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Reports of Governing and Major Subsidiary Bodies



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**IOC Ocean Best Practices System
Steering Group
Fifth Annual Meeting
(SG-OBPS-V)**

Hybrid
Paris, France
12-14 December 2023



UNESCO 2024

Paris, 14 December 2023
English



In-Person

Front row: George Petihakis; Rene Garello; Françoise Pearlman; Emma Heslop; Carolina Peralta; Carol Mazucco;

Mid row: Joanna Post; Pauline Simpson; Virginie van Dongel-Vogels; Peter Pissierssens; Paula Sierra;

Back row: Juliet Hermes; Jay Pearlman; Arno Lambert; Cristian Munoz Mas; Edem Mahu; Johannes Karstensen; Frank Muller-Karger;

On-Screen from L to R:

Cora Horstmann; Rebecca Zitoun; Mark Bushnell;

[Steering Group Membership 2023](#)

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1. OPENING OF THE MEETING

The Fifth Session of the Steering Group for the IOC Ocean Best Practices System (SG-OBPS-V) was held 12-14 December 2023 at the Unesco HQ, 7 Place de Fontenoy, Paris, France. A hybrid format was chosen to facilitate maximum participation of Steering Group members. OBPS Co-Chairs, Rene Garello (RG) and George Petihakis (GP) welcomed participants to the second meeting following Covid-19 that included in-person participation. It was noted that there was a full agenda but with flexibility to allow for full discussion.

2. ADMINISTRATIVE ARRANGEMENTS

Pauline Simpson, Project Manager for the Ocean Best Practices System thanked Joanna Post and Emma Heslop of the IOC Global Ocean Observing System, for hosting the meeting in UNESCO, Paris, and Forest Collins the Local Host support and Qianming (Alice) Chen, a new UNESCO intern who provided technology navigation. She thanked those who had travelled from far to be physically present at the meeting, as well as to those who were joining remotely at inconvenient times.

Since the meeting was hybrid she shared some logistical and administrative information:

- The meeting language would be English
- The meeting would be recorded, - agreed by those attending
- Zoom camera and room microphone would be on throughout the sessions
- In-person participants also had access to the zoom connection but should not use their laptop microphone

2.1 Adoption of the agenda/timetable

Pauline Simpson presented the draft agenda and noted that because of the late start due to changed UNESCO visitor access routes, agenda item 2 would change to only the virtual participants presenting their short career outline and the in-person participants would take advantage of a slightly extended break to meet and greet each other, some for the first time. Agenda item 7 Metrics Dashboard was requested to be postponed until the Task Teams agenda item 11. The agenda was approved and is presented in Annex 1.

3. INTRODUCTION TO OBPS

Since a number of participants were new SG members or guest participants, Rene Garello (RG) (OBPS Co-Chair) presented an [OBPS Overview 2023](#). He briefly went through activities for the year and explained that the OBPS supported the entire ocean value chain and outlined the components of OBPS:

repository, journal, user support and training with a metrics slide to show the (almost) global coverage of repository users. Financial support from the IOC Programme Sponsors, the International Oceanographic Data and Information Exchange (IODE) and the Global Ocean Observing System (GOOS) was gratefully acknowledged and he recognized the importance of additional funding from external projects and listed those that include OBPS involvement. The Steering Group had expanded to include a diverse range of disciplines, geographic regions, gender, and career stages which in addition to SG members, was evidenced by the five Ocean Practices Ambassadors, who had received training during 2023 on communication, to better approach their work of representing OBPS in their regions.

He highlighted that the repository now holds over 2000 records and is accepting practices in multiple languages provided they have an English title and abstract; it has also successfully completed a pilot to test AI translation of 6 endorsed practices into four languages. OBPS work has expanded significantly with developing nations, remote regions and indigenous people through the OBPS Task Teams. Capacity Development and training has been supported by the 4 training videos about OBPS and its repository, and the new ADAPT: Adapting Ocean Best Practices to the local context (Caribbean Pilot Project) is starting. RG reminded the participants that there would be agenda sessions covering much more detail and the priorities for 2024 would be discussed.

4. STEERING GROUP - GETTING TO KNOW YOU

Due to the delayed start, this session heard career details from virtual participants, Mark Bushnell, Cora Horstmann and Rebecca Zitoun. The in-person participants took advantage of a slightly longer break to get to know fellow SG members.

5.A. PROGRESS REVIEW - [STRATEGIC PLAN 2021-2025](#)

[Presentation](#)

George Petihakis (Co-Chair) presented an outline of the OBPS Strategic Plan, and explained that it was developed four years ago, covering 2021-2025. He highlighted the Vision and Mission and system components of the OBPS and described the key strategic service areas including the challenges OBPS is addressing. Strategic areas (objectives) are laid out with goals but detailed implementation is not included within the strategy document itself. The Implementation Plan (see agenda item 5E) is the complementary document which maps the delivery of the strategy and covers three years (2021-2023) and is based on available funds and priority decisions of the SG with progress reviewed at each annual Steering Group meeting.

Comments on the Strategic Plan text detail were offered:

The definition and scope of the term ‘ocean observing’ versus ‘ocean observation’ in the text was queried by Peter Pissierssens (PP) and it was agreed to clarify and update that usage with reference to the ocean value chain. FOO¹ was the framework for the ‘ocean value chain’ but it was suggested FOO is less referenced now. Other comments included that GOOS now uses the term **Ocean Information Value Chain** and it was suggested this could be used as inclusive of science, data management, products and services. OBPS evolution from a project and being part of GOOS infrastructure now needs to be included in the strategic plan, with AISBL and other funding opportunities listed. How users interact with OBPS needs to be thought about. Convergence was comprehensively discussed and Emma Heslop (EH) suggested it should not be an Objective since the community does not work like that; national convergence was suggested but does not help ‘global’. Networks and endorsement are drivers to convergence but there also needs top down support from IODE and GOOS who should lobby for OBPS to top level science organisations such as EGU etc. A suggestion to use ‘reference station/standard’ terminology which is increasingly being used in communities was made and a reminder that Member States contributions and the regional dimension should be included.

ACTION:

5.A.1. Review the Strategic Plan every 5 years.

5.A.2. Include in the Strategic Plan comments on objectives/directions from the Orientation Document (2023-12-07)

5.A.3. Add the regional dimension in the Challenges

SEE 5.D ACTION

5.B. PROGRESS REVIEW - IOC PROGRAMME SPONSORS

Presentation

OBPS under IOC, is co-sponsored by the International Oceanographic Data and Information Exchange (IODE) and the Global Ocean Observing System (GOOS).

The IOC Programme Sponsors had provided an updated and jointly agreed Orientation Document version only a few days before the Steering Group meeting (the internal document was available during the meeting but not

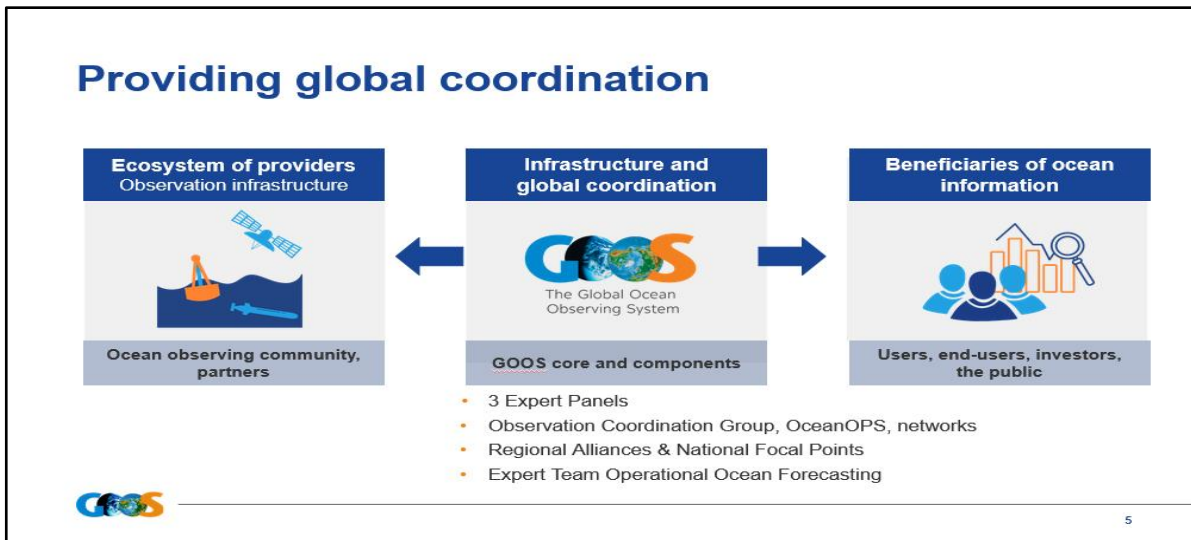
¹ Task Team for the Integrated Framework for Sustained Ocean Observing (2012) A Framework for Ocean Observing (by Lindstrom, E., Gunn, J., Fischer, A., McCurdy, A., & Glover, L. K. et al). Paris France, UNESCO, 25pp. (IOC Information Document 1284, Rev. 2). DOI: 10.5270/OceanObs09-FOO

uploaded to Ocean Expert). The Co-Chairs agreed to respond to the Orientation Document and following perspectives (see Action 5.D)

A joint presentation was provided by the representatives from each of the IOC Programme sponsors *Ocean Best Practice System GOOS and IODE Input*:

Global Ocean Observing System (GOOS) Perspective



Emma Heslop (EH) (GOOS) talked about GOOS and its drivers and where she sees OBPS fits in. She mentioned the Orientation Document and its SWOT and that Recommendations for OBPS would be offered at the end of the presentation. She confirmed the visibility of OBPS is good but it is now time to assess activities.



EH presentation provided a comprehensive overview of the scale of GOOS activities: GOOS coordination was supported by three Expert Panels; Physics and Climate (OOPC); Biogeochemistry and Biology and Ecosystems (BioEco); the Networks Ocean Observation Group (OCG) and OceanOPS; and Regional Alliances and National Focal Points She introduced Emily Smith who was on secondment from NOAA for a year and would be looking at how projects such as OBPS could have more active GOOS engagement and evolve and integrate into GOOS as part of sustained infrastructure; she reminded that OBPS was the only project funded by the GOOS budget. EH highlighted that best practices are written into the 2030 GOOS Strategy and embedded in all GOOS activities. Particularly interesting was the Best Practices maturity rating that had been produced during 2023 for the annual report card, and how that assessment had been made.

GOOS global and emerging networks

GOOS in situ networks ¹	Implementation STATUS ²	Data & metadata			Best practices ⁶	GOOS delivery areas ⁷		
		REAL TIME ³	ARCHIVED DELAYED MODE ⁴	META-DATA ⁵		OPERATIONAL SERVICES	CLIMATE	OCEAN HEALTH
Ship based meteorological - SOT	★★☆	★★☆	★★☆	★★☆	★★☆	🌊	🌍	🌿
Ship based oceanographic - SOT	★★☆	★★☆	★★☆	★★☆	★★☆	🌊	🌍	🌿
Repeated transects - GO-SHIP	★★☆	Not applicable	★★☆	☆☆☆	★★☆	🌊	🌍	🌿
Sea level gauges - GLOSS	★★☆	★★☆	★★☆	☆☆☆	★★☆	🌊	🌍	🌿
Time series sites - OceanSITES	★★☆	Not applicable	★★☆	☆☆☆	★★☆	🌊	🌍	🌿
Moored buoys - DBCP	★★☆	★★☆	★★☆	☆☆☆	★★☆	🌊	🌍	🌿
Tsunami buoys - DBCP	★★☆	★★☆	★★☆	☆☆☆	★★☆	🌊	🌍	🌿
HF radars	Emerging	★★☆	☆☆☆	☆☆☆	★★☆	🌊	🌍	🌿
Drifting buoys - DBCP	★★☆	★★☆	★★☆	☆☆☆	★★☆	🌊	🌍	🌿
Profiling floats - Argo	★★☆	★★☆	★★☆	★★☆	★★☆	🌊	🌍	🌿
Deep & biogeochemistry floats - Argo	Emerging	★★☆	★★☆	★★☆	★★☆	🌊	🌍	🌿
OceanGliders	Emerging	★★☆	☆☆☆	☆☆☆	★★☆	🌊	🌍	🌿
Animal borne sensors - AniBOS	Emerging	★★☆	★★☆	☆☆☆	★★☆	🌊	🌍	🌿

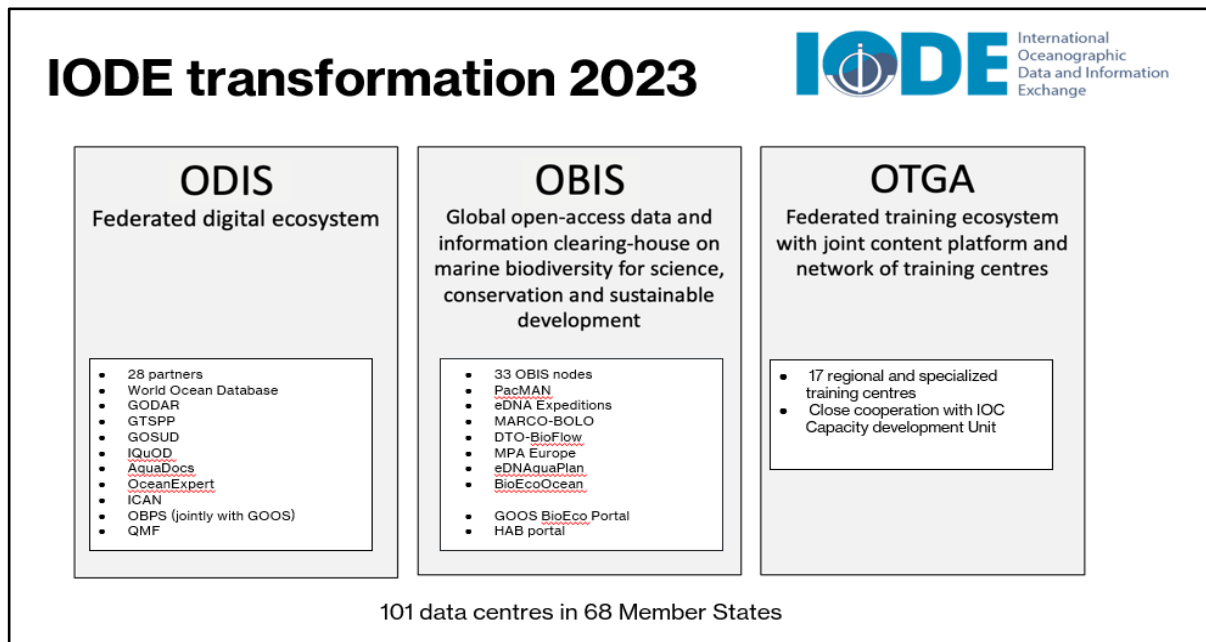



There followed discussion on the Endorsement process for best practices piloted by GOOS (see Agenda Item 8).

Peter Pissierssens (PP) (IODE) continued the presentation from the IODE perspective, and explained that IODE had seen significant transformations. Before 2020 the IODE network of National Oceanographic Data Centres (NODC) operated as silos with no data sharing or data discovery mechanisms. There was a definite regional digital divide and very little training.

From 2020 a transformation targeted equitable data sharing and product and services developed through such as OBIS and ODIS. It was recognized that data systems have to be maintained and IODE took on the role of providing technical assistance and supporting data systems across the IOC and showing other IOC Programmes the methodologies of good data management using best practices. Capacity Development using best practices was offered to all IOC Programmes and globally through the Ocean Teacher Global Academy (OTGA).

He then introduced the new IODE Programmatic Structure of Components, Activities and Projects.



The Programme Components would receive annual funding to sustain their operations ~US\$75/100k; Programme Activities would receive a funding amount of ~US\$25k. and Projects would receive no funding. OBPS is categorised as a Programme Activity linked to the Programme Component ODIS. All Programmatic elements are encouraged to seek extra budgetary funding by obtaining project and research grants. (see Agenda items 9 and 10)

He went on to describe the work of the Ocean Data and Information Service (ODIS) which has 28 partners, including OBPS, already connected. He described ODIS as an internet of ocean information systems with ODISCAT as a database of sources of data. ODIS provides discovery and access to data. The system is underpinned by the ODIS Architecture which offers metadata profile patterns for : Experts and institutions/organisations, Documents, Spatial data and maps, Research vessels, Education and training opportunities, and Projects and is based on Google's schema.org. The search interface is provided through the Ocean InfoHub and he explained the OIH search functionality is continuing to be developed. Through the mechanism of the UN Ocean Decade Programme, Ocean Data 2030, other UN organisations like IMO, WMO etc would be invited to join ODIS, as knowledge product providers.

A concern voiced by the meeting was that although ODIS has sustainable funding its data providers and knowledge products may not be sustainable and PP agreed this contingency must be addressed. Another concern voiced was that the relationship and overlap was not clear between ODIS/OIH and OPFN

and OBPS. Pier Luigi Buttigieg, in his capacity as Chair ODIS, later responded that the OPFN is a subnetwork / sub federation of the ODIS Federation.

RECOMMENDATIONS - FROM IODE AND GOOS

The recommendations presentation was distilled from the IOC Programme Sponsor's Orientation Document and, as the Co-Chairs pointed out, as with that document, an appreciation of current activity was sometimes missing. However it was acknowledged that the lack of regular direct communication between OBPS and the IOC Programme Sponsors could be a cause and an important action was agreed to meet quarterly outside the OBPS monthly ad hoc meetings. It was also acknowledged that OBPS should leverage its IODE and GOOS relationship.

EH worked through the OBPS timeline and then introduced the IOC Programme Sponsors recommendations based on the SWOT analysis in the Orientation Document:

1. Develop scalability of the OBPS to other ocean related disciplines
2. Create guidelines for the submission, review and entry of practices into the repository
3. Agree rules that allow a "practice" to be elevated to "best practice", and for endorsed practice or BP
4. Review of search technology
5. User feedback process initiation
6. Advocacy for Best Practices
7. Assured future support by the host programmes

Because there had been no time to respond since the delivery of the 7 December 2023 second version of the Orientation Document, it was agreed that the Co-Chairs would respond in writing. Emma Heslop suggested that the updated Strategic Plan may suffice as a response.

ACTION:

5.B.1. Communication - Quarterly meeting to be held with the IOC Programme Sponsors (separate from the monthly meeting) to start March 2024

SEE 5.D ACTION

5.C. PROGRESS REVIEW - OBPS

The late provision of the IOC Programme Sponsors Orientation Document did not allow the Co-Chairs time to prepare a response presentation, but Rene Garello and George Petihakis (OBPS Co-Chairs) took the opportunity to comment that the tone, misinformation and content of the first version was a surprise, particularly considering the success of OBPS; the SG are all volunteers and many of the listed recommendations are already being progressed, or in place.

The IOC Programme Sponsors assured that no disparagement was intended. PP emphasised it was an internal document only and EH, that it was a point-in-time discussion document which gives an IOC Programme Sponsors external perspective and feedback and was useful.

5.D. PROGRESS REVIEW - SYNTHESIS

The OBPS Co-Chairs agreed that the IOC Programme Sponsor's recommendations were useful but a response is required now for three perspectives : IODE perspective, GOOS perspective and their joint recommendations, and communicating the OBPS response. Emma Heslop had suggested in agenda item 5B that the updated Strategic Plan may suffice as a response and taking up from that Rene Garello recommended bringing the exercise together and including all responses in an updated or new strategic plan. It was also agreed that this was a co-design exercise between IOC Programme Sponsors and OBPS.

ACTION:

5.C &

5.D.1. The OBPS Co-Chairs agreed to provide a response to the agenda item 5.B, Orientation Document and the Sponsors perspective comments, **by producing an updated Strategic Plan by mid April**

5.E. PROGRESS REVIEW - IMPLEMENTATION PLAN 2021-2023 Presentation

George Petihakis presented the 2021-2023 Implementation Plan and explained that the work plan activity was mapped to OBPS strategic objectives (SO) and work packages (WP) responsibilities. A detailed review of each action both completed or in progress for 2023 would be covered in the next agenda item .

ACTION:

5.E.1. An Implementation Plan 2024 - would be produced at the same time as the updated Strategic Plan

5.F. PROGRESS REVIEW - IMPLEMENTATION - WORK PLAN 2023

Pauline Simpson shared the Work Plan spreadsheet 2023 to review completion and progress. The spreadsheet was updated in real time (see Annex 3), and planned actions for 2024 were discussed and agreed with SG.

Comments on 2024 work plan - see Agenda Item 17 and 20

ACTION:

5.F.1. It was recommended that the Work Plan 2024 should be kept short, otherwise, there was a risk it would never be completed. It was suggested there should be one task per objective.

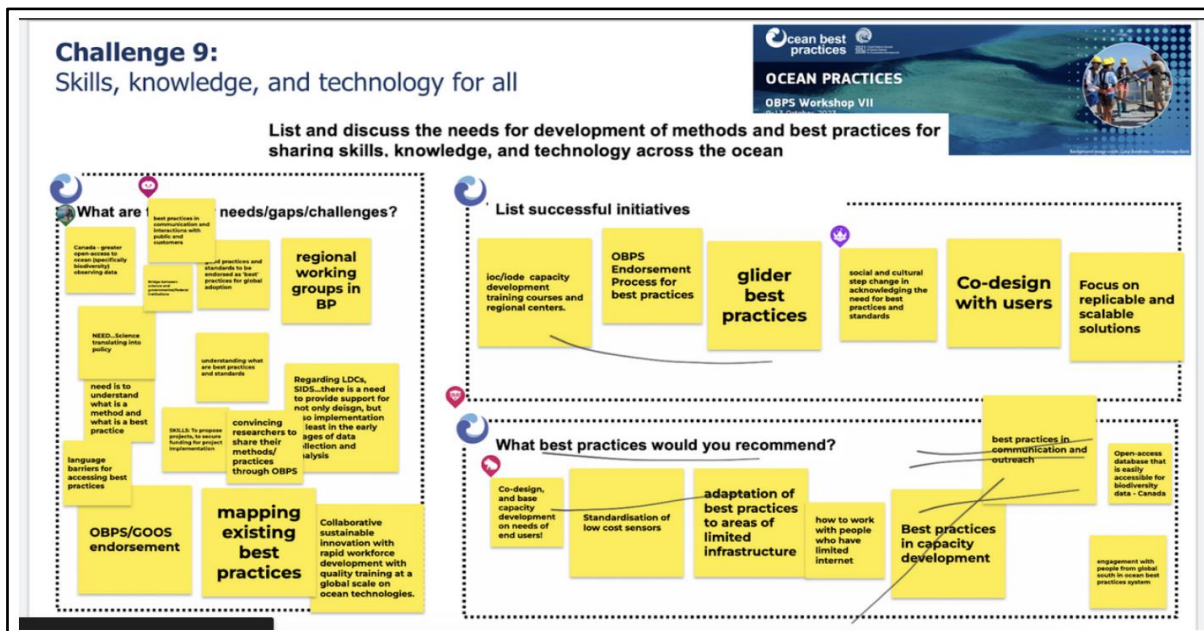
5.F.2. The year's Work Plan should be reviewed every quarter.

**6.A. OBPS WORKSHOP VII & FOCUS SESSIONS
presentation**

Rene Garello (RG), Co-chair of the Workshop VII, introduced the agenda item by first thanking Cora Horstmann, the Workshop Co-Chair and the excellent technology support provided by AIR Centre, Portugal, Jose Mutinho, and many others who had helped to make the workshop a success. All workshop sessions are recorded and available on [YouTube](#). He explained that the [OBPS Workshop VII](#) was held online from 9 to 13 October 2023 and was then followed by a week of 10 online focus sessions on dedicated topics. The workshop aimed to provide shared solutions, including related best practice applications, to the [10 Challenges of the UN Ocean Decade for Sustainable Development 2021-2030](#). An outcome from the workshop and focus sessions will be session reports which have not yet been received from session leaders, but will contribute to a Workshop Proceedings volume. However, from the session presentations, Cora Horstmann had picked up some gaps and recommendations, for example the coastal modelling and citizen science focus sessions expressed that they were missing standards in their research area. Johannes Karstensen (JK) asked what OBPS can do to assist the groups to find a

solution; how does OBPS approach these groups; how to broker this information? EH offered that the way forward is to encourage the community **themselves** to address the gaps. PP queried 'standards' in relation to Citizen Science - it was obvious from comments that the meeting did not appreciate that OBPS holds the evidence that the CS community has produced practices issued by such organisations as the European Citizen Science Association.

Many workshop and focus sessions encouraged interactive participation and RG showed an example of a successful Jamboard exercise, organised by Talen Rimmer, an OBPS Ambassador, during the workshop session *Challenge 9: Skills, Knowledge and Technology*. Carol Mazzuco outlined some of the comments and recommendations she had captured which would be in her session final report. Including the need for low-cost technology and access to data were among many aspects needing to be addressed, particularly for the global south.



EH commented that the Workshop Proceedings should focus on the ocean value chain and look across the Challenge sessions for commonalities in recommendations.

ACTION:

6.A.1. Provide feedback and send official thanks to Jose Mutinho, AIR Centre [RG/CH]

6.A.2. Provide feedback to DCU [RG/CH]

6.B. OBPS WORKSHOP VIII 2024

Rene Garello opened discussion on the 2024 workshop topic and reminded that EH had mentioned the value chain - is that a possible workshop topic?

Frank Muller-Karger suggested that the workshop could build on the outcomes of Barcelona 2024 and the Ocean Vision 2030 Vision White Papers and that the Decade Coordination Unit (DCU) should be heavily involved. He commented that the DCU were not involved in Workshop VII 2023 planning and RG corrected that Alison Clausen had been invited but was not available and did not offer a substitute.

ACTION:

6.B.1. Invite Workshop VIII, 2024 Co-Chairs [CH]

6.B.2. After Barcelona 2024, contact Alison Clausen (DCU), with an invitation to co-design and organise the OBPS/OceanPractices, Workshop VIII, on a possible topic title like *Outcomes of Barcelona 2024 and the Ocean Vision 2030 White Papers* [GP]

7. METRICS DASHBOARD POSTPONED UNTIL Agenda Item 11**8. ENDORSEMENT PROCESS EXPANSION**

- [Best Practice Endorsement Process. Version 1](#) (Hermes, 2020)
- [Generic Endorsement Process draft](#)

Mark Bushnell (MB) and Juliet Hermes (JH) introduced the OBPS efforts to create a 'generic' endorsement process, building on the successful GOOS pilot.

JH provided a description of the GOOS Endorsement Process (Hermes, 2020) and highlighted the importance of documenting the endorsement criteria that any endorsing entity follows. She acknowledged that the GOOS document had not defined the principles (attributes) of what should be included. The GOOS process worked with Networks and they would put forward practices they had used or where a 'best' practice is ready for creation and endorsed (JH used the ARGO example). Most important, the endorsement process has to include a full community review and there has to be documented evidence provided of review and recommendations which should be shown to have been incorporated into the version to be endorsed. It then needed to be acknowledged by the Chair/s of the Network in question, to confirm the practice was requested to be endorsed by GOOS. The OCG team would review it but given that the practice has come from a recognized expert network, would take a broader perspective - and give feedback for any editing required. The practice then goes forward for endorsement and has a GOOS Certificate of Endorsement created which is passed to the OBPS Repository to either create a new document record or update an existing record. The Certificate plus the file of the endorsed version are uploaded to the OBPS Repository and the OBPS Endorsement metadata completed.

The suggestion has been that the GOOS Endorsement Process could be taken forward with some configuration to build a generic OBPS Endorsement Process which would allow practices in the repository or practice recommendations to be endorsed by organisations other than the GOOS Expert Panels and Networks. JH has so far focussed only on the GOOS Endorsement Process, and she expressed that she was not totally in favour of opening it up, because there may be multiple organisations endorsing multiple practices and it will be difficult to know from the 'endorsed' cache which are the 'best' practices (the case for convergence then should be discussed). The endorsement process takes a lot of time and needs significant oversight.

JH then displayed her thoughts on the attributes that should go into a best practices endorsement process.

1. **Community Review Process:** The content should have undergone a thorough community review process involving experts and stakeholders from the ocean observation community to ensure reliability and robustness.
2. **Feedback and Iterative Improvement:** Encourage a culture of continuous improvement by soliciting feedback and allowing for iterative updates or enhancements to best practices based on evolving scientific understanding and technological advancements.
3. **Alignment with Observing Objectives:** Best practices should be directly aligned with the objectives of the observation, encompassing various aspects from data collection methodologies to quality control and management.
4. **Scientific Validity and Reproducibility:** Best practices should be founded on scientifically valid principles and methodologies. They should offer reproducibility and demonstrate superior results compared to alternative methodologies.
5. **Uncertainty**
6. **Interoperability and Standardization:** Best practices should promote interoperability by adhering to standardized methods and data formats. This ensures compatibility and ease of integration with other observation systems.
7. **Efficiency and Future-Proofing:** Emphasize practices that offer efficiency gains, preventing redundancy in data collection and processing. Additionally, these practices should facilitate future-proofing of datasets for long-term usability.
8. **Transparency and Documentation:** Content should emphasize transparency in data collection processes, with detailed documentation that aids in understanding the methodology and implementation.
9. **Innovation and Adaptability:** Encourage innovative approaches that adapt to evolving technological advancements, allowing for flexible and adaptable methodologies.
10. **Impact and Community Adoption:** Prioritize practices that have demonstrated significant impact within the ocean observation community and have been adopted or recognized by relevant networks or expert panels.
11. **Usability and Accessibility:** Best practices should be user-friendly and accessible to a wide range of stakeholders, from scientists and researchers to policymakers and educators.
12. **Relevance and Applicability:** The content should be relevant across a range of observing activities, encompassing diverse parameters, sensors, regions, and applications.

MB started his session by asking two questions concerning endorsing entities

1. Is the entity proposing endorsement qualified to endorse the practice?
2. Is their justification for endorsement adequate?

He confirmed from his QARTOD experience, it does take years to develop practices and that a QARTOD Manual goes through a review and 'endorsement' process in IOOS for it to be signed off by the Director.

He outlined the discussions he had with NOAA and IOOS and the difficulty the word 'endorsement' caused. Nevertheless, he was able to work with IOOS Project Manager to get a signed request for OBPS endorsement of the QARTOD Water Level Manual which MB displayed to progress discussions on the generic endorsement process draft. He outlined the work done on the generic endorsement process draft and raised some questions.

Rene Garello likened the process to publishers' peer review process where experts provide reviews, and a consensus for publication from the reviewers must be agreed, with the editor providing a final decision. Discussion continued on what level of external entity provides the final agreement on endorsement and this is an important aspect being addressed in the generic endorsement process draft.

It was agreed there was no time to work on the draft at the meeting or resolve many points being raised by participants, particularly that OBPS is not a repository of BEST practices but a collection of methods that community

members have shared. The meeting was reminded that on the OBPS Interfaces the following is displayed for users to understand that OBPS repository does not contain only BEST practices:

Please note; unless it has been accepted and annotated in OBPS as an Endorsed Practice by an Expert Panel, inclusion of a methodology in the OBPS, does not indicate that the methodology is recommended by OBPS.

The Endorsement Process was implemented as a mechanism for the community and expert panels/networks to endorse those methods which certified that a method was considered a best practice by a recognized authority.

The next OBPS Monthly Meeting in January would be dedicated to the Endorsement Process draft.

ACTION:

8.1. Articles on a method should include a citation or acknowledgement of OBPS

8.2. Arrange Endorsement Focused Meeting at OBPS Monthly meeting Jan 2024 [PS}

9. EXTERNAL PROJECTS


Presentation

Jay Pearlman (JP), Past Co-Chair acknowledging with thanks the IOC Programme Sponsors support, outlined the other sources of OBPS funding, with a list of the external projects that have also financially contributed to plan and build OBPS. He briefly described the individual projects and amounts and announced some new projects to take OBPS forward e.g. ObSea4Clim. He asked members to alert the Co-Chairs of any new research grant proposal opportunities for OBPS.

Projects	Project or Activity	Major Activities for OBPS	Organizations engaged	approx. amount	Performance period
	ODIP	Formation OBPS, Interoperability	IEEE	105K	2015-2017
	AtlantOS	Formation OBPS, Innovation	IEEE, ...	150K	2015-2019
	JERICO	BP for Coastal Europe, CORE	IEEE, UNESCO	115K	2019-2024
	EuroSea	BP for ocean Observing and applications	UNESCO, GEOMAR, IEEE, ...	90K*	2019-2023
	Capardus	Arctic Practices System	AWI, IEEE	229K*	2020-2023
	BlueCloud2026	BP Applications and outreach	IEEE, OTGA,	107K	2023-2026
	Iliad	BP/Standards for Digital Twins	IEEE, ...	268K	2022-2025
	ObsSea4Clim	BP for EoV; FedNet	GEOMAR, IEEE	380k	2024-2028
	IOC/NORAD ADAPT	BP training Caribbean	USF	99K	2023-2024
	GROOM II	BP strategy for EU RI, convergence/endorsement	HCMR, GEOMAR	30k	2021-2024
	EuroGO-SHIP	BP strategy for EU RI, secondary RM, convergence/endorsement	GEOMAR	75k	2022-2025
	RCN	community/training/Ambassador	USF	70K	2018-2023

*estimated

Ocean Best Practices Insert name of conference, if desired



10. AISBL [presentation](#)

George Petihakis (GP) OBPS Co-Chair, informed the meeting of the intention for OBPS to become an AISBL (Association internationale sans but lucratif), a proposal which had been approved by the Steering Group at the Dec 2022 annual meeting. He explained that the main reason was that funding is key to ensure long term, stable operations. Further development of OBPS and core operations (repository, project manager) as well as certain developments have been partially funded by IODE and GOOS, but limitations exist, which has meant gaining some funding support by participation in projects through third parties such as IEEE (as listed in the previous agenda item) has been necessary.

An AISBL is a non-profit organisation, based in Belgium which will give OBPS a flexible legal entity which can act as a full partner in EU and other grants, whilst at the same time remaining a member of the IOC Family. Emma Heslop had confirmed this was acceptable to UNESCO-IOC. It will enable direct and committed funding via: research grants, donations, sponsorship, commercial/industrial operations (e.g. organising paid lectures, seminars, to gain publicity or to increase income) and membership fees. The presentation outlined the steps taken and in his presentation, GP shared the Ocean Practices AISBL Statutes and Bye-Laws and confirmed the process was expected to be completed early 2024.

ACTION:**10.1. Ensure AISBL documents shared with IODE and GOOS [RG]****11. TASK TEAMS****(Reports submitted see links below)**

OBPS Task Teams are of specific duration and operate within the OBPS Work Package structure and support identified needs, related to the Work Package objectives either from internal OBPS or external volunteers. At the same time, the task teams leverage the ongoing work of other organisations that consider ocean practices.

Each Task Team was requested to provide a report on progress - see link below to each. All Task Teams were thanked for their reports and were commended for their engagement and energy:

22-02: Decision Trees

Decision trees are useful tools for users to quickly reference which practice to choose in various situations. Currently, no clear guidance exists on how to design a decision tree to be effective in selecting applicable practices. The task team is made up of representatives across various external working groups, including social scientists and subject matter experts.

Deliverables planned for February 2024:

1. Develop a best practice for the development of decision trees that will provide users with a pathway to developing effective decision trees for their application.
2. Develop templates for various applications that may help users formulate effective decision trees while also providing a level of standardisation.
3. Recommendations for and templates of decision trees targeting the various interests of the OBPS community

22-01: Coastal Observations in Under-resourced Countries

The purpose of the Task Team is to identify methods or practices that can be broadly used for observations of physical and chemical parameters of the coastal ocean.

To date the task team has made significant progress in establishing a global community and collating resources for writing best practices. Since the team leads and objectives are very similar, this task team has combined efforts with COLaB. Together the two teams have made significant progress in identifying cost effective instrument packages for use in low income communities and

identifying pilot and training sites for the sustained rollout of COLaB packages.

The task team has yet to publish a best practice document; however a comprehensive library of resources has been compiled for the various aspects required for coastal observations.

21-03: Omics/eDNA Protocol Management

The purpose of the Task Team is to build a corpus of omics protocols in the OBPS. To improve the user-driven discovery of omics/eDNA protocols, they will develop omics protocol templates and develop consistent omics specific protocol metadata for these protocols with the Minimum Information for an Omic Protocol (MIOP).

The Omics/eDNA Protocol Management TT now comprises the “Better Biomolecular Ocean Practices (BeBOP)” a UN Ocean Decade endorsed project under the programme OBON (Ocean Biomolecular Observing Network). As part of BeBOP, we have worked in 2023 to further advance our MIOP metadata standard (Minimum Information about an Omics Protocol) as well as create protocol templates that facilitate comparing protocols.

ACTION:

11.1. Confirm that a member of OBIS is in Omics Task Team [PS]

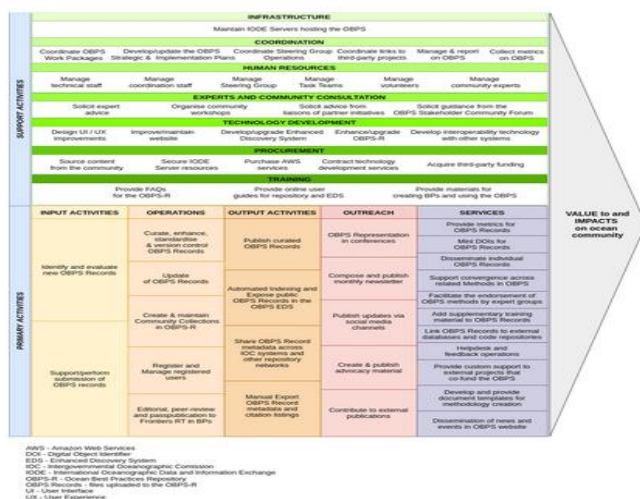
11.2. Investigate future protocols addition to the OceanPractices Federated Network

Github BeBOP Workspace; <https://github.com/BeBOP-OBON>
Protocols.io Workspace;

<https://www.protocols.io/workspaces/better-biomolecular-ocean-practices-bebop/>

21-02: Value Chain Analysis and KPI Development

Cristian Munoz Mas shared his presentation to show the Task Team objective to identify and characterise the Key Performance Indicators (KPI) to track OBPS success and provide guidance toward strategic objectives completion. He showed what the OBPS Value Chain components included though noted it will be updated to reflect any new strategic plan.



A value chain cost analysis was explained but again is a work in progress but will be a valuable tool to indicate the level of external funding required to maintain long term, stable operations.

- Value generated by OBPS VC not yet identified. Direct link to
 - Value proposition and business case are to be defined
 - Impact definition for OBPS not yet done

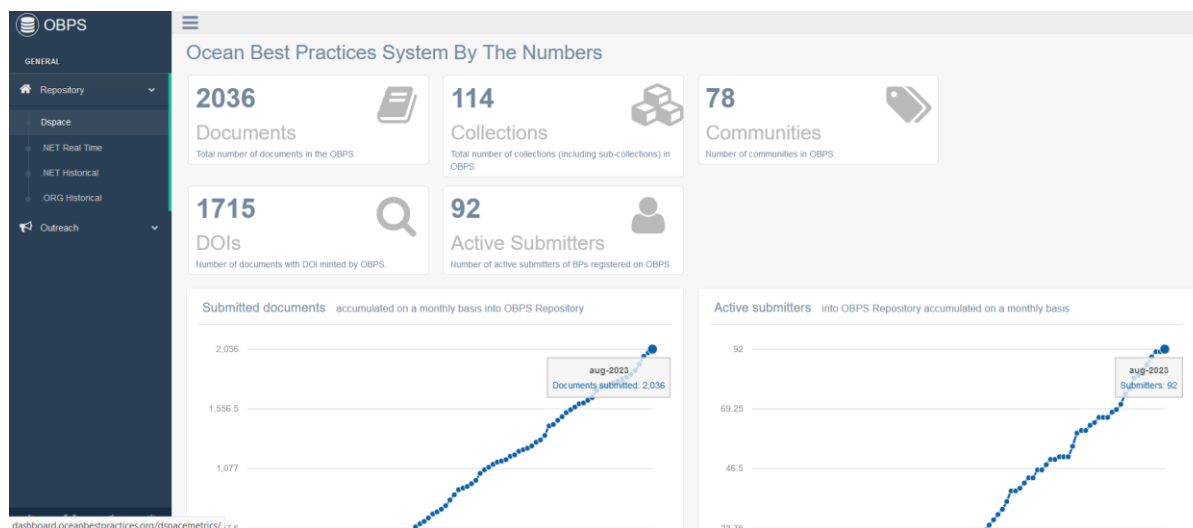
The KPIs are based on thirteen different outcomes from our current strategic plan objectives and a target has been identified to enable metrics to be monitored. However, the agreed creation of a new strategic plan will require new workings. The exercise supports users, funders and OBPS internal processes.

METRICS

Metrics are an important support for KPIs so the methodology to be followed is essential to be correct. The repository metrics are based on DSpace SOLR and Google Analytics and use metadata values which need to be complete as possible. However, repository metadata completeness is a difficult parameter since only two metadata fields are mandatory and where metadata is not provided can mean the metadata values were not known or were not appropriate eg. the spatial field - methodologies are often not linked to any named region. Or, for example, with best practices type metadata, the selection values were changed but there were no resources to map the old values to the new ones.

A demonstration 'OBPS by Numbers' metrics dashboard has been created but there is still work to do.

<http://dashboard.oceanbestpractices.org/>



12. AMBASSADORS PROGRAMME

[presentation](#)

Cora Hoerstmann, who Co-Chairs the Ambassadors Programme, presented details of the Ocean Practices Regional Ambassadors Programme. Five ambassadors are working to a shared

Vision: of a global network of Ambassadors that facilitate regional practices to be supported, created, understood and more broadly adopted and a

Mission: to expand regional capabilities of ocean professionals by increasing the knowledge of and access to regional practices and bringing these practices into a global context and vice versa.

They have progressed through communication and outreach training and produced short videos promoting their OBPS work (available through [OBPS Youtube](#)). Their individual actions have included:

- § Guiding and mentoring students and school kids
- § Ocean Literacy
- § Support OBPS WS VII
- § Support OBPS TT
- § Contributions to OBPS Newsflash
- § Diversity, Equity & Inclusion, Collaboration with ECOP programme

To underpin the Ambassador's work, mentor support is committed to strengthening cross-generational exchange and co-development for a period of 1-2 years. Depending on experience each OceanPractices Ambassador will work together with a mentor in a one-on-one relationship and learn about best practices. Mentors and mentees will meet approximately once every two months (in person, over email, or through zoom). A number of outreach venues

are being planned and members were requested to let CH know where there might be opportunities for the Ambassadors to network.

ACTION

12.1. Contribute Ambassadors piece in OBPS NewsFlash [CH]

12.2. Invite the Ambassadors to OBPS Ad Hoc Meetings, which will also provide to all members, the emails for all the ambassadors [PS]

12.3. Invite the Ambassadors to be members of WP5-6 [CH/VVDV]

13. CAPACITY DEVELOPMENT - ADAPT PROJECT

Presentation

Carolina Peralta, Co-Chair of WP7, Capacity Development and Training explained the status and next steps for a project just starting - *ADAPT: Adapting Ocean Best Practices to the Local Context (Caribbean Pilot Project)*. The project is funded under a Programme Cooperation Agreement between NORAD and UNESCO and is a collaboration between OBPS and two partner institutions from the Caribbean, the INVEMAR (Colombia) and St George's University (SGU), Department of Biology, Ecology and Conservation, Grenada, West Indies. The project has experienced some administrative issues that have delayed the start of the project, but early implementation will include:

- (i) **Establishment of a group of ocean best practice experts** from the IOC Ocean Best Practices System (OBPS) community: support local training, adaptation of existing methods or best practices to regional context, capabilities, and needs.
- (ii) The **co-development of tools and training materials** to support the implementation of best practices in ocean observation at the local level, adapted to ongoing capacity development in the region.
- (iii) Promote two **in-person training workshops** in the Caribbean (Colombia and Grenada), covering core topics in ocean observation in ocean observation
- (iv) **Document and synthesize the learning process** in a Guide on "Developing Capacity in ocean best practice" and on "Adapting Best Practices to local context" to guide other regions to replicate the training and adaptation of best practices.

An initial survey has identified training needs in the region, and a second will be sent out with the help of IOCARIBE, who are administrators for the project contract

Category	Count
Data management	19
Mapping marine ecosystems and habitats	16
Use of satellites for ocean research (physical, chemical or biological assessments)	14
eDNA biodiversity observations	11
Coastal ecosystem restoration (e. g. seagrass, corals)	10
Harmful algal blooms (HABs)	9
Invasive species assessment	9
Seagrass assessment	8
Water quality monitoring (e. g. Nutrients, pH, DO, DOM)	8
Rocky shore biodiversity assessment	7
Coral reef assessment	6
Modeling of species niches and distributions	6
Ocean productivity assessment	6
Sargassum dynamics	3
Ocean turbidity	0

Depending on resolution of contract issues the following timeline is proposed:

1. Survey results: January 2024
2. Identification of the experts and training plan co-development: February 2024 to July 2024
3. On-site trainings: May 2024(Grenada) – June/July 2024 (Colombia)
4. On-line training course via OTGA: September 2024
5. Final report: October 2024.

ACTION

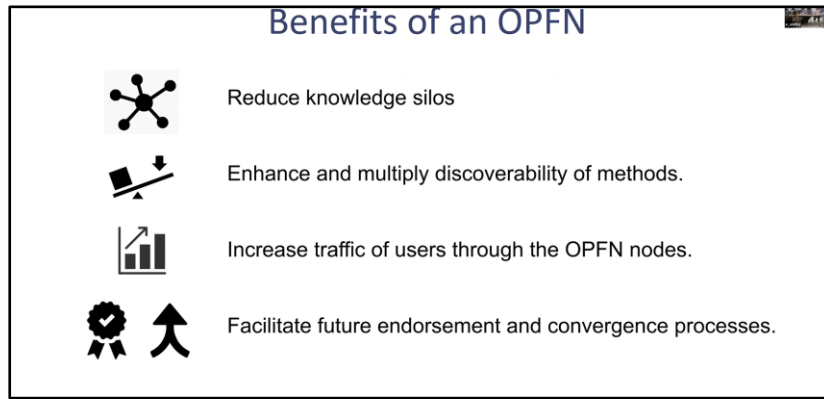
13.1. It was noted that NORAD are still accepting applications, so might be a target for a follow-on project proposal in the Caribbean or another region.

14. OCEAN PRACTICES FEDERATED NETWORK (OPFN)

Presentation

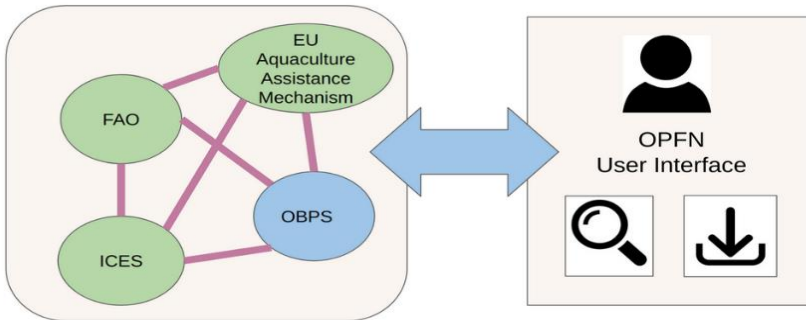
Cristian Munoz Mas, Co-Lead of WP3 expanded on the OBPS strategic objective of an Ocean Practices Federated Network (OPFN) which will support a mechanism for engaging diverse communities of practice and interlinking their methodologies through FAIR digital technologies.

He outlined the main benefits of the OPFN



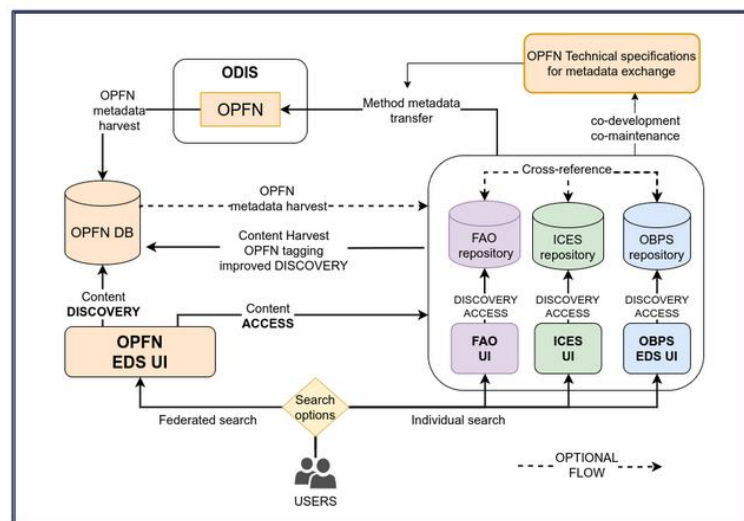
The model is one search interface accessing the content directly from distributed methods content systems (nodes).

Federated Network of MMSs



To enable this model, OPFN will build on an interoperability layer provided by the ODIS-Architecture and content node's adoption of ODIS-Arch schema.org metadata pattern for methods.

Conceptual Architecture



A pilot system focussed on Aquaculture and Fisheries will be established with founding partners OBPS, FAO (OpenASFA) and ICES, who as knowledge product providers contribute to ODIS/Ocean Infohub through API and harvesting mechanisms. He stressed that in OPFN, only metadata would be shared but was looking to access, but not store, the document full text to permit text mining with machine learning applications to tag records mapped from controlled vocabularies. This would provide additional rich metadata searchable through an OPFN portal, and is a functionality already in use in OBPS.

Progress with OPFN is encouraging and the present work timeline for this primary strategic objective is



but could be achieved earlier if additional resources were made available. It was recommended to submit a proposal to funding agencies. PP suggested a proposal to FUST, which would be due for submission in April 2024.

ACTION

14.1. Prepare a proposal for OPFN to FUST (Flanders) (submission deadline April 2024) - some advice was offered by IODE:

- ~Euro/USD? 250K funding request
- Build the proposal as support for the global south
- Avoid duplication (with South in particular)
- Refer to the Ocean Decade
- Discuss with DCOs on Data Sharing & Ocean Observations
- Include support to Capacity development
- Provision of data for science-policy support
- Staff cost must be less than 25%

15. REPOSITORY OPERATIONS

Presentation

Pauline Simpson (PS), Project Manager, whose responsibilities include Repository Management described that the repository has two separate interfaces - Deposit and Search.

The image is a composite graphic for the Ocean Best Practices Repository. On the left is a screenshot of the 'Submission Interface (DSpace)' showing a form for uploading documents. In the center is a dark blue banner with a database icon, the text 'Best Practices in the Repository', the year '2043', and buttons for 'Search for a Best Practice', 'Submit a Best Practice', and 'Metrics'. On the right is a screenshot of the 'Enhanced Discovery Interface (AWS)' showing a search portal with a search bar and filters. At the bottom left is the 'oceanbestpractices.org' logo, and at the bottom right is the 'Ocean Best Practices' logo.

Hosted by IODE, a deposit interface using DSpace repository software provides a rich metadata profile to collect bibliographic and much non-bibliographic metadata like, Adoption, Methodology Type, Endorsement, Maturity Level, EOY, EBV, ECV, and SDG (Sustainable Development Goals).

Hosted by Amazon Web Services, the Enhanced Discovery Service, a bespoke sophisticated search portal, maximises searching across the rich metadata parameters collected during the deposit process. This bespoke open source software is likely to be used for the OPFN search portal. Arno Lambert made the suggestion to discontinue the OBPS EDS and only use the OPFN portal search function. PS contributed that by doing this OBPS would lose autonomy, governance and the ability to search on the rich metadata (ocean focussed) collected through the OBPS deposit process, which other nodes are not recording. The ODIS schema is a much reduced pattern profile which therefore offers much reduced search parameters. RG requested to produce a paper listing the benefits and disbenefits of OBPS relying only on the OPFN search portal to access its rich content.

PS made the point that operational excellence cannot be achieved without dedicated technology/IT support for both interfaces. The calls on the IODE IT support time across all the IODE data and information products make it impossible to provide the level of support required and she listed **some** of the functionality enhancements to the technology that wait to be done.

Deposit Repository – User facing enhancements

- ✓ **Ocean Practices Federated Network (OPFN) pilot and portal** – OBPS repository will provide an MMS to those organizations and communities who are unable to support their own methodological repositories.
- ✓ **Create and implement an EOVS vocabulary** – enable interface selection and population of EOVS metadata field, rather than going out to the GOOS EOVS webpage and copy and paste
- ✓ **Spatial Coverage** - implement the Marine Regions API
- ✓ **Autoingest of Journal metadata** - through CrossRef subscription and Text Data Mining /API implementation
- ✓ **Machine readable BP templates/auto ingest of metadata (Reports)** - upload the method full text file including the metadata – one click deposit
- ✓ **AI translation of additional endorsed practices - extend pilot to include all (6 of the 10 done)**



Ocean Best Practices

SG-OBPS-V, Paris, 12-14 Dec 2023



Enhanced Discovery Service (EDS) – User facing enhancements

- ✓ Upload new vocabularies : ASFA/AGROVOC and WoRMS (and more)
- ✓ Automated Semantic indexing tags on EDS to be added back to the **DSpace repository record** metadata
- ✓ Display download metric (from DSpace/GA) on EDS search results display
- ✓ 'Select all' citations should select every record not just one screen at a time
- ✓ Option to export selected search results in variety of bibliographic management software formats: Bibtext; Endnote. Mendeley etc



Ocean Best Practices

SG-OBPS-V, Paris, 12-14 Dec 2023



The solution recommended is to outsource repository technology maintenance and development which would have to be funded primarily from external project funding.

The meeting took the opportunity to provide feedback which is listed as actions.

ACTION:

15.1. To offer improved visibility to organisations and projects depositing into OBPS, the DSpace Communities should be acknowledged on a new webpage [PS]

- The GOOS OCG Network could be a community? [PS]

15.2. Add a Language search on the EDS - will also provide metric on how many foreign language practices are in OBPS [PS]

15.3. Ensure the 78 IODE Documents in OBPS are easily findable [PS]

15.4. Prepare a paper on Pros and Cons of not enhancing EDS but relying on OPFN search portal [PS/CMM/AL/]

16. WORK PLAN AND BUDGET 2024

When discussing the work plan 2023, the following were suggested to be addressed in the 2024 Work Plan

- 16.1 Citations to OBPS - include on new website and include OBPS self citation papers
- 16.2 In seeking *Frontiers* Modelling editor go to OceanPredict for candidates
- 16.3 Would like to see convergence as an item in the work plan but Generic Endorsement Process may address this topic
- 16.4 Promote the 4 OBPS training videos by making download metrics available on the new website
- 16.5 Make the 4 OBPS training videos available in other languages

[See also Agenda Item 20](#)

17. STEERING GROUP

This agenda item was introduced by Pauline Simpson, who noted that it was about the composition and roles of the Steering Group; the discussion on a proposal for an OBPS Advisory Board and finally to review the SG-OBPS Terms of Reference for compliance with the IODE Rules of Procedure (MG91).

A. MEMBERS

It was reported that Paul Van Ruth (IMOS) had resigned from the SG-OBPS because of a change in work location. The Co-Chairs, with regret, accepted his resignation and would email him with thanks for his considerable contribution to OBPS, particularly as the Chair of the Workshop VI, 2022 Organizing Committee.

The meeting was pleased to welcome two new SG-OBPS members: Dr Justin Buck of NOC/BODC UK, who has agreed to be a co-lead for WP3 Advanced Technologies and Interoperability and Dr Katherina Schoo, IOC Ocean Sciences. Katherina had previously worked with SG-OBPS and was now replacing her colleague, Dr Kirstin Isensee.

B. SG WORK PACKAGE ROLES:

Each member was requested to nominate themselves to a work package area they are interested to work in. ([see WP list](#) and ANNEX 5)

Johannes Karstensen Chief Editor for the *Frontiers in Marine Science Research Topic: Best Practices in Ocean Observation* informed that a refocus of the journal editorial policy included the need for additional

members of the editorial board <https://www.frontiersin.org/research-topics/7173/best-practices-in-ocean-observing>, and he invited SG members to join the editorial board.

ACTION:

17.B.

WP3: Justin Buck would join as a Co-Lead

WP4: Cora Hoerstmann, Johannes Karstensen, Virginie Van

Dongen-Vogels, Frank Muller-Karger were invited to continue or join WP4

VVDV and EM would be invited to join the Frontiers RT Editorial Board [JK]

WP5: Edem Mahu would join as a Co-Lead, and Ambassadors would be invited as members [VVDV and CH]

WP6: will be combined with WP5 in a new WP5-6 Communication, Outreach and Community Engagement [PS]

C. OBPS ADVISORY BOARD

draft proposal;

As OBPS moves towards a new strategic plan, George Petihakis explained that it was proposed to implement an Advisory Board comprised of senior external experts, selected on the basis of the priority needs of the WPs and representing research, applications, policy and data/ information communities of ocean and related sciences value chain; drawn from a diverse range of disciplines, geographic regions, gender, and career stages. The Advisory Board purpose would be to help OBPS gain new insights and explore new opportunities by stimulating robust, high-quality conversations; to review and advise on the continuing development of the OBPS and engaging ocean observing communities in a joint and coordinated effort in producing, reviewing and sustaining best practices.

The draft proposal contained a table for members to add the needed specialities of the Advisory Board. PLB's recommendation that names should not be suggested but rather expertise/skills areas required by the Work Packages, was accepted. It was recommended to send out a call for external membership.

Advisory Board within OBPS Structure



See further discussion under agenda item 21

ACTION:

17.C The meeting was asked to review the Advisory Board draft proposal for a decision under agenda item 21

https://docs.google.com/document/d/1WSjCs20DyJbnhJkia6UVXZ_E4iqgNvCA/edit?usp=sharing&oid=115984934548572908651&rtpof=true&sd=true

D. IODE Rules of Procedure for IODE ... (MG91) review of SG-OBPS

Terms of Reference (2022-12-14) compliance

In 2023, following the approval of the new IODE Programmatic structure, the IODE Secretariat published the *Rules of Procedure for IODE Programme Components, Programme Activities and Projects: Manuals and Guides 91* which sets down the Terms of Reference for the Programmatic Elements. The document was approved at IODE-XXVII and all Programmatic Elements were asked to review their ToR and report on their compliance with MG91 by December 2024 to be submitted to IODE-XXVIII.

Pauline Simpson confirmed she had compared MG91 terms with the SG-OBPS Terms of Reference Version 2022-12-14 and commented: differing interpretation of the text was possible and clarification was needed to be obtained on some details. Initial variances:

The length of term and renewal of the Co-Chairs

In essence both two years but OBPS non-renewable

Rules: (Co-)Chair(s) are elected for one inter-sessional period of the Steering Group (regular meeting), with the possibility of re-election for an additional term. **In exceptional circumstances Co-Chairs (or one of them) can be re-elected for a third term.** If more than one regular meeting is organized within a calendar year then the term of office will be one year;

OBPS: Have a term of office of two years, **non-renewable**.

Co-Chair-Elect

This position is not identified in Rules.

SG-OBPS have included in their ToR a Co-Chair succession process whereby there is a position of Co-Chair-Elect. There are two Co-Chair-Elects at present who will become Co-Chairs at the end of the present Co-Chair term. The Co-Chair-Elect position is a future proofing process; to ensure in advance that there are two agreed candidates for the Co-Chair positions.

PS commented that the proposed OBPS Advisory Board was not a position identified in Rules.

The existing SG Terms of Reference will be submitted to GOOS SC (Apr 2024), understanding that may change after IOCEXXVIII.

ACTION:

17.D.1. The IODE Co-Chair Paula Sierra requested an additional agenda slot to expand on MG91.

17.D.2. Seek further clarification on MG91 details
Prepare an OBPS variances document for official report to IODE at the end of December 2024 for inclusion in discussion at IODE-XXVIII,

17.D.3. The existing SG Terms of Reference will be submitted to GOOS SC (Apr 2024).

E. GOOS REQUIREMENTS OF PROJECTS

Emily Smith (ES) explained she is on secondment from NOAA, to the Global Ocean Observing System (GOOS) as a Programme Specialist. She is working on the GOOS Dialogues with Industry, a collaboration with NOAA and the Marine Technology Society to further the recommendations from the series of webinars. She joined the meeting because she is also working with the GOOS Projects and would be making contact with OBPS shortly.

GOOS Projects are international and fill gaps, advancing innovation and expanding the observing system, services and product delivery by expanding into new areas and capabilities. Projects are not really a GOOS structure and ES will be looking at how projects such as OBPS could have more active GOOS engagement and evolve and integrate into GOOS as part of sustained infrastructure.

18.A. OBPS NEW WEBSITE

presentation

Rachel Przeslawsk [RP], co-Lead of WP5 Communications and Outreach, took the meeting on a tour of the staging version of the new website. It was hoped the new website would be launched before Christmas but various delays had made this impossible. The old website was in need of an overhaul both in design and content and we were fortunate to be able to repurpose some EuroSea Project for UNESCO/OBPS funds to cover the cost. A formal RfP was followed and the process started with a request to SG to review a new menu structure for primary pages. It was decided to stay with WordPress and the developer presented a number of Themes and 70% voted for the new Nicepage 'environmental' theme; content and images were requested and from this RP created the content, rationalising previous web content when appropriate from which the developer then created a staging version on which the SG commented and the developer took on board. RP confirmed that website admin training, backed up by a video, had been provided by the developer. Next steps are to launch the website and call for any immediate edits and content update.

She listed the benefits of the new website:

- Increased security and easy maintenance
- Modern format
- Accessible from desktops, tablets, mobiles
- Streamlined content
- Accurate and current content
- Consistent design and content

RP has provided a brief content guide to ensure that the new website stays fit-for-purpose, stays streamlined and looks good for as long as possible

Guide for content creators

- Only the project manager, technical coordinator and WP5 co-chairs have **admin access** to make changes to the website.
- **No new pages** will be created without justification provided to the project manager or WP co-chairs
- **Images** must be high resolution (e.g. look good on full size monitor, at least 72 ppi)
- **Graphics** must be professionally designed.
- **The website is not an archive.** Links to resources (e.g. pdfs, videos) must be accurate and professional. Outdated or superseded material should not appear or be linked to on the website without good justification.
- **Avoid acronyms and jargon (both scientific and corporate).** Wherever possible, use language that is understandable by a broad global audience. If you must include acronyms (e.g. funding requirement), make this font small and unobtrusive.



Comments from the meeting:

GOOS has Flickr and Image accounts and could help with image selection.

Events - what kind of events will be included. RG said a call could be sent out for events to be included in the Newsletter

ACTION:

19.1. New website to be uploaded and available January 2024

19.2. Topbar heading Projects and Programmes to be changed immediately. PP/EH to recommend what heading to use and any content text.

19.3. SG and Laura (GOOS) to review staging website and use this link to log comments https://docs.google.com/document/d/1kk9t-02uBWia6rnSEx0pQd84zs3Yd_JcWCI2udhDv8U/edit#heading=h.fdjwol6g6bmc

19.4. EH to send Laura's contact for assistance with image selection to RP.

18.B. OBPS COMMUNICATION CHANNELS

presentation

Virginie van Dongen-Vogels [VVDV] explored the history of the monthly *Good, Better, Best* Newsletter and its transition to what is called *NewsFlash*, which is now bi-monthly but even with this reduced number of issues, getting content (news, success stories etc) can still be difficult. Some new sections have been introduced, eg. 'The Bad, the Worse and the Ugly', where (anonymous) researchers recount some of their 'bloopers'.

She shared some NewsFlash statistics

- 515 subscribers (+20 from last year) with an open rate of 42% and click rate of 15% ☑ >30% is very good

Moving to Social Media VVDV confirmed that we had closed the **Facebook** account in 2022.

Twitter / X ☑ account is administered by Nick Roden.

As of 7th Dec: 412 people were following the account. However, no new posts had been submitted for many months. She made the recommendation: for SG to discuss retiring the Twitter / X account or identifying other administrators that can assist with posting and engagement on this platform and she wondered whether IODE or GOOS could tweet for OBPS.

LinkedIn account (Company) started in 2023 and is more suitable for target audiences. <https://www.linkedin.com/company/ocean-best-practices/>

RG queried the decision to have a LinkedIn Company account rather than Group account. RP was not sure what functionality difference there was between Company and Group accounts but Company was how it had been setup last year and change would mean losing what we have built over the last year. RG commented we need to be on social media but need to select which one/s.

PP commented that social media was not just a problem for OBPS but for all IOC. There is significant experience within UNESCO and he recommended that this needs to be a discussion with OBPS, IODE, GOOS, IOC and UNESCO. He queried who our target audience is and what we are trying to get out of the communication. He thought we needed to talk to communication experts and EH agreed this would be useful and suggested Laura Sukonyte (GOOS).

LinkedIn metrics: As of 7th Dec: 225 followers; 38 original posts; 3 reposts, with most popular reaching 18 likes. 220 reactions, 8 comments, and 42 reposts.

☑ New followers and page views occur after every original post, particularly if that post tags other institutions or individuals

VVDV recommended that another SG member join Rachel to post regular content on LinkedIn.

ACTION:

18.B.1. Edem Mahu and some Ambassadors would be joining the work Package and could be invited to offer LinkedIn support.

18.B.2. The new WP5-6 Co-Leads and Members to take forward the recommendation to seek advice from the IOC Communication Group and UNESCO and report back to the OBPS Monthly Meeting

19. OCEAN PRACTICES FOR THE DECADE

presentation

Rebecca Zitourn (RZ) , is Co-Coordinator of the OBPS Ocean Practices for the Decade Programme with Aileen Tan Shau-Hwai and acknowledged that job changes and research cruises left her little time to progress the OceanPractices Decade Programme. She focussed first on the Ocean Decade Barcelona Conference in April 2024 and explained that she had applied for an ‘Oral Presentation’ and would know in February if that was approved, otherwise a Poster presentation might be the next option. In addition, OP is in discussion for the following Barcelona opportunities:

- With the DCC on Data Sharing (and ODIS, OTGA, Ocean Decade 2030) to provide communication content (poster, flyer, video) for a booth and in addition join with a presentation, their satellite event on data sharing
- Blue Cloud 2026: OP will be contributing a presentation to the Blue Cloud Satellite Event on 8 April and also communication content for the BC26 booth
- DCC for OceanPrediction has invited OP to contribute content to a virtual booth]

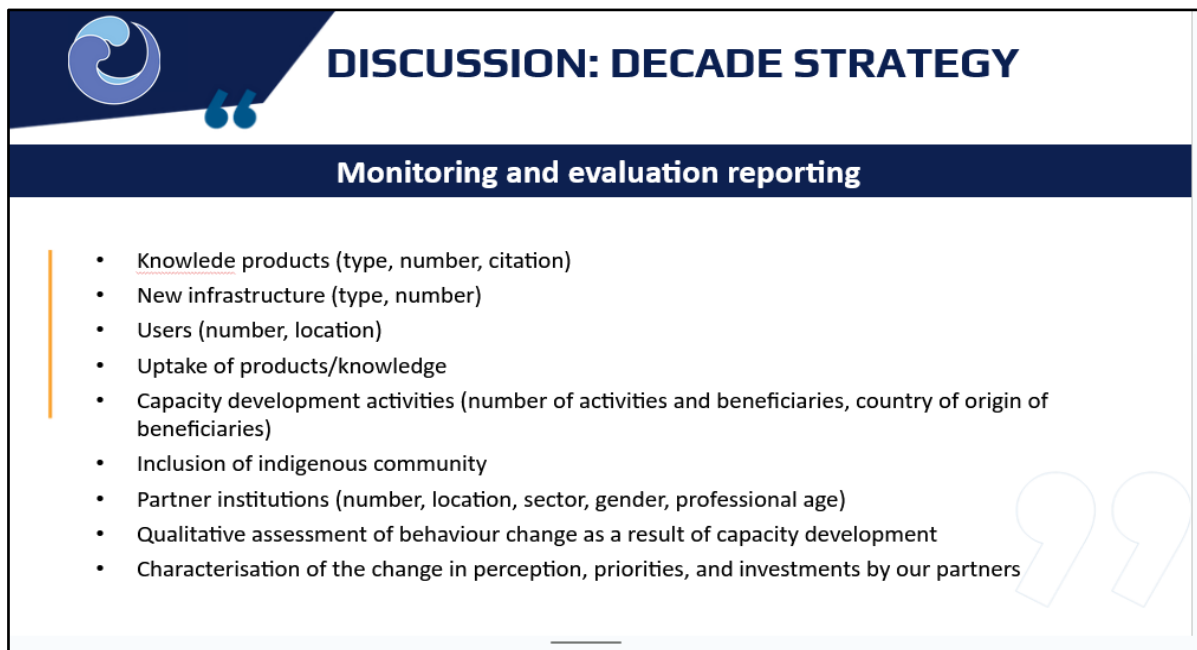
She thought it would be good to gather information on who else would be attending Barcelona - she hoped to obtain funding for the trip.

The Ocean Decade puts out calls for new project applications who then identify which programme they wish to be hosted by. At the moment OP has three endorsed hosted projects and the next round has brought more applications that she has filtered as acceptable and is waiting for the DCU to make a decision on which of the applications to endorse.

RZ highlighted that OP does not have a framework criteria for reviewing Hosted Project applications and complementary documentation on what OP offers the hosted projects and also what is required of them.

Whilst OP has high level objectives it does not have an action plan nor monitoring metrics to evaluate effectiveness of the programme but also is essential for the Evaluation and Monitoring Reporting the DCU requires from each programme each year. The reporting requirements are likely to be simplified next year since the parameters requested were just not being recorded by programmes. Nevertheless, it does raise that OP does not have a strategy/action plan, and metrics to respond to the reporting requirements. The new metrics dashboard provides some reporting requirements but she displayed examples of the questions and admitted that for some only

guestimate numbers can be provided. Yet the DCU are using these responses to evaluate the Ocean Decade and programme effectiveness.



DISCUSSION: DECADE STRATEGY

Monitoring and evaluation reporting

- Knowledge products (type, number, citation)
- New infrastructure (type, number)
- Users (number, location)
- Uptake of products/knowledge
- Capacity development activities (number of activities and beneficiaries, country of origin of beneficiaries)
- Inclusion of indigenous community
- Partner institutions (number, location, sector, gender, professional age)
- Qualitative assessment of behaviour change as a result of capacity development
- Characterisation of the change in perception, priorities, and investments by our partners

We know that ocean best practices pervades all Decade DCO, DCC, Programmes and Projects work, but OP does not streamline its approaches to these entities, mainly because this requires a lot of volunteer time.

RZ presented some budget requirements that were included in the budget 2024, most concerning new communication and outreach products, but they would need to be funded from external project funding. She reminded of the Ocean Practices Network and Ocean Practices Community of Practice on the Global Decade Network and called for members to be sure to join the Global Decade Network and COP/OP Networks and post on both. She really needs someone to take on the OP communication activity.

EH agreed that to organise a successful Decade Programme is demanding and the OBPS should take a look at the value of this as an activity and how to rationalise it and perhaps look at what other groups are doing. The overhead seems too much already. She suggested that OBPS/Ocean Practices could model themselves on such as a DCC which operates as an infrastructure entity and coordinator attracting projects. The OBPS needs to concentrate on its core and OP may not be its core but a 'nice to have'. PP added for IODE a question is - who contributes to whom - do IOC programmes support the Decade or is the Decade creating visibility that might gain more resources for us. Things are shifting to 'support for the Decade' but how far can we go in this? RZ responded, if OP wants to be active in the Decade, then more people and more funding is needed. GK commented we need to be more selective and get

involved where we see OP can have impact because we do not have the funds to hire people. JP suggested we should explore synergies with other external groups and individuals who are working on best practices, and invite them to contribute to our work packages. JK reminded us that OBPS became a Ocean Decade Programme because we thought it would map one-to-one with OBPS activities, and he wonders what we need to do more in OP than our routine operations. PP described that the DCO and DCO were now synchronising with for example ODIS and that might be a model for OBPS to follow. EH suggested that OP is used more as an advocacy channel making sure people are producing best practices and always promoting that. FMK remembered that OP was submitted as an advocacy and feedback programme.

GP observed that it was impossible to resolve the questions raised in this agenda item and the topic should be deferred to a dedicated SG discussion.

ACTION:

19.1. The Ocean Practices for the Decade Programme role and activities need to be reviewed and (re)defined. Arrange a dedicated SG discussion [RZ]

ADDITIONAL ITEM 1 - OBPS ADVISORY BOARD

draft proposal:

Following agenda item 17.C action , the meeting had been given time to review the proposal and this agenda item was to finalise the document for approval. GP shared the proposal and confirmed this was a proposal to start the mechanism to appoint an Advisory Board.

A number of queries and suggestions were raised; edits were made in real time. The document will be available for further comments until the Ad Hoc Meeting in February. 2024.

The meeting approved the proposal for an OBPS (Senior) Advisory Board but requested that the proposal should be finalised after comments from the SG and presented to the February Monthly Meeting for a final approval.

ACTION:

ADD1.1. The edited proposal for an OBPS Advisory Board was approved but some of the Terms of Reference need to be confirmed/revised.
Document available for suggested edits :

https://docs.google.com/document/d/1WSjCs20DyJbnhJkja6UVXZ_E4iqgNvCA/edit?usp=sharing&oid=115984934548572908651&rtpof=true&sd=true

ADDITIONAL ITEM 2 - . RULES AND PROCEDURE FOR IODE PROGRAMME COMPONENTS, PROGRAMME ACTIVITIES AND PROJECTS_MG91

[presentation](#)

Following on from agenda item 18.D, Paula Sierra, IODE Co-Chair provided an overview of the *Rules of Procedure for IODE Programme Components, Programme Activities and Projects: IOC Manuals and Guides 91* and recommended that the variances identified in 18.D should be highlighted to IODE and GOOS Secretariats

[see Action under 18.D](#)

20. WORK PLAN & BUDGET 2024

Rene Garelo introduced this agenda item and explained the process to arrive at the budget. He explained that with the new IODE Programmatic Element Structure, OBPS is now identified as a Programme Activity with an IODE annual budget allocation of ~US\$25k. This level of IODE proposed funding (it still has to be approved at the IODE Management Group In February 2024) necessitates that the majority of the OBPS Work Plan 2024 must be funded from external project research grants.

The budget table indicates that only the white top area is the amount requested for funding by the IOC Programme Sponsors. (IODE and GOOS). The 'grey' area are those activities that external project funds must support and he went through the work plan for those, but cautioned that OBPS can only do its best to cover the work plan items but this could not be guaranteed and some items will not be completed. Even with some project funding it may be necessary to look for support elsewhere or as EH suggested look for funding from some of the communities using OBPS services.

The following work plan and budget was discussed initially in agenda item 16 and then finalised with the SG and IODE and GOOS Secretariats in this agenda item. It would be officially submitted on 15 December 2023, to IODE for the IODE Management Group meeting in February 2024

Timing	Items	2024 OBPS PROPOSED BUDGET USD	2024 BUDGET IOC SPONSORS IODE	2024 BUDGET IOC SPONSORS GOOS	Notes
	MAINTAINING OBPS CORE SYSTEM				
Jan-Dec 2024	Project Manager / Repository Manager	55,000.00	27,500.00	27,500.00	
Jan-Dec 2024	AWS subscription	7,000.00	3,500.00	3,500.00	
Jan-Dec 2024	DSpace Repository & EDS Maintenance (OUTSOURCED)	17,000.00	8,500.00	8,500.00	
	TOTAL -MAINTAINING OBPS CORE SYSTEM	79,000.00	39,500.00	39,500.00	
	DEVELOPMENT OF OBPS CORE SYSTEM (EXB)				
Jan-Dec 2024	Travel (Chair, PM travel, others)	9,000.00	0.00	0.00	EXB
Mar 2024	Create and implement EOv vocabulary on DSpace Deposit interface	3,000.00	0.00	0.00	EXB
Mar 2024	Endorsement infographic	2,000.00	0.00	0.00	EXB
Mar 2024	AI translation of additional endorsed practices (6 of 10 already done)	15,000.00	0.00	0.00	EXB
Mar 2024	Ocean Practices for the Decade - Ambassadors Programme embed into the Work Packages	4,000.00	0.00	0.00	EXB
Apr 2024	Ocean Practices for the Decade - Video , flyer, poster and attendance at UN Ocean Decade	9,500.00	0.00	0.00	EXB
Sep 2024	OBPS Annual Workshop	25,000.00	0.00	0.00	EXB
Sep 2024	Autoingest of metadata (Journal) CrossRef sub+ TDM/API implementation	5,000.00	0.00	0.00	EXB
Nov 2024	SG-OBPS Annual Meeting	25,000.00	0.00	0.00	EXB
Dec 2024	Ocean Practices Federated Network (OPFN) pilot and portal	30,000.00	0.00	0.00	EXB
2025	Repository Certification (3 year sub)	3,000.00	0.00	0.00	EXB
2025	Machine readable BP templates/auto ingest of metadata (Reports)	15,000.00	0.00	0.00	EXB
	TOTAL - DEVELOPMENT OF OBPS CORE SYSTEM	145,500.00			

21. DATE AND PLACE OF SG-OBPS-VI

The Co-Chairs confirmed that If funding is available the next SG-OBPS-VI would be hybrid, otherwise it would revert to being a virtual meeting.

The SG Annual Meeting is normally held at the end of the year, but apart from being Winter, and close to Christmas which increases the travel costs, it was noted that to comply with submission of documents deadline for IODE-XXVIII the meeting should be no later than the end of November 2024. Members contributed dates of other significant meetings and from that a tentative date of **20-22 November 2024** was agreed. A decision of Paris or Oostende location would be made as planning progresses.

ACTION

21.1. The SG Management Team will plan for SG-OBPS-VII to be held 20-22

November 2024. Location will be agreed as planning progresses.

22. APPROVALS

Following full discussion under the agenda item, **the meeting approved** the Advisory Board proposal and the Work Plan and Budget 2024 as presented in agenda item 20.

23. SUMMARY REPORT

The Summary Report will be available for review and approval at the OBPS Ad Hoc Meeting in February 2024.

CLOSE OF THE MEETING

The Co-Chairs Rene Garello and George Petihakis thanked all members of the Steering Group for their commitment and hard work for the Ocean Best Practices System and their contributions to SG-OBPS-V. They acknowledged the financial support for meeting attendance from IODE and IEEE and from individual member's projects and organisations.

The meeting closed at 12.30 CET

ANNEX 1: AGENDA



SG-OBPS-V
Annual Meeting, Paris, 12-14 December 2023
[Unesco, 7 place de Fontenoy, 75007 Paris, France.](#)
Room 4.04, Building III in the Japanese Garden.

ANNOTATED AGENDA

Zoom Link (same link each day):
<https://us06web.zoom.us/j/88471425897?pwd=j4M7ZRjE1L2axK996Z8cvCsYsZlbn.1>

Participants

Logistics: Enter at Place de Fontenoy entrance 08.30-08.45 and go through security to the inner Unesco Reception area..

Working Language English. The meeting will be recorded

CET	Item	Topic
Tue 12 December 2023		
08.30	0	Gather at Unesco Fontenoy Inner Reception from 08.30-09.00. A GOOS staff member will provide name badges for the meeting. At a few minutes before 09.00 she will walk us through to the meeting room.
09.00	1	WELCOME (RG & GP)
09.10	2	ADMINISTRATIVE ARRANGEMENTS (PS) <ul style="list-style-type: none"> - Adoption of the agenda - No Host Dinner Wed 13 Dec, 19.00 @ Marie-Edith ; 34 Rue du Laos, Paris, Île-de-France, - Group Photo
09.15	3	INTRODUCTION TO OBPS (RG) Overview
09.30	4	STEERING GROUP - GETTING TO KNOW YOU - introductions and opportunity to circulate and meet each other
10.30		BREAK
11.00	5a	PROGRESS REVIEW - STRATEGIC PLAN 2021-2025 (RG/GP) presentation <ul style="list-style-type: none"> - Status and updates/revision
11.30	5b	PROGRESS REVIEW - SPONSORS <ul style="list-style-type: none"> - Perspectives : IODE (PP) ; GOOS (EH) Presentation - Orientation Document ... 07 Dec 2023 from IODE/GOOS
12.15	5c	PROGRESS REVIEW - OBPS <ul style="list-style-type: none"> - Statement - OBPS (RG/GP/JP/JK/RZ/CMM)

12.30		LUNCH
13.30	5d	PROGRESS REVIEW - SYNTHESIS (Moderators: RG & GP) - Discussion & Conclusions
14.15	5e	PROGRESS REVIEW - IMPLEMENTATION PLAN 2021-2023 presentation - New plan and synchronize with any updated Strategic Plan?
14.45	5f	PROGRESS REVIEW - IMPLEMENTATION - WORK PLAN 2023 status (PS) - report on activities <u>not covered</u> in the agenda and plans for 2024 with Budget requirements
15.30		BREAK
16.00	6	A. OBPS WORKSHOP VII & FOCUS SESSIONS RECOMMENDATIONS (RG & CH presentation) B. OBPS WORKSHOP VIII PLANS (RG & GP) - Workshop Organising Committee and WS Chair ENDORSEMENT PROCESS EXPANSION (MB & JH) - Hermes (2020) GOOS Best Practice Endorsement Process, Version 1, Generic Endorsement draft - - Theme - Suggestion (FMK) Focus on the outcome of Barcelona 2024 and white papers recommendations - look for BP and gap areas - Budget requirements
16.45	7	METRICS DASHBOARD (CMM) POSTPONED UNTIL WED 11.00 http://dashboard.oceanbestpractices.org/ presentation
17.00		CLOSE OF DAY
Wed 13 December 2023		
09.00	8	ENDORSEMENT PROCESS EXPANSION (MB & JH) - Hermes (2020) GOOS Best Practice Endorsement Process, Version 1, Generic Endorsement draft - Budget requirements
09.30	9	EXTERNAL PROJECTS (JP) presentation - present and future contributions
10.00	10	AISBL presentation (GP) (Association internationale sans but lucratif)
10.30		BREAK
11.00	11	TASK TEAMS (Reports submitted) (MB) - 22-02: Decision Trees - 22-01: Coastal Observations in Under-resourced Countries - 21-03: Omics/eDNA Protocol Management - 21-02: Value Chain Analysis and KPI Development (CMM)

		OBPS ADVISORY BOARD draft proposal : Budget requirement? (GP) Moved from agenda item 17c
		IODE RULES AND PROCEDURES additional presentation . (Paula Sierra)
10.30		BREAK
11.00	20	WORK PLAN & BUDGET 2024 (RG/GP) <ul style="list-style-type: none"> - Include Work Plan 2024 funding requirements - <u>Draft</u> budget 2024 will be submitted to IODE and GOOS
11.30	21	DATE AND PLACE OF SG-OBPS-VI (PS)
11.35	22	APPROVALS (GP) <ul style="list-style-type: none"> - Approval of work plan 2024 - Approval of budget 2024-2025 - Approval of External Advisory Board proposal
12.00	23	SUMMARY REPORT <ul style="list-style-type: none"> - Summary of Meeting Actions (PS)
12.30		CLOSE OF THE MEETING (RG & GP)

ANNEX 2: PARTICIPANTS

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ANNEX 3 WORK PLAN 2023

Strategic Objective	Work Package	Task	Due Date	Implemented by	STATUS @ 12 Dec 2023
S0-01.1	WP2	A1.1. Secure a CORE Trust Seal Repository Certification	2024-01-01	PS	No funding was available in 2023. Requested funding for 2024.
S0-01.3	WP3	A1.3. Create improved content browsing and discovery functions through decision tree methods	2022-12-01	TT Dec Trees	TT for Decision Tree established Dec 2022 there will be paper in 2/2024 where they will identify process to implement 3 tasks/ to report to SG mid-2024
S0-01.4	WP3	A1.4. Expand BP submission processes to include automated submission including review of document template style and completeness.	2023-12-01	PLB	NOT COMPLETED include in 2024 (Organize TechOceanS funding for autoingest using the templates)
S0-01.5	WP3	A1.5. Enhance and expand machine-readable templates offered by the OBPS to cover methodology types submitted	D1.5.1a. Update existing BP document templates and generate new topics with community advice	PS	COMPLETED
			Progress with machine readable templates or machine-readable metadata sheet (with SOCIB).	PLB	NOT COMPLETED (see A1.4) include in 2024 FUNDING REQUIRED
S0-02.3	WP3	A2.3. Expand enhanced search including semantic capabilities to accommodate broader range of disciplines, languages and cultures	2022-06 Upload AGROVOC and WoRMS	PLB /AL	NOT COMPLETED E84 supplied the instructions August 2023, but upload not tested. IT Support have been requested to test
			2023-12-31 EOV Vocabulary uploaded to deposit interface	PLB	Include in 2024

SO-04.1	WP3	<p>A4.1. Design a federation approach, to a global collection of independent methodology management systems</p> <p>A4.2. Develop a pilot demonstration of a federated system so that queries across partner systems enable access to best-practices methodology content hosted elsewhere</p>	2024-12-01	CMM/PS/PLB	Ocean Practices Federated Network In progress . Aquaculture and Fisheries Pilot and OPFN portal
SO-02.1	WP4	A2.1. Provide guidance to communities on process for endorsing BP / develop rigorous OBPS criteria for acceptance		JH/MB	COMPLETED
SO-02.6	WP4	A2.6. Increase contributions to the Frontiers in Marine Science: Research Topic Best Practices in Ocean Observation	ongoing	JK	Ongoing CLOSED
SO-02.5	WP5	A2.5. Host annual workshops	2023-10	RG/CH/PS	COMPLETED
ADD from SG-OBPS-III	WP6	Implement Ocean Practices Ambassadors	2023-12-31	CH/RZ/JP	COMPLETED
SO-03.1	WP7	A3.1. Expand the number of training courses available in the repository	Ongoing	PS	Ongoing CLOSED
	WP7	Submit proposal to NORAD for Caribbean CD Project		ALL/JP/PS	COMPLETED
SO-03.3	WP7	A3.3 Engage formal and informal education institutions and sponsors to advance incorporation of best practices for ocean observing into education curricula	2024-12-31	AP/AM	NOT COMPLETED

SO-04	WP8	Survey of Ocean Practices Partners on continued commitment and contribution	2023-08-01	RZ/ATS-H	NOT COMPLETED
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ANNEX 4 SUMMARY OF ACTIONS - SG-OBP-V

ACTION
<p>5.A. PROGRESS REVIEW - STRATEGIC PLAN 2021-2025</p> <p><u>ACTION:</u></p> <p>5.A.1. Review the Strategic Plan every 5 years.</p> <p>5.A.2. Include in the Strategic Plan response on objectives/directions from the Orientation Document (2023-12-07)</p> <p>5.A.3. Add the regional dimension in the Challenges workshop discussion</p> <p>SEE 5.D ACTION</p>
<p>5.B. PROGRESS REVIEW - IOC PROGRAMME SPONSORS - Recommendation <u>ACTION:</u></p> <p>5.B.1. Communication - Quarterly meeting to be held with the Sponsors (separate from the monthly meeting) starting March 2024</p> <p>SEE 5.D ACTION</p>
<p>5.D. PROGRESS REVIEW - SYNTHESIS</p> <p><u>ACTION:</u></p> <p>5.C & 5.D</p> <p>5.D.1. The OBPS Co-Chairs agreed to provide a response to the agenda item 5.B, Orientation Document and the Sponsors perspective comments, by producing an updated Strategic Plan by mid April 2024</p>
<p>5.E. PROGRESS REVIEW - IMPLEMENTATION PLAN 2021-2023</p> <p><u>ACTION:</u></p> <p>5.E.1. An Implementation Plan 2024 - would be produced at the same time as the updated Strategic Plan</p>
<p>5.F. PROGRESS REVIEW - IMPLEMENTATION - WORK PLAN 2023</p> <p><u>ACTION:</u></p> <p>5.F.1. It was recommended that the work plan 2024 should be kept short, otherwise, there was a risk it would never be completed. Suggested there should be one task per objective.</p> <p>5.F.2. The year's Work Plan should be reviewed every quarter.</p>

6.A. OBPS WORKSHOP VII & FOCUS SESSIONS**ACTION:**

6.A.1. Provide feedback and send official thanks to Jose Mutinho, AIR Centre [RG/CH]

6.A.2. Provide feedback to DCU [RG/CH]

6.B. OBPS WORKSHOP VIII 2024**ACTION:**

6.B.1. Invite Workshop VIII, 2024 Co-Chairs [CH]

6.B.2. After Barcelona 2024, contact Alison Clausen (DCU), with an invitation to co-design and organise the OBPS/OceanPractices, Workshop VIII, on a topic title like *Outcomes of Barcelona 2024 and the Ocean Vision 2030 Vision White Papers* [GP]

8. ENDORSEMENT PROCESS EXPANSION**ACTION:**

8.1. Articles on a method should include a citation or acknowledgement of OBPS

8.2. Arrange Endorsement Focused Meeting at OBPS Monthly meeting Jan 2024 [PS]

10. AISBL**ACTION:**

10.1. Ensure AISBL documents shared with IODE and GOOS [RG]

11. TASK TEAMS**21-03: Omics/eDNA Protocol Management****ACTION:**

11.1. Confirm that a member of OBIS is in Omics Task Team [PS]

11.2. Investigate future protocols.io addition to the OceanPractices Federated Network
Github BeBOP Workspace; <https://github.com/BeBOP-OBON>
Protocols.io Workspace; <https://www.protocols.io/workspaces/better-biomolecular-ocean-practices-bebop/>

12. AMBASSADORS PROGRAMME**ACTION**

12.1. Contribute Ambassadors piece in OBPS NewsFlash [CH]

12.2. Invite the Ambassadors to OBPS Monthly Meetings, which will also provide to allmembers, the emails for all the ambassadors [PS]

12.3. Invite the Ambassadors to be members of WP5-6 [VVDV]

13. CAPACITY DEVELOPMENT - ADAPT PROJECT

ACTION

13.1. It was noted that NORAD are still accepting applications, so might be a target for a follow-on project proposal in the Caribbean or another region.

14. OCEAN PRACTICES FEDERATED NETWORK (OPFN)

ACTION

14.1. Prepare a proposal for OPFN to FUST (Flanders) (submission deadline April 2024) [CMM/JP] - some advice was offered by IODE:

- o ~Euro/USD? 250K funding request
- o Build the proposal as support for the global south
- o Avoid duplication (with South in particular)
- o Refer to the Ocean Decade
- o Discuss with DCOs on Data Sharing & Ocean Observations
- o Include support to Capacity development
- o Provision of data for science-policy support
- o Staff cost must be less than 25%

15. REPOSITORY OPERATIONS

ACTION:

15.1. To offer improved visibility to organisations and projects depositing into OBPS, the DSpace Communities should be acknowledged on a new webpage [PS]

- o The GOOS OCG Network could be a community? [PS/EH]

15.2. Add a Language search on the EDS - will also provide metric on how many foreign language practices are in OBPS

15.3. Ensure the 78 IODE Documents in OBPS are easily findable

15.4. Prepare a paper on Pros and Cons of not enhancing EDS but relying on OPFN search portal [PS/CMM/AL/]

7. STEERING GROUP

17.B. SG WORK PACKAGE ROLES

ACTION:

17.B.

WP3: Justin Buck would join as a Co-Lead

WP4: Cora Hoerstmann, Johannes Karstensen, Virginie Van Dongen-Vogels, Frank Muller-Karger. were invited to WP4

VVDV and EM would be invited to join the Frontiers RT Editorial Board [JK]

WP5: Edem Mahu would join as a Co-Lead, and Ambassadors would be invited as members [VVDV and CH]

WP6: Will be combined with WP5 in a new WP5-6 Communication, Outreach and Community Engagement [PS]

17.C. ADVISORY BOARD**ACTION:**

17.C. The meeting was asked to review the Advisory Board draft proposal for a decision under agenda item 21

https://docs.google.com/document/d/1WSjCs20DyJbnhJkia6UVXZ_E4iqgNvCA/edit?usp=sharing&oid=115984934548572908651&rtpof=true&sd=true

17.D. IODE RULES OF PROCEDURE ... (MG91)**ACTION:**

17.D.1. The IODE Co-Chair Paula Sierra requested an additional agenda slot to expand on MG91.

17.D.2. Seek further clarification on MG91 detail. Prepare an OBPS variances document for official report to IODE at the end of December 2024 for inclusion in discussion to IODE-XXVIII, [PS]

17.D.3. The SG Terms of Reference will be submitted to GOOS SC (Apr 2024).

18.A. OBPS NEW WEBSITE**ACTION:**

18.1. New website to be uploaded and available January 2024

18.2. Topbar heading Projects and Programmes to be changed immediately.

PP/EH to recommend what heading to use and any content text.

18.3. SG and Laura (GOOS) to review staging website and use this link to log comments

https://docs.google.com/document/d/1kk9t-02uBWIA6rnSEx0pQd84zs3Yd_JcWCI2udhDv8U/edit#heading=h.fdjwol6g6bmc

18.4. EH to send Laura's contact for assistance with image selection to RP.

18.B. OBPS COMMUNICATION CHANNELS**ACTION:**

18.B.1. Edem Mahu and some Ambassadors would be joining the work package 5 and could be invited to offer LinkedIn support. [VVDV]

18.B.2. The new WP5-6 Co-Leads and Members to take forward the

Recommendation to seek advice from the IOC Communication Group and UNESCO and report back to the OBPS Monthly Meeting [VVDV/EM]

19. OCEAN PRACTICES FOR THE DECADE**ACTION:**

19.1. The Ocean Practices for the Decade Programme role and activities need to be reviewed and (re)defined. Arrange a dedicated SG discussion [RZ]

ADDITIONAL ITEM 1 - OBPS ADVISORY BOARD**ACTION:**

ADD1.1. The edited proposal for an OBPS Advisory Board was approved but some of the Terms of Reference need to be confirmed/revised. Document available for suggested edits :

https://docs.google.com/document/d/1WSjCs20DyJbnhJkia6UVXZ_E4iggNvCA/edit?usp=sharing&oid=115984934548572908651&rtpof=true&sd=true

21. DATE AND PLACE OF SG-OBPS-VI**ACTION**

21.1. The SG Management Team will plan for SG-OBPS-VI to be held 20-22 November 2024. Location will be agreed as planning progresses.

ANNEX 5 WORK PACKAGE STRUCTURE

The work of the OBPS is structured and implemented through Work Packages (WP) and are led by members of the [Steering Group](#):

WP1: Project Management

Leads: Pauline Simpson, Rene Garello, George Petihakis

Oversees the management of the project including system administration, reporting and progress of the IOC OBPS project.

WP2: Operations (Repository)

Leads: Pauline Simpson, Arno Lambert

Ensures efficient day-to-day management, administration and development of the [OBPS Repository](#), including new user-facing and back-end support and technology enhancements.

WP3: Advanced Technologies and Interoperability

Leads: Pier Luigi Buttigieg, Cristian Munoz Mas and Justin Buck

Identify technology developments and scope capacity to build into the present service, including technical documentation and the introduction of automated processes.

WP4: Publications, Convergence and Endorsement

Lead: TBD

Support the synthesis or convergence of fragmented practices, address the endorsement of best practices, and coordinate the editorship of the scientific journal - [Frontiers in Marine Science: Research Topic. Best Practices in Ocean Observing](#).

WP5-6: Communication, Outreach and Community Engagement

Leads: Rachel Przeslawski, Virginie Van Dongen-Vogels, Mark Bushnell, Frank Muller-Karger

A new joining of WP5 and WP 6 (Community Engagement) to ensure visibility and relevance of the system through community engagement activities, including the production and dissemination of promotional material of the OBPS, including the OBPS [NewsFlash](#). In addition, to build and develop the interfaces between the OBPS and global user communities, representing specific domain interests and nurturing domain experts as OBPS advocates.

WP7: Training and Capacity Development

Leads: Ana Carolina Peralta, Ana Carolina Mazzuco

Address training needs and explore synergies with any organization developing or delivering training within this scope, including building a portfolio of courses available for the relevant audiences.

WP8: OBPS 'Ocean Practices for the Decade' Coordination

Leads: Rebecca Zitoun, Aileen Tan Shau-Hwai

Coordinate the *Ocean Practices for the Decade*, an endorsed UN Ocean Decade Programme contributing to transformative Decade Actions. It supports all ocean stakeholders in securing, equitably sharing, and collectively advancing ocean research methodological heritage. By engaging diverse communities of practice across Ocean Decade Programmes it will address the major challenge of developing global consensus on how methods should interoperate and evolve into best practices .

ANNEX 6 GLOSSARY OF TERMS AND ACRONYMS

Item/ Acronym/ Abbreviation	Definition
AI	Artificial Intelligence
Best practice	A best practice is a methodology that has repeatedly produced superior results relative to other methodologies with the same objective
Convergence	Agreement on a recommendation for a common practice in the selected areas
GOOS	Global Ocean Observing System
Harmonization	Harmonisation refers to the practices which improve the comparability of variables from separate studies, permitting the pooling of data collected in different ways, and reducing study heterogeneity.
Interoperability	The ability of different systems, devices, applications or products to connect and communicate in a coordinated way, without effort from the end user. While the term was initially defined for information technology or systems engineering services to allow for information exchange, a broader definition takes into account social, political, and organizational factors that impact system-to-system performance
IOCARIBE	IOC of UNESCO Subcommission for the Caribbean and Adjacent Regions
IOOS	US Integrated Ocean Observing System
Metadata	Data that describes other data. Meta is a prefix that in most information technology usages means “an underlying definition or description.” Metadata summarizes basic information about data, which can make finding and working with particular instances of data easier; metadata may also be applied to descriptions of methodologies
OBPS	Ocean Best Practices System UNESCO/IOC
Ocean observing	
QA/QC	A combination of quality assurance, the process or set of processes used to measure and assure the quality of a

	product, and quality control, the process of ensuring products and services meet consumer expectations.
Standards	Documents of requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose. Standards are created by recognized standards organizations.
Standard Operating Procedures	A set of step-by-step instructions compiled by an organization to help workers carry out complex routine operations
Sustainability	Availability of resources and funding for keeping a system running in the long-term
Value chain	The set of value-adding activities that one or more organizations perform in creating and distributing goods and services. In terms of ocean observing, the value chain approach can be applied to consider societal benefits of observations, data, analyses and assess the value of data and information features
DTO	Digital Twin(s) of the Ocean
EOV	Essential Ocean Variables (EOVs)
IEEE	Institute of Electrical and Electronic Engineers
ISO	International Standards Organisation
Metadata	Data that describes other data. Meta is a prefix that in most information technology usages means "an underlying definition or description." Metadata summarizes basic information about data, which can make finding and working with particular instances of data easier; metadata may also be applied to descriptions of methodologies.
MMS	Methodology Management Systems
Ocean Observing	Sustained observations of the ocean to understand climate change, predict weather and extreme events, to monitor ocean health, to support nations sustainable and blue economic growth, and adaptation to climate change. Data from ocean observing supports good policy and provides an evidence base for real-time decision-making, tracking the effectiveness of management actions, guiding adaptive responses to sustainable development, and supports businesses and jobs in the marine economy.
Semantics	The meaning and interpretation of words, signs, and sentence structure; the branch of study within linguistics, philosophy,

	and computer science which investigates the nature of meaning and its role in practical applications.
Standard Operating Procedures (SOP)	A set of step-by-step instructions compiled by an organization to help workers carry out complex routine operations.
Standards	Documents of requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose.
Tagging	In information systems, a tag is a keyword or term assigned to a datum or information content entity (such as a digital image, word or phrase in an electronic document or a computer file). This kind of metadata describes an item or subitem and allows it to be found again by browsing or searching.
Trusted	Regarded as reliable or truthful; able to be depended on for an application or analyses; can also be applied to relations between organizations or people.
URI	Uniform Resource Identifier
Value chain	Can be defined as the set of value-adding activities that one or more organizations perform in creating and distributing goods and services. In terms of ocean observing, the value chain approach can be applied to consider societal benefits of the data and assess the value of data and data features.
Web Service	A Web accessible service with a documented interface
WP	Work Package

end