Intergovernmental Oceanographic Commission
Reports of Meetings of Experts and Equivalent Bodies

IODE Steering Group for OBIS (SG-OBIS)

Thirteenth Session

Bogotá, Colombia
25-27 October 2025

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Group Picture of the 13th Session of the IODE Steering Group for OBIS.

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Executive Summary

The 13th session of the IODE Steering Group for OBIS (SG-OBIS-13) took place on 25-27 October 2025, in Bogotá, Colombia, back-to-back with the Living Data 2025 Conference (see Conference take away article). The SG-OBIS meeting had 39 participants representing 20 OBIS nodes from 17 countries, the OBIS Secretariat and 2 observers from GOOS.

The meeting commenced with two days of dedicated sessions by the OBIS Coordination Groups (CGs): the Nodes Coordination Group (NCG), the Data Coordination Group (DCG), and the Products Coordination Group (PCG). These groups serve as essential mechanisms for the community to share expertise, address technical challenges, and drive organizational alignment.

The SG-OBIS endorsed the OBIS Work Plan for 2026-2027 which outlines a realistic suite of activities aligned with OBIS's strategic objectives and the broader goals of the IOC. Key planned outcomes include ensuring the continued operation of the Coordination Groups, supporting the adoption of data standards, achieving the robust deployment of the Products Catalogue, and executing a data product pilot to demonstrate OBIS's utility in informing national-scale biodiversity strategies.

The SG-OBIS also adopted a revised vision, mission, and set of objectives:

- The new vision establishes OBIS as: "A global data ecosystem for marine biodiversity that is comprehensive, integrated, inclusive and accessible, enabling sustained ecosystem services for a healthy ocean".
- The new mission is to: "Lead the coordination of effective marine biodiversity data mobilisation and deliver integrated, standardized high-quality data, information products and services to answer the needs of the global community".
- The new objectives are structured around four core pillars: Building a sustainable global marine biodiversity data infrastructure (Objective I), Supporting evidence-based ocean biodiversity policy (Objective II), Delivering operational biodiversity data services (Objective III), and Empowering communities through capacity development and collaboration (Objective IV).

These updated goals are fundamentally in line with the IOC's work plan and medium-term strategy, specifically recognizing OBIS's direct contribution to High-Level Objective 1: Healthy ocean and sustained ocean ecosystem services. Its implementation is strongly supported by strategic partnerships, such as the collaboration with the Global Biodiversity Information Facility (GBIF). At Living Data 2025, OBIS renewed its 5-year collaboration with GBIF, recognizing this partnership as vital for strengthening data systems, standards adoption, and capacity development. A survey revealed that 91% of responding OBIS Nodes interact with GBIF.

OBIS is strategically positioned to support vital policy frameworks:

- The Convention on Biological Diversity (CBD) and the Kunming-Montreal Global Biodiversity Framework (KM-GBF) reconfirmed OBIS's role, referencing it as a complementary indicator for Targets 20 and 21. The SG requested that OBIS develop robust indicators and guidelines for State Parties to utilize OBIS in their national reporting to the CBD. OBIS also provides open, standardized data to support the process of identifying and updating Ecologically or Biologically Significant Marine Areas

(EBSAs).
- For the BBNJ Agreement (High Seas Treaty), which enters into force in January 2026, OBIS offers data, tools, and expertise across all four pillars. OBIS can support national implementation by providing georeferenced species occurrence data and products (like Species Distribution Maps) to inform the design and monitoring of protected areas. Under the Marine Genetic Resources pillar, OBIS may assist in deploying a Standardized Batch Identifier (SBI) system using DOIs to ensure transparency and accountability.

The critical need for long-term sustainability was a central discussion point. The SG-OBIS welcomed opportunities to explore diversifying its funding streams and decided to establish an Intersessional Working Group (IWG) dedicated to exploring a fundraising strategy.

The strength of OBIS is rooted in its community, with emphasis placed on building capacity, awareness, and support at the node level. The NCG's 2026 work plan is ambitious, focusing on improving communication, promoting exchanges, and increasing the visibility and recognition of the OBIS Nodes and their contributions. A key initiative is the establishment of a Node-to-Node programme for mentoring and peer learning, alongside the creation of a building block-based communication toolkit designed specifically to help Nodes communicate their value to host institutions, funders, and governmental backers.

OBIS is a flagship Programme Component of IODE, recognized as the digital foundation for marine biodiversity data within the IOC digital ecosystem, supporting IOC strategic goals. Through its coordinated community effort to mobilize and manage marine biodiversity data and to generate innovative data products, OBIS translates scientific data into actionable knowledge necessary to underpin evidence-based decision-making for global conservation and the sustainable management of ocean resources.

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1. Opening of the session and adoption of the agenda

SG-OBIS Co-Chairs Mrs Katherine Tattersall and Mr Dan Lear opened the 13th session of the OBIS Steering Group, asking each OBIS Node to introduce themselves and welcomed Dr Emma Heslop (Program Specialist GOOS) and Dr Audrey Danaude (Co-Chair GOOS BioEco Panel) as observers to this session.

Dr Martha Vides welcomed all participants in the City of Bogotá. She said: “I know that many of you know my city better than I do at this point, and I hope you are enjoying it. The meeting was organised by OBIS Colombia and funded by the Institute for Marine and Coastal Research (INVEMAR), which is based in the city of Santa Marta and acts as the headquarters for the Node. INVEMAR is one of the five research institutes that make up Colombia's Environmental System (SINA). Together with the Humboldt Institute, the Pacific Institute, the Amazon Institute (SINCHI), IDEAM and National Parks, as well as regional autonomous corporations, it is responsible for providing environmental advice on decisions made in Colombia, particularly to the Ministry of the Environment. INVEMAR is responsible for conducting basic and applied research across almost 50% of Colombia's territory, which is marine. Colombia entrusts us with resources for investment in meetings such as this one, which strengthen collaboration and support in the management of marine biodiversity data. On behalf of our director, Francisco Arias Isaza, I would like to welcome you. I hope we can have a productive and comfortable meeting that allows us to continue with the important mission to which the network is committed”.

The SG-OBIS expressed their gratitude for INVEMAR in their generosity in hosting SG-OBIS-13. INVEMAR are consistently supportive of OBIS, having hosted two SG meetings in the last decade.

The SG-OBIS welcomed holding the SG meeting back-to-back with the Living Data 2025 Conference, providing the opportunity for wider visibility to OBIS and connection with other organizations like TDWG, GBIF and GEO BON.

Mrs Katherine Tattersall reminded us of the SG-OBIS ToRs:

- Propose, and revise as necessary, the vision, mission, objectives, strategies (e.g. sustainability), management structure, work plans, budgets and timetables for OBIS
- Review and respond to reports from OBIS coordination groups

- Monitor the implementation of the adopted work plan, identify any technical, scientific or capacity challenges and suggest appropriate responses
- Seek to support each other with resource mobilisation to advance the mission of OBIS together
- Report to the IODE Management Group (every year) and IODE Committee (every two years)

Mrs Katherine Tattersall explained that this SG-OBIS session will include two days of OBIS coordination group meetings, followed by a final one day formal session. Remote participation was made possible via Zoom.

The SG-OBIS adopted the agenda of SG-OBIS-13.

Mary Kennedy (19 April 1956 - 30 July 2025)

It was with sadness that we learned of the passing of Mary Kennedy on 30 July 2025. Mary showed unwavering commitment to OBIS. She was an outstanding contributor and a vivid force in the community.

"*Mary was a pioneer in OBIS Canada*," says Maria Cornthwaite, OBIS Canada Node manager and co-chair of the OBIS Nodes Coordination Group. "*OBIS Canada would not be where it stands today without Mary's contributions. She was either directly responsible for, or heavily involved in, the publication of all our datasets prior to 2020*."

Ward Appeltans, OBIS Programme Manager, remembers first working with Mary as a member of the IODE GE-BICH (Group of Experts on Biological and Chemical Data Management and Exchange Practices), the predecessor of the current OBIS Vocab working group. Ward collaborated with Mary when she was an editor for the Canadian Register of Marine Species (CaRMS), and later, when she became the OBIS Canada Node manager. OBIS Project Manager Ward Appeltans recalls that

"Mary was not only one of the most passionate marine biodiversity data persons in the world, she was also a hard worker who did not want to waste time. I remember an anecdote that tells how committed to data she was: GE-BICH needed a shared virtual workspace, so Mary got to the task and immediately created a Google site for it. She could not accept that data would stay on people's shelves. She went into her colleagues' offices, took their disks containing marine biodiversity data, and published them on OBIS. Her justification was that 'the Queen owns the government and publicly funded data, which should be accessible to all.' Nobody could object to that. Mary processed and published 126 datasets by herself to OBIS. She remains to date one of the most active OBIS data managers."

For John Nicholls, Oceans Past Initiative Node manager and co-chair of the OBIS Nodes Coordination Group, "*we have lost a wonderful ambassador for nature and humanity. Mary worked tirelessly to promote and gather crucial data, and I will always remember her active engagement with OBIS over the years*."

"*Meetings with Mary were always a pleasure, and as others have said, her energy and passion for open data were both inviting and engaging. OBIS lost one of its founding ambassadors*," says Anton Van de Putte, Antarctic OBIS Node manager.

Mary retired from Fisheries and Oceans Canada in 2013 after 35 years of service, but she didn't let retirement get in the way of her passion for sharing data. She remained active in the OBIS, GBIF, and iNaturalist communities, always ready to share her knowledge and inspire others.

You can read Mary Kennedy's obituary here[1] and a tribute from iNaturalist here[2].

2. OBIS Progress Reports

2.1. OBIS Secretariat

Mr Ward Appeltans (OBIS Programme Manager) introduced this agenda item and reminded the Steering Group that the role of the OBIS Secretariat exists to provide training and technical assistance to its network of partners (including OBIS Nodes and data providers), deliver guidance and advice on the development of new data standards and technical improvements, to encourage international cooperation, to implement the OBIS work plan, to oversee the budget, and to foster and develop the group benefits of the network.

OBIS Secretariat Office location

The OBIS secretariat is part of the IOC Project Office for IODE based at the VLIZ InnovOcean Campus in Ostend, Belgium. The Memorandum of Understanding (MoU) between the Flanders Marine Institute (VLIZ) and the IOC regarding hosting the IOC Project Office for IODE is scheduled to expire on 31 December 2026. The renewal of this crucial agreement was formally endorsed by the IODE Committee (Recommendation IODE-XXVIII.6.3), and based on the positive results of the Project Office review, and conditionally upon the Government of Flanders agreeing to continue hosting, the IOC Assembly (Decision A-33/3.4.2, Section IV) decided that the IOC Project Office for IODE should be continued and the MoU between IOC and VLIZ be renewed. This renewal is fundamentally vital for OBIS. OBIS is recognized as a flagship Programme Component of IODE and relies heavily on the Project Office (PO) for its successful development and hosting. The Project Office provides essential support to the IOC data ecosystem through OBIS, ODIS, and OTGA, ensuring the continuous and stable hosting and

[1] https://www.dartmouthfuneralhome.ca/obituary/mary-kennedy
[2] https://forum.inaturalist.org/t/in-memoriam-mary-kennedy-mkkennedy/68908

development of key services like OBIS. The sustained funding from the Government of Flanders over the past 20 years has been critical to the development of the Project Office, enabling OBIS to advance critical international work.

The SG-OBIS thanked the Flanders Government for hosting the OBIS secretariat since 2012 and stressed that the renewal of the host agreement between Flanders and IOC is important for the continuation and success of OBIS.

2.1.1. Staffing

The OBIS Secretariat currently has 11 employees: one UNESCO permanent post, two project appointments, seven consultants and one part-time admin assistant. There is also one unfilled UNESCO permanent post (technical and scientific coordinator). The OBIS secretariat team positions are currently:

- OBIS Manager: covered by UNESCO-IOC regular programme
- OBIS Data Manager: covered by EU project DTO-BioFlow and eDNA expeditions
- OBIS Community Engagement Officer: covered by eDNA expeditions, IODE RP and OBIS special account
- OBIS Training Officer: covered by EU BioEcoOcean
- OBIS Researcher/Modeller: covered by EU project MPA Europe
- OBIS Data Officer: covered by EU project MARCO-BOLO
- OBIS eDNA Science Officers (2): covered by EU projects MARCO-BOLO, eDNAquaPlan and eDNA expeditions
- OBIS Stakeholder Engagement Officer: covered by EU project MARCO-BOLO
- OBIS BiOES officer: covered by FUST BiOES small scale activity
- Admin support officer (part-time): covered by Flanders Government via host agreement.

OBIS Technical and Scientific Coordinator
At a request from the IOC Assembly, an IOC Regular Programme (P3 level) post “OBIS Technical and Scientific Coordinator” was created and the vacancy advertised on 25 January 2024. This position is considered critical to ensure the continuation and success of OBIS beyond 2024. Unfortunately, the recruitment process is currently still on hold. The UNESCO Director-General decided not to proceed with the appointment of the proposed candidate and currently no jobs are being advertised until the new UNESCO DG is onboard (after November 2025).

To mitigate the immediate impact, the IOC Executive Secretary found a temporary solution to cover the salary of the OBIS Data Manager with extra-budgetary resources until the end of 2025. For 2026, we need to cover this core position with funding from OBIS-led projects.

The IODE Committee (IODE-28, March 2025) regretted the delay in filling this critical OBIS position and called on the IOC Executive Secretary to start a new call before the end of 2025, with a new recruitment expected to be started during the second semester of 2026.

The IOC Assembly (Resolution A-33/3, Section III, June 2025) addressed persistent staffing difficulties, noting with concern that previous decisions aimed at stabilizing IOC functions like IODE and OBIS, including human resources, have not been fully achieved. This failure is primarily due to the IOC not being able to fill established posts, which consequently slows the execution of the IOC programme. The IOC Assembly stressed the importance of ensuring the recruitment of technically competent staff suited for interaction with expert communities, and urged the Director-General of UNESCO to delegate the authority to the IOC Executive Secretary to manage recruitments and select staff for IOC.

The SG-OBIS stressed the importance of re-opening the recruitment of the OBIS data manager position as soon as possible. The lack of a stable technical position in the OBIS secretariat is a serious risk and one that we cannot afford with the growing demand on OBIS to deliver critical services and support to the ocean community.

To increase the financial situation of OBIS and improve its mid-term sustainability, and provide support to the OBIS Community, such as travel support to ensure full participation in OBIS meetings, Mr Laurent Chmiel proposed to develop a fundraising strategy. To maximize efficiency and diversify the financial stream sources, a strategy could be built around a 3-year multi-donor approach. Each donor would contribute 20-40K€ per year for three years. To avoid misalignment with OBIS's mission or interference in its objectives, the funds are earmarked for specific use. The process is traceable and transparent: each year, OBIS publishes a donor report on the supported activities.

The SG-OBIS welcomed opportunities to explore the capacity to diversify the funding available to OBIS.

The SG-OBIS decided to establish an IWG to explore a funding raising strategy and report back to the SG. The following nodes expressed interest (in addition to the OBIS secretariat): IndOBIS, OBIS Colombia, Caribbean OBIS, OBIS-UK, AntOBIS, OBIS Australia, OBIS Deep Sea, OBIS OPI, OBIS Japan, OBIS Brazil.

2.1.2. Communication and outreach

Mr Laurent Chmiel (OBIS Community Engagement Officer) introduced this agenda item with summary slides available here[3]. Mr Chmiel presented an overview of the 2025 OBIS communication strategy[4]. This strategy supports the current OBIS work plan and will be revised based on the outcomes of the discussions at OBIS SG-13.

The current OBIS Communication strategy was established in April 2025. It is structured around the OBIS Vision and Mission, as well as four objectives:

[3] https://oceanexpert.org/document/37384
[4] https://oceanexpert.org/document/37385

1- Enhancing OBIS visibility and credibility as both a provider and a community;
2- Expanding data contributions to OBIS;
3- Securing sustainable funding;
4- Attracting strategic collaborations.

These objectives aim to achieve three main outcomes:

1- OBIS is perceived as a trustworthy source of marine biodiversity data,
2- OBIS is recognized for fostering strong stakeholder relationships,
3- OBIS is viewed as an infrastructure with real-world impact.

The strategy serves as guidelines to ensure that all voices within the OBIS Community are represented and visible, that its achievements reach the right audiences, and that, as a whole, the Community receives the recognition it deserves. The strategy also ensures that OBIS appears as a cohesive organization, with a coherent and harmonized tone of voice, a coherent visual identity across all that supports a clear and coherent messaging.

Mr Chmiel presented the communication performance metrics, noting that the OBIS website recorded 11,5M sessions and 60M event counts between October 2024 and October 2025. He highlighted that these numbers are mostly organic, with residual communication influence. On social media, LinkedIn is by far the leading platform, with 3,581 followers (+78.5% from February 2025). LinkedIn is the platform where the most engagement happens for OBIS, with a very qualified audience. X remains stable at 2,538 followers (+3.4% from February 2025). The engagement on Instagram, Bluesky, and Mastodon remains modest, with 225 followers (+11.4% from July 2025), 180 followers (+30.4% from July 2025), and 24 followers (+166.7% from July 2025). Maintaining engagement on these platforms requires a lot of resources and time, but it is essential that we reach out to audiences that would otherwise remain out of scope. There are a lot of opportunities for development on Mastodon and Bluesky, with potential cooperation tracks with more established organizations and within the IOC.

Mr Chmiel presented samples of the communication assets and production deployed on the OBIS channels from October 2024 until today. He noted that this year has been experimental, with the implementation of new tools (Discourse) and the exploration of innovative messages, assets, and media, culminating in the communication effort at Living Data 2025.

Mr Chmiel presented seven next steps and improvement tracks for the OBIS communication:

1. Updating the communication strategy with the latest insights from the SG-13 and the answers from the OBIS Nodes Annual Activity Report, with a focus on making the Nodes and the OBIS Community more visible.

2. Develop the OBIS stakeholder map, with the support of the Nodes. For practical reasons, Mr Chmiel highlighted that the exercise will, most likely, be online and asynchronous. It should be

completed by Q2 2026.

3. Develop the OBIS Annual Impact Report to highlight OBIS contributions at all scales, from local to global, and emphasize the role and contribution of each Node in the organization's achievements. Mr Chmiel expressed that this report can only be achieved with the help of the Nodes in providing the needed information. The content of the report will be shaped and established in consultation with the Nodes in an asynchronous manner.

4. Develop an OBIS Node Communication kit to support the Node delivering messages to their funders, host institutions, and governmental backers.

5. Produce more Node-focused content for outreach: stories behind datasets, on campaigns and surveys, achievements from the Nodes, and more. Again, Mr Chmiel noted that this content can only exist in full cooperation with the Nodes.

6. Produce a series of community portraits highlighting individuals from Node staff and emphasizing their role and contributions. As for the point above, this can only be made possible in full cooperation with the Nodes and their staff.

7. Reorganize the communication channels to support Deliverable 3.3 of the Nodes Coordination Group, with a focus on offering the Nodes the most practical possible approach.

Finally, Mr Chmiel closed his presentation by proposing to refresh OBIS branding. He explained the benefits for OBIS to boost its image, and underlined the strategic importance for OBIS to increase its desirability as an organization and a brand, beyond its scientific accomplishments. These benefits include increased potential to attract private funders, the possibility to create new streams of revenue, and the increased potential for partnerships beyond the scientific field. Mr Chmiel also emphasized that a clear branding is a great carrier for strategic messages and potentially increases impact while reducing effort.

The SG-OBIS commended the OBIS Community Engagement Officer for elevating OBIS communications and engagement activities onto a more professional footing.

The SG-OBIS welcomed the evolution of the OBIS Communication Strategy and requested periodic updates on its implementation.

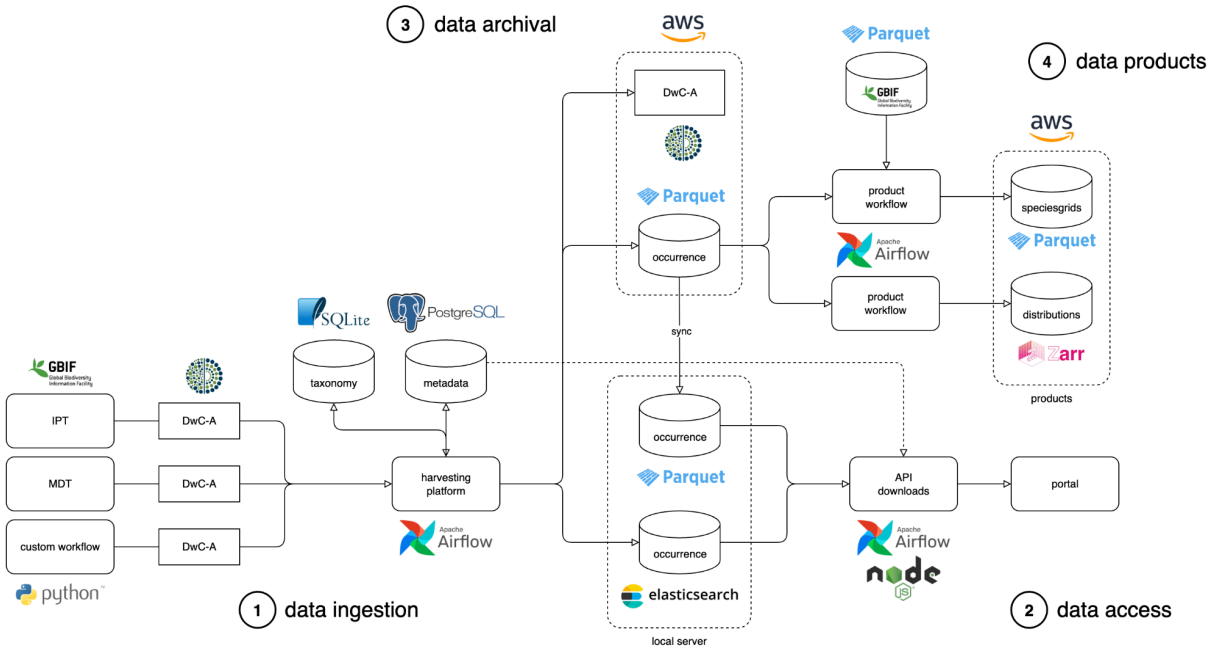
2.1.3. Technical developments

Mr Pieter Provoost, OBIS Data Manager, introduced this agenda item. A new OBIS website has been developed. This is again a Jekyll based static website for news and content, combined with a new Python based backend for the dynamic pages of the data portal. Both are combined in a single repository with a Docker configuration for easy development and deployment. Some new features include:

- Tags are now functional, this allows for example to create thematic pages or list all posts related to a project on the project's page (e.g., https://obis.org/projects/dto-bioflow/).
- The dataset search returns more relevant results and also supports boolean operators.
- The maps have been refreshed and now show record numbers and bathymetry. The maps use custom tilesets served from the OBIS web server that have been created from OpenStreetMap and GEBCO data. An explore button has been added to dive deeper into the occurrences within the current viewframe.
- Statistics on data quality have been moved to a separate tab to avoid overwhelming the user with numbers.
- The Explore page allows exploring occurrences for any set of filters, including a text search which can be used to find various identifiers such as catalogNumber, materialSampleID or organismID.

A mechanism has been created to request a DOI for a subset of OBIS data through the portal. DOIs are currently created as draft and still need to be approved by secretariat staff. Links to the underlying datasets are preserved in the DOI metadata. A demo video is available here: https://bit.ly/obis-doi-demo.

The technical architecture of the OBIS platform has been thoroughly revised. The PostgreSQL database is no longer used for storing occurrence data, but just for metadata and metrics. Instead, we now have GeoParquet based data storage in addition to the existing Elasticsearch index. Some benefits are simplicity, faster downloads, and no more need for monthly exports: the full OBIS dataset can now be downloaded for local analysis from AWS, for example for product creation. As we have successfully applied for AWS Open Data sponsorship, there are no costs for storage or retrieval. Versioning is currently not enabled in S3, but this could offer a solution for data archiving and snapshotting. Silas Principe is developing tutorials explaining how to use the Parquet dataset at https://resources.obis.org/.



In addition, we are now using a local copy of WoRMS for taxon matching as the previous API based matching was a bottleneck in the processing of incoming datasets.

Dataset tagging has been implemented. For example, https://rs.obis.org/obis/vocabulary/DatasetType/EnvironmentalDna can be used as a search term for finding eDNA datasets or records (not just datasets with DNADerivedData extension) on the portal, through the API, or in the Parquet dataset. Automated tagging needs to be further developed.

The flow of non-matching names to WoRMS has been deblocked.

Work on QC tools for eDNA data is ongoing, see: https://oceanexpert.org/document/37371.

The SG-OBIS thanked the OBIS data manager for his presentation and congratulated the Secretariat on the impressive progress on technical developments made over the last year. The design and function of the refreshed OBIS website provides improved clarity and additional features that will be of great benefit to OBIS and the wider community.

2.1.4. Projects

The OBIS secretariat staff reported on progress achieved in the various projects with a focus on the deliverables finalized or under development. An introduction to each project is available from the meeting report[5] of the previous SG meeting.

[5] https://obis.org/2024/05/30/sgobis12/

MARCO-BOLO

Steve Formel reported on the MARCO-BOLO project on behalf of the Secretariat

- Delivery (co-author) of the Deliverable 1.1 'Joint Data and Information Management Plan with Key External Partners' which highlighted and linked to the importance of storing project outputs in an appropriate repository (ie OBIS), using appropriate (meta)data standards and adoption of existing IODE architecture to facilitate data discovery via ODIS.
- Delivery (co-author) of the Deliverable 2.1 Final report on meta-analysis of the performance of eDNA-based approaches and associated optimal diversity indices for biodiversity observations. Version 1.0 was delivered on the 25th of November 2024, and a major revision (Version 2.0) was delivered on the 30th of September 2025. This version is currently under review by the European Commission. The OBIS contributors were mainly involved in the review of eDNA methods to measure Essential Biodiversity Variables (EBV) and Essential Ocean Variables (EOV).
- Delivery (lead author) of Deliverable 6.2 Three co-design/co-creation/stakeholder consultation workshop reports, with recommendations/decisions for the project workplan, including alignment with IODE standards and systems. This report summarizes the results of three co-design/co-creation/stakeholder consultation workshops (oversaw by OBIS Sec staff) held between technical partners and representatives of the wider marine biodiversity observation community (e.g., policy makers, European Regional Sea Conventions, national authorities, academics and researchers, etc.). During the workshops efforts were made to: increase awareness and demonstrate the value of EOVs as a complement to EBVs; stress the importance of using and measuring EOVs to harmonize data collection and storage in open repositories like OBIS to facilitate reporting to EU and international legal frameworks; present the Seagrass cover and composition EOV as a use case; connect platforms like the EBV Data Portal of GEO BON to open databases like OBIS; discuss the value of novel observation approaches such as eDNA for established biological indicators; recommend that deposited datasets be assigned DOI's that can be linked to ODIS, etc. A relevant conclusion was the need for more case studies/use cases to illustrate robust pipelines and workflows from raw data to EOVs/EBVs to biological indicators.
- Initiated by the OBIS Sec to increase awareness and understanding of EOVs, MARCO-BOLO, in consultation with GOOS and GEO BON/MBON, developed and designed a series of infographics about GOOS Essential Ocean Variables (EOVs)[6], with a focus on GOOS Biology and Ecosystems EOVs and Essential Biodiversity Variables (EBVs) managed by the Group on Earth Observations Biodiversity Observation Network (GEO BON).

eDNAquaPlan

Emilie Boulanger reported on progress on behalf of the Secretariat

- Organisation (lead) of the Milestone 6 Workshop for conceptualising and writing on the eDNA data ecosystem. Held online on the 5th of February 2025, and brought together eDNA experts and stakeholders - mainly within the eDNAqua-plan consortium - to

[6] https://goosocean.org/document/36676

conceptualize and improve the eDNA data ecosystem. The proceedings were published to Zenodo at 10.5281/zenodo.14967993.

- Delivery (lead author) of the Milestone 7 Report: The eDNAqua-Plan conceptual landscape proposal v1 on the 30th of April 2025. This was revised after receiving feedback from the use cases (WP4) and published to Zenodo on the 18th of July 2025 at 10.5281/zenodo.16090824.
- Co-organisation of the Milestone 14 Blueprint workshop which was held online on the 8th and 9th of October 2025. This workshop invited stakeholders of the eDNA data landscape - outside of the consortium - to review the landscape assessment and proposal for a future landscape. The Milestone 6 and 7 landscape proposal above formed the bases for this workshop, and its outcomes will help define the Blueprint for the future landscape.

MPA Europe

Silas Principe reported on the project on behalf of the Secretariat.

The Horizon Europe project MPA Europe is applying systematic conservation planning to map a network of marine protected areas (MPAs) that maximize biodiversity protection across Europe. As a project partner, OBIS contributes essential biodiversity information that is key to the prioritization process. Our involvement in the project is providing direct benefits to the OBIS community, such as:

- New data have been ingested into OBIS and included in the OBIS network (https://zenodo.org/records/8096273).
- Development (lead) of global-scale species distribution models (SDMs) for more than 12,000 marine species occurring in Europe, using recent climate scenarios (Shared Socioeconomic Pathways). This work involved the creation of data-cleaning and modelling pipelines, which will serve as the foundation for future global OBIS SDMs. The resulting range maps will potentially support various applications, such as identifying data gaps, assessing invasive species potential, and quality control of eDNA results, among others. All pipelines are fully reproducible and openly available for further development (https://zenodo.org/records/10058739, https://zenodo.org/records/10422129, https://iobis.github.io/mpaeu_docs/, https://github.com/iobis/mpaeu_sdm).
- Development of a dedicated application to explore all models in detail (https://shiny.obis.org/distmaps, https://zenodo.org/records/14524781). This experience contributed to the creation of the eDNA expeditions dashboard and is expected to support future dashboard developments within OBIS.
- Extensive participation in stakeholder meetings, consistently promoting awareness of the importance of sharing biodiversity data through OBIS (some reports available at https://zenodo.org/communities/mpaeurope/records).

DTO-BioFlow

Pieter Provoost reported on the project on behalf of the Secretariat.

- The DTO will ingest the full OBIS dataset as Parquet from AWS, so new data could be available in the DTO within the hour. We also have a combined OBIS/GBIF dataset (speciesgrids) which will be pushed to the DTO and updated on a monthly schedule (as we use the monthly exports from GBIF and WoRMS).
- A STAC catalog has been prepared for the technical connection to the DTO, we are working with the DTO infrastructure team to make some final adjustments.
- We will be using the same workflow to push the SDMs developed by Silas Principe to the DTO.
- OBIS and MBA working on eBird and iNaturalist marine subsets for the DTO.

BioEcoOcean

Elizabeth Lawrence reported on the project on behalf of the Secretariat.

- Delivery (co-author) of Deliverable 2.3 Updated BioEco EOV Specification Sheets, on 16th of May, 2025. OBIS Secretariat led the development of data guidelines for EOV data in collaboration with ODIS. GOOS is leading further revision to finalize the BioEco EOV Specification Sheets with the BioEco Panel. The data guidelines are provided as a living appendix, available online.[7]
- Development (lead) of an EOV Metadata and Data Application[8] to facilitate metadata additions to the BioEco Portal using ODIS-Architecture formats (JSON-LD), associated with D4.5 (due Oct 2027) Improved observing and reporting capacity for BioEco EOVs, ECVs and EBVs.

PacMAN (2020-2024)

There was no verbal report as the project was completed.

The Pacific Islands Marine Bioinvasions Alert Network (PacMAN) project, funded by the Flanders Government through the UNESCO-Flanders Trust Fund for Science, has delivered a fully operational and transposable framework for the early detection and management of marine invasive species. PacMAN has enabled the translation of eDNA data into actionable insights for local managers through the development of an OBIS-supported bioinformatics pipeline and a user-oriented decision-support dashboard.

PacMAN bioinformatics pipeline (https://github.com/iobis/PacMAN-pipeline):

- A robust, OBIS-supported sequencing and analysis pipeline to process eDNA data and detect marine invasive species.
- Incorporates data synchronisation with the World Register of Introduced Marine Species (WRiMS) and OBIS for risk assessment and validation.

PacMAN decision-support dashboard (http://portal.pacman.obis.org):

- An interactive, user-friendly platform allowing local managers and researchers to visualise, interpret, and act upon eDNA results.Features include:
    - Real-time species detection and validation.
    - Integration with WRiMS distribution data and OBIS-derived thermal niches.

[7] https://iobis.github.io/eov-data-management/
[8] https://eovmetadata.obis.org/

- Tools for pest status updates and note-taking by registered users.

eDNA Expeditions (2021-2024)
There was no verbal report as the project was completed.
The UNESCO eDNA Expeditions project was funded by the Flanders Government through the UNESCO-Flanders Trust Funds for Science and Culture. Through a combination of molecular analysis, citizen engagement, and data visualisation via the OBIS-designed UNESCO eDNA Expeditions Dashboard, the project demonstrated an effective, inclusive, and scalable approach to science-based ocean monitoring. Concretely it delivered:

- Comprehensive global eDNA dataset on OBIS:
    - 396 samples collected from 21 marine World Heritage sites in 19 countries, generating over 600 million DNA sequences. Analysis (using the PacMAN bioinformatics pipeline) identified 450,000 unique DNA sequences, corresponding to 4,400 marine species, including 86 sharks and rays, 28 marine mammals, and 3 turtle species. See all datasets in OBIS : https://obis.org/search?q=edna+expeditions

- Development of a dedicated online data platform eDNA Expeditions Dashboard (https://dashboard.ednaexpeditions.org/) featuring:
    - Visual, layered interfaces for educators, scientists, and policymakers.
    - Interactive maps, thermal stress indicators, and biodiversity summaries.
    - Open Science-based accessibility and usability across stakeholder groups.

The SG-OBIS welcomed the range of projects that OBIS are actively engaged with, recognising the importance of the projects in funding strategic development.

The SG-OBIS requested the OBIS Secretariat to set up a mechanism to support regular reporting of project aims and outcomes to ensure alignment with the OBIS workplan.

2.2. OBIS Executive Committee

Mr Dan Lear reminded SG-OBIS of the Terms of Reference of the OBIS Executive Committee (OBIS EC) which consists of Current and Former SG Co Chairs, the Co-Chairs of the Coordination Groups and those of the OBIS Secretariat that support the Coordination groups, is to:

- Support the secretariat and assist with the management of OBIS.
- Address issues that arise intersessionally.
- Work with the Secretariat to draft documents, monitor the work plan, and otherwise ensure that the work of the Steering Group and Coordination Groups progresses.

- To monitor the implementation of the adopted work plan, identify any technical, scientific and capacity challenges and suggest appropriate responses.

During the inter-sessional period, the OBIS EC met twice, once in person and once online:

- OBIS-EC-6, 14-16 October 2024, in Oostende, Belgium. Report[9]
- OBIS-EC-7, 14 and 23 July 2025, online. Report[10]

During the inter-sessional period, the OBIS SG Co-Chairs represented OBIS at several meetings:

- Workshop on the BBNJ Batch Identifier, 13 July, 2024, London, UK
- 28th Session of the IODE Committee, 12-14 March 2025, Santa Marta, Colombia
- One Ocean Science Congress, 9-13 June 2025, Nice, France
- Australian Marine Science Association Conference, 13-17 July 2025, Melbourne, Australia
- International Data Week 2025, 13-16 October 2025, Brisbane, Australia
- Datos Vivos/Living Data 2025, 21-24 October 2025, Bogotà, Colombia
- Signing OBIS-GBIF Letter of Agreement, 23 October 2025, Bogotà, Colombia

28th Session of the IODE Committee

The OBIS Co-Chairs attended and represented OBIS at the 28th Session of the IODE Committee (12-14 March 2025, Santa Marta, Colombia). As one of the three IODE programme components (together with ODIS and OTGA), OBIS plays a pivotal role and is the central digital foundation for marine biodiversity data supporting IOC strategic goals.

The IODE Committee approved the OBIS 2025 work plan and expressed its appreciation to the OBIS community for the significant progress in mobilising and sharing biodiversity data and capacity development efforts.

The IODE Committee also thanked OBIS for setting a new priority strategy and management structure to align itself with the new Rules of Procedure for IODE Programme Components, including the creation of the Data Coordination Group (DCG) and the Products Coordination Group (PCG). Noting that OBIS was the only IODE Programme Component that reported on progress in aligning its management structure with the new IODE Rules of Procedure.

The IODE Committee also thanked OBIS for revising its guidelines for data sharing and use within OBIS to align itself with the new IOC Data Policy and Terms of Use (2023).

The IODE Committee also welcomed OBIS's commitment to internal and external collaboration such as :

[9] https://obis.org/2024/11/22/obis-ec6-report/
[10] https://obis.org/2025/09/02/ec7-report/

- The collaboration with the Global Biodiversity Information Facility (GBIF), noting this will increase the size of the network and capacity for high-quality data about marine and coastal biodiversity.
- The interoperability of OBIS with ODIS and the IOC Data Architecture. OBIS is recognized as a foundational component of the IOC Data Architecture, operating as an existing ODIS Node, required to establish mechanisms to detect, identify, validate, and relay metadata relevant to GOOS BioEco EOVs, de facto becoming a GDAC for BioEco EOVs.
- The collaboration between IODE and GOOS, specifically involving the BioEco panel and OBIS, to develop a GOOS Biodiversity Plan.
- The collaboration with the OceanTeacher Global Academy (OTGA) in developing and delivering OBIS training activities.
- The IODE Committee urged OBIS to actively participate in the IOC-Wide Strategy on Sustainable Ocean Planning and Management (SOPM), which is expected to leverage OBIS.
- Collaboration with IOC Regional Networks: The IOCARIBE region requested to explore options for further cooperation with OBIS during the 2026–2027 biennium, including the development of a regional OBIS network and IOCAFRICA requested support for an eDNA training course.
- WDS Collaboration: The IODE Committee recommended that the World Data System (WDS) and IODE collaborate to demonstrate the value of their federated data systems, specifically mentioning ODIS and OBIS.

The IODE Committee commended OBIS's leadership in specific projects:

- The successful implementation of the eDNA Expeditions project, and partners were encouraged to collaborate with OBIS and share DNA-derived species occurrence data with OBIS to enhance global monitoring.
- The successful implementation of the PacMAN project building local capacity and developing an early-warning system for marine invasive species in the Pacific Islands, primarily in Fiji and recommended that its results and developed practices should be used as examples for similar projects by Member States.

The IODE Committee explicitly welcomed the mention of OBIS in the CBD's Kunming-Montreal Global Biodiversity Framework (GBF).

The IODE Committee expressed concern that the recruitment process of the P-3 regular programme post for the OBIS Data Manager is currently on hold due to a UNESCO Director-General decision and requested the IOC Executive Secretary to restart the new call before the end of 2025.

The SG-OBIS welcomed the OBIS EC progress report and thanked the Co-Chairs for representing OBIS at a wide range of important meetings.

The SG-OBIS reiterated the importance of re-opening the recruitment of the OBIS data manager position as identified in the OBIS staffing agenda item.

2.3. IWG-SG-OBIS-Membership

Katherine Tattersall reported that the IWG-SG-OBIS-Membership (established at SG-OBIS-12) met on 29 August 2025 to focus on developing a plan to define the constituency of the OBIS Steering Group (SG) when the number of interested nodes exceeds the mandated limit. The core discussion revolved around the tension between adhering to the new SG-OBIS Terms of Reference (TORs)—which prescribe a reduced SG size of up to 16 seats for OBIS nodes—and achieving global equity and geographic balance in participation.

Key Issues Discussed:

- Funding and Attendance Model: A major concern was the current funding scenario and its impact on the TORs. While mandatory in-person attendance can be used to leverage funding for some nodes, the lack of available funding currently forces reliance on hybrid attendance to increase equity.
- Geographic Equity Challenges: The group noted the critical need for global equity, recognizing that geographic representation is key for diversity potentially requiring explicit inclusion in the TORs (e.g., representation from each ocean basin).
    - An analysis of UN Regional Group representation shows a severe current imbalance: the African Group has only 2 OBIS Nodes and the Eastern European Group has only 1 OBIS Node, compared to 15 Nodes in the Western European and others Group, 9 in the Latin American and Caribbean Group and 9 in the Asia-Pacific Group.

Discussion touched upon balancing the involvement of the "active voice community" (those who are currently doing most of the work) with the need for international representation mandated by OBIS's status as operating under a UN body.

The IWG-SG-OBIS-Membership felt that under the current circumstances it will be difficult to implement the ambition of having a reduced Steering Group (with 16 seats for nodes) and at the same time ensure equity in geographic balance. We still have a severe under-representation of OBIS Nodes in the following UN regional groups: the African Group (2 OBIS Nodes) and the Eastern European Group (1 OBIS Node). In addition, the lack of travel funds to support participation of Nodes in those regions and those in developing countries, will not allow us to reach geographic balance in meeting attendance; hybrid attendance is currently considered an adequate second-best solution for the interim.

The IWG-SG-OBIS-Membership proposed that the membership of the SG-OBIS (decision at SG-OBIS-12) is currently an aspiration to work towards including attaining the position that OBIS has sufficient funds to support equal participation and that the OBIS network has

members across all regions in the world. Hence we feel that it is prudent to postpone the decision to propose a selection process and implement the reduction at this stage.

The SG-OBIS recognised that membership of SG-OBIS, as agreed at SG-OBIS-12, will remain aspirational until adequate funding and geographic node coverage is available to ensure equal participation.

2.4. OBIS Coordination Groups

Dan Lear informed the SG-OBIS that each of the OBIS Coordination Groups held meetings with the full reports available in Annex.

2.4.1. OBIS Nodes Coordination Group

In its first year of existence, the Nodes Coordination Group (NCG) reported a series of collective successes, highlighting the commitment and dedication of the OBIS Community. A few key metrics highlight these achievements, including an average of 51 participants across the six meetings (in twelve sessions) organized by the NCG between October 2024 and September 2025, and publication of four OBIS Pulse newsletters. More importantly, the engagement of the OBIS Community is demonstrated as a joint effort across OBIS Nodes to improve crucial collaboration areas, from communication to capacity development and funding. A “Year in Review", with insights drawn directly from the *OBIS Nodes Annual Activity Report 2025 (unpublished)*, included as an annex, demonstrates the collective successes of the OBIS node network. The report shows that despite structural disparities in funding or staffing, the Nodes, as a community, are determined to advance data mobilization and contributions to OBIS. An upcoming Node-to-Node programme is a testimony to that strong drive to collaborate.

Progress on 2025 NCG Deliverables:

Activities	**Status**
Nodes Coordination Group meetings: the NCG should organise at least 5 coordination meetings between November 2024 and October 2025.	The NCG has held six dual-session meetings between November 2024 and September 2025.
Meeting attendance: Percentage of Nodes attending each meeting between November 2024 and October 2025.	51 participants on average across six meetings and 12 sessions between November 2024 and September 2025.
Participant engagement: Number of questions asked by meeting participants between November 2024 and October 2025.	This KPI is difficult to track, but the engagement during the NCG meetings has been very high.
Flash Talks attendance: number of views per Flash Talk between November 2024 and October 2025.	The Flash Talks were attended by 51 viewers on average

Wiki users: number of Wiki monthly users between November 2024 and October 2025.	The Discourse board has 35 users.

NCG Workplan for 2026

The NCG work plan for 2026 (see chapter 5 of this report) illustrates the expectations of the OBIS Nodes, with a much broader scope than its predecessor, echoing the needs and aspirations of the OBIS Community. Based on feedback, experience, lessons learned from the previous work plan, and insights from the workshop on day 1 of the SG-OBIS "*Tackling systemic & common challenges"*, the plan captures requests for improvement in three crucial areas:

- Improving the communication and promoting exchanges between OBIS Nodes and between the OBIS Nodes and the Secretariat
- Improving the visibility of the OBIS Nodes and the recognition of their contributions
- Improving capacity among OBIS Nodes.

The 2026 NCG work plan is ambitious, and its success relies on the OBIS Nodes' effective collaboration and continued willingness to work together as a community.

The NCG deliverables and KPIs are described in the OBIS Workplan for 2026.

The full NCG report is available as Annex 1.

The SG-OBIS warmly thanked the NCG Co-Chairs, secretariat and participants for providing an important mechanism for all Nodes to share knowledge, challenges and successes.

The SG-OBIS welcomed the development of the 2026 workplan.

OBIS Community Hero Award 2025

At the conclusion of the NCG meeting, the SG Co-Chairs Katherine Tattersall and Dan Lear presented for the first time a number of OBIS Community Hero Awards to Nodes in our network:

"We now reach a very special moment in our OBIS story - the presentation of the first ever *OBIS Community Hero Awards*. We are delighted to have been asked to deliver these awards, which celebrate the dedication, generosity, and collaborative spirit that define our community.

The establishment of the Node Coordination Group has been a real step-change for engagement across OBIS. It has created a space where ideas, expertise, and support can flow between nodes and regions. And it provides the perfect forum to reflect on our shared achievements - and to recognise a number of colleagues who have gone above and beyond in their commitment to this network and to open ocean biodiversity data.

These *Community Hero Awards* are about people - those who, through their daily work and quiet persistence, strengthen the foundation of OBIS. They are data managers, educators, and scientists who ensure that knowledge is shared, standards are advanced, and connections are strengthened across regions and generations.

This year, we have **six awards** to announce. The nominations came from across our node community and from the OBIS Executive Committee - and I should take a moment, thank our Executive Committee members for their guidance, energy, and support of this initiative. Together, they have helped identify individuals who exemplify what it means to be part of the OBIS community - people who make collaboration possible and easier and who remind us that the strength of OBIS lies not in its systems or databases, but in its people. So today, as we celebrate six outstanding contributors, we also celebrate the collective achievement of OBIS itself - a global partnership that continues to grow, evolve, and inspire.

Each of our awardees embodies the spirit of open science and the belief that shared data can drive better understanding and stewardship of the ocean. Their work - from regional leadership and capacity building to advancing standards and data mobilisation - represents the very best of what our community can achieve together.

Awardees:

Martha Vides
I am honoured to present this award to **Martha Patricia Vides Casado**, a marine biologist with nearly 30 years' experience, working at INVEMAR in Santa Martha, Colombia. Martha has served as OBIS Co-Chair and is the current OBIS Colombia Node Manager. She has been instrumental in strengthening regional and global OBIS coordination, and championing inclusivity and capacity building across Latin America and beyond. Our meeting today, and over the next couple of days, has been organised by Martha and with financial support from INVEMAR, which demonstrates her incredible commitment to the work that OBIS achieves.

Yi-Ming Gan
This award recognizes **Yi-Ming Gan**, a data manager and data engineer who has been tirelessly active in OBIS as a core team member of Antarctic OBIS. Ming has co-authored and led OBIS data-quality and data-model efforts and is a key figure in our collaboration with GBIF and TDWG. Ming's technical leadership in standards, data quality and FAIR data practices - and willingness to share expertise with the community - have been vital to OBIS's ability to deliver trusted biodiversity data. Her consistent good advice and expertise in the field are invaluable

Carolina Peralta
We proudly recognise **Ana Carolina Peralta Brichtova**, Caribbean OBIS Node Manager, researcher, and educator with strong links to a wide range of regional institutions. Through her leadership in building OBIS-LAC connections and advancing regional biodiversity data mobilisation, she has strengthened collaboration and capacity across the Caribbean and Latin America.

Leen Vandepitte
We are very pleased to acknowledge **Leen Vandepitte**'s long term commitment to aligning OBIS taxonomy with global standards. As the coordinator of the World Register of Marine Species (WoRMS), Leen has greatly improved the accuracy, consistency, and usability of species identifiers within OBIS data. The WoRMS taxonomy underpins OBIS data publishing and has been a key to our success in providing a reliable and standardised global dataset. Her dedication to quality and collaboration ensures that OBIS remains a trusted source of marine biodiversity information worldwide.

Ei Fujioka
We are honoured to acknowledge **Ei Fujioka**, data manager of OBIS-SEAMAP. Quiet in temperament but powerful in impact, Ei Fujioka has published an extraordinary ~1,200 datasets to OBIS, vastly enriching global marine biodiversity data coverage. He is a Research Scientist at the Marine Geospatial Ecology Laboratory (MGEL), Duke University, where he leads technical development of OBIS-SEAMAP's data architecture, mapping tools and visualisation workflows. Ei was the developer of the OBIS website and mapper which ran from 2010 to 2017, and therefore was instrumental in OBIS. His leadership has supported data integration of marine mammals, seabirds, sea turtles, rays and sharks into a globally accessible platform.

OBIS Node Acknowledgement: OBIS Black Sea Node
Last, but not least we want to recognise the ongoing commitment of the OBIS Black Sea node. Despite incredibly difficult and adverse circumstances in the region, the Black Sea Node has continued to mobilize and share marine biodiversity data, maintain node services, and support the Black Sea ocean biodiversity community — an inspiring example of resilience and commitment to OBIS's mission."

The SG-OBIS warmly joined in congratulating the inaugural *OBIS Community Heroes* — and in celebrating the collaboration, generosity, and curiosity that make OBIS such a remarkable global family.

2.4.2. OBIS Data Coordination Group

Ruben Perez, DCG co-chair, reported to the OBIS SG that DCG progress on its 2025 workplan has been maintained, with deliverables organised as focused work packages led by self-nominated members. Seven online DCG meetings were held, with notes being compiled for publication in an OBIS-owned public repository, and available online - once set up. Progress on Essential Ocean Variable (EOV) publication guidelines advanced through collaboration with the GOOS BioEco Panel, with responses received for eight of thirteen EOVs, highlighting the need for further creation of data schemas to enable automated transformation into Darwin Core for integration into OBIS. 100% of the OBIS nodes were surveyed on their engagement in external initiatives, showing strong participation with initiatives like GBIF and TDWG emphasizing the relevance of bringing back to the DCG the insights that these members gather in those

networks to ensure efficient collaboration. Another survey on long-term data archiving gathered responses from 33 Nodes, revealing challenges in infrastructure, capacity, and funding that are informing the development of a scalable OBIS-wide archival strategy.

DCG work also progressed on metadata interoperability with ODIS, with initial integration of structured dataset metadata using JSON-LD and plans to expand coverage to taxonomic, EOV, and other OBIS asset fields. Support for DNA-derived data included updates to the OBIS manual, two webinars on the GBIF Metabarcoding Data Toolkit, and development of annotation workflows for sequence-based taxa. Taxonomic and measurements and facts vocabulary improvements continued with collaboration with the WoRMS and BODC teams. At the same time engagement with the Darwin Core Data Package (DwC-DP) model and Humboldt extension teams ensured OBIS workflows and use cases were represented. Overall, DCG efforts in 2025 strengthened interoperability, enhanced OBIS Node readiness, and advanced long-term data sustainability. A progress status of each deliverable is presented in the following table.

Activities	**Status**
At least 5 online meetings scheduled through October 2025 SG-OBIS adopted data work plan for 2026-2027	completed
By end 2025, review and provide implementation guidelines to OBIS Nodes for at least 90% of existing biodiversity EOV specifications, which will support the publication of EOV data by OBIS nodes	In progress
Conduct a survey by mid 2025, targeting 100% of OBIS nodes, to assess their engagement in at least 5 key external data-related groups, to include GOOS, GBIF, and TDWG and present findings with recommendations to the OBIS EC	completed
Ensure that by the end of 2025, we present a Register of Engagement covering 100% of OBIS Nodes to the OBIS EC and report to NCG	completed
By end of 2025, achieve functional integration of OBIS data with the IOC data architecture, ensuring 100% alignment with interoperability standards, and report progress to SG-OBIS and SG-ODIS	completed
Complete a review of the eDNA data extension for DwC and the eDNA FAIR checklist by end 2025, providing a final report with actionable recommendations for enhancing data interoperability and accessibility to the Joint GBIF/OBIS DNA derived data guidelines working group	Modified into reviewing eDNA guidelines in OBIS manual and strengthening eDNA knowledge within the OBIS network. completed

By end 2025, survey 100% of OBIS nodes' ability to provide long-term data archiving. Design and present model for tiered, CoreTrustSeal aligned, long-term data archiving to the NCG	In progress

After reviewing progress on 2025's workplan and the future objectives and strategy of OBIS as a whole and the DCG, the group conducted exercises to define and rank a list of priorities for OBIS by: a. summarising priorities; b. an online poll to rank priorities; c. discussing the ranking, including time for questions and "advocacy" and d. a show of hands around the room to show which nodes had capacity and interest in supporting the delivery of each priority.

The Co-chairs of the DCG later distilled a brief description of the actions required to complete each priority activity, and ranked the effort required from the DCG, OBIS Secretariat, OBIS Nodes and the broader OBIS community to complete the actions.

Ranking by the DCG was as follows. Details of the other steps are captured in the DCG Full Report in Annex 2:

1 Data Quality: Towards an OBIS data validation tool
2 Manual: Revise and update
3 eDNA data management
4 Support the WoRMS taxonomic matching work
5 DwC-DP: Hands on Workshop
6 EOVs: Create methods to monitor EOV data in OBIS
7 DCG Strengthening: Really support members engaged in other initiatives
8 Data Quality: Map all MoFs to controlled vocabs
9 DCG Strengthening: Develop instructions to maintain OBIS Engagement Catalogue
10 EOVs: Contribute to development of Data Schemas
11 Data Quality: Thematic data laundry sessions within NCG meetings
12 Data Quality: Improve interpretation on what is considered is_marine at records level
13 New models/extensions: generic approach to serving them
14 DwC-DP: OBIS data Indexation
15 DwC-DP: Contribution to DwC-DP How-to guide
16 Data Quality: Enhance delivery of eMoF in GBIF
17 Humboldt extension: Hands on Workshop
18 Workshop to add relevant ODIS keywords to metadata
19 Humboldt extension: OBIS data Indexation

During the assessment, some streamlining decisions were made by the co-chairs: to group workshops into a series as a single task delivered in a measured way across the year; to choose some tasks critical to OBIS broader strategy and workplan; to choose some tasks that are low effort or that can be achieved rapidly. The full list of priorities, ranks and brief descriptions are in the DCG's full report annex. The Co-chairs of the DCG will review the priority

list bi-monthly and may promote some activities, with the endorsement of the DCG, to 2026 deliverables if capacity arises, or actions for other deliverables are complete.

The DCG deliverables and KPIs are described in the OBIS Workplan for 2026.

The SG-OBIS welcomed the OBIS DCG progress report and thanked the Co-Chairs for the coordination of the delivery of high quality outputs from the 2025 workplan.

The SG-OBIS welcomed the development of the 2026 workplan.

The OBIS Secretariat presented a special award to a person who has gone above and beyond for the community. The award was for Ruben Perez in recognition of his outstanding contributions to OBIS data coordination and quality initiatives. Ruben has played key roles as a data manager within European marine data networks, and his steady leadership as co-chair of the Data Coordination Group, along with his practical work on data standards and node support, has helped OBIS remain reliable and accessible. For us, it almost felt like he was part of the OBIS secretariat.

2.4.3. OBIS Products Coordination Group

OBIS PCG Co-chairs Jonathan Pye and Stephen Formel informed the SG that the Products Coordination Group (PCG) convened 5 times in the intersessional period - in four divided online sessions in December 2024, March, June and September 2025, as well as a hybrid session at the SG-OBIS-13. These meetings were attended by about 15 people on average and informed the scoping, technical assessment, deployment, configuration and testing of the Products Catalogue, which comprised the bulk of the 2025 work plan. PCG members identified key features such as:

- Provenance for aggregated datasets and workflows that create products
- Ocean Data Information System (ODIS) discoverability
- Flexibility for associating institutions and adding custom data tags.

These features were scoped and included in a provisional Products Catalogue, built on an open-source data catalogue platform (CKAN) and demonstrated at the 5th PCG meeting held within SG-OBIS-13. Data product presentations offered at PCG meetings from national institutions provided examples of OBIS-backed data products that inform policy, and examples of independently-designed data products that would be suitable to express in the Catalogue.

An evaluation of the JupyterHub’s role in supporting community-designed data products and the costs of maintaining such a solution was initiated, with suggested alternatives such as public-backed solutions like Google CoLab, which is free but would not include the advantage of processing proximity to OBIS data sources.

For 2026, proposed deliverables include:

- A node pilot for data products informing policy questions at the national level
- Products supporting several of the GOOS BioEco Essential Ocean Variables
- A refocusing of the obis-speciesgrids data product to highlight biodiversity data collection in the Asia Pacific region

Providing the capability to indicate products inform policy and assessment goals such as KM-GBF targets, CBD EBSA proposals and the UN World Ocean Assessment will be among the designed extensions to the Products Catalogue in 2026.

The table below lists the status of the OBIS 2025 work plan PCG tasks.

Outcome N° 3. Operational Products Coordination Group (PCG)	
Performance indicators *(list 2-5 indicators)* 1. At least 5 online meetings scheduled through October 2025 2. SG-OBIS adopted product work plan for 2026-2027	**Status** *(completed, in progress, cancelled)* in progress
Deliverables 1. Meeting minutes shared through a public portal via the OBIS website	in progress
Outcome N° 4. Enhanced access to FAIR OBIS Products	
Performance indicators *(list 2-5 indicators)*	**Status** *(completed, in progress, cancelled)*
1. Detailed plan drafted for development of catalogue.	In progress
2. Developmental "OBIS Products Catalogue" stood up for testing	completed
3. Developmental "JupyterHub" stood up for testing	completed
4. Production "OBIS Products Catalogue" published	in progress
Deliverables 1. OBIS Products Catalogue	in progress

The SG-OBIS thanked the PCG Co-Chairs, Members and secretariat in the development of important product outputs promoting the value of OBIS resources to the global community.

The SG-OBIS welcomed the development of the 2026 workplan.

3. OBIS Strategic Partnerships

3.1. OBIS Nodes engagement with other partners

Mr Stephen Formel updated the Steering Group on the OBIS Nodes engagement survey, which was conducted at the request of the DCG as part of the DCG 2025 workplan. A survey was conducted to identify how OBIS nodes engage with major partner organizations. 32 respondents, from 24 OBIS nodes, self-reported engagement levels with five key organizations: GBIF, TDWG, GEO BON, GOOS, and ODIS, as well as external organizational partnerships. Engagement levels were categorized as Active (participation on committees, receiving funding, leadership roles), Passive (using services, following news), or None (no current interaction).

Key Findings

- **91% of respondents** interact with GBIF (41% active, 50% passive), making it the most engaged organization
- **72% engage with TDWG**, demonstrating strong data standards community participation
- **53% engage with ODIS**, reflecting growing interest in ocean data interoperability
- Half of all respondents (50%) interact with GOOS and GEO BON, indicating connections to ocean observation systems

Multi-Organizational Participation

- **31% of respondents** (10 people) actively participate in 2 or more organizations simultaneously
- One individual (Katherine Tattersall, OBIS Australia) demonstrates exceptional cross-network leadership with active engagement across 4 organizations: GBIF, GEO BON, GOOS, and ODIS
- This multi-organization engagement suggests strong potential for cross-pollination of ideas and coordination across networks

Additional Details

The survey reveals a diversity of roles across the network. Active Member is the most common role with 21 occurrences, indicating strong hands-on participation in organizational activities. Expert/Advisor roles are also prevalent with 12 occurrences, demonstrating the community's significant technical expertise and willingness to provide guidance. Beyond the five surveyed organizations, 25% of respondents maintain active relationships with external organizations, and 15 different external organizations were noted.

Organizational Engagement Breakdown

Organization	Active	Passive	Total Engaged	Engagement Rate
GBIF	13 (41%)	16 (50%)	29	**91%**

Organization	Active	Passive	Total Engaged	Engagement Rate
TDWG	6 (19%)	17 (53%)	23	**72%**
ODIS	4 (13%)	13 (41%)	17	**53%**
GOOS	4 (13%)	12 (38%)	16	**50%**
GEO BON	4 (13%)	11 (34%)	15	**47%**

Full results of the OBIS Nodes Engagement Survey resulting from the Data Coordination Group workplan are available in Annex 4.

It was noted that the survey is useful and should be repeated in subsequent years. The survey successfully identified which staff members are involved in which activities, providing valuable clarity on individual contributions and helping prevent confusion and duplication of effort. It was suggested a venue be created with official channels where members participating in external initiatives can report back, seek input, and prompt collective action or discussion.

The SG-OBIS requests that the Engagement survey be repeated annually, reporting to SG-OBIS, and that official channels via NCG be created for members participating in external initiatives to report back, seek input and prompt collective action/discussion.

3.2. UN Ocean Decade

OBIS 2030 - The biodiversity data hub for the Ocean Decade Actions

Katherine Tattersall recalled that in April 2023, the Ocean Decade endorsed OBIS 2030, an Ocean Decade project proposed by OBIS and which sits under the MarineLife 2030 programme. In 2025, OBIS is well on its way toward realizing the ambitions of OBIS 2030. The network has made impressive progress in strengthening data openness, interoperability, and digital infrastructure, exemplified by the migration to GeoParquet and AWS Open Data hosting, and improved APIs. These achievements have positioned OBIS as a leading global provider of FAIR, open-access biodiversity data—a central tenet of the 2030 vision.

OBIS has also begun delivering innovative information products—including eDNA dashboards, DOI-enabled datasets, and global species distribution models—that translate scientific data into policy-relevant insights supporting the Sustainable Development Goals and international conventions.

OBIS's commitment to capacity development and inclusivity continues to grow through flagship initiatives such as eDNA Expeditions, PacMAN, and the UN Decade Transformational Alignment

Initiative (TAI4OBIS - see below). These programmes are empowering local data stewards—especially across SIDS and developing states—building the global skills base envisioned under OBIS 2030. Enhanced communication and outreach strategies have elevated OBIS's visibility, uniting its community and strengthening partnerships across IOC, GBIF, CBD, and BBNJ processes.

However, some 2030 ambitions remain only partially realized. A sustainable staffing and funding model for the Secretariat is unresolved, risking continuity of data stewardship and delivery of services that are becoming core to meeting IOC Member State obligations. While the value and essential nature of true engagement with Indigenous and local knowledge holders is recognized, practical application of CARE principles has yet to be embedded. Similarly, systematic gap analyses of global, taxonomic, and temporal data coverage—core to the 2030 vision—are still aspirational, with limited evidence of implementation. These gaps may be addressed under a proposed GOOS Biodiversity Plan, currently in early stages of discussion with OBIS. Finally, consistent progress tracking and reporting metrics remain under development.

Looking ahead, OBIS is well positioned to deepen its role within the UN Ocean Decade ecosystem, and will benefit from stronger collaboration and promotion through the Decade Coordination Office for Ocean Data Sharing to connect more effectively with other Decade Actions and initiatives. Continued support in this area would amplify OBIS's global reach and impact.

In summary, OBIS has established a strong, future-ready foundation for OBIS 2030—marked by openness, innovation, and global collaboration. With sustained engagement and cross-Decade coordination, OBIS is poised to achieve its full transformative potential by 2030.

Transformational Alignment Initiative (TAI4OBIS)
Laurent Chmiel provided an update on the Transformational Alignment Initiative (TAI4OBIS), a community-led initiative coordinated by the Ocean Decade Coordination Office for Ocean Data Sharing in partnership with OBIS. TAI4OBIS is a capacity-building initiative that aims to accelerate marine biodiversity data mobilization by transforming local data holders into global contributors. The project is based on a train-the-trainer, grassroots approach, where a small number of OBIS Nodes, chosen for their available training resources, train members of communities, selected for their leading positions within those communities, to become OBIS-certified trainers. These trainers can in turn transform members of their communities into OBIS contributors.

To avoid duplication and maximize impact, TAI4OBIS will integrate existing training resources and materials developed by OBIS, adapting them when relevant (for example, through translations). The project has been voluntarily paused until mid-November, when an operational budget will be established. Once this step is completed, the initiative will be proposed for Ocean Decade endorsement.

The SG-OBIS supported the development of community-led initiatives under the Ocean Decade to increase engagement and broaden the user-base of OBIS.

The SG-OBIS requested that the Decade Coordination Unit provide more visibility and increase awareness of OBIS 2030 among Decade actions.

3.3. GBIF

The ongoing collaboration with GBIF was introduced by Katherine Tatersall. Leveraging the collaboration agreements between OBIS and GBIF (signed in 2014[11] and 2020[12]), a joint OBIS-GBIF strategy[13] and action plan[14] with a focus on wider technical collaboration and shared capacity-building activities was launched in June 2024. Meanwhile, as the 5-year agreement signed in 2020 expired, a new 5-year agreement was signed during the Living Data 2025 conference. A new 2026 joint OBIS-GBIF action plan needs to be developed.

We reported on the following activities during the inter-sessional period:

- Stephen Formel (OBIS Data Officer) presented a lightning talk at the Marine life thematic community session of the GBIF Global Nodes Meeting on 18 October 2025.
- GBIF Norway, GBIF Ecuador and GBIF Brazil joined OBIS as national OBIS nodes.
- The 32nd GBIF governing board meeting was attended by Ward Appeltans, Katherine Tattersall, and Stephen Formel as OBIS observers.

eDNA Data Infrastructure of GBIF
GBIF invited the OBIS secretariat to participate in the technical review of the GBIF DNA data roadmap, to be held on 11–13 November 2025 in Copenhagen, Denmark. The event will gather invited experts and stakeholders to explore the technical needs and opportunities for integrating eDNA-derived data into GBIF.

The workshop will provide input for a roadmap to guide future developments, including work that GBIF expects to launch in 2026.

Central topics will include:

- Indexing and searching DNA sequence data
- Dynamic updating and standardisation of taxonomic assignments for eDNA occurrences
- Developing a catalogue of DNA reference libraries
- Establishing consistent data flows from metabarcoding and other eDNA studies

[11] https://obis.org/2014/10/03/gbif/
[12] https://obis.org/2020/09/07/obis-gbif/
[13] OBIS-GBIF Joint Strategy for Marine Biodiversity Data: https://doi.org/10.35035/doc-kcqs-5h52
[14] OBIS-GBIF 2024 Action Plan on Marine Biodiversity Data: https://doi.org/10.35035/doc-e52v-5875

DarwinCore Data Package
Public review of a new conceptual model[15] and Data Package Guide for Darwin Core is underway within TDWG, affecting both GBIF and OBIS publication capabilities.

Joint Training
OBIS will be conducting joint training with GBIF by leading an OBIS session during the GBIF Technical Support Hour, 3 December 2025.

Upon request from OBIS Brazil, the secretariat clarified that the OBIS secretariat always consults the relevant OBIS node when a marine publisher to GBIF requests endorsement from OBIS.

It was noted that there was much discussion during the GBIF and Living Data meetings about the need to re-invigorate the GBIF-OBIS joint strategy implementation committee. OBIS SG discussion emphasized the need to ensure that communication flows to OBIS nodes who are not connected with GBIF.

The SG-OBIS recognised the vital importance of our ongoing collaboration and partnership with GBIF to strengthen data systems, standards adoption and capacity development.

The SG-OBIS requested a mechanism to improve feedback to OBIS nodes and the Secretariat on collaborative activities between GBIF and OBIS.

The SG-OBIS requested that the OBIS EC contact the community and capacity development team in GBIF and recommended that a component of marine-specific OBIS training be included in the Biodiversity Information for Development (BID) training.

The SG-OBIS requested that GBIF advertise the role of OBIS, and continue to encourage GBIF nodes to join the OBIS network as publishers or nodes.

The SG-OBIS very warmly welcomed the participation of GBIF members in OBIS DCG and PCG activities.

Recognising the increasing interest of GBIF nodes in joining OBIS, the SG-OBIS requested that the clear distinction between an OBIS Node and OBIS Data Provider be added to the OBIS website, with information about the process of joining the OBIS network. Additionally, the Terms of Reference and Role Descriptions for OBIS Nodes, managers and staff be added to the website where they are more visible and accessible.

The SG-OBIS requested that the GBIF-OBIS Strategy Implementation Committee develop case studies/models of collaboration between, or joint membership of, GBIF and OBIS

[15] https://www.tdwg.org/news/2025/public-review-of-conceptual-model-and-dp-guide-for-darwin-core/

Nodes. These case studies should be made available from the above section of the OBIS website.

The SG-OBIS applauded the signing of the new Letter of Agreement between GBIF and OBIS, and celebrated the closeness of our communities.

3.4. GOOS and Biodiversity Plan

Dan Lear reported that the OBIS community had developed closer engagement with GOOS via Dr Audrey Darnaude (GOOS BioEco Co-Chair) and Dr Emma Heslop (GOOS Programme Specialist) who presented the preliminary draft of the GOOS Biodiversity Plan to OBIS Nodes at the Living Data 2025 OBIS timeslot on Friday 24 Oct 2025.

The GOOS Biodiversity Plan will be a strategic framework aimed at delivering an integrated and fit-for-purpose system for global ocean observing and data delivery that meets national, regional, and global needs for marine biodiversity information. The plan is necessary because current approaches to marine biodiversity monitoring are fragmented, resulting in diverse data and metadata standards, poor access to data, significant observational gaps, difficulty in data harmonization, and unequal access to capacity. The need to observe the ocean is driven by societal requirements such as forecasting, early warning systems, assessing ocean health, and supporting global policy frameworks like the Kunming-Montreal Global Biodiversity Framework (KM-GBF), the Paris Agreement, and the BBNJ Agreement. The plan utilizes Essential Ocean Variables (EOVs), which are the minimum set of variables needed to assess ocean state, including those specifically for Biodiversity.

The plan focuses on four main interconnected objectives, building upon the existing GOOS BioEco EOVs framework and the expertise of partners like OBIS for data systems and infrastructure:

- **Mature the Ocean Observing System for BioEco EOVs**: This objective focuses on improving data quality and consistency by facilitating the creation and promotion of standardized approaches for data collection and delivery, ensuring alignment with FAIR and respecting CARE principles. It also involves strengthening a central gateway (like a BioEco Portal) to increase the visibility of observing networks and assess their maturity state.
- **Facilitate BioEco EOV Data Use in Decision-Making at All Scales**: This involves engaging with end-users to identify specific biodiversity information needs for informed policy and management. Actions include demonstrating the application of FAIR and open BioEco EOV data streams to support policy development and ensuring the delivery of operational, useful data, including near real-time observations.
- **Strengthen Capacity & Expand Global Observing Coverage**: This aims to increase global coverage by connecting diverse observing communities and supporting capacity building in underrepresented regions. Activities include strengthening GOOS

partnerships to align efforts and reduce redundancy, increasing awareness of BioEco EOVs, and facilitating the development and delivery of training tools that support the full lifecycle of ocean biology and ecosystems observations.
- **Drive Innovation & Promote Adoption of Emerging Technologies**: This involves promoting the development and implementation of cutting-edge tools and methods. It focuses on fostering the maturation and application of innovative technologies capable of delivering real-time information and facilitating the integration of BioEco EOVs into data platforms traditionally used for physical and biogeochemical data collection.

OBIS is **invited** to play a central role within the framework of the GOOS Biodiversity Plan, defined by three key functions:

Providing Data Infrastructure and Expertise. OBIS provides the strengths and expertise necessary for the management and delivery of marine biodiversity data. Specifically, OBIS is responsible for metadata and data systems and infrastructure. This includes establishing robust data pathways and handling the full lifecycle of observations, from collection to application. OBIS ensures that data is Findable, Accessible, Interoperable, and Reusable (FAIR) and promotes the use of standardized approaches for managing and delivering data.

Strategic Collaboration and Standardization. OBIS is critical for ensuring coherence and effectiveness across the observing community, often working in close collaboration with the GOOS BioEco Panel on nearly every strategic action. This collaboration ensures that the ocean observing system matures effectively. Specific collaborative roles include:

- Interoperability: Working to develop interoperable (meta)data and sharing pipelines to facilitate the integration, accessibility, and usability of datasets across local, regional, and global scales.
- Capacity Building: Partnering in the development and delivery of training tools and workshops that support the full lifecycle of ocean biology and ecosystems observations.
- Standardization: Supporting the promotion and adoption of community standards for (meta)data produced through new and emerging technologies.

Supporting Global Policy and Knowledge Flow. OBIS is essential for transforming raw observations into useful information for decision-making and policy.

- Policy Support: OBIS helps demonstrate the application of FAIR and open BioEco EOV data streams to support policy development and decision-making at all scales. It helps connect diverse observing communities to fulfill national, regional, and global needs for marine biodiversity information.
- Provenance Tracking: OBIS advocates for and implements solutions, such as the comprehensive use of Digital Object Identifiers (DOIs) ensuring proper attribution and traceability.

The SG-OBIS welcomed the opportunity for closer engagement with the GOOS BioEco Panel, and the opportunity to co-develop an operational biodiversity observing system.

The SG-OBIS recommended proactive engagement by the OBIS EC with GOOS to ensure the proposed GOOS Biodiversity Plan aligns with the overall strategic direction of OBIS and report outcomes to the OBIS-SG.

The SG-OBIS requested that GOOS in consultation with OBIS calculate the full costs of developing and implementing the GOOS Biodiversity Plan, including the risks of insufficient funding being secured.

3.5. Convention on Biological Diversity (CBD)

Mr Ward Appeltans previously informed SG-OBIS on the developments within global frameworks and legislation including BBNJ, EBSA designation and the CBD and the Kunming-Montreal Global Biodiversity Framework and invited reactions from the SG.

Kunming-Montreal Global Biodiversity Framework
At COP16 (Cali, 2024), Parties to the Convention on Biological Diversity reconfirmed OBIS's role in supporting the Kunming-Montreal Global Biodiversity Framework (KMGBF). OBIS is included in the framework as a complementary indicator for Goal D ("Invest and Collaborate"), Target 20 ("Strengthen Capacity-Building, Technology Transfer, and Scientific and Technical Cooperation for Biodiversity") and Target 21 ("Ensure That Knowledge Is Available and Accessible To Guide Biodiversity Action"). The IODE Committee (IODE-28) welcomed the mention of OBIS in the CBD's KMGBF (CBD/COP/DEC/15/5), and requested that OBIS develops robust indicators and guidelines for State Parties on how to use OBIS in their national reporting to the CBD.

During COP16, IOC's three systems – OBIS, GOOS and ODIS, – were recognized by the CBD's Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) as the operational and ready ocean components of the upcoming Global Biodiversity Observing System (GBIOS) to support the monitoring framework of the KM-GBF. This proposed, but not as yet fully operational initiative has been developed by the Group on Earth Observations Biodiversity Observation Network (GEO BON) and its partners to provide the critical data needed to monitor biodiversity change and target action. GBIOS is a collaboration-based effort relying on existing networks, similar to the global weather network.

Ecologically or Biologically Significant Marine Areas (EBSAs)
COP16 adopted new modalities for describing and updating Ecologically or Biologically Significant Marine Areas (EBSAs), marking a new, more dynamic phase in the process. The revised framework allows rolling submissions, flexible information-sharing, and the integration of diverse knowledge systems, ensuring that EBSAs remain scientifically current and aligned with the KM-GBF and emerging high seas governance under the BBNJ Agreement. During the first cycle of the EBSA process, which ran from 2011 to 2018, OBIS provided vital information on marine species distributions, habitats, and ecosystems, contributing to identifying and

describing 321 EBSAs across the ocean. On 5 September 2025, the OBIS Secretariat held a meeting with the CBD Secretariat in which it was highlighted that OBIS can again play a key role in the EBSA process by providing open, standardised biodiversity data to fill geographic and taxonomic gaps, strengthen EBSA evidence bases, and deliver metrics of biodiversity change to support adaptive management and global monitoring.

OBIS Nodes including OBIS Colombia and OBIS Korea are members of the CBD EBSA Advisory Group and their continued engagement is of value to the whole OBIS Community. Additionally OBIS Brazil is highly active in the development of indicators under the CBD.

The SG-OBIS requested that the EC-OBIS and Secretariat continue to explore how to best support the KM-GBF, in order to further the visibility and use of data from OBIS nodes.

The SG-OBIS supported the prominence of OBIS in the KMGBF and EBSA processes, reporting and indicator development reflecting the benefit to the visibility and recognition of OBIS as the marine element within GBIOS.

3.6. BBNJ

Mr Ward Appeltans introduced the "Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction", commonly referred to as the BBNJ Agreement or the "High Seas Treaty", which is a landmark international legal text that directly addresses biodiversity-related challenges in the high seas. With over 60 countries having ratified it, the BBNJ Agreement will enter into force on 17 January 2026 and become the first international legally binding instrument explicitly focusing on biodiversity in the High Seas.

The BBNJ Agreement is structured around four interdependent pillars, each addressing specific needs identified by the Parties:

The **Marine genetic resources, including questions on the sharing of benefits (MGR)** pillar aims to establish a framework for fair, transparent and equitable access to genetic material and its sequence data, ensuring that scientific and commercial gains will be shared among all Parties, contributing to the common good, particularly for developing countries.

The **Area-Based Management Tools (ABMTs), including Marine Protected Areas (MPAs)** pillar provides the legal basis for designating, assessing and monitoring conservation zones in the high seas and regulating human activities. Establishing coordinated and concerted MPAs in areas beyond national jurisdiction is a significant milestone for marine protection, in line with global conservation targets such as protecting 30% of the global Ocean by 2030 set by the Kunming-Montreal Global Biodiversity Framework.

The **Environmental Impact Assessments (EIA)** pillar stipulates that planned activities in areas beyond national jurisdiction with potential effects on the marine environment must go through a transparent, science-based process led by the State planning the activity to determine the extent of impact on the surrounding ecosystems. This pillar promotes common oversight and precautionary decision-making to prevent illegal or environmentally hazardous activities in marine areas beyond national jurisdiction.

The **Capacity-Building and Transfer of Marine Technology (CB&TMT)** pillar aims to address disparities in scientific, technical, and institutional capacities between Parties by promoting financial, technical, and institutional support to improve national capabilities. This pillar seeks to close skill, knowledge, and technology gaps, encourage inclusive participation, and reinforce cooperation among Parties, contributing to more equitable and effective Ocean governance.

OBIS expertise supporting the needs of the BBNJ Agreement

With over 25 years of experience and an active global community, OBIS provides data, tools, and expertise that can support the implementation of the BBNJ Agreement. As the world's largest marine biodiversity data platform, OBIS provides open, FAIR-compliant data, tools, and services aligned with the Agreement's provisions on transparency, equitable access, and benefit-sharing. It integrates standardized, high-quality biodiversity data from areas beyond national jurisdiction and can demonstrably support the four pillars of the BBNJ Agreement.

Under the Marine Genetic Resources (MGRs) pillar, OBIS can support the deployment of a Standardized Batch Identifier (SBI) system. SBIs are globally unique, persistent identifiers assigned to batches of biodiversity data, such as marine genetic resources, to make them continuous, traceable, and supported by machine-readable metadata. An existing and widely accepted system and protocol, Digital Object Identifiers could be particularly well-suited to power and sustain a global Standardized Batch Identifier system. With a DOI-based approach, OBIS can support the preservation of the data provenance, enable citation and usage tracking, and preserve data integrity. Such a system would also guarantee acknowledgement, recognition, and ownership for data contributors while maintaining accountability along the entire data transformation chain, a crucial condition for Large Ocean States and Developing States.

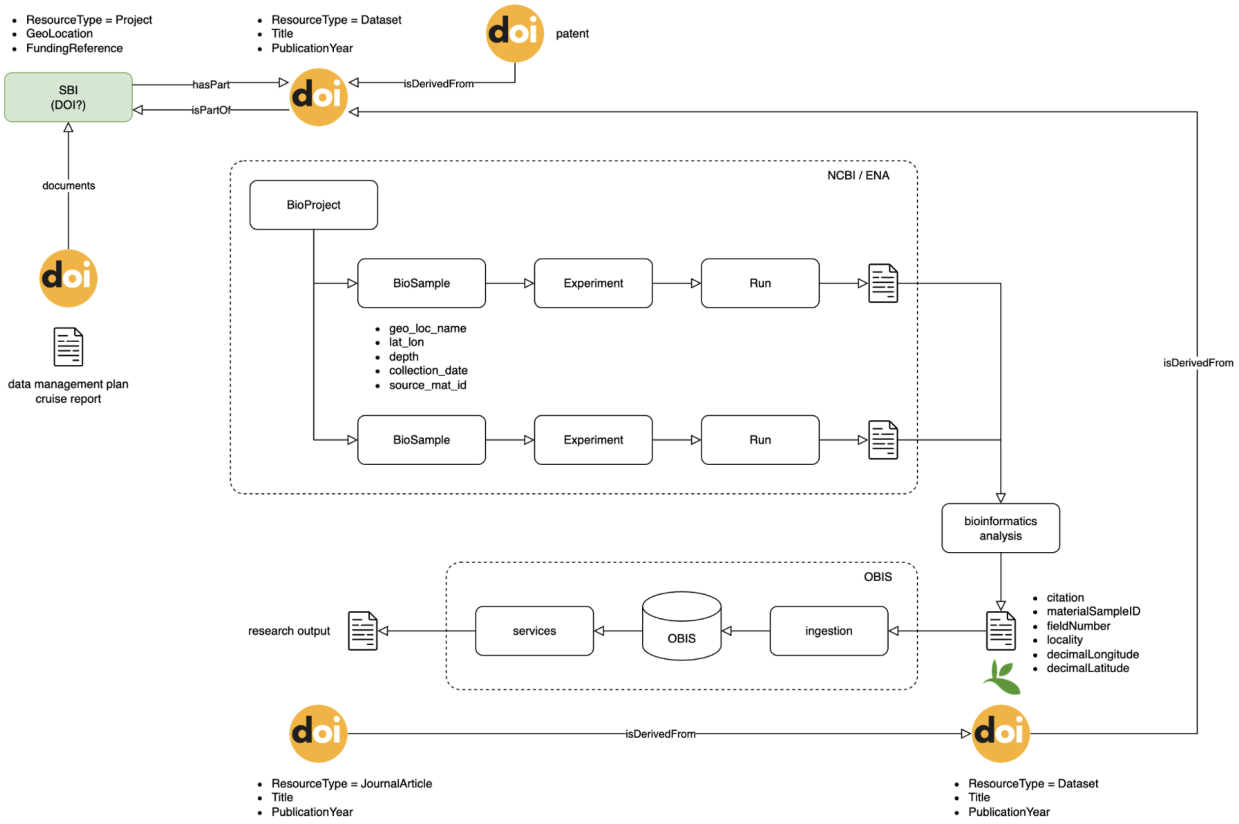


Figure. OBIS emphasizes that good identifiers must be globally unique and persistent and must allow for the retrieval of metadata using a standardized protocol like DOIs. A cruise needs a BBNJ SBI (DOI), linked to a data management plan and cruise report (DOI), the cruise will lead to a dataset with raw data (DOI), the raw data will be part of a bioproject in NCBI/ENA. The raw data will be processed through a bioinformatics pipeline and will result in a DwC dataset (DOI) which will be published in OBIS and GBIF. The OBIS services will allow the creation of products, and publications (DOI), and patents (DOI) can link to the original dataset. This approach will allow us to develop a full knowledge graph visualizing all the connections, and a clear pathway to downstream applications from the original SBI.

On a more operational level, OBIS can also support the design and implementation of the local-to-global data pipeline powering the MGR pillar. Through two recent flagship projects—the Pacific Islands Marine Bioinvasions Alert Network (PacMAN) and Phase I of the UNESCO eDNA Expeditions—OBIS has demonstrated its capacity to integrate molecular marine biodiversity data into actionable products and to establish end-to-end biomolecular frameworks supporting evidence-based decision-making. This includes tracking in-situ species occurrences and associating them with collection events, cruise tracks, and sampling protocols to provide context and increase transparency in data collection.

OBIS can directly contribute to the ABMT/MPA pillar by providing georeferenced species occurrence data and derivative products such as Species Distribution Maps, which can inform the identification, design, and monitoring of high seas protected areas. Additional visualization tools and indicators developed by the OBIS community further support stakeholder

engagement, scientific consultation, adaptive management of conservation zones, and the deployment of Area-Based Management Tools from the BBNJ Agreement. Notably, OBIS's contribution to the State of the Ocean Report 2024 showcased its capacity to aggregate, analyze, and visualize nearly 50 million distribution records, documenting 93,106 marine species within Marine Protected Areas (MPAs) worldwide, including 72% of all species classified as threatened according to the IUCN Red List, underscoring the value of OBIS data integrations for evidence-based MPA policy.

Under the EIA pillar, OBIS provides baseline biodiversity and species distribution data, including modelled species range maps illustrating current and future climate change scenarios. This data is essential for conducting robust impact assessments, with long-term observation series enabling comparisons of pre-/post-impact conditions analysis as well as cumulative impact analysis over time. OBIS can also support the early identification of areas harbouring sensitive species or habitats, highlighting biodiversity hotspots where planned activities may cause disproportionate disruptions. Additionally, OBIS's capacity to integrate innovative data streams, such as environmental DNA, can broaden the scope of EIAs and help future-proof the pillar. OBIS contributes to making these data discoverable and reusable, enhancing transparency and accountability in the EIA process.

Finally, OBIS plays a supporting role under the Capacity-Building and Technology Transfer pillar. Its community includes 29 National and 7 Thematic Nodes, 15 of which are located in Developing States, with over 6000 contributors around the world. The OBIS Nodes have a solid track record in capacity-building and data mobilization, turning local data holders into global contributors. In partnership with the OceanTeacher Global Academy, OBIS and its community have developed multilingual and standardized courses to develop local capacity for marine biodiversity data collection, management, and sharing.

OBIS Korea reported that in collaboration with the ISA, they are setting up a biosample/voucher specimen and eDNA sample repository/biobank for the Area. Collaboration with OBIS is encouraged, especially in light of the implementation of the BBNJ standard batch identifier.

The SG-OBIS requested OBIS, through the Secretariat and Nodes, to remain actively engaged in the BBNJ process and regularly report on BBNJ relevant activities to the SG and via the NCG.

3.7. Other Priority Partnerships

Ward Appeltans informed the SG that in order to formalize relationships with important strategic partners, cooperation agreements are being considered with Protected Seas, BODC, TDWG, MBON, Marine Regions and WoRMS.

SG-OBIS encouraged the Secretariat to pursue the formation of Cooperation agreements to recognise vital collaborations and ensure alignment with key partner initiatives.

4. OBIS vision, mission, objectives and IOC medium-term strategy

Dan Lear reminded the Steering Group that the current OBIS vision, mission and objectives date back from the 3rd OBIS Steering Group (December 2013). The IWG-OBIS management structure (established by SG-OBIS-11) was tasked to review the vision, mission and objectives, but the group did not conclude this task at SG-OBIS-12. The SG-OBIS-13 is now tasked to perform this review and align the OBIS vision, mission and objectives with IOC's new medium-term strategy, including strategies such as the GOOS Biodiversity Plan.

The IOC's new strategic framework[16] is designed to significantly advance global ocean governance and sustainability goals by focusing on capacity building, coordinated data management, policy implementation support for major agreements, and through strengthening fundamental ocean observations. The strategy addresses global sustainability goals by operating within the critical timeframe of the second half of the UN Ocean Decade for achieving the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs)

For reference, the IOC is guided by five **High-Level Objectives (HLOs)** that align directly with global sustainability goals:

1. **Healthy ocean and sustained ocean ecosystem services**.
2. **Effective warning systems and preparedness** for tsunamis and other ocean-related hazards.
3. **Resilience to climate change and contribution to its mitigation**.
4. **Scientifically founded services for the sustainable ocean economy**.
5. **Foresight on emerging ocean science issues**.

The work of the IOC is organized around a framework of **six primary functions (A-F below)**. These functions are the means through which the IOC implements its High-Level Objectives (HLOs) and delivers its programs.

- **Function A – Ocean Research:** Focuses on supporting international collaboration to foster new knowledge, translating that knowledge into products for decision-making and informed policy development, and building research capacity. This includes activities related to climate and ocean variability, ocean acidification, ocean deoxygenation, blue carbon, ocean stressors, and delivery into multilateral processes.
- **Function B – Observing system/Data management:** Focuses on coordinating and sustaining the Global Ocean Observing System (GOOS), strengthening coordination and

[16] https://oceanexpert.org/document/36438

partnerships, and managing data through systems like the International Oceanographic Data and Information Exchange (IODE), and its programme components the Ocean Data and Information System (ODIS), and the Ocean Biodiversity Information System (OBIS). This function is a high priority for IOC reflecting long-term sustained observations and data management.

- **Function C – Early warning and services:** Focuses on coordinating intergovernmental networks for four regional tsunami warning and mitigation systems, acting as a global standard setter for tsunami warnings. It also includes initiating planning and implementation of broader multi-hazard early warning systems (EWS) to support climate resilience, sustainable biodiversity, and food security, including for events like harmful algal blooms and marine heatwaves.
- **Function D – Assessment and information for policy:** Focuses on strengthening the IOC's engagement and contributions to global assessment initiatives such as the World Ocean Assessment (WOA), the Intergovernmental Panel on Climate Change (IPCC), and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). This function supports the finalization and expanded reporting of SDG indicators (14.1.1, 14.3.1, 14.a.1).
- **Function E – Sustainable management and governance:** Focuses on building on IOC's leadership in Marine Spatial Planning (MSP) to deliver technical support nationally and regionally, and implementing an IOC-wide strategy on Sustainable Ocean Planning and Management (SOPM). This function also coordinates the implementation of the Ocean Decade.
- **Function F – Capacity Development:** Focuses on actioning the Implementation Plan for the IOC Capacity Development Strategy (2023–2030) and guiding activities by the priorities of that strategy. A key focus is on enhancing Member State capacity to engage in and benefit from IOC programmes, with a particular emphasis on Africa and Small Island Developing States (SIDS).

It is important that the future OBIS vision, mission and objectives and workplan reflect these overarching aspirations of the IOC’s Medium Term Strategy, the IOC functions, the IOC’s 43C/5 workplan (2026-2027), as well as the GOOS Biodiversity Plan.

4.1 OBIS vision

Current vision:

To be the most comprehensive gateway to the world’s ocean biodiversity and biogeographic data and information required to address pressing coastal and world ocean concerns.

New suggested vision:

A global data ecosystem for marine biodiversity that is comprehensive, integrated, inclusive and accessible, enabling sustained ecosystem services for a healthy ocean.

This vision recognizes that OBIS contributes directly to the IOC's High-Level Objective 1: *Healthy ocean and sustained ocean ecosystem services*, and serves as the authoritative data foundation for assessing ocean vulnerability to multiple stressors.

4.2 OBIS mission

Current mission:

To build and maintain a global alliance that collaborates with scientific communities to facilitate free and open access to, and application of, biodiversity and biogeographic data and information on marine life.

New suggested mission:

Lead the coordination of effective marine biodiversity data mobilisation and deliver integrated, standardized high-quality data, information products and services to answer the needs of the global community.

4.3 OBIS objectives

The current OBIS objectives were agreed in 2013 and read as follows

- Provide world's largest scientific knowledge base on the diversity, distribution and abundance of all marine organisms in an integrated and standardized format (as a contribution to Aichi biodiversity target 19)
- Facilitate the integration of biogeographic information with physical and chemical environmental data, to facilitate climate change studies
- Contribute to a concerted global approach to marine biodiversity and ecosystem monitoring, through guidelines on standards and best practices, including globally agreed Essential Ocean Variables, observing plans, and indicators in collaboration with other IOC programs
- Support the assessment of the state of marine biological diversity to better inform policy makers, and respond to the needs of regional and global processes such as the UN World Ocean Assessment (WOA) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)
- Provide data, information and tools to support the identification of biologically important marine and coastal habitats for the development of marine spatial plans and other area-based management plans (e.g. for the identification of Ecologically or Biologically Significant marine Areas (EBSAs) under the Convention on Biological Diversity.

- Increase the institutional and professional capacity in marine biodiversity and ecosystem data collection, management, analysis and reporting tools, as part of IOC's Ocean Teacher Global Academy (OTGA)
- Provide information and guidance on the use of biodiversity data for education and research and provide state of the art services to society including decision makers
- Provide a global platform for international collaboration between national and regional marine biodiversity and ecosystem monitoring programmes, enhancing Member States and global contributions to inter alia, the Global Ocean Observing System (GOOS) and the Global Earth Observing System of Systems (GEOSS)

Here we suggest the following revised and updated OBIS objectives:

OBIS Objective I. Build a sustainable global marine biodiversity data infrastructure

- Establish a highly accessible, scientifically trusted, fully integrated and interoperable global data infrastructure that aligns with the IOC data architecture.
- Ensure adherence to international data standards and frameworks, respecting FAIR and CARE principles.
- Support sustained data flows and delivery of the Biology and Ecosystems Essential Ocean Variables (EOVs) of the Global Ocean Observing System (GOOS)
- Secure long-term archiving of marine biodiversity data and information, enabling seamless worldwide exchange and accessibility.

OBIS Objective II. Support evidence-based ocean biodiversity policy

- Support commitments to international biodiversity agreements by co-designing and aligning data, information products and services with major policy frameworks (e.g., the Kunming-Montreal Global Biodiversity Framework and the BBNJ Agreement) and national, regional and global assessments (e.g., UN World Ocean Assessment, IPBES, IOC StOR).

OBIS Objective III. Deliver operational biodiversity data services

- Deliver operational biodiversity data, information products and services including decision support tools, for monitoring, managing, and protecting marine ecosystems, multi-hazard early warning and mitigation systems and Sustainable Ocean Planning and Management (SOPM).

OBIS Objective IV. Empower communities through capacity development and collaboration

- Ensure equitable capacity to collect, manage, publish, access and use marine biodiversity data for all, through capacity development, innovation, and targeted community initiatives and strengthened collaboration.

The SG-OBIS adopted the new OBIS Vision, Mission and Objectives.

The SG-OBIS requested that the new OBIS Vision, Mission and Objectives are integrated into OBIS communication and promotional materials by the Secretariat.

5. OBIS Work Plan 2026-2027

The proposed work plan represents a realistic suite of activities that progresses the strategic aims of OBIS and aligns with the wider strategies of IOC. Where relevant additional tasks have been identified that, where resources allow, will be integrated.

<table>
<tr><th colspan="2">1. FULL DESCRIPTION OF THE PROGRAMME ACTIVITY/PROJECT</th></tr>
<tr><td colspan="2">General objective (Describe the aim and rationale)

See OBIS Objectives</td></tr>
<tr><td colspan="2">Project outcomes</td></tr>
<tr><td colspan="2">Outcome N° 1. Ensure an operational OBIS Nodes Coordination Group (NCG)</td></tr>
<tr><td>Improve the communication and promote exchanges between OBIS Nodes and between the OBIS Nodes and the Secretariat.

Performance indicators (list 2-5 indicators)

KPI 1
At least 5 online dual-session meetings scheduled through October 2026.

KPI 2
Number of OBIS nodes participating per meeting with a minimum of 10.

KPI 3
High percentage of OBIS Nodes actively presenting or leading discussions during NCG meetings, with a target of 60% per year.

KPI 4
Number of reported inter-Node collaborations that are</td><td>Status (completed, in progress, cancelled)</td></tr>
</table>

not covered by the Node-to-Node programme, supported or initiated by the NCG, with a target of 10 per year. **KPI 5** High percentage of OBIS Node satisfaction with communication and support from the NCG, with a target of 80% per year.	
Deliverables **D1.1** Meeting minutes shared through a public portal via the OBIS website. **D1.2** A revised version of the NCG meeting to give more space to Node-to-Node communication (standing deliverable). **D1.3** An Improved OBIS Pulse newsletter to help circulate information horizontally among Nodes.	
Outcome N° 2 Create and adopt communication tools to leverage the visibility of the Nodes and their contributions	
Performance indicators *(list 2-5 indicators)* **KPI 1** Number of OBIS Nodes using and adapting the communication toolkit to reach their institutions/funders, with a target of 50% of the OBIS Nodes. **KPI 2** High satisfaction with the development of communication kits that fit the needs of OBIS nodes, with reported node satisfaction of 80% as reported in the annual OBIS nodes engagement survey.	**Status** *(completed, in progress, cancelled)*
Deliverables **D2.1** Create a building block-based communication toolkit aiming at funders and backers and host organizations, that can be adapted to each OBIS Node.	
Outcome N° 3 Improve and track capacity among OBIS Nodes	

Performance indicators *(list 2-5 indicators)*	**Status** *(completed, in progress, cancelled)*
KPI 1 Number of reported Node-to-Node mentoring activities established annually, with a target of 10. **KPI 2** Number of FAQ entries, with a target of 20. **KPI 3** Number of OBIS Nodes who report having filled capacity gaps in the last year through NCG-led actions, with a target of 6.	
Deliverables **D3.1** Create an onboarding roadmap/process for new OBIS Nodes, in association with the OBIS Secretariat and the OBIS Nodes. **D3.2** Set up the Node-to-Node programme, in association with the OBIS Secretariat and the OBIS Nodes. **D3.3** Create a process to capture essential capacity-related discussions across communication channels and save them to a FAQ. **D3.4** Create a central Node Knowledge Repository on the OBIS website to document processes, tools and skills available for each Node. The Repository will be co-designed with the OBIS Nodes.	
Outcome N° 4 Ensure an operational Data Coordination Group (DCG)	
Performance indicators *(list 2-5 indicators)*	**Status** *(completed, in progress, cancelled)*
KPI 1 At least 5 dual online sessions scheduled through October 2026. **KPI 2**	

Every 2 months, within the DCG, undertake a dynamic task reprioritisation exercise to ensure ongoing strategic alignment and effective resource allocation.	
Deliverables **D4.1** Meeting minutes shared through a public portal via the OBIS website. **D4.2** Share within the DCG the list of prioritised activities for bi-monthly review and endorsement.	
Outcome N° 5 Review and support the alignment and adoption of data standards, specifications and publication mechanisms	
Performance indicators *(list 2-5 indicators)* **KPI 1** Two [online] workshops delivered by the end of 2026, each with at least 10 participants. **KPI 2** Support plan for WoRMS annotation completed and approved by both OBIS DCG and WoRMS Data Management Team by June 2026, with defined targets and responsibilities. **KPI 3** Planned approach to indexing DwC-DP with documentation completed and validated by OBIS Data Coordination Group by June 2026, including defined indexing approach, implementation roadmap, and resource needs. **KPI 4** Planned approach, implementation plan, and timeline on incorporating standardized methods to quantify, track, and report EOV data coverage and trends within OBIS, developed and approved by the SG-OBIS by October 2026. **KPI 5**	**Status** *(completed, in progress, cancelled)*

Implementation plan for the creation of an eDNA data management course, including a course outline and delivery timeline by October 2026.	
Deliverables **D5.1** Deliver 2 workshops to advance adoption of data standards within OBIS. **D5.2** Document a plan to support WoRMS Data Management Team in OBIS taxon annotation improvements. **D5.3** Document a DWC-DP indexing strategy in collaboration with GBIF. **D5.4** Design and document an approach, implementation plan, and timeline to quantify and monitor EOV data within OBIS. **D5.5** Review OBIS guidelines on eDNA data and plan and document training that will improve knowledge and eDNA data delivery within the OBIS network.	
Outcome N° 6 Ensure an Operational Products Coordination Group (PCG)	
Performance indicators *(list 2-5 indicators)* **KPI 1** At least 5 dual online sessions scheduled through October 2026.	**Status** *(completed, in progress, cancelled)*
Deliverables **D6.1** Meeting minutes shared through a public portal in collaboration with the other Coordination Groups.	
Outcome N° 7 Robust operational deployment of the OBIS Products Catalogue	
Performance indicators *(list 2-5 indicators)* **KPI 1**	**Status** *(completed, in progress, cancelled)*

Indicators for international efforts aligned with OBIS priorities are available for application to registered Products in the OBIS Products Catalogue. **KPI 2** Data products created by OBIS Secretariat as well as OBIS Nodes are registered in the OBIS Products Catalogue. **KPI 3** Products from the OBIS Products Catalogue are available for harvest by ODIS.	
Deliverables **D7.1** OBIS Product Catalogue is officially deployed with OBIS styling and is integrated into the OBIS domain as part of the operational OBIS ecosystem. **D7.2** OBISProducts Catalogue schema extension for data product indicators meeting international policy outcomes (e.g., KM-GBF, CBD, WOA), in collaboration with partners and partner networks. **D7.3** Active GitHub repository for monitoring and incorporating feedback from OBIS nodes on appropriate language and nomenclature for metadata. **D7.4** Training material describing how OBIS uses the OBIS Products Catalogue, and indicating which data products should carry international policy indicators.	
Outcome N° 8 Data product pilot showcasing OBIS' ability to serve national policy outcomes and highlight the richness of available data in OBIS's national and regional Nodes.	
Performance indicators *(list 2-5 indicators)* **KPI 1** Data products expressing species richness or species-specific distribution models are available for OBIS nodes and regions to implement.	**Status** *(completed, in progress, cancelled)*

Deliverables **D8.1** Develop a set of data products focused on serving national policy outcomes as an example of OBIS' suitability in informing national-scale biodiversity strategies.	
Describe the governance model. *(e.g., steering group, advisory group)* The OBIS Work Plan is implemented by the OBIS Secretariat with the active support from the community through the OBIS Coordination Groups who report to the OBIS Steering Group. The OBIS Executive Committee monitors the implementation. The OBIS Steering Group sets the priorities.	
Explain how the Programme Activity/Project will target one or more IODE or IOC objectives. The OBIS Work Plan contributes to all 5 IOC high level objectives.	
Expected duration. Start date: 1 Nov 2025 End date: 31 Oct 2026	

The SG-OBIS recognised that more high priority strategic activities have been identified within the Coordination Groups, but the current level of resourcing prevents delivery.

The SG-OBIS endorsed the proposed work plan and recommended that the work plan is submitted to the IODE Management Group for approval.

The SG-OBIS supported the development of an achievable set of tasks and deliverables to ensure all activities are completed to a high standard.

6. OBIS Co-Chairs

6.1. OBIS Coordination Group Co-Chairs

Katherine Tattersall suggested that in order to ensure continuity across annual work plans and enable individuals to establish themselves in the role that the Terms of Reference for Coordination Group Co-Chairs be updated to reflect that each Co-Chair appointment is based on a 2-year term with an optional rolling 2 year additional term subject to approval of SG-OBIS.

The SG-OBIS recommended that the two Coordination Group Co-Chair roles be offset, so that each year there is one CG Co-Chair replaced.

The SG-OBIS approved the updates to the Coordination Group Co-Chair Terms of Reference.

SG-OBIS requested that for transparency and clarity the Terms of Reference for Co-Chairs and OBIS Groups are available on the OBIS website.

6.2. OBIS SG Co-Chairs

Dan Lear reiterated that the ToR for OBIS SG Co-Chairs, approved at SG-OBIS-12, states that SG Co-Chairs are appointed for 2 terms of 1 year each, extended up to 3 terms through mutual agreement and with the endorsement of the Steering Group.

Co-Chair Katherine Tattersall is ending her second term and has stated that she would like to stay on for a third term should the SG-OBIS agree.

Co-Chair Dan Lear is ending his first term and has stated that he would like to stay on for a second term should the SG-OBIS agree.

The SG-OBIS strongly endorsed the continuation of both Katherine Tattersall and Dan Lear as SG Co-chairs and thanked them for their ongoing dedication to the role. The SG noted that this will be the final year for Katherine Tattersall as SG Co-Chair.

7. Adoption of the report

The SG-OBIS adopted the report.

8. Date and place of next session

At the 7th EC-OBIS meeting it was proposed to hold the 14th session of the OBIS Steering Group on 11-16 November 2026 at the OBIS Secretariat, InnovOcean Campus in Ostend, Belgium. The SG-OBIS-14 meeting will be back to back with the 7th World Conference on Marine Biodiversity (WCMB[17]) 17-20 November 2026 in Bruges, Belgium.

[17] https://www.wcmb2026.org/

The SG-OBIS welcomed the proposal from the EC-OBIS to have the 14th SG-OBIS session to be in Belgium, and requested OBIS nodes to submit proposals for hosting the 15th session to the OBIS secretariat ahead of the 14th session.

9. Closing

The OBIS Co-Chairs thanked all participants on-site and on-line and expressed deep appreciation of the OBIS Secretariat for their support, dedication and exceptional expertise.

IndOBIS expressed its thanks to the OBIS community for the welcome and support that they and the OBIS Secretariat provide to the Nodes. Hashim Manjebrayakath (IndOBIS node manager) presented a plaque from CMLRE of the Ministry of Earth Sciences, Government of India, to OBIS which will be kept in the OBIS Secretariat offices in Oostende, Belgium, for OBIS.

The SG-OBIS thanked the host INVEMAR for their great support in hosting the SG-OBIS-13 including exceptional catering and technical support.

The 13th session of the OBIS steering group ended at 18:19 on Monday 27 October 2025.

Annex 1: OBIS Nodes Coordination Group (NCG) Full Report

1. Introduction

The NCG meeting took place on 25 October 2025, co-chaired by Ms. Maria Cornthwaite (in-person) and Dr. John Nichols (on-line), with secretariat support provided by Mr. Laurent Chmiel.

Dr. John Nichols opened the meeting, describing the purpose of the NCG, explaining the approach that the meeting would follow, and introducing the agenda.

2. Year in Review

Ms. Maria Cornthwaite presented the OBIS Nodes Year in Review (see slides in https://www.oceanexpert.org/document/37478), consisting of information summarized from the OBIS Nodes Annual Activities Reports, with supplementary information from the Long Term Archiving Survey. The focus of the review was on presenting the node accomplishments from a community perspective.

2.1. Datasets published

OBIS nodes reported that they collectively published 1405 new datasets since the SG-OBIS-12 meeting in 2024, based on the answers of 29 respondents.

2.2. Node staff & funding

The OBIS community displays strong disparities in staffing levels and funding, with variable resources and capacity.

Of the 26 nodes that responded, the most significant proportion (about 38 %) reports teams of 3 people. However, 24 % operate with only one staff member. A smaller fraction have 4–5 staff (each 14 %), and a few larger nodes (7–12 staff) represent under 10 % of all OBIS Nodes. The survey did not specifically ask about how much time the node staff spend on OBIS, but several nodes noted that their staff are not able to work full-time on OBIS.

While about one-third of participants report long-term stability, a similar share are uncertain beyond a few months.

These results underscore the need for a sustained, equitable funding mechanism to ensure continuity across all regions and maintain global capacity.

2.3. Key Achievements

Nodes listed many achievements in addition to publishing data. These were summarized into five areas:

2.3.1. **Expanding data mobilization, improving data availability**

Data mobilisation remains OBIS's strongest pillar, with over 40% of all achievements relating to dataset publication and data availability improvement

- Publication by the OBIS Nodes of 1405 new datasets, with several Nodes doubling their output
- Publication by the OBIS Nodes of 7 scientific papers using OBIS data (3 more in preparation)
- Publication and curation of 2 global databases, expanding OBIS global data coverage
- Publication of 2 open-data guides to facilitate community contributions
- Support for dataset publication by non-specialist and local institutions
- Integration of national monitoring datasets into OBIS, strengthening long-term data stewardship

2.3.2. **Strengthening pipelines and technical systems**

Several Nodes are modernising data flows toward automation and interoperability, bridging biodiversity and ocean-observation infrastructures.

- Infrastructure improvements, including reinforcement of data quality control and validation tools
- Enhanced telemetry data pipelines, enabling automated publication
- Implementation of pilot workflows for real-time publishing with partner organizations
- Deployment of automated telemetry systems supported by an open-by-default data policy
- Standardisation of biological data formats, improving interoperability across institutions
- Co-development of eDNA data pipelines in collaboration with partner organisations
- Recruitment of specialised staff, strengthening technical and bioinformatics capacity

2.3.3. **Capacity development: building skills and mobilizing local data**

Capacity development is thriving in the OBIS Community, and is blossoming in the Mediterranean, Latin America, and Asia–Pacific nodes, highlighting decentralised leadership.

- Eighteen Nodes organized or participated in 62 training events, at local, national, and regional levels
- Development of multilingual learning opportunities to increase local capacity
- Onboarding of new data publishers and partners
- Targeted capacity building for institutional staff, improving data documentation and interoperability practices
- Organisation of 11 joint regional workshops to promote data sharing, collaboration, and best practices for alignment with global biodiversity frameworks
- Technical and thematic meetings to promote peer exchange on data structures, quality metrics, and policies

- Creation of a national institutional consortium, advancing standardisation and collective stewardship

2.3.4. **Expanding the OBIS collaboration network**

Partnerships increasingly operate on multi-node and cross-infrastructure levels, demonstrating the OBIS strength as an integrative force in global biodiversity data governance.

- Creation of a regional coordination framework supported by a grant to enable its operational rollout
- Expanded cross-regional partnerships to promote shared capacity and policy alignment
- Strengthened international collaborations between ocean observing and biodiversity data infrastructures, improving interoperability and data exchange
- Integration of OBIS data into regional biodiversity information systems, improving visibility and policy uptake

2.3.5. **Visibility, leadership, and policy impact across the OBIS community**

Thanks to its transparency and robust, community-led governance, OBIS is increasingly recognised as a trusted source of high-quality marine biodiversity data. It plays a vital role in supporting evidence-based decision-making for conservation and the sustainable management of ocean resources.

- Strengthened internal leadership and governance, with community members actively contributing to the strategic direction of OBIS
- Enhanced scientific visibility through open-data guides and peer-reviewed papers
- Increased policy engagement, with OBIS data and expertise informing regional and global frameworks for ocean management and biodiversity planning
- Greater institutional integration, as OBIS aligns with national & regional scientific data infrastructures
- Recognition at regional level around the world, acknowledging OBIS community leadership
- Active representation in global fora, showcasing OBIS's role in advancing marine biodiversity observation and emerging technologies such as eDNA.

2.4. What's next: node priorities for the future

Nodes listed many priorities for the coming years. These were summarized under three themes:

2.4.1. Building sustainable infrastructure and funding

- Improve data quality, validation, interoperability
- Secure institutional and financial sustainability
- Encourage innovation and data-driven research

2.4.2. Scaling up regional cooperation and policy engagement

- Build regional capacity and coordination mechanisms
- Deepen policy and governance engagement
- Strengthen collaboration within and beyond OBIS

2.4.3. Transforming data into actionable knowledge

- Strengthen data mobilisation and publication
- Enhance communication, outreach, and visibility

2.5. Year in Review Discussion

The OBIS nodes welcomed the presentation of the Year in Review, noting that the annual surveys provided rich information and a valuable feedback loop to understand progress, challenges, and emerging needs across the community. Several participants emphasized the importance of maintaining this reflective mechanism while exploring ways to automate aspects of data collection to reduce the reporting burden on Nodes.

Training and capacity development emerged as a central theme. Participants discussed how to strengthen national-level training initiatives and improve visibility of existing opportunities, with suggestions such as developing a certification system for OBIS trainers and simplifying course structures to prevent learning repetitions. The group agreed that training materials need to remain up to date as data standards evolve and could include modular certification paths or topic-specific badges. Suggestions were made to upcycle and translate existing training resources and to expand awareness of the OBIS–OTGA courses through improved communication.

Participants noted that manual survey completion is time-consuming for many Nodes and represents a considerable cost in staff time. Participants proposed exploring automated tracking systems, such as using identifiers (ORCIDs, RORs) or APIs to monitor dataset publications and citations.

On data publication and integration, participants exchanged experiences regarding national and institutional data flows. Some highlighted the challenge of journal submission practices that divert datasets from OBIS. It was proposed that OBIS explore dialogue with publishers and national authorities to promote dataset deposition through national OBIS Nodes as a recognized open-data pathway.

Several participants underlined the importance of communication and visibility—both among Nodes and with the Secretariat. Suggestions included better showcasing Node activities, providing regular updates on accomplishments, and developing examples of best practices that could serve as reference models for other organizations.

Interoperability and collaboration were recurring topics. Members reflected on linkages between OBIS and partner initiatives such as GOOS BioEco. It was suggested that OBIS contribute examples of national or thematic best practices that could help GOOS and other observing communities integrate biodiversity data more effectively. Participants agreed that highlighting OBIS capacities, for instance, through a public list of each Node's thematic expertise, would make it easier for data holders and observing communities to identify the right Node for collaboration.

Finally, participants reiterated the importance of continuous coordination and peer learning across the community. The discussion confirmed that OBIS's strength lies in its community-driven model, where Nodes learn from each other and collectively advance data sharing, quality, and capacity worldwide.

2.6. Conclusion of Year in Review

The year in review reflects strong alignment with OBIS's overarching strategic priorities. Efforts to build sustainable infrastructure and funding remain essential, as survey results highlight disparities in staffing and resources across Nodes. Continuous improvement of data quality, validation, and interoperability is underway through modernised pipelines and cross-infrastructure collaborations. The community is fostering innovation and data-driven research, with OBIS Nodes co-developing new methods and publishing scientific results. Regional cooperation and policy engagement are scaling up, anchored by decentralised leadership in multiple regions. Finally, OBIS continues to transform marine biodiversity data into actionable knowledge, enhancing its visibility and policy relevance globally.

3. Workshop and strategic discussion

Members of the NCG and OBIS Secretariat took part in a workshop led by Mr. Laurent Chmiel, OBIS Community Engagement Officer, and a strategic discussion led by Ms Maria Cornthwaite. The workshop, entitled "Tackling systemic & common challenges," addressed the six most common challenges listed in the Nodes Activities Report as hindering Node participation and contribution to OBIS-related activities. The six challenges were raised and consolidated from the OBIS Nodes Annual Activity Report. The outcome of the workshop was a set of collaboratively designed solutions that feed into the work plans of the NCG and other coordination groups.

The Strategic Discussion addressed emerging strategic opportunities and challenges for OBIS over the next 3–5 years, in the context of institutional, national, and regional priorities. The discussion was structured around five themes, all raised from the OBIS Nodes Annual Activity Report. The outcome is a concise set of co-created strategic priorities that will feed a series of strategic recommendations from the OBIS NCG to the OBIS SG. These are:

3.1. NCG Recommendation 1: Harnessing emerging science and technology for marine biodiversity data

- Invite all OBIS Nodes to contribute to innovation efforts, creating a collaborative environment for testing, validating, and integrating new technologies such as eDNA, AI, and real-time observations.
- Develop targeted training modules to strengthen technical capacity within Nodes and ensure shared understanding and consistent application of emerging technologies.
- Encourage partnerships with technology providers and research institutions to jointly explore and pilot innovative tools that enhance marine biodiversity monitoring and analysis.
- Ensure long-term support and guidance from the Secretariat to help Nodes adopt new tools sustainably, including technical documentation, interoperability standards, and data quality frameworks.

3.2. NCG Recommendation 2: Strengthening data interoperability and actionability

- Co-design and implement common data formats and schemas across OBIS and related infrastructures to improve interoperability and data reuse.
- Promote the integration of biological, environmental, and observational data to deliver more actionable products for science, management, and policy.
- Strengthen alignment with partners such as GBIF, GOOS, and EMODnet, ensuring harmonized standards and simplified data exchange workflows.
- Advance the development of APIs and dashboards that make OBIS data more accessible, traceable, and usable for non-technical audiences.

3.3. NCG Recommendation 3: Expanding capacity, equity, and sustained participation

- Implement a “buddy system” to match Nodes with complementary expertise, encouraging peer learning, mentoring, and knowledge transfer.
- Launch a matchmaking process to connect training needs with existing resources and trainers across the OBIS community.
- Co-design training implementation plans with Nodes, ensuring local ownership and equitable access to learning opportunities.
- Establish follow-up mechanisms after workshops to maintain engagement, support trainees, and translate training outcomes into active data contributions.

3.4. NCG Recommendation 4: Strengthening strategic partnerships and sustainable funding

- Diversify funding sources by developing a strategic partnership and fundraising framework targeting philanthropic, institutional, and private partners.

- Create a concise OBIS communication package for funders and host institutions, showcasing community impact and value.
- Encourage shared resource models (e.g. joint staff positions, co-funded regional coordination) to increase resilience and reduce duplication.
- Strengthen advocacy and visibility of OBIS's role in supporting global biodiversity data frameworks to attract long-term investment.

3.5. NCG Recommendation 5: Positioning OBIS within global and national policy frameworks

- Enhance communication with national and regional authorities to highlight OBIS's relevance for biodiversity reporting and policy implementation (e.g. SDG, CBD, BBNJ).
- Develop an advocacy strategy demonstrating how OBIS data supports national commitments and global frameworks.
- Promote the use of OBIS data in official reporting mechanisms by providing guidance, APIs, and ready-to-use indicators.
- Strengthen collaboration with policy-oriented initiatives such as GEO BON, GOOS, and regional ocean observing systems to ensure data uptake in decision-making.

4. Specific objectives from the prior year and outcomes

4.1. Group logistics and communications

The "bi-monthly meetings scheduling", "interactions with other CGs", and the "introduction of Flash talks" have been fully developed. The NCG has held six dual-session meetings with notable attendance (51 participants on average across six meetings and 12 sessions between November 2024 and September 2025).

The delivery items "Identify possible mentoring possibilities where individual Nodes may be supported by more experienced Nodes" and "Receive feedback from PCG and DCG regarding developments to assist in identifying training and mentoring needs of Nodes" have been developed but not fully implemented. These items will be integrated into the upcoming Node-Node Support Programme framework, which was presented at the 5th NCG meeting and enriched by the Nodes' answers to the Annual Activity Report, as well as comments collected during the NCG meeting at OBIS SG-13.

The last two delivery items, "Identify and implement optimum contact methods" and "Identify

and endeavour to engage with non-responsive Nodes" have stalled due to a lack of time and resources. The two items will be integrated into Delivery 1.3 of the future NCG work plan.

4.2. Training

The requested actions "Identify the needs of the Nodes and signpost them to the appropriate resources" and "Identify any new and appropriate mentoring that may be necessary (with assistance and engagement from the Product Coordination Group and Data Coordination Group)" have been merged into the Node-to-Node programme which framework will be developed based on the specific answers from the Nodes from the corresponding survey. The requested actions "Identify and encourage certification of all Node Managers and any relevant representatives of a Node" and "Share with OBIS Secretariat/OceanTeacher Global Academy/etc. Members who may guide and/or direct engagement", will also be merged into the same programme.

4.3. Support for Nodes

The "Engage with and assist Nodes who have not produced data for a while" and "Address issues and concerns around funding for Nodes" requested actions have been addressed in an informal manner. Across meetings and surveys, concerns over funding and long-term sustainability have been frequently mentioned. The requested action "Identify any specific issues/ideas that Nodes may present" has been addressed during a workshop at OBIS SG-13, based on the answers to the OBIS Nodes Annual Activity Report.

5. NCG Deliverables from Prior Year

Deliverable 1.1: "Build an NCG Wiki and make it accessible to Nodes"

This deliverable has been started through the establishment of a Discourse board. However, a lift-up mechanism that would allow saving, summarizing, and highlighting relevant discussions and solutions to issues from the Discourse board to a wiki or an FAQ has been turned into Deliverable 3.3 in the upcoming NCG work plan.

Deliverable 1.2: "Progress reporting and engagement representation at EC meetings and SG meetings"

This deliverable has been completed (51 participants on average across six NCG meetings and 10 sessions between November 2024 and September 2025).

Deliverable 2.1: "Create and distribute a Flash Talk template to be used by the Nodes by November 2025"

This deliverable has been completed, with a good uptake from the community.

Deliverable 2.2: "Create an interactive issue-reporting platform where Nodes can pose questions, suggest ideas, and report issues to be addressed either during NCG meetings or in the Wiki"

This deliverable has been completed with the OBIS Discourse platform, with the limitations and solutions proposed within Deliverable 1.1 above.

NCG Work plan for 2024-2025	
Outcome N° 1. Operational Node Coordination Group (NCG)	
Performance indicators *(list 2-5 indicators)* 1. **Nodes Coordination Group meetings**: the NCG should organise at least 5 coordination meetings between November 2024 and October 2025. 2. **Meeting attendance**: Percentage of Nodes attending each meeting between November 2024 and October 2025. 3. **Participant engagement**: Number of questions asked by meeting participants between November 2024 and October 2025.	**Status** *(completed, in progress, cancelled)* **Completed** **Completed** **Completed**
Deliverables 1. **Build an NCG Wiki** and make it accessible to Nodes 2. **Progress reporting** and engagement representation at EC meetings and SG meetings	 **Completed** **Completed**
Outcome N° 2 Improve Inter-Node Communication	
Performance indicators *(list 2-5 indicators)* 1. **Flash Talks attendance**: number of views per Flash Talk between November 2024 and October 2025. 2. **Wiki users**: number of Wiki monthly users between November 2024 and October 2025.	**Status** *(completed, in progress, cancelled)* **Completed** **Cancelled**
Deliverables 1. **Create and distribute a Flash Talk template** to be used by the Nodes by November 2025. 2. **Create an interactive issue-reporting platform** where Nodes can pose questions, suggest ideas, and report issues to be	 **Completed** **Partially completed**

addressed either during NCG meetings or in the Wiki.	

Annex 2: OBIS Data Coordination Group (DCG) Full Report

Ruben Perez, OBIS DCG Co-Chair, reported to the OBIS SG that DCG progress on the workplan deliverables and core tasks has been maintained throughout 2025 (See presentation at https://www.oceanexpert.org/document/37479). The group organised each deliverable as a focused work package led by self-nominated members that reported regularly to the DCG group. 7 DCG online meetings have been held, from which notes are still being compiled for publication through an OBIS-owned public repository to reinforce transparency.

Work on EOV publication guidelines has advanced through collaboration with GOOS BioEco Panel, who were surveyed about the existence of data schemas for each EOV following their respective specification sheets. Responses were received for 8 out of 13 EOVs, with a positive answer for two EOVs, negative for three and still investigating for another three of them. Highlighting the need of creating data schemas for all EOVs in order to progress with EOV data integration into OBIS via automated transformation to DwC.

100% of the OBIS nodes were surveyed on their engagement in external initiatives, showing strong participation with initiatives like GBIF and TDWG. The specific results of this survey were expanded on in the 3.1 section of this document, supporting a central registry of external linkages to better coordinate collaboration with other biodiversity information related initiatives.

Another survey was run on the nodes' long-term archiving strategy. Responses were received from 33 nodes indicating an uneven access to certified institutional archives, revealing challenges in infrastructure, capacity and funding. These results are guiding the development of an OBIS-aligned scalable strategy for long-term data preservation.

Work continues to strengthen metadata interoperability with ODIS. A first integration stage is complete, with dataset pages now exposing structured metadata using JSON-LD. The next phase will expand metadata richness to include fields such as taxonomic coverage and EOV indicators, and explore how to represent other OBIS assets (products, services, software) within ODIS.

Support for new data types, particularly DNA-derived data, remains a core focus. The deliverable has been refined to prioritise updates to the OBIS DNA manual and capacity building. Two webinars were delivered on the GBIF Metabarcoding Data Toolkit, strengthening network proficiency in eDNA data publishing. Annotation workflows for sequence-based taxon names are being developed to address expected growth.

Discussions from the NCG workshop on including OBIS strategies for new technologies, identified main challenges for DNA data in OBIS, that were brought to the DNA group of the DCG. OBIS should be established as a global database for high quality eDNA metabarcoding data, and the ease of access to eDNA data and data across the eDNA data landscape should be ensured. To achieve this goal, quality control of eDNA data is required, access to eDNA data should be improved through a dashboard and by better separation of eDNA data, and capacity development should remain a main priority.

Taxonomic and vocabulary improvements with NERC P01 controlled vocabularies are ongoing. Approximately 2% of OBIS records remain unmatched to WoRMS. Automated and manual curation workflows are reducing this number while improving alignment to approved vocabularies. DCG was also engaged in the evolution of the Darwin Core Data Package model and the Humboldt extension, engaging with the respective TDWG Task Groups to ensure OBIS workflows and use cases are represented.
Overall, DCG work in 2025 has strengthened interoperability foundations, expanded community readiness, and advanced data sustainability in line with OBIS strategic priorities.

Annex 3: OBIS Product Coordination Group (PCG) Full Report

Co-chairs: Steve Formel, Jonathan Pye
Secretariat Support: Silas Principe

3.1 Executive Summary

The OBIS Products Coordination Group held its fifth meeting of 2025 in Bogotá, Colombia. The session focused on reviewing progress toward established deliverables, demonstrating new developments in OBIS data products, presenting the OBIS Products Catalogue, and planning priorities for 2026. The meeting successfully achieved its objectives of evaluating current workplan status, gathering feedback on the Products Catalogue, and identifying future strategic priorities for the group.

3.2 PCG Workplan and Priorities: Current Status

The PCG was established to deliver two main outcomes: (1) an Operational Products Coordination Group and (2) Enhanced access to FAIR OBIS Products. Progress on these outcomes was reviewed during the meeting.

Outcome 1: Operational Products Coordination Group
The PCG was expected to hold at least five online meetings through October 2025. Four meetings were successfully organized prior to this session, making this the fifth and final meeting of the year. These meetings provided a platform for discussing product needs, challenges, and opportunities. Several sessions included presentations of data products, which generated ideas for future developments and potential additions to the catalogue.

All meetings for 2026 are currently being planned, with invitations to be sent before the new year. Co-chairs expect this to improve meeting experience by giving more lead time for agenda creation and for members to plan to attend. The group noted the challenge of timezone management, which was addressed by holding meetings at two different times to create engagement opportunities across the global community.

Outcome 2: Enhanced Access to FAIR OBIS Products
Progress was made on the following performance indicators:

1. Detailed plan drafted for the development of the catalogue: https://www.oceanexpert.org/document/37476
2. Developmental OBIS Products Catalogue set up for testing
    a. *Note: will be taken down after the demo is completed in this meeting.*
3. Developmental JupyterHub set up for testing
    a. Note: https://jupyter.obis.org/hub/ is *operational, but not yet in use – to be discussed*
4. Production OBIS Products Catalogue published (ETA: Dec 31, 2025)

Significant time was devoted to the development of the Products Catalogue. The effort proved more challenging than initially anticipated, but the investment in establishing robust metadata standards and ensuring alignment with the ODIS infrastructure is considered highly valuable to both data providers and consumers. The group acknowledged that presentations of products from the external community were valuable, and that exposure to current tools and data products serves to inform future development effort, even if the products presented are not directly included in the catalogue.

3.3 New Developments

Silas Principe from the Secretariat presented several new developments in OBIS data products and infrastructure:

DOI System for Custom OBIS Exports
A new DOI system has been implemented for derived products, allowing users to obtain DOIs for custom OBIS data exports. This enhancement supports proper citation and tracking of the data components used to create OBIS-derived research products. A short video demo is available here.

Gridded Products
Two major gridded data products were presented. Both products are noteworthy examples of how OBIS is different from other networks, like GBIF. These are value- added products which are targeted towards the needs of our users and can be reused across various regions of the OBIS networks.

- **speciesgrids (github):** Gridded datasets of WoRMS aligned marine species distributions, as GeoParquet, based on OBIS and GBIF occurrence snapshots.

- **obistherm (github):** OBIS occurrence data matched with multiple sources of monthly temperature data, covering the period from 1986 to present. A publication is scheduled for submission to Global Ecology and Biogeography by the end of October 2025

OBIS AWS Export
The OBIS dataset is now available as GeoParquet format through the AWS Open Data Program. The export includes full Darwin Core archives and is part of an agreement with AWS to provide event and occurrence data and also species range maps.

JupyterHub Status
Discussion regarding the OBIS JupyterHub instance revealed that while the platform is operational, budget constraints currently prevent making it publicly available. The group acknowledged that a sponsor may be needed to support broader access for OBIS and community product development.

3.4 OBIS Products Catalogue: Overview and Demonstration

Steve Formel presented a comprehensive overview of the OBIS Products Catalogue, addressing the challenge of tracking the extensive work being done with OBIS data across 36 nodes worldwide and 668+ contributing institutions.

Problem Statement
The OBIS network identified a critical need for a central location to track and discover the hundreds of products created from OBIS data. Without such a system, the network was losing track of valuable work and missing opportunities to avoid duplication and allow members to build on one another's existing output.

Solution and Technical Implementation
The catalogue is built on CKAN, selected after some community product landscape research due to several key advantages:

- Purpose-built for data catalogues (e.g. data.gov)
- Capability to nest catalogues
- Already in use by the ocean community
- IODE Ocean Data Portal, CIOOS)
- Powerful search and filtering capabilities
- Open source and free
- Flexible and customizable
- API for automation

Workflow
The proof of concept demonstrates a four-step workflow:

- Researcher publishes to Zenodo (obtaining a DOI)
- Metadata is imported into the catalogue
- Catalogue exports to ODIS format (JSON-LD)
- Product becomes discoverable across ocean data systems

Organization Structure
The catalogue presents registered products organized in three hierarchical levels that mirror OBIS structure:

- Nodes (36 worldwide)
- Institutions (668+ contributing organizations, populated via OBIS API and Ocean Expert)
- Products (actual maps, papers, datasets, categorized by type and theme, linked to nodes and institutions)

The catalogue tracks various product types based on Zenodo/DataCite classifications, including datasets, software, images/figures, presentations, publications, posters, videos, lessons, and other outputs.

User Interface
The catalogue homepage features:

- Central search functionality
- Browse by product type (maps, papers, software)
- Browse by theme (climate, conservation)
- Recent additions

Individual product pages display title, authors, description, access links, related products, and the stewarding OBIS node.

Submission Options
Three methods are available for adding products:
- Import from Zenodo (recommended for FAIR compliance)
- Manual entry via form
- Batch upload by contacting OBIS

Timeline
- November: Revisions based on SG13 feedback and import of existing products
- December 1: Soft launch to all OBIS nodes for product addition and management
- January 1: Public launch with full announcement and training materials

Testing and Feedback Session
Participants were provided with access credentials to test the developmental catalogue and encouraged to provide feedback through GitHub issues or a dedicated Padlet.

Looking Ahead: Supporting Product Development

The group engaged in strategic discussion about future priorities for the PCG, focusing on three key areas: community support for product development, indicators for policymaking, and support for OBIS node priorities.

Community Support for Product Development
The discussion addressed tools, platforms, and training needs:

JupyterHub

JupyterHub was recognized as useful for those without access to large computational infrastructures, offering easy access by moving compute resources close to the data in an agnostic manner. While moving data and enabling remote access is relatively easy at current scale, costs present a challenge for scaling to OBIS-wide usage. However, the pipelines developed across the OBIS network are beneficial and need to be centralized. Google Colab was suggested as an alternative, though it is not available across the entire OBIS network. A data pipeline-creating platform that is implemented near to the OBIS dataset was identified as useful for training purposes. Overall, interest in JupyterHub as a transition platform was present but not considered the highest priority.

Training and Tutorials

The effective use of GitHub for training and tutorials was discussed as a key component of community support.

Indicators for Policymaking
The group discussed the role of the PCG in supporting indicators for international policymaking, particularly related to GOOS Essential Ocean Variables (EOVs), Convention on Biological Diversity (CBD) reports, and other international frameworks.

Key points raised included:

- Clarification is needed regarding PCG's specific role and leadership in this area
- GOOS BioEco EOVs present potential for well-aligned ‘quick wins’
- Understanding user-community needs through persona exercises and user stories is important
- GOOS, IOC, and CBD are looking to OBIS for leadership, particularly noting that the Kunming-Montreal Global Biodiversity Framework specifically mentions OBIS in Targets 19 and 20
- EBSAs (Ecologically or Biologically Significant Marine Areas) need updating, and OBIS should actively support countries with products, (gridded products were specifically mentioned) for EBSA proposals, referring to EBSA specification sheets
- Input from local nodes is needed to understand specific needs
- Direct connections to IOC delegations and national BBNJ leads can support identification of key contact points
- Colombia expressed strong interest in becoming a pilot for how data can be elevated and applied to support international frameworks
- The Data Coordination Group and Products Coordination Group are identified as appropriate spaces for development, while the Nodes Coordination Group serves as the broader audience, a space to refine the application of this development work
- OBIS needs to engage directly with policymakers to bridge the gap between academics and policy

National-Level Data Product Needs
Discussion focused on understanding what national and regional affiliations need from OBIS and whether these needs could become standard pipelines. Several specific contexts and opportunities were identified:

    - OBIS plans to submit a funding proposal to FUST for downstream applications
    - Funds associated with the Deepwater Horizon incident are linked to the Gulf of Mexico, providing a large volume of data that could demonstrate value
    - IOC medium-term strategy focuses on multi-hazard early warning systems, including deoxygenation, acidification, heat waves, invasive non-native species, pathogens, and pests. The group discussed how OBIS can respond to this priority
    - Potential exists for OBIS to develop a platform or portal for ASEAN countries
    - Concerns were raised about competition from commercial companies, balanced by recognition of OBIS advantages: longevity, integrity, honest motivation, and strength through international collaboration
    - OBIS needs to improve demonstration of its benefits

    - Engagement with commercial bodies via the PCG was suggested
    - Regional requirements and lessons learned from newer nodes (such as OBIS Korea, which is not yet directly connected to national policy) were discussed
- Additional opportunities identified:
    - Application of species distribution model outputs in specific regions (e.g., Japan)
    - Product creation and promotion to showcase global perspectives, including regions beyond the global north, particularly in Asia
    - Products linked to 30x30 requirements
    - Product Shapefiles catalogue (with note that collaboration with Marine Regions or partnership with Protect Planet Ocean would be preferable to avoid overlap)
    - Support for data papers, with potential for OBIS to support costs and centralize support

Conclusion

The OBIS Products Coordination Group successfully completed its 2025 workplan objectives, including the development and demonstration of the OBIS Products Catalogue. The group has identified clear priorities for 2026, focusing on community support, policy engagement, and national-level data product needs. The soft launch of the Products Catalogue is scheduled for December 1, 2025, with public launch on January 1, 2026.

Annex 4: OBIS Node Engagement Survey

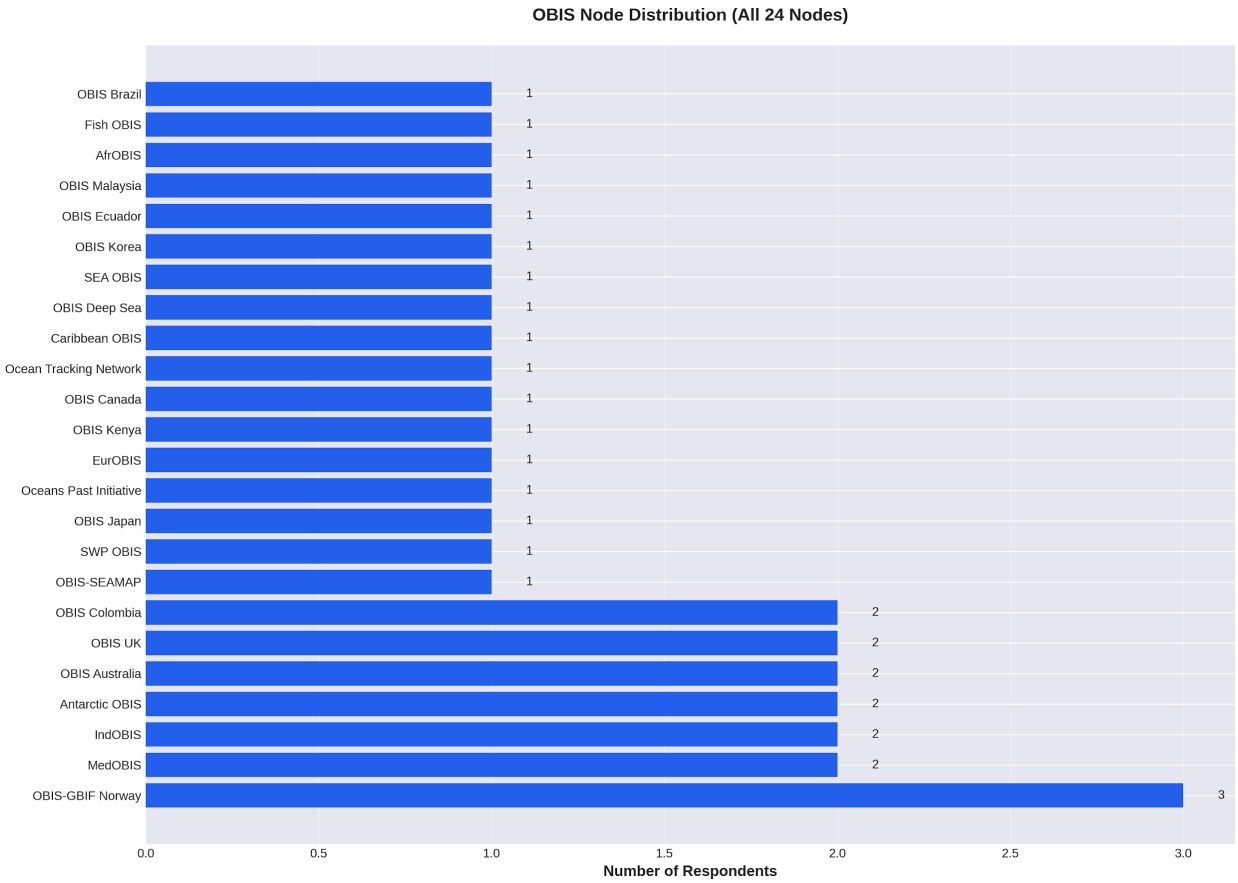


FIGURE: Responses to the survey by OBIS node. 24 of 37 nodes responded to the survey. Responses were not dominated by any single node.

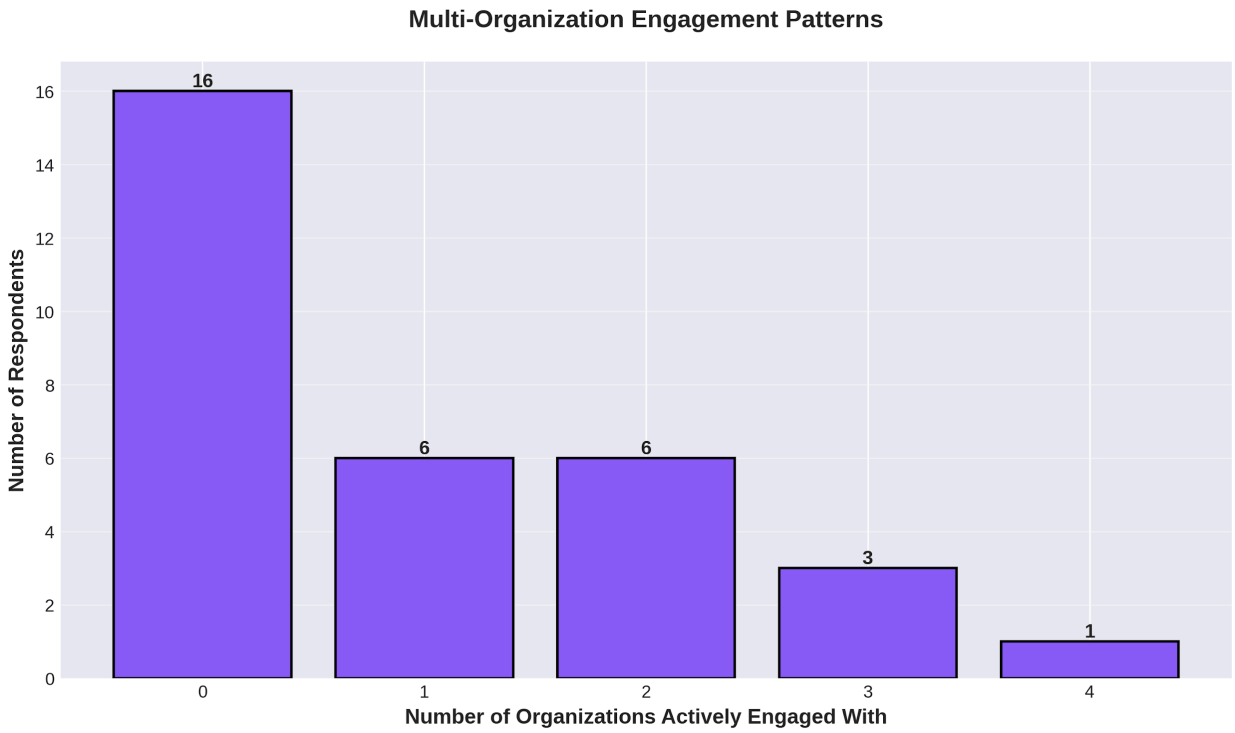


FIGURE: Number of organizations with which the respondent is actively engaged. Approximately half of the respondents indicated no active engagements with these 5 organizations.

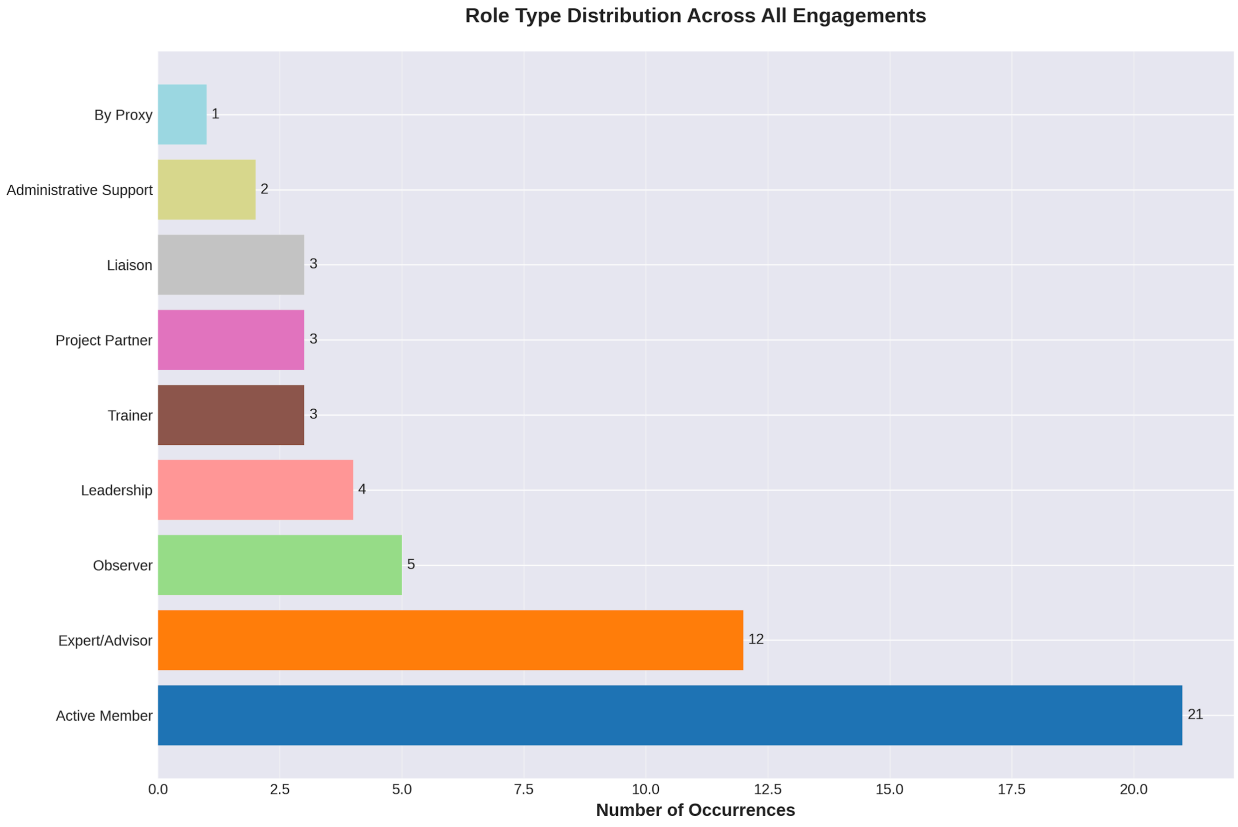


FIGURE: Self-described roles of nodes during engagement with partners.

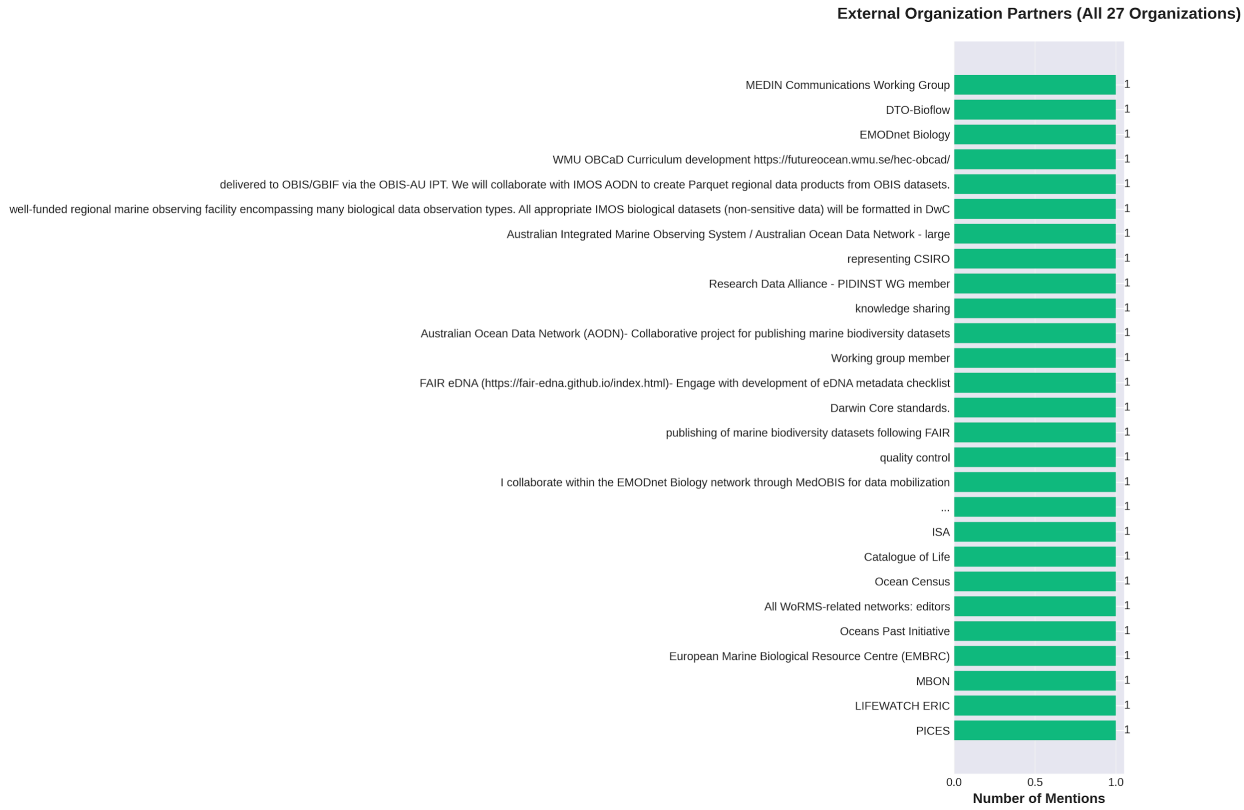


FIGURE: Additional organizations with which respondents are actively engaged.

Name	OBIS Node	GBIF	TDWG	GEO BON	GOOS	ODIS	Other Orgs
Vanessa Pitusi	OBIS-GBIF Norway	Active	None	None	None	None	
Ei Fujioka	OBIS-SEAMAP	Passive	None	Passive	None	None	
Kevin Mackay	SWP OBIS	Active	None	None	Passive	Passive	
Takashi Hosono	OBIS Japan	Passive	Passive	Passive	Passive	Passive	1
Dimitra MAVRAKI	MedOBIS	Passive	Passive	None	None	Passive	3
John Nicholls	Oceans Past Initiative	None	None	None	None	Passive	1
Dr Hashim Manjebrayakath	IndOBIS	None	None	None	None	None	
Johnny Konjarla	IndOBIS	None	None	None	None	None	
Leen Vandepitte	EurOBIS	Passive	Passive	None	None	Passive	1

Andreas Altenburger	OBIS-GBIF Norway	Active	Active	Passive	Passive	Passive	
Ioannis Rallis	MedOBIS	Passive	Passive	Passive	Passive	Passive	1
Yi-Ming Gan	Antarctic OBIS	Active	Active	Passive	Active	None	
Sachit Rajbhandari	OBIS Australia	Passive	Passive	Active	Active	Active	2
Katherine Tattersall	OBIS Australia	Active	Passive	Active	Active	Active	3
Chloe Figueroa Ashforth	OBIS UK	Passive	Passive	None	Passive	Passive	3
Katrine Kongshavn	OBIS-GBIF Norway	Active	Passive	None	None	None	
Fatuma Mzingirwa	OBIS Kenya	Passive	Passive	Passive	None	Passive	
Maria Cornthwaite	OBIS Canada	Passive	None	None	None	None	
Anton Van de Putte	Antarctic OBIS	Active	Active	Active	Passive	None	
Jonathan Pye	Ocean Tracking Network	Passive	Active	Passive	Active	Passive	
Ana Carolina Peralta	Caribbean OBIS	Passive	Passive	Passive	Passive	None	
Dan Lear	OBIS UK	Passive	Passive	Passive	Passive	Active	
Martha Patricia Vides Casado	OBIS Colombia	Passive	None	None	None	None	
Hanieh Saeedi	OBIS Deep Sea	Active	Passive	Passive	Passive	Passive	
Erika Montoya Cadavid	OBIS Colombia	Active	Passive	None	None	Passive	
Kit Elloran	SEA OBIS	Active	Passive	Active	Passive	None	
Sang Ho Baek	OBIS Korea	Passive	None	None	None	None	
Victor Chocho	OBIS Ecuador	Active	Active	None	None	None	
Muhammad Hafiz Borkhanuddin	OBIS Malaysia	Passive	Passive	None	Passive	Passive	
Tshikana Rasehlomi	AfrOBIS	Active	Passive	Passive	Passive	Active	
Hank Bart	Fish OBIS	Passive	Passive	None	None	None	
Clara Baringo Fonseca	OBIS Brazil	Active	Active	None	None	None	

Table: Summary of individual responses.

Name	OBIS Node	Organization	Engagement Level	Role	Description
Vanessa Pitusi	OBIS-GBIF Norway	GBIF	Active	Active Member	In the Outreach group attending meetings and conferences to talk about GBIF Norway and data publishing. Teaching workshops. Attend node meetings.
Ei Fujioka	OBIS-SEAMAP	GBIF	Passive	(Not specified)	
Ei Fujioka	OBIS-SEAMAP	GEO BON	Passive	(Not specified)	
Kevin Mackay	SWP OBIS	GBIF	Active	Active Member	New Zealand GBIF Strategy & Mobilisation group
Kevin Mackay	SWP OBIS	GOOS	Passive	(Not specified)	
Kevin Mackay	SWP OBIS	ODIS	Passive	(Not specified)	
Takashi Hosono	OBIS Japan	GBIF	Passive	(Not specified)	
Takashi Hosono	OBIS Japan	TDWG	Passive	(Not specified)	
Takashi Hosono	OBIS Japan	GEO BON	Passive	(Not specified)	
Takashi Hosono	OBIS Japan	GOOS	Passive	(Not specified)	
Takashi Hosono	OBIS Japan	ODIS	Passive	(Not specified)	
Takashi Hosono	OBIS Japan	PICES	External	Active Member	
Dimitra MAVRAKI	MedOBIS	GBIF	Passive	(Not specified)	
Dimitra MAVRAKI	MedOBIS	TDWG	Passive	(Not specified)	
Dimitra MAVRAKI	MedOBIS	ODIS	Passive	(Not specified)	
Dimitra MAVRAKI	MedOBIS	LIFEWATCH ERIC	External	Active Member	
Dimitra MAVRAKI	MedOBIS	MBON	External	Trainer	
Dimitra MAVRAKI	MedOBIS	European Marine Biological Resource Centre (EMBRC)	External	Observer	
John Nicholls	Oceans Past Initiative	ODIS	Passive	(Not specified)	
John Nicholls	Oceans Past Initiative	Oceans Past Initiative	External	Expert/Advisor	
Leen Vandepitte	EurOBIS	GBIF	Passive	(Not specified)	
Leen Vandepitte	EurOBIS	TDWG	Passive	(Not specified)	

Leen Vandepitte	EurOBIS	ODIS	Passive	(Not specified)	
Leen Vandepitte	EurOBIS	All WoRMS	External	Active Member	
Andreas Altenburger	OBIS-GBIF Norway	GBIF	Active	Active Member	I am part of the Node staff of GBIF Norway
Andreas Altenburger	OBIS-GBIF Norway	TDWG	Active	Observer	I have proposed new DwC terms to TDWG
Andreas Altenburger	OBIS-GBIF Norway	GEO BON	Passive	(Not specified)	
Andreas Altenburger	OBIS-GBIF Norway	GOOS	Passive	(Not specified)	
Andreas Altenburger	OBIS-GBIF Norway	ODIS	Passive	(Not specified)	
Ioannis Rallis	MedOBIS	GBIF	Passive	(Not specified)	
Ioannis Rallis	MedOBIS	TDWG	Passive	(Not specified)	
Ioannis Rallis	MedOBIS	GEO BON	Passive	(Not specified)	
Ioannis Rallis	MedOBIS	GOOS	Passive	(Not specified)	
Ioannis Rallis	MedOBIS	ODIS	Passive	(Not specified)	
Ioannis Rallis	MedOBIS	I collaborate within the EMODnet Biology network through MedOBIS for data mobilization	External	Project Partner	
Yi-Ming Gan	Antarctic OBIS	GBIF	Active	Active Member	Collaboration with GBIFS and other GBIF nodes, members of OBIS-GBIF joint implementation committees, testing and provide feedback on DwC-DP development
Yi-Ming Gan	Antarctic OBIS	TDWG	Active	Active Member	Member of Humboldt Extension task groups, BDQ TG2
Yi-Ming Gan	Antarctic OBIS	GEO BON	Passive	(Not specified)	
Yi-Ming Gan	Antarctic OBIS	GOOS	Active	By Proxy	OBIS DCG Deliverable 1
Sachit Rajbhandari	OBIS Australia	GBIF	Passive	(Not specified)	
Sachit Rajbhandari	OBIS Australia	TDWG	Passive	(Not specified)	

Sachit Rajbhandari	OBIS Australia	GEO BON	Active	Expert/Advisor	Participation in OBON workshop
Sachit Rajbhandari	OBIS Australia	GOOS	Active	Expert/Advisor	Participation in the SCOR ConCensus WG to inform development of a Fish Survey EOV
Sachit Rajbhandari	OBIS Australia	ODIS	Active	Active Member	Working on contributing Geonetwork metadata catalogue
Sachit Rajbhandari	OBIS Australia	FAIR eDNA (https://fair	External	Active Member	
Sachit Rajbhandari	OBIS Australia	Australian Ocean Data Network (AODN)	External	Active Member	
Katherine Tattersall	OBIS Australia	GBIF	Active	Observer	GBIF Governing Board meeting
Katherine Tattersall	OBIS Australia	GBIF	Active	Liaison	Participation in OBIS-GBIF joint strategy and work planning
Katherine Tattersall	OBIS Australia	GBIF	Active	Expert/Advisor	GBIF regional nodes meeting for the Australia/Pacific
Katherine Tattersall	OBIS Australia	GBIF	Active	Liaison	GBIF-OBIS strategy implementation committee (committee is inactive)
Katherine Tattersall	OBIS Australia	TDWG	Passive	(Not specified)	
Katherine Tattersall	OBIS Australia	GEO BON	Active	Expert/Advisor	Engagement with OBON (Omics BON)
Katherine Tattersall	OBIS Australia	GOOS	Active	Expert/Advisor	Participation in the SCOR ConCensus WG to inform development of a Fish Survey EOV
Katherine Tattersall	OBIS Australia	GOOS	Active	Leadership	OBIS-GOOS collaboration and future planning discussions as OBIS Co-Chair
Katherine Tattersall	OBIS Australia	ODIS	Active	Active Member	Preliminary engagement to register the CSIRO NCMI IDC marine metadata system, incorporating extensive non-biological datasets, paused while we upgrade our underlying infrastructure (recommencing end 2025)

Katherine Tattersall	OBIS Australia	ODIS	Active	Project Partner	Representing/presenting ODIS activity under the broader IODE umbrella (alongside other IOC/IODE components), as OBIS co-chair and member of the IODE management group
Katherine Tattersall	OBIS Australia	Research Data Alliance	External	Liaison	
Katherine Tattersall	OBIS Australia	Australian Integrated Marine Observing System / Australian Ocean Data Network	External	Leadership	
Katherine Tattersall	OBIS Australia	WMU OBCaD Curriculum development https://futureocean.wmu.se/hec	External	Expert/Advisor	
Chloe Figueroa Ashforth	OBIS UK	GBIF	Passive	(Not specified)	
Chloe Figueroa Ashforth	OBIS UK	TDWG	Passive	(Not specified)	
Chloe Figueroa Ashforth	OBIS UK	GOOS	Passive	(Not specified)	
Chloe Figueroa Ashforth	OBIS UK	ODIS	Passive	(Not specified)	
Chloe Figueroa Ashforth	OBIS UK	EMODnet Biology	External	Active Member	
Chloe Figueroa Ashforth	OBIS UK	DTO	External	Active Member	
Chloe Figueroa Ashforth	OBIS UK	MEDIN Communications Working Group	External	Leadership	
Katrine Kongshavn	OBIS-GBIF Norway	GBIF	Active	Active Member	Node staff member
Katrine Kongshavn	OBIS-GBIF Norway	TDWG	Passive	(Not specified)	
Fatuma Mzingirwa	OBIS Kenya	GBIF	Passive	(Not specified)	
Fatuma Mzingirwa	OBIS Kenya	TDWG	Passive	(Not specified)	
Fatuma Mzingirwa	OBIS Kenya	GEO BON	Passive	(Not specified)	

Fatuma Mzingirwa	OBIS Kenya	ODIS	Passive	(Not specified)	
Maria Cornthwaite	OBIS Canada	GBIF	Passive	(Not specified)	
Anton Van de Putte	Antarctic OBIS	GBIF	Active	Active Member	
Anton Van de Putte	Antarctic OBIS	TDWG	Active	Expert/Advisor	
Anton Van de Putte	Antarctic OBIS	GEO BON	Active	Observer	
Anton Van de Putte	Antarctic OBIS	GOOS	Passive	(Not specified)	
Jonathan Pye	Ocean Tracking Network	GBIF	Passive	(Not specified)	
Jonathan Pye	Ocean Tracking Network	TDWG	Active	Active Member	
Jonathan Pye	Ocean Tracking Network	GEO BON	Passive	(Not specified)	
Jonathan Pye	Ocean Tracking Network	GOOS	Active	Expert/Advisor	
Jonathan Pye	Ocean Tracking Network	ODIS	Passive	(Not specified)	
Ana Carolina Peralta	Caribbean OBIS	GBIF	Passive	(Not specified)	
Ana Carolina Peralta	Caribbean OBIS	TDWG	Passive	(Not specified)	
Ana Carolina Peralta	Caribbean OBIS	GEO BON	Passive	(Not specified)	
Ana Carolina Peralta	Caribbean OBIS	GOOS	Passive	(Not specified)	
Dan Lear	OBIS UK	GBIF	Passive	(Not specified)	
Dan Lear	OBIS UK	TDWG	Passive	(Not specified)	
Dan Lear	OBIS UK	GEO BON	Passive	(Not specified)	
Dan Lear	OBIS UK	GOOS	Passive	(Not specified)	
Dan Lear	OBIS UK	ODIS	Active	Active Member	
Martha Patricia Vides Casado	OBIS Colombia	GBIF	Passive	(Not specified)	

Hanieh Saeedi	OBIS Deep Sea	GBIF	Active	Administrative Support	
Hanieh Saeedi	OBIS Deep Sea	TDWG	Passive	(Not specified)	
Hanieh Saeedi	OBIS Deep Sea	GEO BON	Passive	(Not specified)	
Hanieh Saeedi	OBIS Deep Sea	GOOS	Passive	(Not specified)	
Hanieh Saeedi	OBIS Deep Sea	ODIS	Passive	(Not specified)	
Erika Montoya Cadavid	OBIS Colombia	GBIF	Active	Expert/Advisor	
Erika Montoya Cadavid	OBIS Colombia	GBIF	Active	Trainer	
Erika Montoya Cadavid	OBIS Colombia	TDWG	Passive	(Not specified)	
Erika Montoya Cadavid	OBIS Colombia	ODIS	Passive	(Not specified)	
Kit Elloran	SEA OBIS	GBIF	Active	Expert/Advisor	
Kit Elloran	SEA OBIS	TDWG	Passive	(Not specified)	
Kit Elloran	SEA OBIS	GEO BON	Active	Administrative Support	
Kit Elloran	SEA OBIS	GOOS	Passive	(Not specified)	
Sang Ho Baek	OBIS Korea	GBIF	Passive	(Not specified)	
Victor Chocho	OBIS Ecuador	GBIF	Active	Leadership	
Victor Chocho	OBIS Ecuador	GBIF	Active	Trainer	
Victor Chocho	OBIS Ecuador	TDWG	Active	Active Member	
Muhammad Hafiz Borkhanuddin	OBIS Malaysia	GBIF	Passive	(Not specified)	
Muhammad Hafiz Borkhanuddin	OBIS Malaysia	TDWG	Passive	(Not specified)	
Muhammad Hafiz Borkhanuddin	OBIS Malaysia	GOOS	Passive	(Not specified)	
Muhammad Hafiz Borkhanuddin	OBIS Malaysia	ODIS	Passive	(Not specified)	
Tshikana Rasehlomi	AfrOBIS	GBIF	Active	Expert/Advisor	

Tshikana Rasehlomi	AfrOBIS	TDWG	Passive	(Not specified)	
Tshikana Rasehlomi	AfrOBIS	GEO BON	Passive	(Not specified)	
Tshikana Rasehlomi	AfrOBIS	GOOS	Passive	(Not specified)	
Tshikana Rasehlomi	AfrOBIS	ODIS	Active	Active Member	
Hank Bart	Fish OBIS	GBIF	Passive	(Not specified)	
Hank Bart	Fish OBIS	TDWG	Passive	(Not specified)	
Clara Baringo Fonseca	OBIS Brazil	GBIF	Active	Active Member	
Clara Baringo Fonseca	OBIS Brazil	TDWG	Active	Project Partner	

Table: Detailed responses with roles and comments.

Name	OBIS Node	Organization	Comment
Vanessa Pitusi	OBIS-GBIF Norway	General	I use the services as in the newsletters that are sent and also use APECS to publish events, summer schools, etc.
Leen Vandepitte	EurOBIS	General	Far too many interactions and representations to fit into a single reply. Most important: as both eurobis node manager & WoRMS coordinator, i make sure that other communities and initiatives are aware of OBIS, and how e.g. WoRMS & OBIS collaborate.
Yi-Ming Gan	Antarctic OBIS	General	https://www.formeldataservices.com/

Table: Additional feedback from survey.

Annex 5: List of Participants 13th Session of the IODE Steering Group for OBIS

SG-OBIS Co-Chairs (+ past Co-Chair)

Mr Dan LEAR
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Jefe Línea de Investigación ITE-BEM
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Instituto de Investigaciones Marinas y Costeras José Benito Vives de Andreis
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Mr Ruben PEREZ PEREZ
Biodiversity Informatics Data Manager
Royal Botanical Garden - GBIF Spain Coordination Unit
El Consejo Superior de Investigaciones Científicas
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Mr. Jonathan PYE
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Rede Nacional de Ensino e Pesquisa
National Education and Research Network
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Senior engineer
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Mr. Ohnam KWON
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Miss Vanessa PITUSI
Zoological Collection Manager
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Ms. Leen VANDEPITTE
Senior scientist
Data Centre
Vlaams Instituut voor de Zee
Flanders Marine Institute
InnovOcean Campus Jacobsenstraat 1 8400 Oostende Belgium

SG-OBIS Remote participants

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