











NATIONAL DECADE COMMITTEE FOR BELGIUM INTERACTIVE SESSION – OPEN GROUP 2 December 2022 Oostende, InnovOcean Campus

National Decade Committees (NDCs) are conceived as the critical connection between local actors and the global Decade Community. NDCs are multi-agency and multi-stakeholder platforms that aim to engage the national ocean community and facilitate co-design of initiatives (programmes, projects, activities and contributions) that can be endorsed as Decade Actions, across groups of stakeholders. The NDC for Belgium will be based on the <u>operational guidelines</u> established by the General Secretariat of the Ocean Decade.

Summary report

One of the tasks of the National Ocean Decade Committee for Belgium is to facilitate the identification of relevant existing contributions to the Ocean Decade and potential Ocean Decade actions from the broader ocean (science) community in Flanders and Belgium. To this purpose the Belgium committee builds on the previous discussions and topics agreed during the 2019 VLIZ scientific guidance committee (COASTAL TREASURES Session).

The session aims to:

- Inform: what actions were taken since last meeting: current projects, proposals and actions
- Inspire: what can be done, what are the networks and existing initiatives to build on, including currently endorsed Ocean Decade Actions (programme, project, or activity) coordinated by other organisations or consortia, to connect with
- Launch a call for action and collaboration, identifying potential contributions and how VLIZ Ocean Decade secretariat can support

Content: Participants were divided into three groups to discuss current projects, opportunities for collaboration and proposed decade actions for each of **the three proposed broad topics for 45 min.** At the session, they received information to find synergies between their ideas & projects and ocean decade objectives and get guidance on how to ensure their endorsement. At the end of the session, each group moderator reported back to plenary (5 min each group).

Thematic groups:

Group 1 (blue): Blue Carbon and Nature-based solutions [Room: Asterias Auditorium]

Co-moderators: Tina Mertens (leading) and Ine Moulaert







Cultural Organization







Introduction: NbS are actions to protect, sustainably manage and restore natural or modified ecosystems that address societal challenges effectively and adaptively, while simultaneously providing human well-being and biodiversity benefits (IUCN and UNEA). Blue carbon is the carbon stored in coastal and marine ecosystems. Blue Carbon ecosystems – e.g. mangroves, tidal marshes and seagrasses - are ecosystems that are able to sequester and store carbon in both the plants and the sediment below.

Blue carbon ecosystems were identified as a key priority to address current biodiversity and climate challenges. The ocean decade aims to increase knowledge and develop innovative solutions to maintain, restore or improve this ecosystem functioning under changing environmental, social and climate conditions.

This group discussed examples of projects focusing on blue Carbon NbS as possible contributions and potential Ocean Decade actions.

Participants:

- Dieter Rabaut
- Dries Debruyne
- Ine Moulaert
- Jos Smits
- Kobus Langedock
- Koen Degrendele
- Patrik Peeters
- Sheila Heymans
- Tina Mertens
- Niko Koedam
- Colin Janssen
- Filip Volckaert
- Maurice Hoffman
- Kris Hostens
- Annelies Debacker

Replies from suggested questions:

- 1. Do you know of another related project?
 - o EMB example project: Embracing the Ocean, collaboration with artists (music/dance)
 - Filip Volckaert (KUL): fish stocks have greatly diminished --> now only 10% of original stocks.
 Implementation of MPAs are a good measure. VLIZ is involved in Blue4All (Mission Ocean project on connection and stronger collaboration between MPAs)
 - FUST mangrove restauration project in Latin America, with participation of marine research groups in Flanders and Belgium
 - ICOS Integrated Carbon Observing System, ocean carbon monitoring and ocean acidification

















- Example (already a UNOD project): COST action 'sea unicorn', marine functional connectivity (KUL, ILVO, KBIN, UL)
- ILVO: Sole-DNA (stocks), SYMAPA (finalized)
- VUB-ICA (already a UNOD action?): question of IUCN to set up a network for red listing and conservation of mangrove species and ecosystems. Could be created also for e.g. Seagrass, salt marshes and other coastal ecosystems. Connection with session 3.
- Flemish Hydraulics (Patrick Peeters): Dune in front of Dyke, Sand suppletion of beaches --> use
 of different type of material
- 2. How do you consider your participation in a decade action?
 - EMB: What does it mean for EMB to be an implementing Partner for Europe. Things you do already can be acknowledged as decade action. Link policy briefs with UNOD actions
 - DBC (De Blauwe Cluster): ambitions of the industrial stakeholders to work on this. The language
 of the marine scientist/biologist is different from the language of the engineers --> create better
 understanding, mixed education (biology, legal, engineering,...)
 - DEME: Nature Inclusive Design in Offshore Wind Parks--> how to do this in a cost-efficient way
 by e.g. piggybacking on existing operations
 - ILVO: possible projects that could be considered as a decade action: project CoastalVision and Susana (Partners UA, UGent, KBIN, ILVO; studying Sand extraction and Ecosystem Services as well as blue carbon stock in sandy seafloors)
- 3. How can VLIZ support and/or collaborate in currently endorsed or new decade actions?
 - INBO: Creation of public awareness is important. Transformative change, convince users of planetary boundaries --> VLIZ can play an important role.
 - Ecosystem services are relevant in the comparison of activities and locations. There need to be more and better guidelines and tools to implement Nature Inclusive Design (NID) and use of ES (this is for now better developed for terrestrial ecosystems).
 - o EMB: suggestion: VLIZ to bring the 4Helix together and especially the local community.
 - o INBO: e.g. Science café's

Think Thank North Sea was taken as an example of current projects related to decade objectives, as an opportunity where members/stakeholders can participate and as an option of VLIZ to support as national decade secretariat.

Group 2 (orange): Citizen science and co-design [Room: Ostrea – 1st floor]

Co-Moderators: Juana Jimenez (leading) - Nancy Fockedey

Introduction: Most people are still disconnected with the ocean, regardless of age, education and expertise, people need a minimum understanding on why the ocean is important, how our daily lives depend on it and how we can reduce our impact (Ocean Literacy). To close this gap, co-design must be strengthened, additionally considering cooperation and inclusivity.











Cultural Organization







The group needed more discussion on general concepts and definitions. The concept of citizen science was discussed. Tom Baur (POM WVL) asked if it was possible to receive some guidelines/which are the best methods for citizen science or (bidirectional) stakeholder/public engagement. Some participants' project had a component on science communication and almost everyone considered valuable engaging the public in some steps of their project.

Participants:

- Ana Catarino
- Bert Van Severen
- Diana Di Nitto
- Ellen Decaestecker
- Franky Bauwens
- Joelle De Weerdt
- Juana Jimenez
- Karen Rappé
- Nancy Fockedey
- Peter Van Besien
- Peter Landschützer
- Rudy Herman
- Tom Baur
- Veerle Willaert
- Wilfried Vandaele

Replies from suggested questions:

- 1. Do you know of another related project?
 - Peter Landschützer (VLIZ): in Germany there is a citizen science project with CO2-sensors on recreational sailing boats (i.e. the largest marine fleet, environmentally friendly, global coverage where research vessels sometimes do not come). It delivers not only data; sailors/crew members felt that their expertise and opinion was considered when they had the opportunity to participate in the project/data collection. We might work with local sailors in the Belgian coast?
 - Ana Catarino (VLIZ) adds using the opportunity of an individual sailing ship making a big trip to measure parameters or take samples along the way; like Blackfish (Gert & Karen)
 - Ana Catarino (VLIZ) shared her experience in the COLLECT project which goal is to acquire data on
 marine plastic debris distribution and abundance on the coasts of African countries (Ghana, Nigeria,
 Benin, Cote d'Ivoire, Morocco and Cabo Verde) by training secondary school students as citizen
 scientists and promoting knowledge transfer between local communities, researchers and members
 of the Partnership for Observation of the Global Ocean (POGO). https://pogo-ocean.org/innovation-in-ocean-observing/activities/collect-citizen-observation-of-local-litter-in-coastal-ecosystems.













- Ana Catarino (VLIZ) also mentioned Plastic Pirates, a pan-European citizen science project where VLIZ
 participates in, on monitoring litter in rivers with secondary school children.
- Diana Di Nitto (VUB) mentions the call of Western Indian Ocean Marine Science Association (WIOMSA) to submit a project in science communication and ocean Literacy on arts and science, trainings, open labs and exhibitions. Like the Mozambique Project on education with virtual reality and podcast stories. The aim is to share stories like campaigns at sea, narrated by fisherman. They currently received funding from European Union, however they are looking for extra funding and the option to collaborate with other countries in Africa or Europe. Can we endorse it as an UN decade activity?
- Nancy Fockedey (VLIZ): the project Blue Mission BANOS will support the EU Mission Ocean & Waters, specifically in the Baltic and North Sea Basins, and focusses on how to make the Blue Economy carbon-neutral and circular by 2030. VLIZ leads the work package on public engagement and citizen science. We need to inspire, engage and support all relevant stakeholders on working with the public to reach this goal. We will organize workshops to detect challenges and bottleneck is how to engage the public on this theme.
- Rudy Herman (ex EWI): mentions the Clean Beach Cup where the public is involved in a clean-up.
 Initiative by surfing clubs.
- Franky Bauwens (Natuurpunt) mentions the ProperStrandlopers, a collective of citizens to clean up beach litter (now a vzw, also engaged in citizen science). Other projects and organizations of citizen who monitor and study the marine environment: SeaWatch-B and Grote Schelpenteldag (by VLIZ), Strandwacht and Strandwerkgroep.
- Bert Van Severen (EWI-VLIZ) highlighted the time frame of the project RecVis (Recreational Fisheries)
 and mentioned it was important that this data can be preserved and continued, as a good example
 of combining community, climate and economic activity.
- City of Oostende has a participation officer: see https://ons.oostende.be/nl-BE/ where people can submit ideas. They are guided in a trajectory with small groups.
- The BLUE Balance project (https://www.blauwecluster.be/project/blue-balance) is looking for public engagement and participation within new proposals, initiatives and decision making processes. E.g., the multi-use of space at sea (aquaculture and wind farms): how are people are standing against it?
- 2. How do you consider your participation in a decade action?
 - Participation is not clear, since the perspective is that projects must be linked to (citizen) science always.
 - Can we participate in existing projects? Can the secretariat help to find a link with existing programs or projects?
 - Diana Di Nitto (VUB): We are now in the beginning of the process, but how do we proceed?
 - Ellen Decaestecker (KULAK, KU Leuven): works on microbiome studies with marine mammals. How can my PhD-student connect with this initiative and involve the public to get samples?
 - Does the project have to link with at least 1 to the 10 challenges, or is more better?
 - Can a person submit a project? Or do you need to organize yourself in a group of practicioners?













Most of this session was used to answer questions about how to engage in the ocean decade, advantages, and procedure for endorsement. Also on what can be the role of the Ocean Decade secretariat, e.g. to help in link with existing programs or projects.

This discission raised the attention to the need for better communication to non-scientific groups on the ocean Decade. There seems to be a big need to communicate more on the general aspects of the decade in a simple way and to a broader audience. On how people/stakeholders can connect with the Ocean Decade's challenges.

- 3. How can VLIZ support/collaborate in currently endorsed or new decade actions?
 - Guidelines and guidance (support) in endorsement procedure.
 - International network: screening of potential partners or collaboration with Latin America or African countries

Group 3 (green): BUILDING OCEAN KNOWLEDGE: value chain and capacities [Room: Trivia entrance – ground floor]

Co-moderators: Ann-Katrien Lescrauwaet (leading) and Emma Coulembier

Introduction: Part of the ocean decade mission is to ensure that all stakeholders have the skills and can access the technology needed to produce, interpret and use data, information and knowledge in an equitable way ('leave no one behind'). Data management initiatives are encouraged to be linked to capacity development opportunities for exchange of knowledge, information and learning through the adoption of a capacity development exchange approach.

Participants:

- Ann-Katrien Lescrauwaet
- Bart Deronde
- Broos Van de Moortel
- Emma Coulembier
- Francisco Hernandez
- Gert Verreet
- Giacomo Montereale Gavazzi
- Gudrun De Boeck
- Jayson Gutierrez
- Karolien Van Puyvelde
- Leandro Ponsoni
- Maarten De Rijcke
- Mahmoud Abuzuhri
- Patric Jacobs
- Sebastiaan van de Velde







Cultural Organization







- Thanos Gkritzalis
- Yoshiyuki Nishio
- Jan Mees

Replies from suggested questions:

sharing, incl. building capacities and skills).

- Do you know of another related project?
 The moderator and participants referred to following projects (non-exhaustive list) that build on the ocean knowledge base and incorporate different elements in the value chain (from observation to
- Ocean Info-Hub (<u>www.oceaninfohub.org</u> and https://search.oceaninfohub.org/) global open source initiative, includes application to search data and information, with 3 regional nodes focusing on SEPacific, Latin America and Caribbean, and African continent. An expert technical working group with over 90 technical experts from partner projects and pilot regions, collaborate and share their knowledge in technical working platforms on Slack (over 4100 posts) and Github.
- Shared training resources on an open-source shared platform for Marine Training in Ocean Teacher Global Academy OTGA: Training course on data management (oceanteacher.org)
- Sea Level Station Monitoring Facility (www.ioc-sealevelmonitoring.org/map.php); an open source platform that connects and shares information from sea level gauges and stations worldwide to improve Tsunami preparedness and response time, provides training instances, seeks regional collaboration and data sharing, transfer the data and knowledge into decision making (save lives in coastal areas)
- Marine Regions: data and information sharing on quality assessed geospatial data, in a structured approach. Partners can share their (geo)data and use/download the standardized data from the platform.
 www.marineregions.org
- Digital Twin of the Ocean: ambition expressed both at EU and global level to have a digital representation of the Ocean and climate. Builds further on open-source initiatives and existing data systems (Copernicus, Mercator, EMODnet, ODIS, (Eur)OBIS, ...)
- Compendium Coast and Sea: a collaborative effort of marine experts, sharing and using quality information and data on the Belgian part of the North Sea. An open source application and layered approach in knowledge transfer (summary for policy, public, marine expert, source document): www.compendiumcoastandsea.be
- Sustainable Seabed Knowledge Initiative: <u>Launched at the 2022 UN Ocean Conference</u>, SSKI will describe biological diversity (new species) from the regions of the Area that are currently being explored for mineral resources and may be targeted for future exploitation. The initiative and the new knowledge it will generate will enable scientists to create maps of life on the seafloor and help us understand and manage the possible effects of anthropogenic activities on deep-sea ecosystems: https://www.isa.org.jm/sski.
- 2. How do you consider your participation in a decade action?

Several endorsed Ocean Decade actions (programmes/projects) are available for collaboration. The opportunities for collaboration range from data sharing to capacity building, to exchange of expertise and strengthening awareness through joint (strategic) communication and dissemination efforts. Have a look or contact the National Ocean decade secretariat (VLIZ) for more information and support. Examples include:













- PacMan: Pacific Islands Marine Bioinvasions Alert Network (FUST project, IODE-Belgium)
- Pacific eDNA Coastal Observatory, a project from McGill University Canada
- ABC WoRMS: Above and beyond completing the World Register of Marine Species; part of an Ocean Decade Programme MarineLife2030 (VLIZ, Belgium)
- Fenoy-X: A data domain system of ocean knowledge for the future prosperity of ocean resources in the Western Indian Ocean. (Fenoy: Malagasy name for filing the gaps) (X: is for the decade) Western Indian Ocean Early Career Scientists Network South Africa
- CoastPredict Observing and Predicting the Global Coastal Ocean, an Ocean Decade Programme,
 Alma Mater Studiorum University of Bologna Italy
- 3. How can VLIZ support/collaborate in currently endorsed or new decade actions?
- DISSEMINATE BEST PRACTICES IN BUILDING KNOWLEDGE VALUE CHAINS: Participants underlined the
 importance of some of the existing initiatives as best practices, such as OTGA and OceanInfoHub. These
 initiatives go far beyond providing services. They develop the (global) standards in an open environment.
 The group suggests strengthening communication and dissemination of these best practices. Advocate
 the use of Ocean InfoHub standards.
- CONNECT KNOWLEDGE VALUE CHAINS AND COMMUNITIES OF PRACTICIONERS/USERS: Communities of
 practitioners and Users communities can associate with these: example the Mangrove experts' network
 is a community that can be supported by the Ocean InfoHub and the OTGA. E.g. accelerate and upscale
 the transfer of knowledge e.g. on new tools and methods to sample and analyse microplastics in the
 marine environment.
- KNOWLEDGE VALUE CHAIN TO ANSWER GENERAL RESEARH QUESTIONS: artificial intelligence and robotics can help accelerate the generation of the scientific answers to general societal questions. Semantics and multilingual standards are part of this process. Our marine research community can support (e.g., translating the BODC standards that are English).
- PACKAGE THE SERVICES (in value chain) AND MAKE MORE ACCESSIBLE ALL THE SERVICES BY VALUE CHAIN: good progress is made in developing tools for sharing data and information (towards the user communities) but less efforts towards the 'builder' communities (software and data tools). We can make progress by developing tags of softwares and data tools, data tools building communities to increase their findability and accessibility (metadata and descriptions of software packages and data tools). Githubs and Slacks that work on tools and software. Example is the OGGM group at VUB working on Glacier Modeling Systems (Github, Python..). The group suggests building and tag a catalog of software and data tools for marine research.

REPORTING BACK TO THE PLENARY

Conclusions and next steps:

 The secretariat thanks the open group for its enthusiastic engagement and valuable suggestions in the three working groups of the interactive session.







Educational, Scientific and Cultural Organization







- The secretariat will take these suggestions to the core group of the national committee for endorsement and guidance towards next steps (core group to be established following open call for membership); the secretariat will liaise with other national Ocean Decade Committees
- The secretariat will seek support from the broader marine R&I community in Belgium to engage in and further develop the proposed actions and offering its support to the participants to inform on the Ocean Decade developments through webpage, social media, newsletter, and direct communication.

The secretariat closes the session, reiterating its support to all participants and interested persons/organisations to liaise with/seek endorsement by the Ocean Decade secretariat (IOC-UNESCO) and the EU Mission Ocean secretariat.