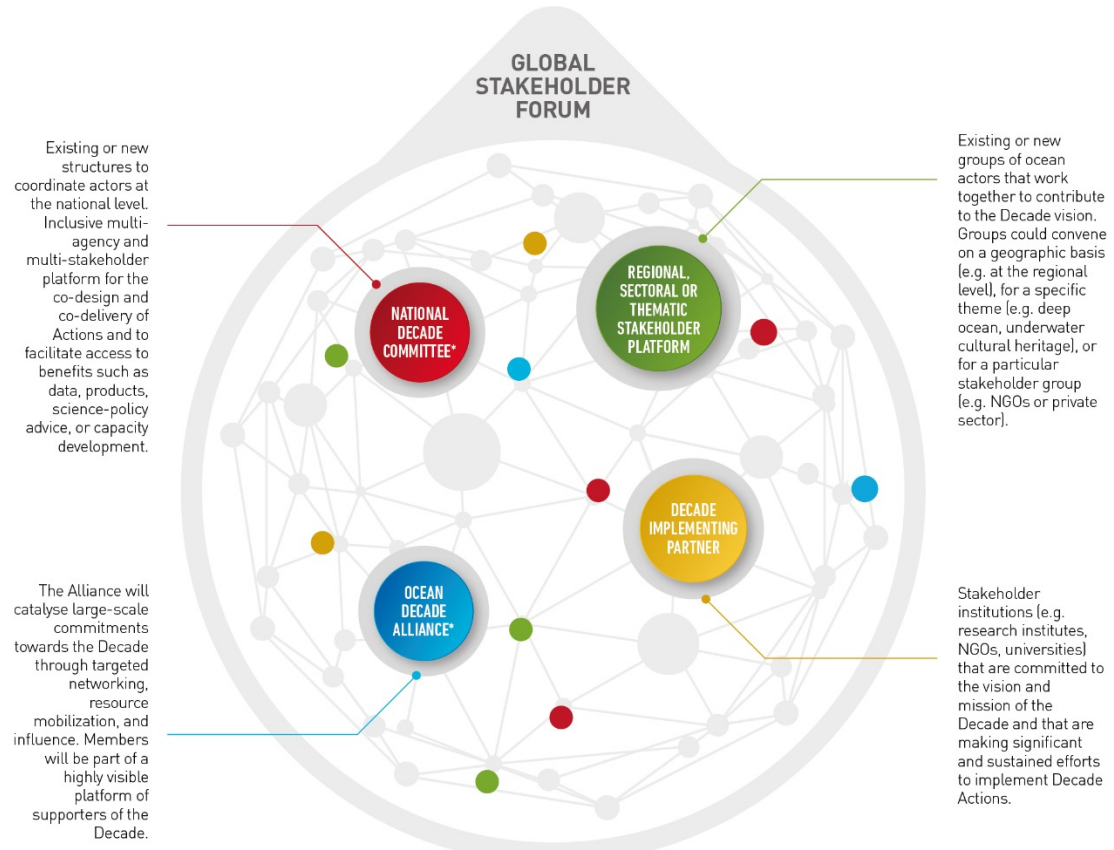
DECADE OBJECTIVES

The steps in the process from the ocean we have to the ocean we want. Objectives are relevant to all Challenges. Prioritisation and translation of objectives into Actions will vary depending on context.



DECADE ACTIONS

The tangible initiatives and endeavours that will be implemented by a wide range of Decade stakeholders to fulfil the objectives and thus achieve the Challenges.

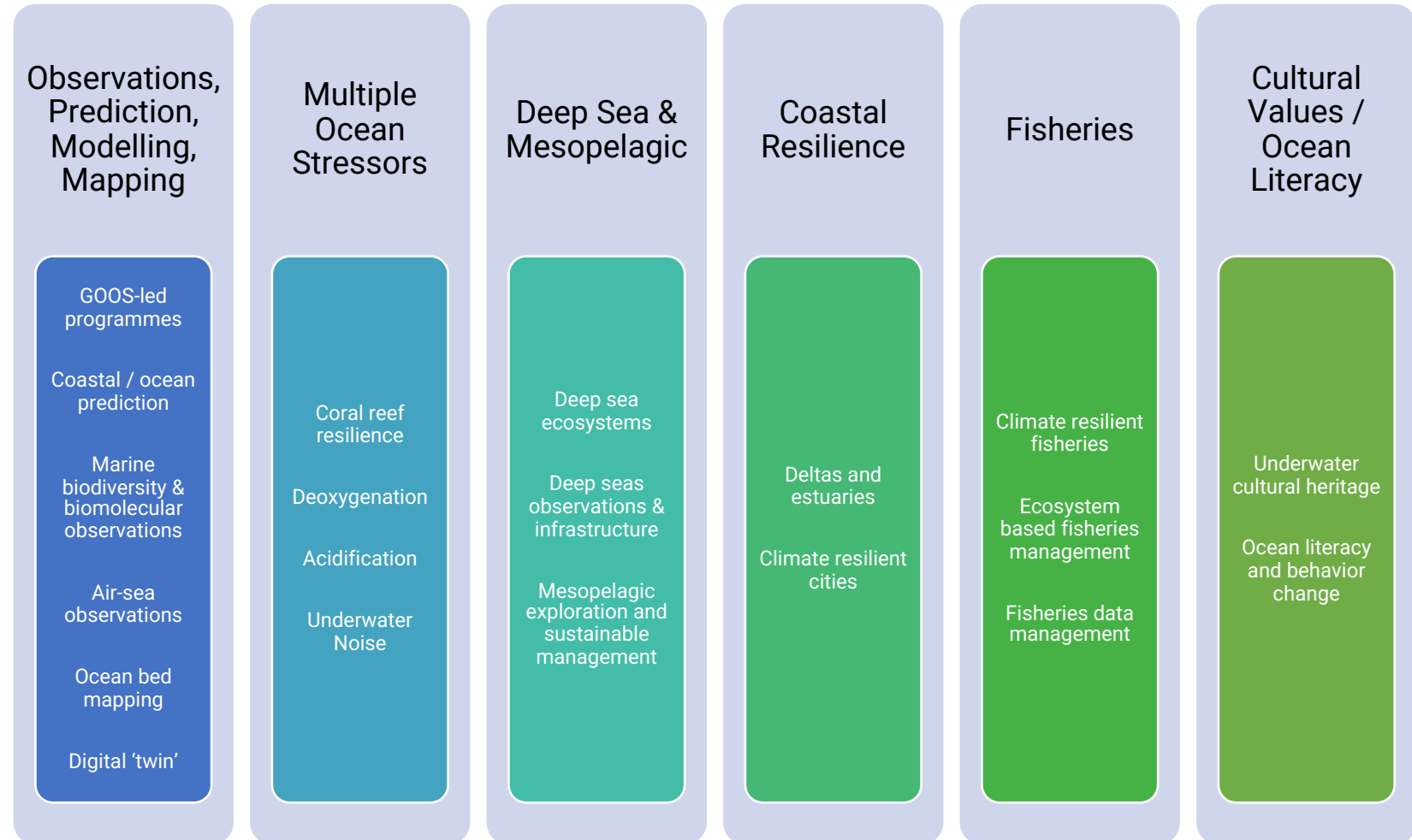


Time for Action! – First Results of Call for Decade Actions No. 01/2020

28
programmes

7 UN led
Decade
Actions

33
contributions

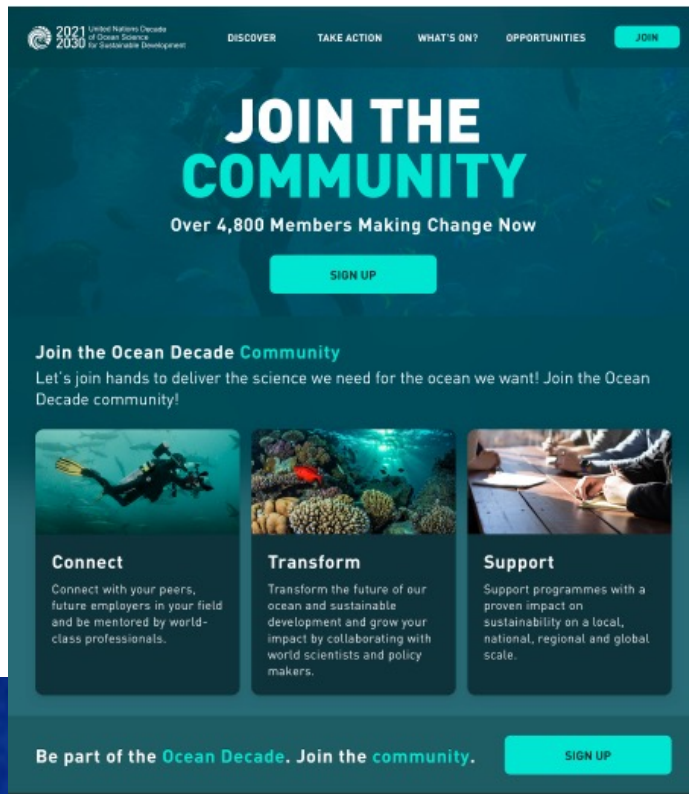


Regional programme: Pacific solutions to save our ocean

Network programmes: ECOPs, gender, networks to facilitate co-design and co-creation of Decade Actions including innovation, stimulate investment and incite global engagement

Stakeholder Engagement: Regional & National Initiatives

- Diverse regional initiatives developing Action Plans or regional programmes
- 24 National Decade Committees established



2021 United Nations Decade of Ocean Science for Sustainable Development 2030

DISCOVER TAKE ACTION WHAT'S ON? OPPORTUNITIES JOIN

JOIN THE COMMUNITY

Over 4,800 Members Making Change Now

SIGN UP

Join the Ocean Decade Community
Let's join hands to deliver the science we need for the ocean we want! Join the Ocean Decade community!

Connect

Connect with your peers, future employers in your field and be mentored by world-class professionals.

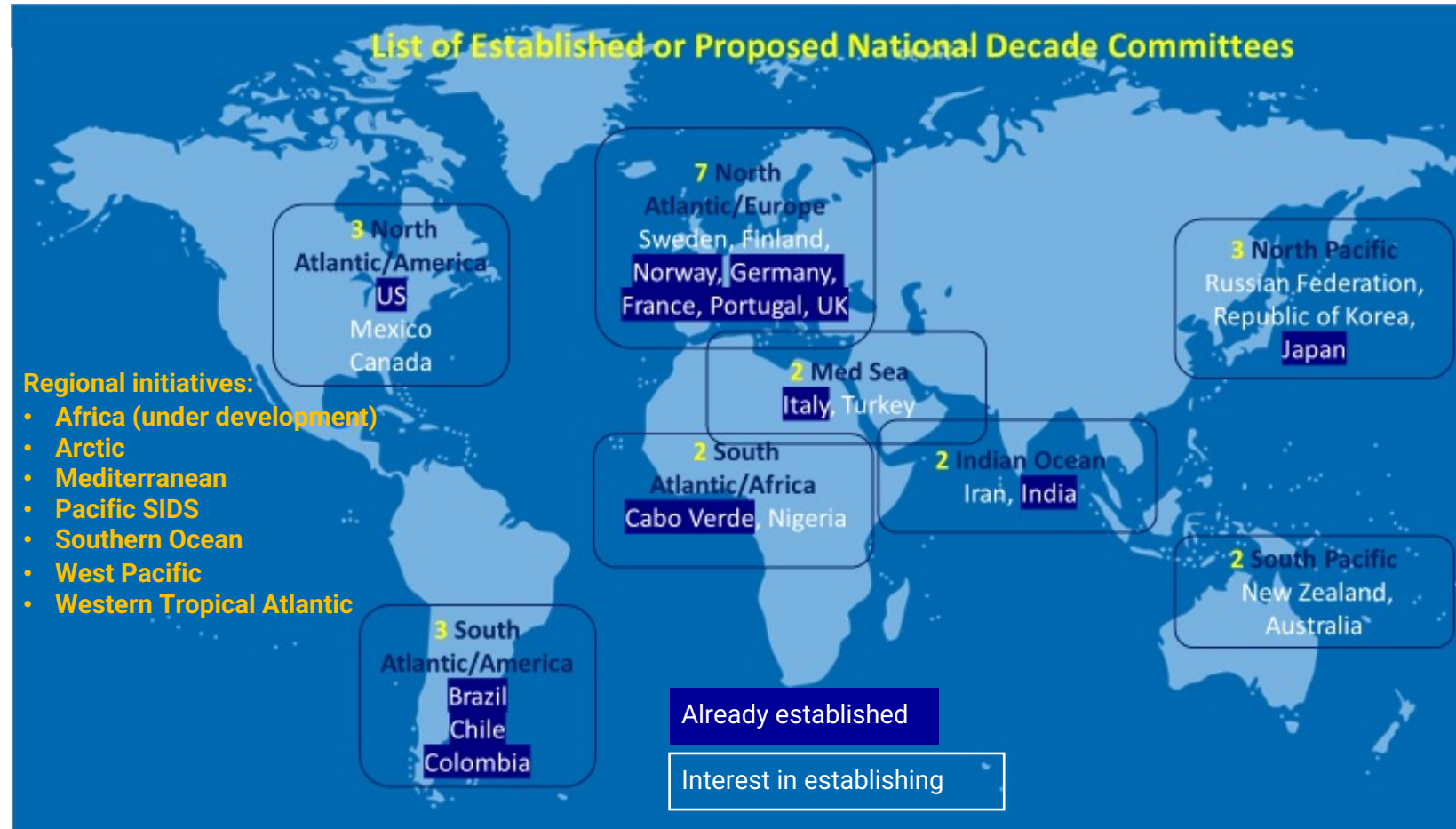
Transform

Transform the future of our ocean and sustainable development and grow your impact by collaborating with world scientists and policy makers.

Support

Support programmes with a proven impact on sustainability on a local, national, regional and global scale.

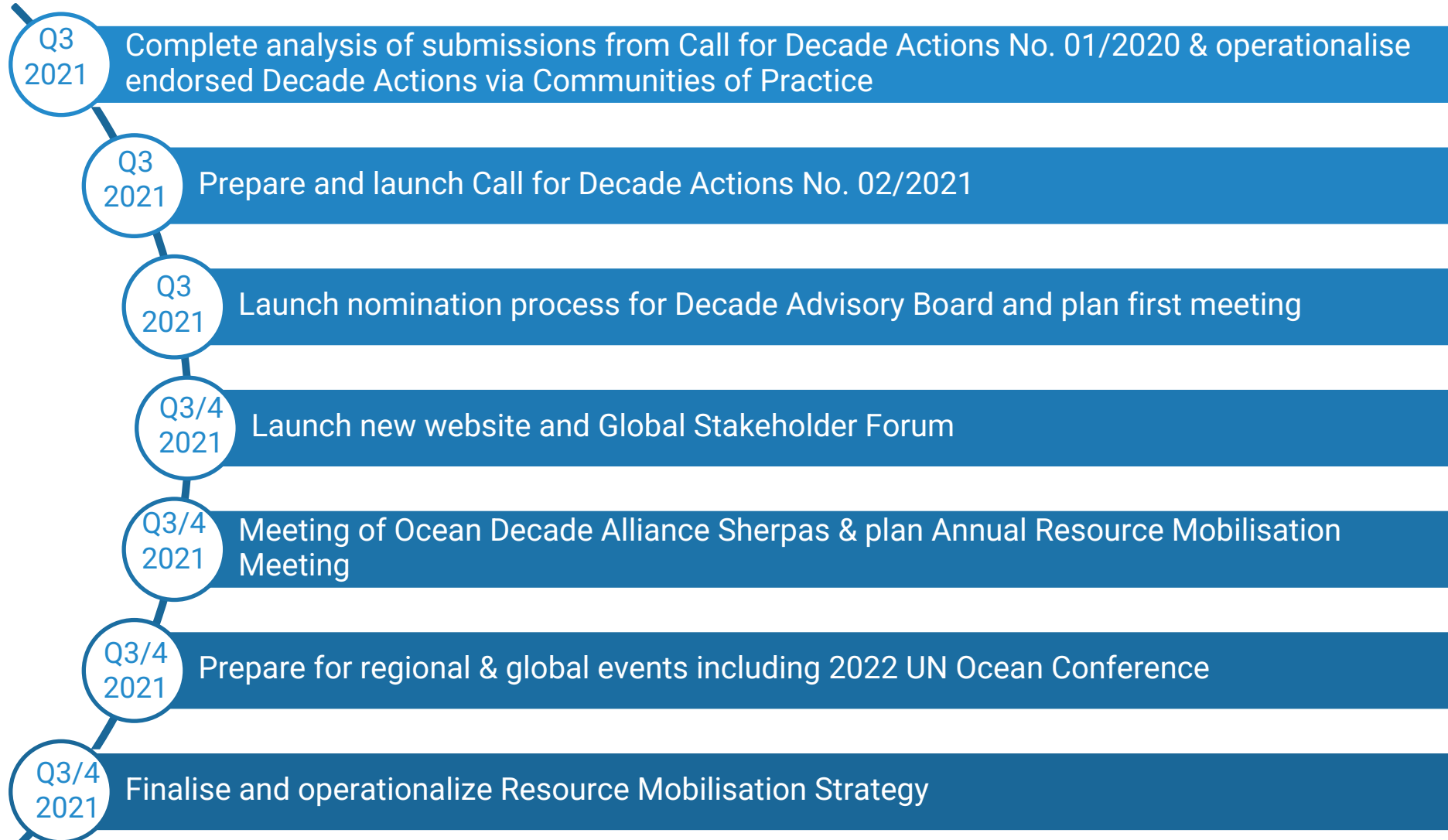
Be part of the Ocean Decade. Join the community. SIGN UP



Upcoming Milestones



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Why do we need an Action Plan for the Southern Ocean Region ?

Deneb Karentz – Vice President for Science – SCAR

The Southern Ocean

Profile

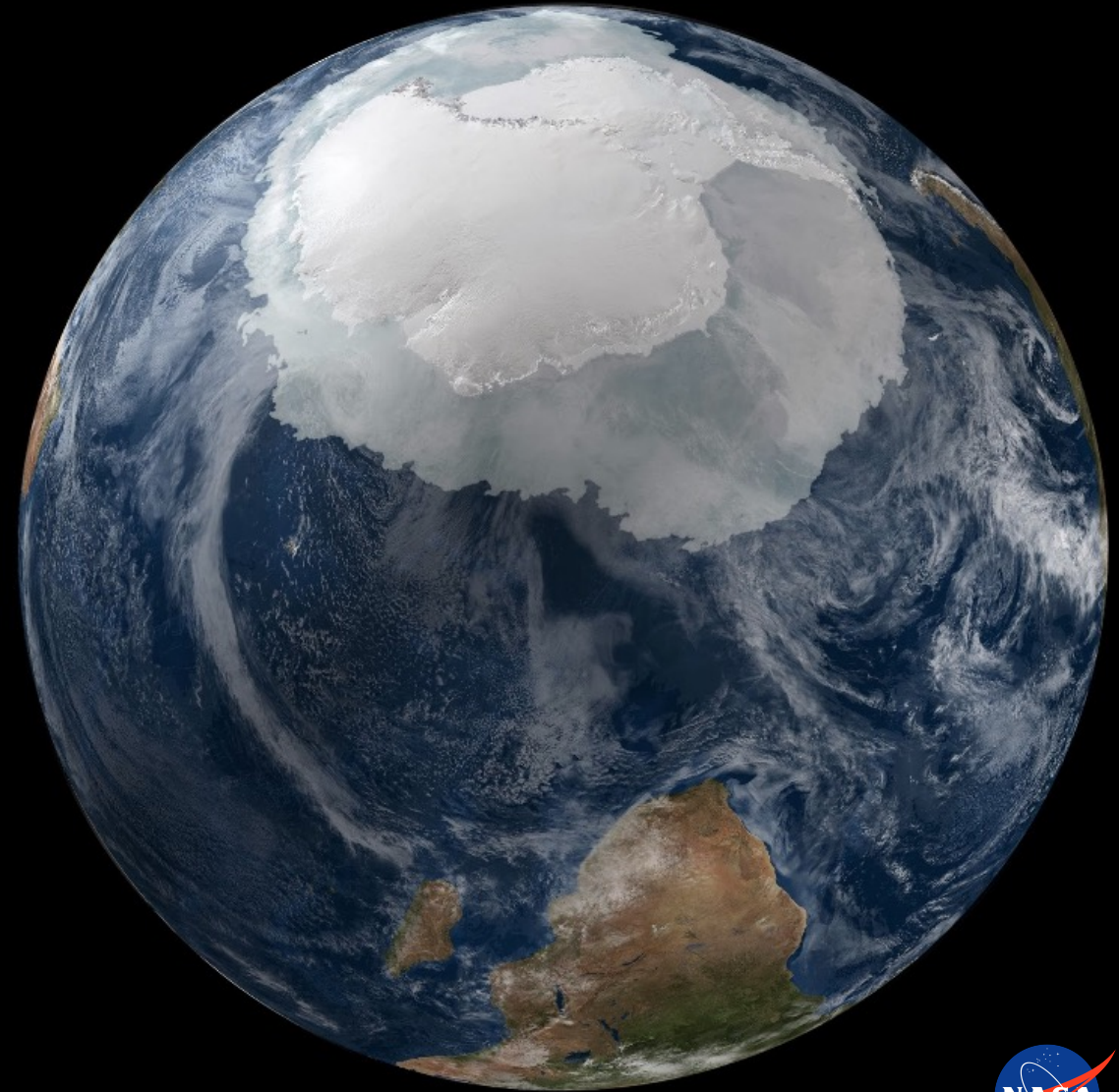
Location: Surrounds Antarctica

Size: ~21.8 million km²

Volume: 72 billion liters of water
(5.4% of global ocean)

Age: ~30 million years old
(youngest ocean)

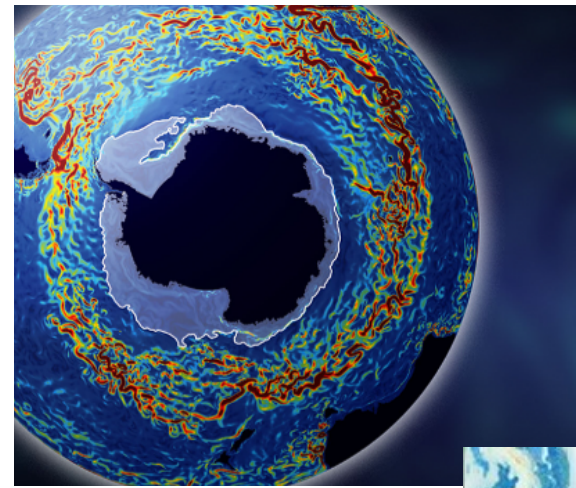
Temperature: -2 to 10 C



The Southern Ocean

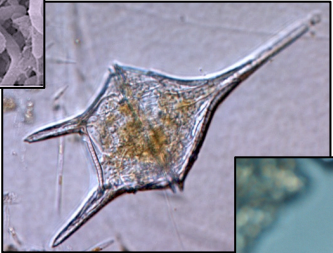
Importance

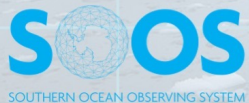
- Antarctic Circumpolar Current
- thermohaline circulation
- biodiversity



M. Mazloff, MIT

NOAA





The Southern Ocean Decade Task Force

- Belgian Science Policy Office (BELSPO)
- Museum of Natural Sciences of Belgium
- Scientific Committee on Antarctic Research (SCAR)
- Scientific Committee on Oceanic Research (SCOR)
- European Polar Board (EPB)
- SCAR Antarctic Biodiversity Portal (Biodiversity.aq)
- Southern Ocean Observing System (SOOS)
- Integrating Climate and Ecosystem Dynamics in the Southern Ocean (ICED)
- International Oceanographic Data and Information Exchange (IODE)
- Climate and Ocean: Variability, Predictability and Change (CLIVAR)
- International Association of Antarctica Tour Operators (IAATO)



The Southern Ocean Region is Different.

Need to consider:

- Scientific bases, not cities and towns
- Primary governance through the Antarctic Treaty System, not individual nations



COMNAP Antarctic facilities

Governance of Antarctica and the Southern Ocean

The Antarctic Treaty



Aims:

- To demilitarize Antarctica, establish as a nuclear-free zone, and ensure use for peaceful purposes only
- To promote international scientific cooperation

The Antarctic Treaty System

Includes:

- Convention on the Conservation of Antarctic Seals (1978)
- Convention on the Conservation of Antarctic Marine Living Resources (1982)
- Protocol on Environmental Protection to the Antarctic Treaty (1991)



Convention on the Conservation of Antarctic Marine Living Resources



Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)

- develops conservation measures for the Southern Ocean
- coordinates research
- collects and analyzes data on effort and catch
- monitors compliance with measures implemented for sustainability

Protocol on Environmental Protection

Committee on Environmental Protection

Designates Antarctica as a

“natural reserve, devoted to peace and science”

- Sets basic principles for human activities in Antarctica
- Prohibits all activities relating to Antarctic mineral resources, except for scientific research
- Addresses environmental impact assessment, biological conservation, tourism, waste disposal/management, marine pollution, area protection and management, liability environmental emergencies



The Southern Ocean United Nations Decade of Ocean Science for Sustainable Development



www.sodecade.org

-  A clean ocean where sources of pollution are identified and removed
-  A healthy and resilient ocean where marine ecosystems are mapped and protected
-  A predictable ocean where society has the capacity to understand current and future ocean conditions
-  A safe ocean where people are protected from ocean hazards
-  A sustainably harvested ocean ensuring the provision of food supply
-  A transparent ocean with open access to data, information and technologies
-  An inspiring and engaging ocean where society understands and values the ocean

“The science we need for the ocean we want.”

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Outcome of the 1st Southern Ocean Regional Workshop

Eileen Hofmann – Co-chair of SOOS Executive Committee



Background

- Engage the Southern Ocean community and ensure input of Southern Ocean priorities into the UN Decade of Ocean Science
- Organized a one-day workshop prior to the Ocean Sciences Meeting, San Diego CA, February 2020
 - 30 participants, representing 11 countries
 - Expertise in ocean sciences, policy, governance and science communication
 - All career stages
- Survey done prior to the workshop to assess Southern Ocean community priorities



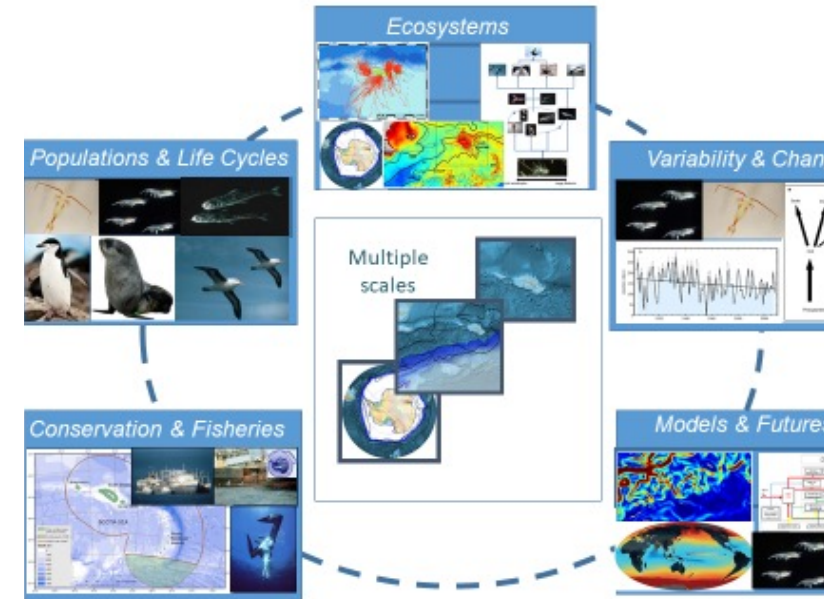
Workshop Goals

- Identify key science priorities
 - Focused on 3 of the 6 UN Decade Science Themes
- Identify cross-cutting themes
- Provide recommendations and plan future activities
- Workshop report available at
 - <http://www.sodecade.org/resources>



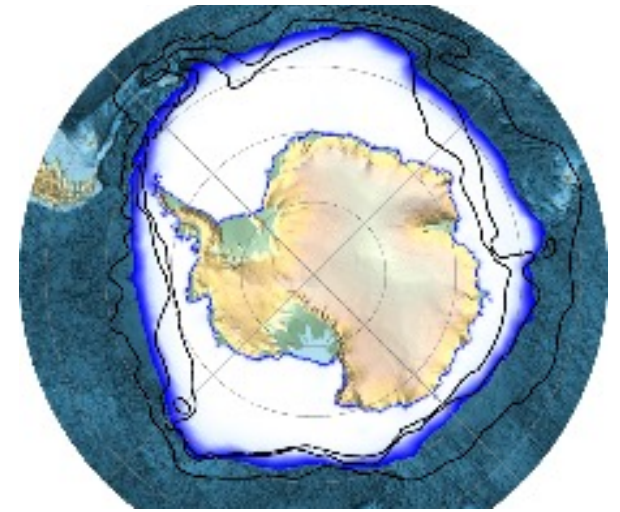
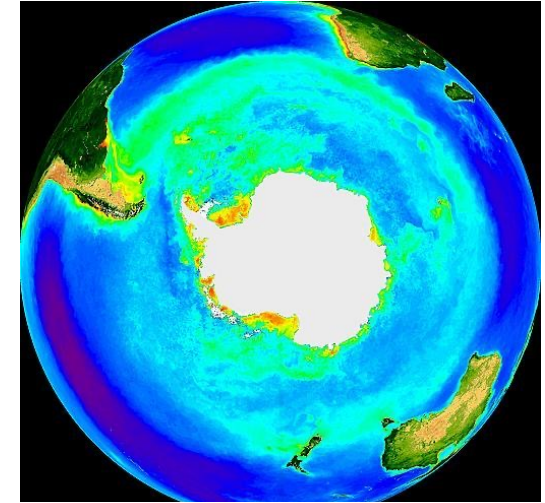
Theme 1 Healthy & Resilient Ocean

- Improve understanding of
 - Key drivers of change and impacts on SO species and food webs
 - Sea ice, including its role in SO ecological processes
 - Role of SO in biogeochemical cycling, especially air-sea exchange of CO₂
- Improve *societal* understanding of SO issues and the global value of the SO in the Earth system



Theme 2 Predicted Ocean

- Enhance and expand observational capability to support predictions
- Improve and enhance SO modeling capability
 - Capacity development
 - New sectors



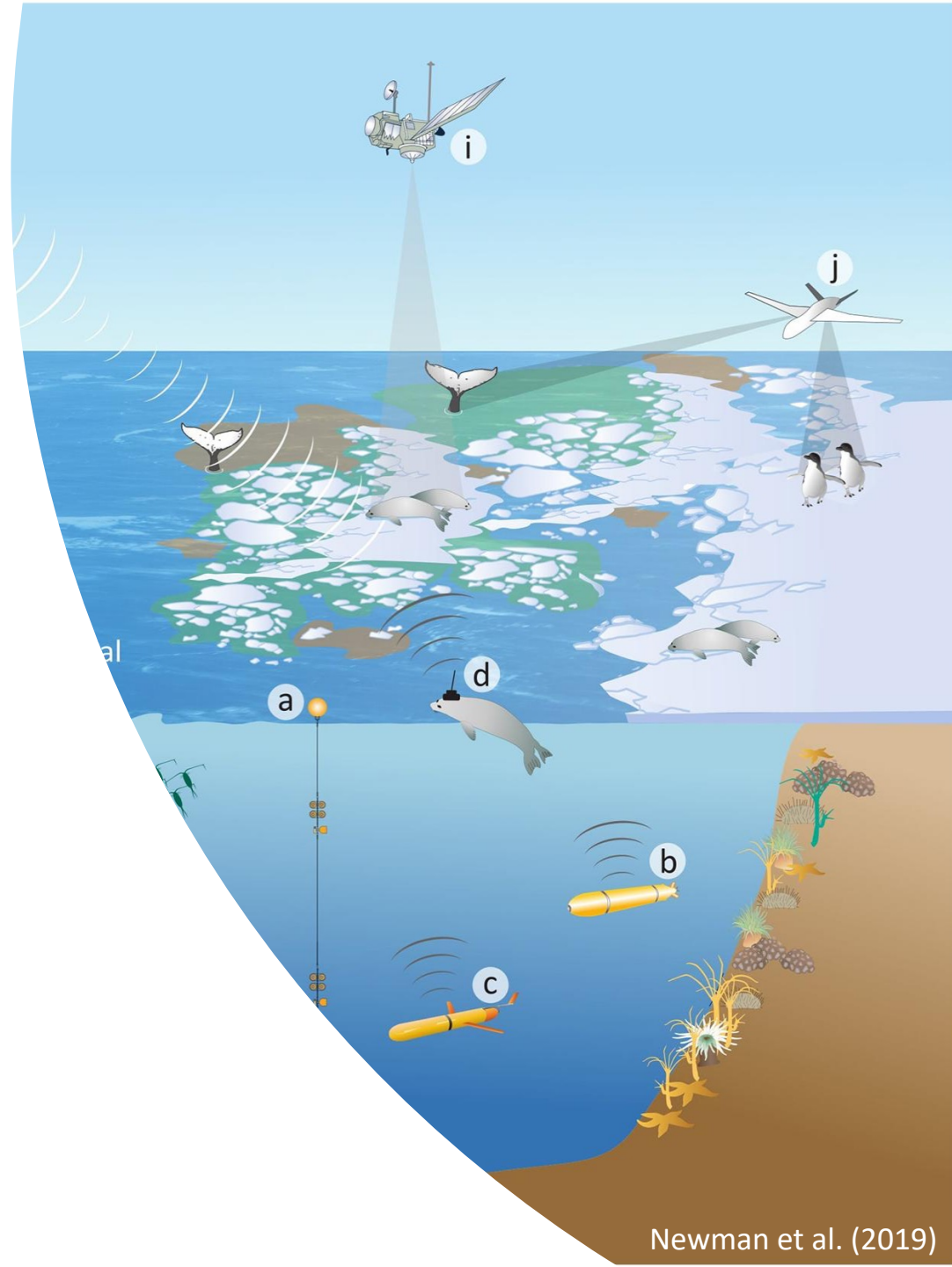
Theme 3 Sustainable Productive Ocean

- Increase the suite, types and reliability of measurements needed to inform management and policy
- Ensure a sustainably harvested and productive SO by working towards a stronger interface between science and policy
- Ensure science-based and effective marine protected areas and uphold sustainable fisheries management



Cross-cutting Themes

- Improve remote sensing capability, especially winds
- Enhance predictive skill across climate, circulation, cryosphere, and ecosystems
- Facilitate capacity development and engagement of new communities
- *Implement coordinated, international, circumpolar observational programs*



STATUS AND OF KEY

On land and at

- Imagery (satellites and)
- Direct observ

Under ice and o

- Direct sampling observations
- Acoustics (active/passive)
- Telemetry
- Environmental

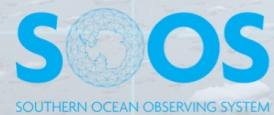
BIOLOGICAL PATHWAYS

- Biochemical tracers
 - Dietary and environmental
 - Fatty acids
 - Stable isotopes
- Food web models



Recommendations

- Circumpolar programs
 - Total carbon budget
 - Quantification of life histories of key species
 - Coverage of annual cycle
 - Quantify the role of sea ice in regulating ecosystem productivity
- UN Decade provides a platform for engaging national programs in such efforts
- Continue engagement of SO community in development of plans and activities to support these efforts
 - Southern Ocean Task Force/Southern Ocean Action Plan



THANK YOU!

QUESTIONS?

ehofmann@odu.edu



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Overview of the Southern Ocean process

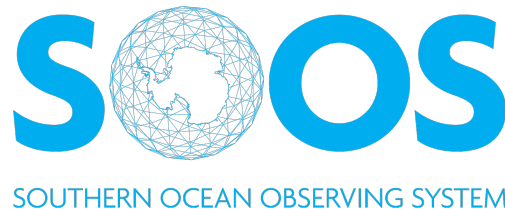
Renuka Badhe – Executive Secretary of EPB

Task Force to develop SO Action Plan

1st Southern Ocean
Regional Workshop
(Feb 2020)



Southern Ocean
Task Force



Review of existing work

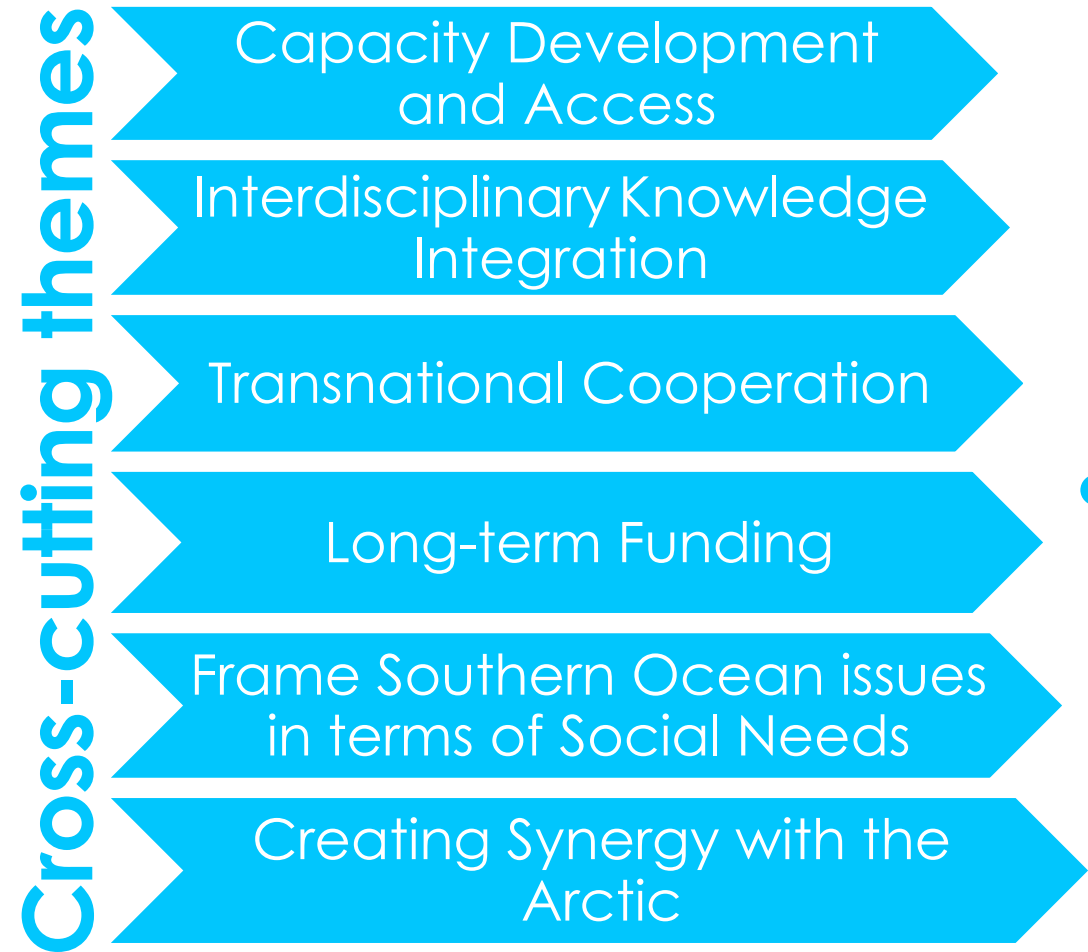


Review of identified priorities for the Southern Ocean in the context of the UN Ocean Decade



Review of existing work

Review of identified priorities for the Southern Ocean in the context of the UN Ocean Decade



Focus of each Working Group



Online solicitation of priorities and involvement

Defining the future of the Southern Ocean

[Home](#)

[About](#)

[Action Plan](#) ▾

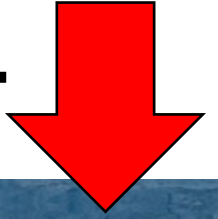
[Resources](#)

[Contact](#)

[TAKE ACTION](#)

Join The Process

Online solicitation of ~~priorities~~ and involvement



Defining the future of the Southern Ocean

Home

About

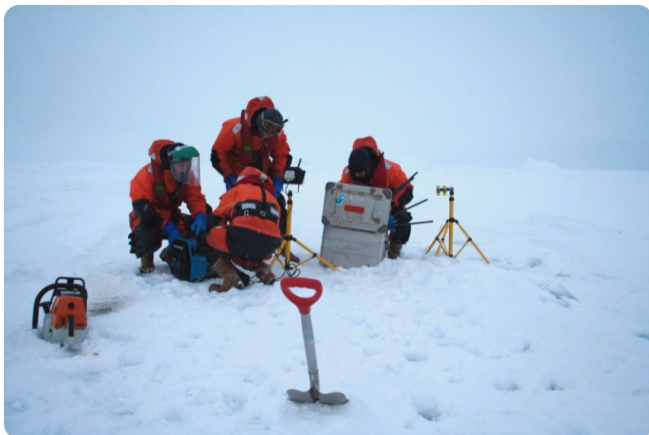
Action Plan ▾

Resources

Contact

TAKE ACTION

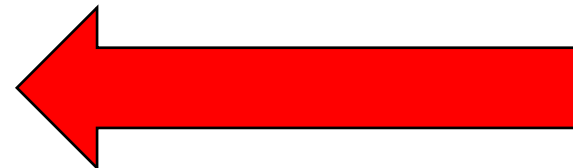
Join The Process



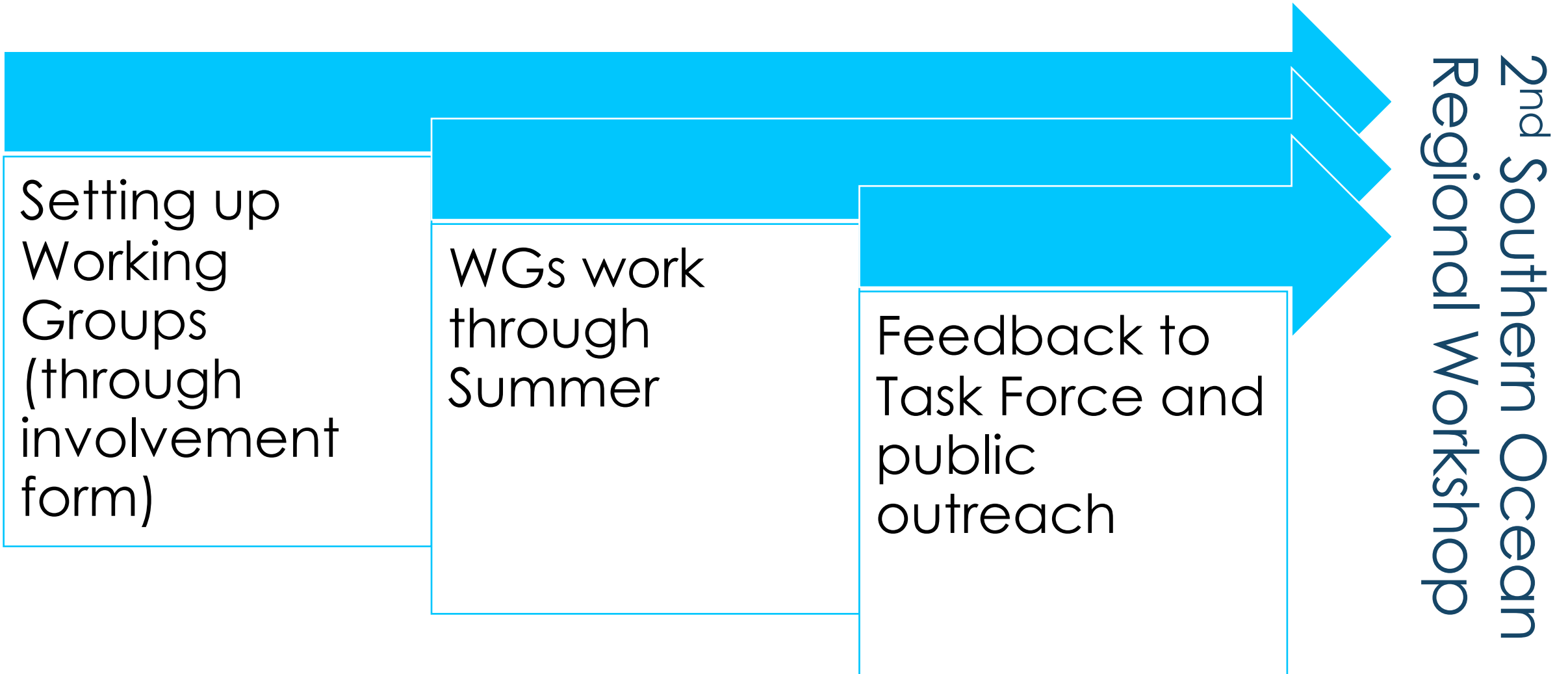
Collaborate With Us !

If you are interested in getting further involved in the [Southern Ocean process](#) for the UN Decade of Ocean Science for Sustainable Development, we kindly ask that you complete the **involvement form** below.

INVOLVEMENT FORM



Towards the 2nd Southern Ocean Regional Workshop



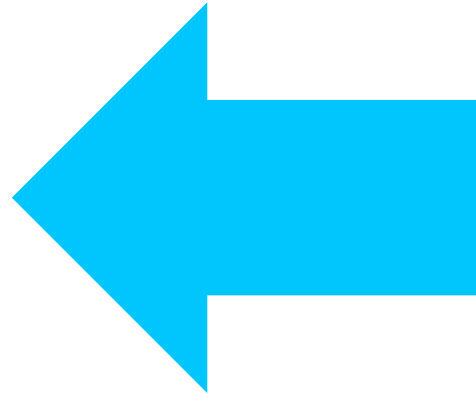
2nd Southern Ocean Regional Workshop

Cross-cutting themes

Challenge 1
Challenge 2
...

Action 1
Action 2
...

-  Clean Ocean
-  Healthy and Resilient Ocean
-  Productive Ocean
-  Predicted Ocean
-  Safe Ocean
-  Accessible Ocean
-  Inspiring and Engaging Ocean



Draft Southern Ocean Action Plan



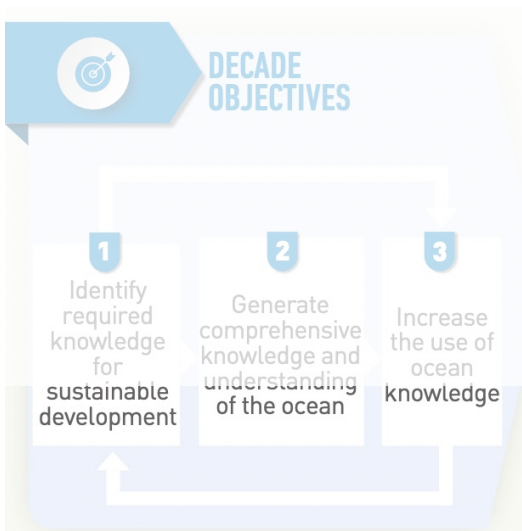
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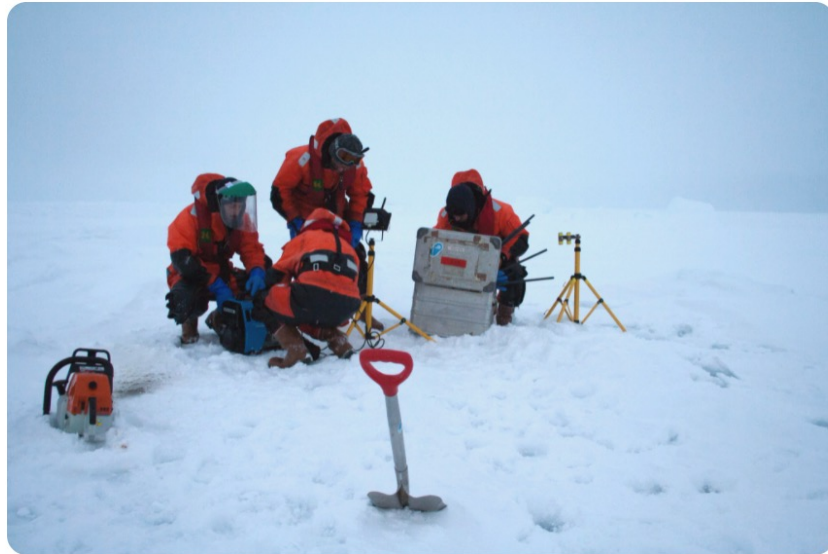
Draft Southern Ocean Action Plan

2nd Southern Ocean Regional Workshop

ting

Challenge 1
Challenge 2

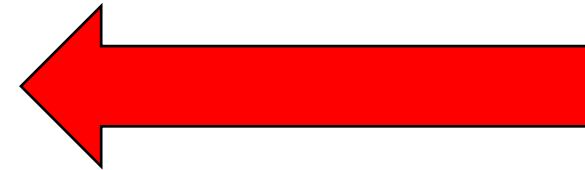
 Clean Ocean



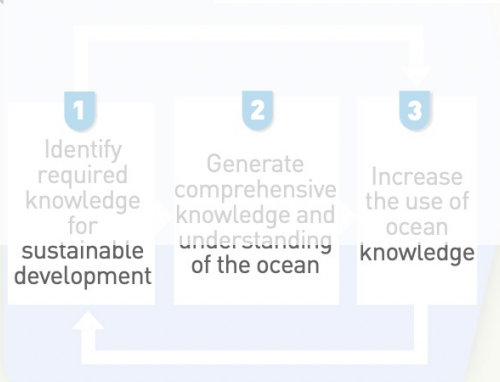
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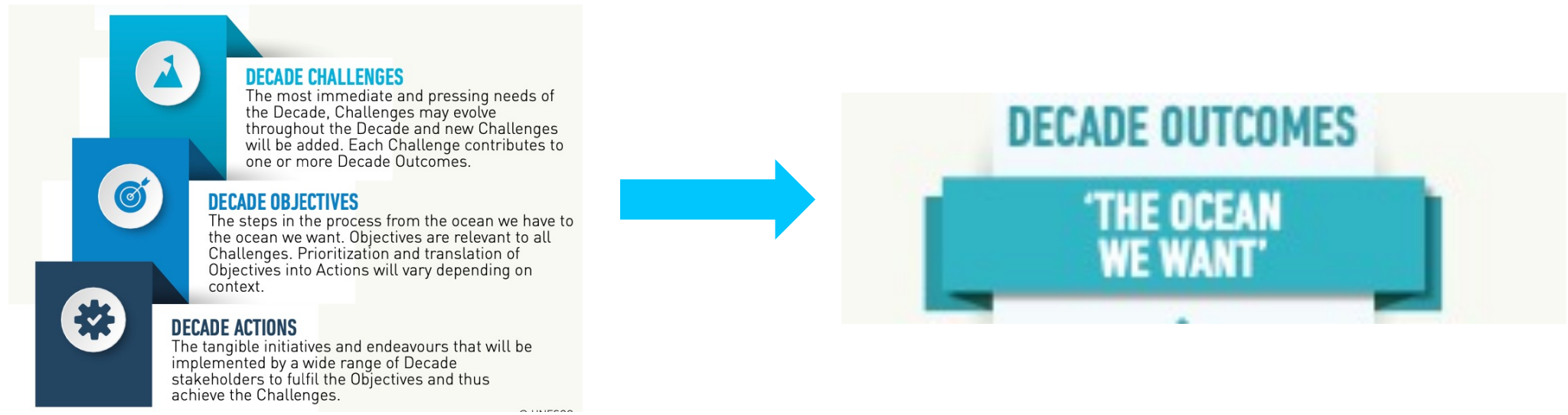
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 Accessible Ocean
 Inspiring and Engaging Ocean

Draft Southern Ocean Action Plan

Post 2nd Southern Ocean Regional Workshop to the Southern Ocean Action Plan



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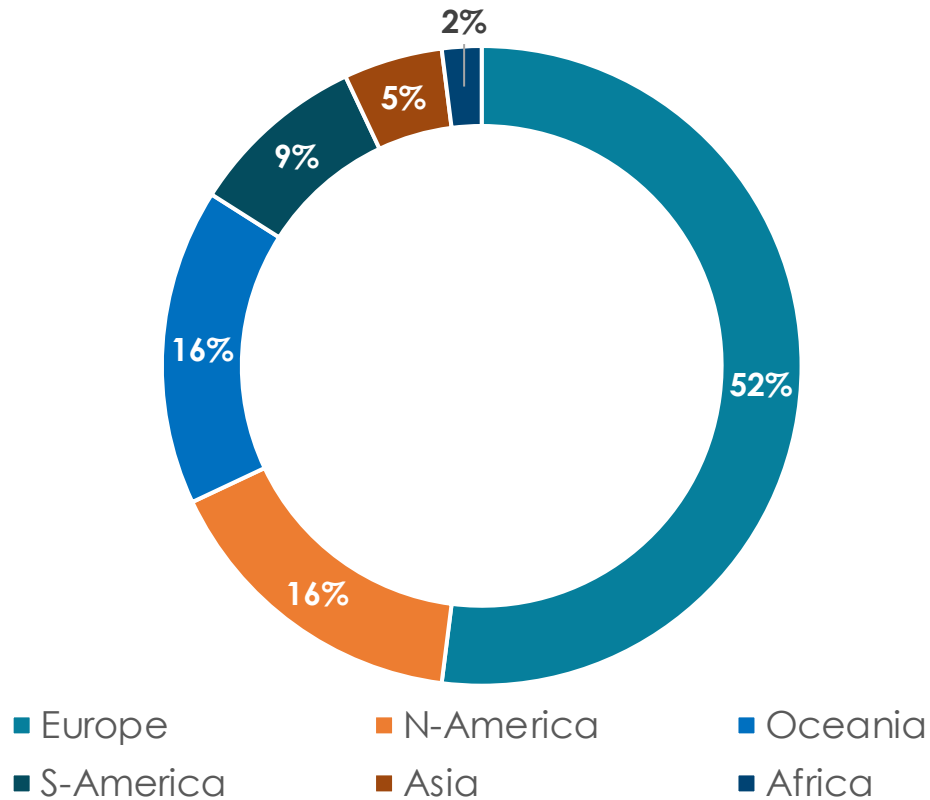


Working Group meetings

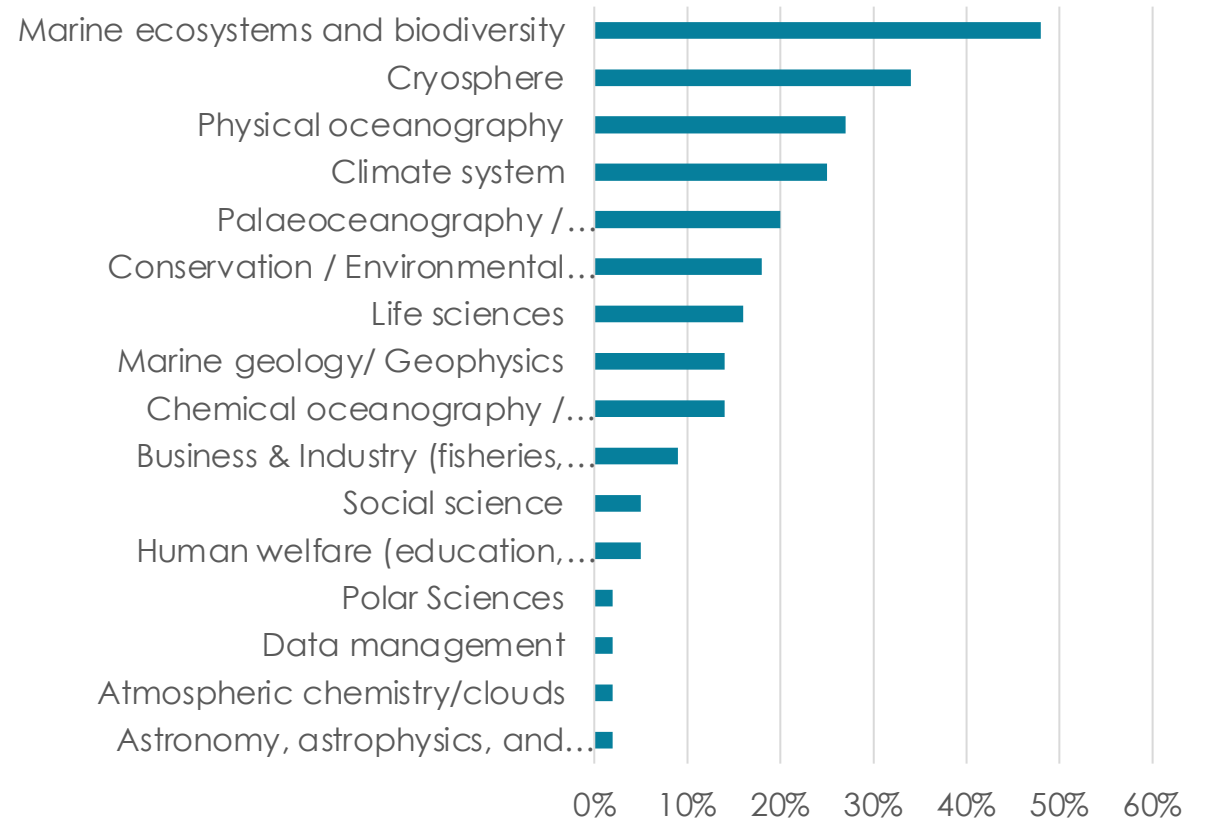
Annemie Janssen – Science Officer at SCAR Antarctic Biodiversity Portal

Update on the Southern Ocean stakeholder solicitation

Geography



Area of interest



Objectives of Working Groups

- Identify regional challenges that need to be overcome to achieve Southern Ocean priorities identified through the survey (cfr report).
 - Research challenges
 - Logistical challenges
 - Uptake challenges
- Identify tangible actions that would be able to address these challenges.
- Identify already-existing activities and stakeholders who are presently working towards resolving these challenges.
- Rank suggested actions in order of priority while taking into account feasibility and timeline.



Expectations



Prior to WG meetings

- Get an overview of the Southern Ocean Process
- Read the report of identified Southern Ocean priorities
- Read WG Guidelines

During WG meetings

- Take notes for the WG report
- Work towards achieving the meeting objectives

Between meetings

- Contribute to the writing of the WG draft report
- Comment on other WG draft reports if needed.
- Review comments on your own report

After WG meetings

- Submit draft WG report by 13th September 2021
- Each WG chair must prepare a short presentation for the 2nd Southern Ocean Regional Workshop (20-22 September 2021)

How to join the process

Fill in the involvement form !

- Different levels of engagement
- For WG meetings, select the WG(s) you would like to participate in (1 – 7)

***** Cross-cutting themes : all participants will have commenting access**

↓ Access the form here ↓

<https://www.sodecade.org/involvement-form/>



Important dates



2021
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9 July

Kick-off meeting

13 September

Deadline for the submission of WG draft reports

Public outreach event : date tbd

20-24 September – Southern Ocean Decade and Polar Data Forum Week 2021

- 2nd Southern Ocean Regional Workshop (20 – 22 September)
- Polar Data Forum IV (22–24 September)

→ *Event website to be launched soon !*



Questions



THANK YOU