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Reports of Meetings of Experts and Equivalent Bodies

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Sixth Session

Oostende

14-16 October 2024

UNESCO

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Oostende, 14-16 October 2024
English only



From left to right: Ward Appeltans, Saara Suominen, Elizabeth Lawrence, Pieter Provoost, Emilie Boulanger, Dan Lear, Katherine Tattersall, John Nicholls, Silas Principe de Souza, Stephen Formel (online participants not on group picture: Laurent Chmiel, Jonathan Pye, Maria Cornthwaite)

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Executive Summary

The Sixth Session of the Ocean Biodiversity Information System (OBIS) Executive Committee (EC-OBIS) was held in Oostende from 14-16 October 2024. The key objectives included reviewing progress within the newly restructured OBIS, which now includes three coordination groups: the OBIS Product Coordination Group (PCG), OBIS Data Coordination Group (DCG), and OBIS Nodes Coordination Group (NCG) as approved at the 12th OBIS Steering Group. Other priorities involved refining communication and outreach strategies, preparing for upcoming events, and drafting the OBIS Workplan and budget for 2025, along with a long-term vision for OBIS's future.

The meeting addressed several strategic priorities in communication and outreach. Recognising the need for a new website to reflect OBIS's growth and showcase our services and resources. The committee also generated story ideas for a new outreach flyer to highlight OBIS's impact and role in advancing marine science, designed to attract data and funding, expand OBIS's network, build trust, and raise awareness of OBIS's mission.

The work of the three coordination groups was discussed, with specific outcomes for each. The Product Coordination Group (PCG) prioritised creating a product catalogue to inform users about OBIS's existing data products. The Data Coordination Group (DCG) concentrated on developing data standards for Essential Ocean Variables, and coordination with partners such as GOOS, GBIF, and TDWG. The Nodes Coordination Group (NCG) identified ways to enhance engagement with OBIS nodes, address training needs, and overcome challenges related to data submission.

Planning for upcoming events was also a central topic. The Executive Committee discussed participation in the 28th session of the IODE Committee, the 3rd International Ocean Data Conference, the joint OBIS-GBIF-GEONET-TDWG Living Data 2025 conference, and the 13th OBIS Steering Group meeting, viewing these as key opportunities to promote OBIS's work, strengthen engagement with key partnerships and the wider user community, and advance overall strategic objectives.

The development of an OBIS work plan and budget for 2025 was another major agenda item. This comprehensive plan outlines the resources needed for each Coordination Group and the Secretariat's activities. The Executive Committee also initiated a visionary document to guide OBIS's future, setting ambitious goals and exploring synergies with other IODE programme components.

The Coordination Groups will commence work on their plans, scheduling regular meetings and engaging their communities. The Secretariat will move forward with the communication strategy and website, working closely with a designer and developer. Meanwhile, the EC-OBIS will collaborate with the broader OBIS community to create a forward-looking vision aligned with IOC and IODE goals.

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1. Welcome and adoption of the agenda

Katherine Tattersall, SG-OBIS Co-Chair, opened the meeting and introduced the agenda items.

We commenced with a round table introduction of all participants and welcomed two new OBIS staff members who joined the OBIS Secretariat this year: Dr Emilie Boulanger, OBIS eDNA Officer (consultant) and Mr Laurent Chmiel, OBIS Communication Engagement Officer (consultant).

Because this is the first time the OBIS Executive Committee (EC-OBIS) had met after the restructuring of OBIS at the SG-OBIS-12 meeting, Katherine reminded us that the EC-OBIS is composed of SG-OBIS Co-chairs, past SG-OBIS Co-Chair, Co-Chairs of the various coordination groups and the OBIS Programme Manager representing the OBIS Secretariat. All the members of the OBIS Secretariat were invited because they act as Secretariat support to the various Coordination Groups.

The SG-OBIS Co-Chairs received a nomination from Maria Cornthwaite to act as Co-Chair of the Nodes Coordination Group. So far, no nominations are received for the Data Coordination Group and the SG-Co Chairs will assume this role ad interim (a.i).

The current OBIS Executive Committee members are:

- Katherine Tattersall: SG-OBIS Co-Chair and DCG Co-Chair a.i.
- Dan Lear: SG-OBIS Co-Chair and DCG Co-Chair a.i.
- John Nicholls: NCG Co-Chair
- Maria Cornthwaite: NCG Co-Chair
- Stephen Formel: PCG Co-Chair
- Jon Pye: PCG Co-Chair
- Ward Appeltans: OBIS Programme Manager

The **EC-OBIS adopted** the agenda and welcomed Maria Cornthwaite as NCG Co-Chair, albeit pending final approval from her home institution.

The **EC-OBIS appreciated** the opportunity to meet in person, particularly as it enabled us to initiate the new Coordination Groups and start off on a positive basis.

The **EC-OBIS thanked** IODE for the support in hosting and financially supporting this meeting.

2. OBIS Communication and Outreach

2.1 OBIS website

Mr Laurent Chmiel, the OBIS Community Engagement Officer, introduced this agenda item by summarising the work accomplished during the OBIS secretariat retreat on 10-11 October 2024. During the retreat, we mapped user profiles, catalogued their needs, and analysed the strengths of the OBIS website, as well as identified areas for improvement.

The **EC-OBIS stated** that the current website - developed almost 10 years ago, is still pleasant to use, and congratulated Pieter Provoost on building and maintaining the website with minimal resourcing. However, a new OBIS website is due to reflect the many changes in OBIS and highlight new resources.

The EC-OBIS reviewed the OBIS website planning outcomes and provided additional details as needed to inform the OBIS communication and website strategies (see Annex 2), and offered that the EC-OBIS and other groups are available for further feedback and consultation regarding content and structure of the website.

The **EC-OBIS suggested** that the new website would be excellent for our community and OBIS nodes and should provide a central information repository that we can point people to.

The **EC-OBIS further suggested** that:

- Website in other languages could be considered
- Google or AI translate could be used for parts of the website, although it is hard to replicate the whole website in other languages
- We could link from the website pages to meeting reports for transparency and other documents describing the governance of OBIS
- Trust and transparency will be a core part of the part of the messaging work - we are a trusted source

2.2 OBIS Storylines

Mr Laurent Chmiel introduced this agenda item which aims to develop a plan for local/regional and global impact stories that can be shared by the secretariat and by OBIS Nodes, respectively. The secretariat and co-chairs identified a need for capturing stories behind the datasets and for stories that demonstrate the impact of OBIS at both national and global level.

It is anticipated that stories will capture the full value chain of OBIS, from collecting data through to creating a product for the marine community.

The EC-OBIS agreed that the goals and motivations of our stories are to:

- Attract more data
- Attract funding

- Expand the OBIS network
- Build trust in OBIS
- Raise awareness about OBIS

The EC-OBIS also highlighted the strong UNESCO Brand to which OBIS is part of and operating under the UN flag is an important aspect for our operations.

Story ideas

The **EC-OBIS brainstormed** story ideas that capture the impact and value of OBIS. These are captured in the table below:

Efficiency	New technology and how it can speed up and help the work
	OBIS as a neutral knowledge broker, even if information isn't found through OBIS website/products, OBIS is a broker/component in the information system
	OBIS encourages and enables FAIR (Findable, Accessible, Interoperable, and Reusable) data standards to be met - working with OBIS means you will be making data FAIR.
Addressing a need	A specific data types like eDNA sampling
	Modelling, MPAs, management and 30 by 30
OBIS community	Global story about no one being left behind, that the global South is an important participant in the network
	The importance of partnerships and how to partner with others to deliver (how OBIS partners with others to deliver impact)
Impact	How OBIS contributes to global assessments, including IOC State of the Ocean Report, UN World Ocean Assessment and assessment under IPBES
	Story of the fish survey community - value in having a story told by UNESCO
	OBIS as a facilitator, mobiliser of change (demonstrate with numbers, e.g. x number of scientists are now using these standards to publish, and also demonstrate how many scientists are using the data) - global coalition - community perspective, our network is our strength <ul style="list-style-type: none"> - Want others to come to us because they see us as the expert community
	Visit the library page of papers that cite OBIS, this might be more impactful than citing numbers - network of influence where there are

	these papers that cite OBIS, and then those papers are cited by X number of people
Human interest	<p>Using OBIS in developing biodiversity baselines - young people have never experienced how the ocean was before it changed; illustrate that the baselines are shifting. Nature restoration law exists in some areas, not just about protecting the present state but about understanding how it was in the past is important.</p> <ul style="list-style-type: none"> - Consideration; how far do we go back for a storyline? - How far back do we want to shift our baseline? - E.g. Mediaeval times - how many fish in the North Sea back then - “Shifting baseline syndrome” (Daniel Pauly 1995¹)
	<p>Personal stories, the human dimension of the data (people who are collecting data)</p> <ul style="list-style-type: none"> - Focus on the people and history of OBIS is “low hanging fruit” E.g. see ESIP as an example, what ESIP meant to them - the people/network of OBIS - Retelling of the story of the Census of Marine Life and how that provided momentum for where we are now
	Story maps in general are good and valued
	Human interactions with the ocean in ancient times vs. present time - major shifts in the far distant past that were just as impactful as what has happened in the last hundred years - a story map
	How do we identify the local stories - we need a local perspective to be able to pull out relevant stories from the data, as we aren’t able to do this from our office. Work with data providers.
	<p>“My ocean” series - an individual’s connection with the history and present of the ocean they know and relate to, and what they want for the future of “my ocean”</p> <ul style="list-style-type: none"> - Provide links/ communication channels to governments? - We all share one planet, it’s happening everywhere, global impact
Science and monitoring	“Fit-for-purpose” angle: aggregated data is fit for purpose for some types of monitoring and reporting
	OBIS is now 24 years old, and it prompts us to reflect on how the ocean looked two decades ago. Over the years, we have witnessed significant trends and changes in marine ecosystems, from declining fish populations and coral reef degradation to the increasing impacts of climate change and pollution. This historical perspective allows us to

¹ Pauly, D. 1995. Anecdotes and the shifting baseline syndrome of fisheries. Trends in Ecology and Evolution. 10(10:430).

	detect patterns, understand the consequences of human activities, and inform our strategies for sustainable ocean management moving forward.
	Idea: when someone publishes a dataset, allow them to highlight messages that they'd like to see in a story - can be data publishers and data users, what they'd like to see in a story; to flag with the Secretariat that "there is a story here"

2.3 OBIS Key Messages

The EC-OBIS participated in a brainstorming session to identify "meta-areas where we have legitimacy to speak" that can contribute to initial thinking about OBIS branding and messaging. As an example, we considered the Ocean Decade slogan: "the science we need for the ocean we want".

Message	Comments
We collect data and give it to the world	
OBIS is changing the way that marine biology is done	"Cleaning up the world of marine biology data"?
OBIS is a catalyst for science	
OBIS is a catalyst for change in the way science is done	e.g. in the US adoption of DwC as standards is becoming more mainstream.
This is what is happening with marine biodiversity, this is where the ocean is going	
What does the data show?	Not doing science ourselves, retaining neutrality, not making policy or advising on policy - but this is what the data shows.
OBIS is the place where people rally to discuss [x]	OBIS provides a venue for this question to be investigated - the data, the network, the science
Did you check OBIS?	For data informed decisions
Do you want data informed decisions? Did you submit your data to OBIS?	

Stories of data publishers	Highlighting data publishers will provide good incentive to people to publish their data
Submit your data to validate or quality control other incoming global data (e.g. eDNA)	
OBIS: we advance marine science	

We change the way marine biology is done

- We advance marine science.
- More robust and with evidence
- Using standards
- Encourage FAIRness / have template for data management plan
- More scientists are using our science
- Datasets used in meta analysis
- Collect the data and give it to the world
- QC at OBIS

We are a community

- Show data pipeline
- Portraits of scientists
- Highlight the data publishers
- Why should you share your data with the world?

We have real-world impact

- How is our data used?
- Network of influence of OBIS data
- Answers to the general audience's big questions
- We contribute to data-informed decisions

2.4 OBIS Communication Strategy

The EC-OBIS workshopped a strategy for development of OBIS communications material, inspired by our desire for a package of text, images, powerpoint presentations and other materials for use by both OBIS nodes and the Secretariat.

In the meeting, a short Communication Strategy workshop led by Laurent Chmiel was conducted on a Miro platform. There were four stages to the activity:

3. The EC-OBIS was asked to brainstorm what communication activities and materials they envisaged being employed and asked to think freely and creatively.
4. The ideas were then classified into five categories of “purpose” that naturally fell out of the feedback. Categories were: Attract more data, Attract funding, Expand the network, Build trust in OBIS, Raise awareness about OBIS.
5. Ideas were ranked on a matrix, from short term (<1 year) to long term on the x-axis and less important to more important on the y-axis. There were no short term, less important tasks. There were numerous short term important tasks and a moderate number of long term important tasks and medium-to-long term less important tasks.

Work commenced to determine what the outcome of each activity would be, what resources were required to build or deliver each one, and how the product would be disseminated. This stage was incomplete in session and will be finished later. The Miro Board is [here](#) (PDF export).

Outcomes of the workshop session were:

1. Overarching objectives

Five overarching, priority communication objectives emerged from this session:

- Attract more data.
- Attract more funding.
- Expand the network.
- Build trust in OBIS.
- Raise awareness about OBIS

These objectives will serve as landmarks to build the upcoming OBIS communication strategy.

2. Prioritisation

The EC-OBIS team identified specific actions and items aligned with the communication objectives. Each was ranked according to their importance for the organisation and anticipated delivery timeline, spanning from short-term (less than a year) to long-term (up to five years). The actions and items identified during the session will be further developed and integrated into the upcoming OBIS Communication strategy.

3. Implementation iteration

The EC-OBIS team prioritised the "short-term/important" items and actions, refined them to a more granular level, suggested development paths, and explored potential implementation approaches.

Overall, the session produced excellent material and insights that will be further developed and incorporated into the OBIS communication strategy.

The **EC-OBIS recommended** that the OBIS communication activity should constantly take into consideration the goal/motivation for OBIS - every story should connect to a goal/motivation for OBIS. Examples could be borrowed from OTN.

The **EC-OBIS instructed** Laurent Chmiel to engage directly with the Nodes Coordination Group to further identify story ideas.

2.4.1 Press Releases and Media relationships

The EC-OBIS discussed whether a press release or media page would be beneficial. Key discussion points were:

- It can be tricky to time these releases effectively, as they should coincide with trending topics to capture journalists' attention.
- While nurturing relationships with the media is important, there isn't a short-term strategy in place.
- Press releases often lack appeal for journalists, who are unlikely to act on them without a compelling angle.
- One potential pathway to finding stories is to connect with the communications teams of our host institutions. Additionally, we could offer the option to include highlights as part of dataset metadata, creating a resource for reporters to easily access relevant information.
- Establishing relationships with two or three key reporters could further enhance our outreach efforts.

The **EC-OBIS recommended** that these ideas for a press release space and media relationships be considered as part of development of an OBIS Communications Strategy.

3. Product Coordination Group (PCG) Discussion and Planning

Stephen Formel and Jonathan Pye, both PCG Co-Chairs, introduced this agenda item and presented a report on the activities of the PCG.

The membership of the PCG is currently:

- Co-Chairs
 - Stephen Formel (OBIS-USA) sformel@usgs.gov
 - Jonathan Pye (OTN) jonathan.pye@dal.ca
- Full member list: <https://oceanexpert.org/group/503>

The purpose, responsibilities and ToRs of the PCG are in Annex 3

The **EC-OBIS recommended** that the membership of the PCG be expanded to include representatives of our partners including other IOC programmes, e.g. the GOOS BioEco Panel, and that there be a focus on what our external users need in addition to the needs of OBIS nodes and existing members of the OBIS community.

3.1 Review of OBIS PCG activities

Stephen Formel reported that prior to the EC-OBIS, the members of the PCG reviewed the actions assigned or suggested to the PCG during SG-OBIS-12. These are summarised in the table below.

SG Report Section	Action	Description
2.2	Support development of JupyterHub and OBIS products platform	Test and give user feedback on JupyterHub and OBIS products platform
3.1.2	Organise OBIS R packages	Document and coordinate relevant R packages into an umbrella package, or https://r-universe.dev/
3.5.1	Resolve challenges remaining from OBIS Data Quality Control Project Team	Within OBIS, the obis-qc pipelines, and the R packages “obistools” and “EMODnetBiocheck” still need to be aligned for a standardisation of quality control procedures within the network.
Annex 5	Develop Requested Products	<ul style="list-style-type: none"> ● Spread and distribution of non-native species over time. ● Distribution of records by depth and bottom depth. ● Animation of OBIS records through time and depth. ● eDNA data dashboard. ● Diversity indicators (with possible corrections). ● Harvesting marine datasets from GBIF.
Annex 6	Support GBIF-OBIS Joint Actions	Support download DOI services and citation tracking for OBIS
Annex 6	Support GBIF-OBIS Joint Actions	Further develop the new GBIF data model to accommodate OBIS practices by developing tools for publishing and accessing marine data in an expressive way i.e. event core, eMoF, basic view and extended view

The PCG identified 5-10 priorities, which are:

- Identify, prioritise, and coordinate the development of data and information products that are of interest to our user community.

- Advise on how best to showcase and catalogue data and information products developed by the wider OBIS community, in line with the OBIS data policy, including proper acknowledgment of other formats of resources (e.g. software applications, workflows, papers, etc.).
- Set minimum metadata and quality requirements for data and information products.
- Propose and develop tools, pipelines, and documentation that can bolster the development of products based on OBIS data.
- Support groups/institutions working on product development (e.g. early warning systems, ecological synthesis groups, etc.) to identify potential collaborations.
- Propose a process for frequent expert validation of data and information products by consulting with local scientific experts and end-users (including local communities and indigenous people).
- Engage with activities of other relevant bodies by identifying representatives and report back to the group

3.2 New OBIS PCG inter-sessional activities

Based on these efforts the following activities are listed for the PCG:

Requested Actions

Group Logistics

- Schedule monthly (or more infrequent) meetings
- Work with OBIS Secretariat to set up Mailman, or another mechanism to allow PCG members to efficiently communicate with the most current set of members
- Organise OBIS Product Coordination Group workshop

Previously Identified








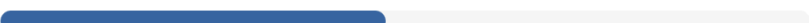
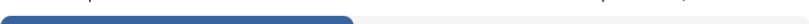
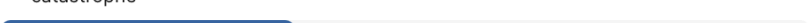
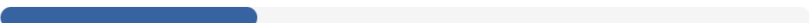
- Support development of JupyterHub and OBIS products platform
- Organise OBIS R and python packages
- Resolve challenges remaining from [OBIS Data Quality Control Project Team Report](#)
 - Within OBIS, the obis-qc pipelines, and the R packages “obistools” and “EMODnetBiocheck” still need to be aligned for a standardisation of quality control procedures within the network.
- Develop Requested Products
 - Review Requested Products: <https://github.com/iobis/iwg-products/issues>
 - Spread and distribution of non-native species over time.
 - Distribution of records by depth and bottom depth.
 - Animation of OBIS records through time and depth.
 - eDNA data dashboard.
 - Diversity indicators (with possible corrections).
 - Harvesting marine datasets from GBIF.
- Support GBIF-OBIS Joint Actions
 - Support download DOI services and citation tracking for OBIS

- Further develop the new GBIF data model to accommodate OBIS practices by developing tools for publishing and accessing marine data in an expressive way i.e. event core, eMoF, basic view and extended view

New Requests

- Coordinate Products (e.g. MOF viewer, queue status, metadata manager) for Node Managers
- Interactive version of the vocab decision tree. See: <https://github.com/jonamil/better-catastrophe>
- Cloud optimised snapshots, with grid indices
- GOOS Near-real time data pilot - explore the possibility of publishing animal tracking data and ocean variables in near-real time (< 24-48hours) to OBIS, to inform GOOS biological EOVs directly and oceanographic forecasting models via the AniBOS project. https://members.devel.oceantrack.org/ipt/resource?r=demo_live_seals_imos

The PCG Co-Chairs then led an exercise to prioritise these PCG activities using Slido. The outcomes of the exercise are below.

1. Group Logistics (schedule meetings, setup mailing list, organize PCG workshop)

2. Develop Requested Products (Review IWG-Products Repo; non-native species over time; records by depth and bottom depth; Animation of records over time/depth; eDNA dashboard; Diversity indicators; Harvesting marine datasets from GBIF)

3. Development of Products Catalog on OBIS.org

4. Organize OBIS R and python packages

5. Coordinate Products (e.g. MOF viewer, queue status, metadata manager) for Node Managers

6. Support development of JupyterHub and OBIS products platform

7. Cloud optimized snapshots, with grid indices

8. Resolve challenges remaining from OBIS Data Quality Control Project Team

9. Support GBIF-OBIS Joint Actions (download DOI services and citation tracking; support development of the new GBIF data model to accommodate OBIS practices)

10. Interactive version of the vocab decision tree. See: <https://github.com/jonamil/better-catastrophe>

11. GOOS Near-real time data pilot - explore the possibility of publishing animal tracking data and ocean variables in near-realtime (< 24-48hours) to inform GOOS biological EOVs and forecasting models via AniBOS


The **EC-OBIS** discussed the motivations for priorities. In summary, after ranking the potential actions in slido, the group discussed the relative ranking (see below). No ranks were adjusted, however it was noted that the development of the Product Catalog was a clear priority to inform users of the existing data products supported by OBIS. There were also some actions that were described as partially or nearly complete, some of which were interlinked. We agreed that the first two months of PCG meetings would be used to help identify the scope of resources available to accomplish the actions. Other notable points raised by the EC-OBIS during this presentation include:

- Documentation of all Products, and Catalog function, should be done in the Catalog in order to keep the documentation close to the Products themselves
- Products should be general in purpose in order to make them adaptable, reusable and generally effective for future purpose

- Challenges from the previous OBIS Data QC Project Team - need to bring these back to the surface in order to gain proper context for the challenges facing the new Group.
- DCG guidance - ensure that Provenance and Citation are preserved and promoted from the data sources through any Data Products that are created for OBIS
- Decision-tree workflow tool - some specific users saw a need for this decision tree navigator, but this may be a niche perspective. It was agreed that it was important to make the vocabulary tools functional, but making them palatable was not a key priority.
- GOOS Pilot - the partnership between OBIS and GOOS is timely, there are many real time data streams possible from across the OBIS world that could contribute to the data product that our partner (GOOS) is envisioning. Positions OBIS as a viable data source for our partners working in near-real time scales. Perhaps this isn't the lowest-priority.

Next steps include organising the first meetings of the PCG, reviewing this discussion with members, and identifying the resources available for these actions, including the relevance of each action to nodes (e.g. not all actions might be as relevant to thematic nodes as to national nodes).

The EC-OBIS reviewed and endorsed the following PCG work plan 2025 for submission to IODE-28:

Outcomes <i>(add more outcomes if needed)</i>	
Outcome N° 1. Operational Products Coordination Group (PCG)	
Performance indicators <i>(list 2-5 indicators)</i> At least 5 online meetings scheduled through October 2025 SG-OBIS adopted product work plan for 2026-2027	Status <i>(completed, in progress, cancelled)</i> In progress
Deliverables: Meeting minutes shared through a public portal via the OBIS website	In progress
Outcome N° 2 Enhanced access to FAIR OBIS Products	
Performance indicators <i>(list 2-5 indicators)</i> Detailed plan drafted for development of catalogue. Developmental "OBIS Products Catalogue" stood up for testing Developmental "JupyterHub" stood up for testing Production "OBIS Products Catalogue" published	Status <i>(completed, in progress, cancelled)</i> In progress
Deliverables: OBIS Products Catalogue	In progress
List of partners and key stakeholders. <i>(Indicate how partners and stakeholders contribute to the action)</i> GOOS BioEco Panel, MBON, US-IOOS, CIOOS, and OTN and many others are all important user communities whose feedback should be included in the development of the products catalogue. Members of these efforts and organisations may also be invited to sit on the PCG to guide priorities.	

Explain how the Programme Component/Programme Activity/Project is contributing to other IODE or IOC programmes and activities.

OBIS “Products” include data and information products, from any type of analysis (e.g. description, data visualisation, etc.) that synthesise and generate new information from data hosted on OBIS and other sources. Currently, these products are not well coordinated and fall short of being FAIR. The Products Coordination Group will increase the impact and value of these products by creating a catalogue, and coordinating products within that catalogue, to increase the findability and accessibility of OBIS Products. Increased FAIRness should increase the efficiency of other IODE and IOC programmes and activities using OBIS products by reducing the time needed to find and reshape, or repurpose, these products in support of IODE/IOC efforts.

Provide details on long-term sustainability. *(including confirmed extra budgetary resources)*

The OBIS Products Coordination Group depends on in-kind contributions of OBIS nodes and partners, guided and supported by members of the secretariat. Specifically, the secretariat position of OBIS technical coordinator remains unfilled, but is crucial for supporting the development of the products catalogue and relevant OBIS products.

The long-term sustainability of this group depends on positive feedback, where the in-kind contributions are seen as a productive and useful contribution by OBIS nodes and partners. This initial year will depend more critically on OBIS funding for website and catalogue development to develop a solid foundation for subsequent work.

Risks. *(Describe the potential risk of not achieving the expected results)*

If the OBIS Products Coordination Group is not able to produce an OBIS Products Catalogue, at best, the IODE/IOC collaborators and OBIS stakeholders will not comprehend the full utility, or production, of OBIS. At worst, OBIS may be perceived as an inefficient endeavour that is not able to cultivate and coordinate sophisticated information products. Lastly, there is some risk of having insufficient funds to develop the website and catalogue development to its full potential. Properly assessing this risk depends on initial framing of the development work so that costs can be accurately estimated.

4. Data Coordination Group (DCG) Discussion and Planning

Dan Lear and Katherine Tattersall (DCG Co-Chairs a.i.) presented a report on activities of the DCG.

The purpose, responsibilities and ToRs of the PCG are in Annex 4 and membership list is available at <https://oceanexpert.org/group/538>.

Co-Chairs of the DCG conducted a slido poll in the EC-OBIS meeting, to reflect the priorities of those present. The outcomes of the poll are below in Section 4.2

4.1 Review of OBIS DCG activities

The members of the DCG reviewed the actions assigned or suggested to the Data Coordination Group during SG-OBIS-12, and additional priority actions were identified during EC-OBIS-6. These are summarised in the table below.

SG Report Section	Action	Description
New Item	Run drop-in sessions for data questions and problems	Monthly drop-in sessions to answer node questions and support nodes for data questions specifically. Run for an hour. If they can't be answered in the session then take away for answering later
New Item	Alignment of data standards/publication mechanisms	Maintain an awareness and engagement with groups using data standards or publication methods not currently implemented within OBIS E.g., there is a core group requiring use of the Humboldt extension We can't force adoption of standards however possible to investigate cross-walks/software transformations.
3.5.3	Nodes interested in data models/extensions nominate to represent OBIS in TDWG/GBIF groups	The SG-OBIS suggested that the Data Coordination Group formally delegate OBIS nodes with an interest in the data model and other extensions (e.g., Humboldt) developments to join the relevant TDWG and GBIF groups as a representative of OBIS, follow-up on OBIS-relevant developments, provide feedback and report back to the OBIS data coordination group
4.1.2	OBIS data publishing certification: - flexible start date or scheduled start dates - assessment model (nodes to help?) - node-node mentoring - open course to non-node	The SG-OBIS recommended that the Data Coordination Group consider: <ul style="list-style-type: none"> • Whether nodes can request for certification to be opened at any time, or there can be a schedule for training going forward (annual, quarterly opportunities, etc). • If part of the assessment work can be distributed amongst volunteer nodes. • Whether node-node mentoring can help new nodes to complete training, or supplement training.

	partners?	<ul style="list-style-type: none"> ● If the course can be opened more broadly and be made available to other partners
4.1.6.1	<p>Strategic directions in data for OBIS:</p> <ul style="list-style-type: none"> - pilot projects - resources - data-driven research areas - ocean policy drivers for mobilisation - (ocean) management data applications - other topics 	<ul style="list-style-type: none"> ● Identify and pursue new directions, potential pilot projects, potential resources, and areas of development for data-driven research and ocean policy and management applications, as well as investigate timely topics to help set future strategic directions. This will be done in coordination with the Data Coordination Group and Products Coordination Group
4.2	Prepare guidelines for nodes about long-term archive of data	The SG-OBIS requested the OBIS secretariat and Data Coordination Group to provide guidelines to nodes for long-term archival of data, via the Node Coordination Group.
Annex 6	Technical cooperation in delivery of joint OBIS/GBIF Action Plan	<ul style="list-style-type: none"> ● Enhance the delivery of the extended Measurement or Fact extension in GBIF ● Improve event-based data representation in GBIF ● Implement environment flags and filtering abilities within GBIF ● Improve interpretation of what is considered is_marine at records level

The DCG Co-Chairs identified 5-10 priorities to be addressed by the Data Coordination Group:

1. Engage with the activities and working groups of other relevant bodies by identifying representatives and report back to the group
2. Advise on and improve engagement with the OBIS data publishing certification, including opening the course to external parties
3. Support nodes in the archiving of long term data through the development and promotion of guidelines
4. Support the technical cooperation associated with the joint OBIS/GBIF Action Plan
5. Identify and support potential projects, resources, and areas of data-driven development

6. Review the implications for nodes and the Secretariat of the changes to the DNA extension
7. Review current situation and make recommendations for a data mobilisation register

4.2 New OBIS DCG inter-sessional activities

Requested Actions

Group Logistics

- Schedule monthly meetings
- Work with OBIS Secretariat to set up Mailman, or another mechanism to allow DCG members to efficiently communicate with the most current set of members

Previously Identified

- Support and cooperate on the data related elements of the joint OBIS/GBIF Action Plan
 - Enhance the delivery of the extended Measurement or Fact extension in GBIF
 - Improve event-based data representation in GBIF
 - Implement environment flags and filtering abilities within GBIF
 - Improve interpretation of what is considered is_marine at records level
- Support Data Coordination Group members with engagement and representation in other data model/extension related groups
 - Survey DCG to identify current engagement
 - Review and analyse to identify gaps and opportunities
 - Develop catalogue of 'OBIS Engagement'
 - Provide feedback and liaison from external groups to NCG and Secretariat
- Evaluate requirements and limitations in capacity for nodes to support the publication of data aligned to the GOOS EOVS specifications.
- Understand, evaluate and recommend processes of long-term data archiving by OBIS nodes.

New Requests

- Run additional inter-sessional drop-in events for data-related questions and problems
- Review and propose action to align data standards/publication mechanisms employed by other key communities

The DCG Co-Chairs then led an exercise to prioritise these DCG activities using Slido. The outcomes of the exercise are below.



The **EC-OBIS discussed** the motivations for priorities and wider issues related to the DCG and inter-Coordination Group liaison. In summary it was noted:

- OBIS data manager Pieter Provoost will provide Secretariat support to the DCG, and OBIS CD officer Elisabeth Lawrence will be a standing member of the group.
- Much of the assessment process for data publishing certification is now automated, so the task of supporting assessment has now become unnecessary.
- Need to provide support to nodes in the understanding of the GOOS EOV specifications and delivery of appropriately configured data.

The DCG Co-chair(s), along with the NCG Co-chair(s) will provide standardised, templated update reports to the Nodes Coordination Group meetings where appropriate. These will

cover topics such as progress of work plan items and the dissemination of Coordination Group outcomes. Reciprocal feedback will be returned to the DCG via this mechanism.

The EC-OBIS reviewed and endorsed the following DCG work plan 2025 for submission to IODE-28:

Outcomes <i>(add more outcomes if needed)</i>	
Outcome N° 1. Operational Data Coordination Group (DCG)	
Performance indicators <i>(list 2-5 indicators)</i> At least 5 online meetings scheduled through October 2025 SG-OBIS adopted data work plan for 2026-2027	Status <i>(completed, in progress, cancelled)</i> In Progress
Deliverables: Meeting minutes shared through a public portal via the OBIS website	In Progress
Outcome N° 2 Review, support, alignment and adoption of data standards, specifications and publication mechanisms including long-term archiving of data	
Performance indicators <i>(list 2-5 indicators)</i> 1. By end 2025, review and provide implementation guidelines to OBIS Nodes for at least 90% of existing biodiversity EOVS specifications, which will support the publication of EOVS data by OBIS nodes 2. 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 3. 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 4. 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 5. 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. 6. 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	Status <i>(completed, in progress, cancelled)</i> In progress
Deliverables 1. Biodiversity EOVS Publication Guidelines for OBIS Nodes 2. OBIS Node Engagement Survey Report & Recommendations 3. Register of OBIS Node Engagement	In progress

<ol style="list-style-type: none"> 4. OBIS metadata published to ODIS following the latest specifications in the ODIS architecture guide https://book.odis.org/ 5. Update to the OBIS-GBIF DNA derived data guidelines (Publishing DNA-derived data through biodiversity data platforms, https://doi.org/10.35035/doc-vf1a-nr22) 6. Long-term Data Archiving Model Proposal 	
<p>List of partners and key stakeholders. <i>(Indicate how partners and stakeholders contribute to the action)</i></p> <p>GOOS BioEco Panel, GBIF, and TDWG all are active in the setting and development of data-related standards and specifications. Liaison and alignment will strengthen the position of OBIS, and reciprocal contributions to the DCG, where appropriate will further streamline the flow in the wider data ecosystem.</p>	
<p>Explain how the Programme Component/Programme Activity/Project is contributing to other IODE or IOC programmes and activities.</p> <p>The Data Coordination Group supports the effective flow of standards-aligned data from the point of collation at the OBIS nodes, and facilitates the ‘Publish once, harvest many times’ paradigm. Improved flow of data from OBIS nodes increases the available evidence base which forms the foundation of derived data products, tools and services within OBIS and more widely, including the GOOS BioEco Portal. Additionally, alignment with the activities of other groups engaged in the wider biodiversity data space significantly improves interoperability and overall FAIRness of OBIS data, supporting cross-domain working and removing barriers and data silos.</p>	
<p>Provide details on the long-term sustainability. <i>(including confirmed extra budgetary resources)</i></p> <p>The Data Coordination Group depends on in-kind contributions of OBIS nodes and partners, guided and supported by members of the secretariat. The long-term sustainability of this group depends on positive feedback, where the in-kind contributions are seen as a productive and useful contribution by OBIS nodes and partners.</p> <p>The DCG does not currently have established Co-Chairs with the Co-Chairs of SG-OBIS currently acting in this capacity. The support of the wider OBIS community in taking on the DCG Co-Chair will be essential to the long term success of the group.</p>	
<p>Risks. <i>(Describe the potential risk of not achieving the expected results)</i></p> <p>The lack of an effective DCG will reduce the availability and flow of data from the OBIS nodes. In turn this will negatively impact the available biodiversity data available to underpin assessments and associated tools, products and services developed elsewhere in OBIS and beyond. And the reputation and perceived effectiveness of the wider OBIS network.</p>	

5. Nodes Coordination Group (NCG) Discussion and Planning

John Nicholls and Maria Cornthwaite (Co-Chairs NCG) presented a report on activities of the NCG.

The purpose, responsibilities and ToRs of the NCG are in Annex 5 and membership list is available at <https://oceanexpert.org/group/386>.

5.1. Review of OBIS NCG activities

Members of the NCG reviewed the actions assigned or suggested to the Nodes Coordination Group during SG-OBIS-12. These are summarised in the table below.

SG Report Section	Action	Description
3.3	Address Nodes reports	Focus on Nodes who are not submitting - identify support that may be available
3.4.2	Engage with OBIS Manual updating	Encourage feedback and content for manual
3.4.2	OBIS Online Self-Paced Training Course	Encourage engagement and active participation - ensure all Node Managers (and/or reps) are certificated
3.5.1	OBIS Data Quality Control Project Team	Coordinate with DCG and PCG on developments of outstanding tasks of the DQPT
Annex 4	OBIS Communication Plan	Disseminate and focus on Communication plan engagement elements
Annex 6	GBIF and OBIS joint strategy and action plan for marine biodiversity data	Address issues arising from the OBIS/GBIF joint strategy
Annex 8	OBIS node reporting to SG-OBIS-12	Engage with Node reporters and address issues arising

The NCG Co-Chairs identified 5-10 priorities to be addressed by the Nodes Coordination Group:

- Identify and engage with “missing” Nodes to ensure participation and involvement.
- Identify optimum communication methodologies for the NCG (time-zones, maximised involvement)
- Engage with other CGs, Secretariat and SG - share minutes, issues raised, shared meetings, etc.
- Focus on OBIS Training possibilities for Nodes (certification and updating)
- Address issues of non-submission by specific Nodes
- Identify possible solutions to specific issues raised by members from the initial Questionnaire (October 2024)
- Address concerns around funding and local support for Nodes

5.2. New OBIS NCG inter-sessional activities

Requested Actions

Group Logistics & Communication

- Schedule bi-monthly meetings
- Identify and implement optimum contact methods
- Interact directly with other CGs - brief reports relayed to NCG
- Identify and endeavour to engage with non-responsive Nodes
- Introduce “Flash” talks by individual Nodes that encourage engagement and interaction
- Identify possible *mentoring* possibilities where individual Nodes may be supported by more experienced Nodes
- Receive feedback from PCG and DCG regarding developments to assist in identifying training and mentoring needs of Nodes












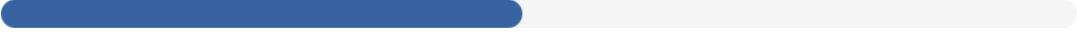
Training

- Identify needs of Nodes and signpost them to appropriate resources
- Identify any new and appropriate *mentoring* that may be necessary (with assistance and engagement from the Product Coordination Group and Data Coordination Group)
- Identify and Encourage certification of all Node Managers and any relevant representatives of a Node
- Share with OBIS Secretariat/OceanTeacher/etc. Members who may guide and/or direct engagement

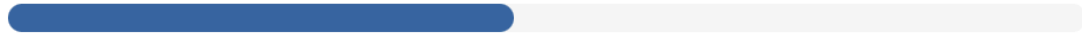
Support for Nodes

- Engage with and assist Nodes who have not produced data for a while
- Address issues and concerns around funding for Nodes
- Identify any specific issues/ideas that Nodes may present

The co-chairs of the NCG led an exercise to prioritise proposed work plan activities using Slido. The outcomes of the exercise are below.

1. Identify and engage with “missing” Nodes to ensure participation and involvement.

2. OBIS Online Self-Paced Training Course enforcement

3. Engage with and assist Nodes who have not produced data for a while

4. Comms: Schedule bi-monthly meetings

5. Comms: Introduce “Flash” talks by individual Nodes that encourage engagement and interaction

6. Focus on OBIS Training possibilities for Nodes (certification and updating)

7. Address issues of non-submission by specific Nodes

8. Engage with other CGs, Secretariat and SG - share minutes, issues raised, shared meetings, etc.

9. Training: Identify needs of Nodes and signpost them to appropriate resources

10. Comms: Identify possible mentoring possibilities where individual Nodes may be supported by more experienced Nodes

11. Comms: Identify and implement optimum contact methods

12. Identify any specific issues/ideas that Nodes may present


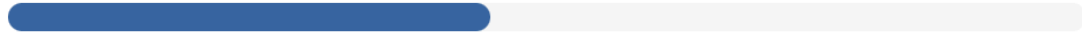
13. Identify optimum communication methodologies for the NCG (time-zones, maximised involvement)



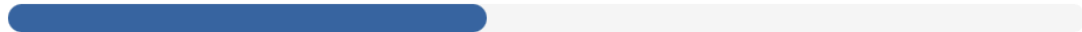
14. Address Nodes reports - encourage nodes to submit them



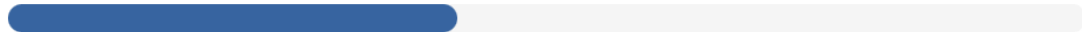
14. OBIS Communication Plan - focus on communication plan elements



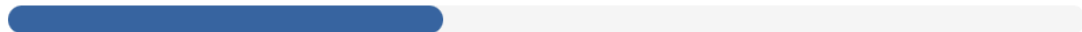
16. Comms: Identify and endeavour to engage with non-responsive Nodes



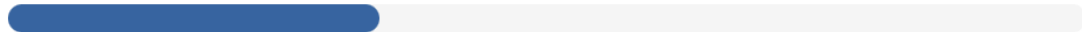
17. Engage with OBIS Manual updating



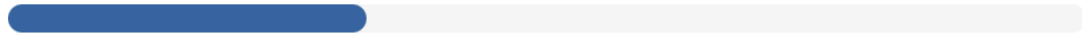
18. Training: Identify and Encourage certification of all Node Managers and any relevant representatives of a Node



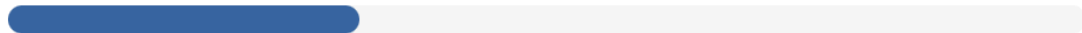
19. Training: Identify any new and appropriate mentoring that may be necessary (with assistance and engagement from the Product Coordination Group and Data Coordination Group)



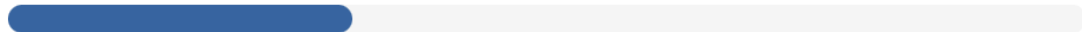
20. Address concerns around funding and local support for Nodes



21. Address issues arising from the OBIS/GBIF joint strategy



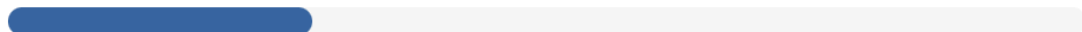
22. Training: Share with OBIS Secretariat/OceanTeacher/etc. Members who may guide and/or direct engagement

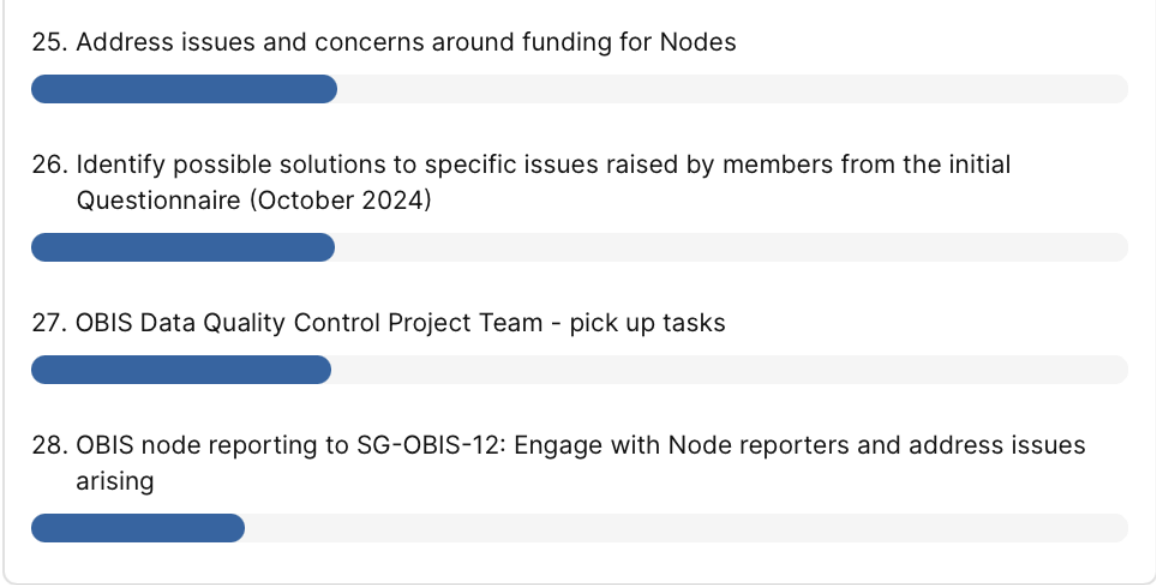


23. Comms: Interact directly with other CGs - brief reports relayed to NCG



24. Comms: Receive feedback from PCG and DCG regarding developments to assist in identifying training and mentoring needs of Nodes





The **EC-OBIS discussed** the motivations for priorities and additional topics related to the NCG. In summary:

It was recognised that the 25% response rate received from the nodes survey was low compared to previous attempts at engagement. However the increased rate reflects a greater effort in the issuing of reminders to solicit responses. The intention with the NCG survey was to establish a baseline response rate with limited reminders being issued.

Whilst the level of activity of some nodes in the OBIS Nodes network can currently be considered low we are seeing an increase in requests to join the network. Several GBIF nodes have expressed interest in joining. GBIF nodes may be better resourced (receiving national government funding) compared to some OBIS nodes, enabling them in greater participation. Once candidate nodes complete the IODE ADU certification process and are approved, they are eligible to participate in the OBIS NCG and SG-OBIS.

There is a need to track node engagement across the range of OBIS Coordination Groups which could be integrated into annual Node reporting exercises.

The NCG will receive secretariat support from Laurent Chmiel, to facilitate engagement and drive enthusiasm across the network. It was also recognised that some node representatives might not be comfortable with public speaking and presenting their nodes activities. In these cases, there is the opportunity to use a 'proxy' presenter from within the NCG, or for the community and/or secretariat (via the Engagement Officer role) to provide coaching and support. Regardless, one key aim of the NCG is to provide a platform to capture and celebrate the successes of all OBIS nodes.

The EC-OBIS reviewed and endorsed the following NCG work plan 2025 for submission to IODE-28:

Outcomes <i>(add more outcomes if needed)</i>

Outcome N° 1. Operational Node Coordination Group (NCG)	
Performance indicators <i>(list 2-5 indicators)</i> <ol style="list-style-type: none"> Nodes Coordination Group meetings: the NCG should organise at least 5 coordination meetings between November 2024 and October 2025. Meeting attendance: Percentage of Nodes attending each meeting between November 2024 and October 2025. Participant engagement: Number of questions asked by meeting participants between November 2024 and October 2025. 	Status <i>(completed, in progress, cancelled)</i> In progress In progress In progress
Deliverables <ol style="list-style-type: none"> Build an NCG Wiki and make it accessible to Nodes Progress reporting and engagement representation at EC meetings and SG meetings 	In progress In progress
Outcome N° 2 Improve Inter-Node Communication	
Performance indicators <i>(list 2-5 indicators)</i> <ol style="list-style-type: none"> Flash Talks attendance: number of views per Flash Talk between November 2024 and October 2025. Wiki users: number of Wiki monthly users between November 2024 and October 2025. 	Status <i>(completed, in progress, cancelled)</i> In progress In progress
Deliverables <ol style="list-style-type: none"> Create and distribute a Flash Talk template to be used by the Nodes by November 2025. 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. 	Complete In progress
List of partners and key stakeholders. <i>(Indicate how partners and stakeholders contribute to the action)</i> <p>Membership of the NCG is mandatory for OBIS Node Managers (or reps) and incorporates representation from the OBIS Secretariat and PCG and DCG.</p> <ol style="list-style-type: none"> Nodes are mandated to participate and engage within the CG. The core elements include raising issues, sharing experiences, signposting resources, and identifying requirements. The Secretariat provides a secretarial role and structural support PCG and DCG engage and share experiences and outputs 	
Explain how the Programme Component/Programme Activity/Project contributes to other IODE or IOC programmes and activities. <p>Reinforcing the OBIS community is essential for fostering engagement and ensuring the commitment of data providers.</p>	
Provide details on long-term sustainability. <i>(including confirmed extra-budgetary resources)</i>	

The programme is sustainable indefinitely based on:

- Availability of Secretariat support (Comms Officer)
- Availability of Co-Chairs
- Engagement of Nodes

Risks. *(Describe the potential risk of not achieving the expected results)*

Loss of Comms Officer support could severely limit the effectiveness of the OBIS NCG

Loss of Co-Chair involvement and support could similarly severely limit the effectiveness of the OBIS NCG

6. Branding and Funding

6.1 OBIS handout poster

The IOC secretariat at HQ in Paris asked the OBIS secretariat a 1 pager on what IOC/OBIS does related to biodiversity, which can be used as a hand-out to potential donors.

The EC-OBIS ran a Miro board to capture messaging for the 1 pager and poster handout to support a biodiversity focused funding bid. During the EC-OBIS meeting Laurent Chmiel developed a draft poster to capture these ideas which was shared with the EC in session for comment. Working with Project Manager Ward Appeltans, the text was updated and a new iteration of the poster shared with EC-OBIS. The second draft poster was reviewed by the EC-OBIS and the floor was opened for feedback and live edits.

The EC-OBIS endorsed the final poster design which is available from:

<https://oceanexpert.org/document/35113>.

6.2 Budget for branding and website development

The current OBIS website is nearly 10 years old and however, still functional, some improvements need to be made that highlight more our activities and services.

Mr Ward Appeltans has determined in discussion with IODE that we have approx \$15,000 USD to spend between (i) website development and (ii) materials for handing out at conferences.

The spending plan could include:

- Website design/designer (frontend)
- Website developer (backend)
- Physical materials: hoodies, etc.

The EC-OBIS identified three options for website building:

Option 1:

- Static website (current)
 - Can build in house (backend)
 - Will need a designer
 - More secure
 - Maintenance costs
 - Bug fixes/patches
 - Improvements/updates to structure
 - Hosting costs
 - Content is managed through Jekyll (text files)
 - No limitations design-wise
 - User submitted articles would need to be submitted via template, e.g. google docs, or would need to be written in markdown (markdown editors are effective)

Option 2:

- CMS (e.g. Wordpress/Drupal)
 - Would have to outsource both design and backend
 - Maintenance costs
 - Bug fixes/patches
 - Improvements/updates to structure
 - Hosting costs
 - Higher risk of malicious attack
 - More capacity for collaboration - each team member can upload content independently

Option 3:

- get it designed externally, build a static site and review how it's going, then if necessary or desirable could migrate to a CMS.

The **EC-OBIS reviewed** the three options and concluded the following:

- **Constraint:** We need to spend the allocated funds by the end of the calendar year.
- **Significant constraint:** Publishing Google Docs and reviewing material will require time.
- **Workflow (staging):** There is a pool of material that needs to be reviewed before publication, which can work with the CMS as well.
- **Workflow (efficiency):** Fields in a template could be pre-populated to avoid rewriting them each time.
- **Github:** A development branch can be utilised, which can later be merged.

A cost estimate is needed to inform our decision:

- Laurent Chmiel recently completed a build with both front-end and back-end components but no content population, using a well-made WordPress template. The cost was €12,500.
- An additional €5,000 may be required for design alone.
- A team of 25 is needed to work on the website and publish content after review.
- No plugins will be used.

- A maintenance contract would cost €6,500, hosted on a server, with support for maps/APIs.

Decisions:

- We plan to hire a designer (approximately US\$5,000).
- There is reluctance to outsource maintenance to an external party due to potential cost implications.
- **Internal maintenance:** Could result in a significant workload.
- **External maintenance:** Could lead to additional costs.

Capacity to do the work:

- Pieter Provoost currently does not have the capacity to build and maintain the system but may be available in 2025.
- If Pieter Provoost reduces his involvement in projects, it could free up time in his work plan.
- There is a strong recommendation to hire someone local to complete the work within a practical timeframe.
- The proposal is for a local Jekyll developer to design a skin, with Pieter Provoost starting the build in January and continuing thereafter.
- **Query:** Is there someone else within the IODE community who can take on part of Pieter Provoost's workload? **Answer:** The workload beyond January is currently unknown.

The EC-OBIS made the following decisions:

- The Secretariat will identify and appoint a designer, with an initial contract value of under US\$5,000.
- It is important to provision a contingency of US\$2,500 for additional, unplanned expenditure.
- Merchandising decisions are to be made urgently within the Secretariat, with input from OTN, at an estimated cost of US\$7,500.

7. OBIS Meetings and events

7.1 IODE-28 Committee meeting and IODC-3 Conference

Mr Ward Appeltans reported that the 28th session of the IODE Committee is scheduled for 12-14 March 2025 in Santa Marta, Colombia. However we are still waiting for confirmation of the meeting venue (latest mid-November). An IODE MG meeting will probably be held online early December 2024 to prepare and make decisions around the organisation of IODE-28. At least one SG-OBIS Co-Chair is expected to participate and represent OBIS.

The Third International Ocean Data Conference (IODC-3) is supposed to precede the IODE-28, on 10-11 March 2025. An update will be provided by IODE mid-November 2024.

Katherine Tattersall, Dan Lear and Ward Appeltans are members of the IODC-3 planning committee and OBIS is expected to organise a session.

Action: We propose having a meeting between EC-OBIS, the OBIS Secretariat including the OBIS Community Engagement Officer to develop a plan for an OBIS session. The plan will cover the presentations and messaging of the session, and capture the breadth and diversity of OBIS activities.

7.2 Living Data 2025

Mrs Katherine Tattersall reported that “Living Data (Data Vivos) 2025” is a joint conference between OBIS, GEOBON, TDWG and GBIF. The conference will be held in October 2025 in Bogota, Colombia, and will bring together members of four global biodiversity networks, alongside hundreds of scientists, researchers and other experts from around the world.

The conference website is live <https://www.livingdata2025.com/> and registration will open after confirmation of venue and dates from the Humboldt Institute, who are the local coordinators. An announcement of dates is anticipated within a month.

Conference objectives are to:

- Promote open, interoperable data
- Support knowledge rights of indigenous and local communities
- Train and empower the community
- Learn about innovative tools and solutions
- Evaluate the state of biodiversity
- Establish biodiversity monitoring networks
- Strengthen international collaboration
- Ensure equitable participation from the global south
- Integrate biodiversity into education and public life
- Connect science with policymakers
- Accelerate progress on global goals and targets

The OBIS All-hands meeting will be held in conjunction with Living Data 2025, as an OBIS session at the conference, and there is also a proposal for integrated marine presentations across other sessions, to break down silos between organisations.

ACTION: The Secretariat will prepare a strategy for optimising node engagement in the All-Hands meeting.

ACTION: Once the dates for the meeting are confirmed, they will be circulated to the NCG. The OBIS DCG and PCG will encourage participation from community members, who may also submit abstracts for presentations or posters on behalf of the coordination groups.

7.3 SG-OBIS-13

Mr Dan Lear reported that the SG-OBIS-13 will be held in conjunction with Living Data 2025 in Colombia. The SG meeting will either be in a venue provided by the conference coordinators, or may need to be organised by the OBIS Secretariat.

ACTION: Katherine Tattersall should attend the next Living Data planning meeting and prior to that, will email Joe Miller (GBIF) to inform of OBIS' intent to run SG-OBIS sessions concurrently with GBIF committee and governing board meetings.

The EC-OBIS proposed to hold the following linked meetings prior to Living Data 2025:

- **Saturday: OBIS Nodes Coordination Group (OBIS node managers and staff)**
- **Sunday: OBIS Project and Data Coordination Groups (subset of OBIS node staff, some external partners)**
- **Monday: OBIS Steering Group**
- **Tuesday-Friday: Living Data 2025 with OBIS session on Thursday.**

The OBIS meetings will be in hybrid mode (so need internet, projector, screen). We expect around 30-40 people.

ACTION: SG Co-Chairs and the Secretariat to respond to the request for OBIS requirements to Conference organisers, and ensure SG-OBIS and coordination group members are informed as planning progresses.

8. OBIS Workplan and budget 2025

Mrs Katherine Tattersall reported that the working documents (OBIS report) for IODE-28 are due to the IODE office by 15 November 2024. Also relevant is the UNESCO biennium which will cover 2026-2027.

As a component of the IODE programme, besides the progress report and 2025 work plan and budget, OBIS has also been tasked with delivering a substantive document that looks to the future, encompassing not only 2025 and 2026 but also the medium-term outlook for 2025, 2026-2027, and 2028-2029.

We have been instructed to assume that the current level of funding and budget across IODE will be maintained when making our projections. Additionally, we are encouraged to be "visionary" in outlining our expectations for OBIS by the end of 2027 and 2029. This vision should include descriptions of potential synergies with other IODE programme components (OTGA, ODIS) and partnerships.

The projection should be accompanied by both financial and staffing requirements and ideally include two scenarios:

- one based on the current resource plan (RP) and existing staff, and

- another based on the current RP plus external funding and additional staff, representing a more ambitious work plan aimed at achieving the visionary outcome.

We will need to discuss this plan with SG-OBIS and the wider community to identify clear visions for the future that can inform IOC-wide structural decisions.

This document will not be finalised during this meeting, but we will need to provide a clear framework and way forward to ensure deadlines are met.

Using a Miro board EC-OBIS undertook an exercise to capture the landscape, deadlines and drivers until 2029. This exercise focussed not only on pre-planned, 'business as usual' events, but attempted to identify and timeline aspirational and visionary elements where OBIS can deliver 'added value' to the wider marine community and build on existing expertise, tools and initiatives.

This exercise will inform the requested resource plans whilst also providing a roadmap for future activity. The Miro board is summarised in Annex 6.

The EC-OBIS with support from the Secretariat will further develop this visionary document with 2 weeks consultation to the OBIS Community and with 2 weeks to then refine the OBIS vision document. Miro board exercise to pull out a visionary future:

<https://miro.com/app/board/uXjVLRgu1g4=/>

OBIS 2025 Budget

		IODE RP requested	IODE RP requested	Covered by other funds	IODE plus external funding
	Activity	2025	2025	2025	
		base scenario	extra scenario	external funds	preferred scenario
PCG	Online meetings and coordination: In-kind (12 hrs/month)	\$0	\$0	\$72,000	\$72,000
	Infrastructure costs: (JupyterHub Instance for 5 active users at a time with 16GB RAM or for 100 active users with 64GB RAM)	\$5,000	\$5,000		\$8,400
	PCG workshops: One face-to-face meeting for the PCG (none yet unless extra budget)	\$0	\$0		\$30,000
	OBIS Secretariat staff	\$0	\$0		\$30,000

	support: UX Consultant (none unless extra budget)				
DCG	Online meetings and coordination: In-kind (12 hrs/month)	\$0	\$0	\$72,000	\$72,000
	DCG workshops: One face-to-face meeting for the DCG (none yet unless extra budget)	\$0	\$0		\$30,000
	OBIS Secretariat staff support: IODE QMF and CoreTrustSeal Accreditation Consultant (none yet unless extra budget)	\$0	\$0		\$30,000
	Infrastructure costs: long term storage and associated operational costs	\$10,000	\$10,000		\$10,000
	Training Workshop: In-kind (16 hrs/month)	\$0	\$0		\$48,000
NCG	Online meetings and coordination: In-kind (12 hrs/month)	\$0	\$0	\$72,000	\$72,000
	All-Hands meeting: Funding for member attendance at biannual All Hands meetings (including Living Data & SG-OBIS 2025) - inc retained from previous year	\$40,000	\$45,000		\$50,000
	Infrastructure costs: Communication platform subscriptions (e.g. Slack, Miro, other preferred tools?) Licence fee for <100 users.	\$2,000	\$2,000		\$2,000
	Regional face-to-face NCG meetings (room and catering) 2-3 per year (none yet unless extra budget)				\$50,000
SG	SG-OBIS-13 venue and secretariat travel	\$15,000	\$17,000		\$40,000
	SG-OBIS Co-Chairs (20			\$120,000	\$120,000

	hrs/month)				
SEC	Notion subscription	\$1,500	\$1,500		\$1,500
	Staff travel, IOC Assembly June 2025 etc	\$2,000	\$10,000		\$15,000
	Branding, Communication & outreach	\$4,500	\$9,500		\$10,000
	OBIS Secretariat Staff: Programme Manager (Fixed Term)			\$190,000	\$190,000
	OBIS Secretariat Staff: OBIS Technical and Scientific Coordinator (Fixed Term)			\$190,000	\$190,000
	OBIS Secretariat Staff: OBIS CD officer (Consultant)			\$66,000	\$120,000
	OBIS Secretariat staff support (PCG): Researcher (PA P-2)	\$0	\$0	\$120,000	\$150,000
	OBIS Secretariat staff support: OBIS Data Manager (PA-P3)	\$0	\$0	\$0	\$150,000
	OBIS Secretariat staff support: OBIS Community Engagement Officer (consultant)	\$40,000	\$50,000	\$10,000	\$150,000
	OBIS Secretariat Staff: associate project officer - eDNA (PA P-2)			\$120,000	\$120,000
	OBIS Secretariat Staff: eDNA science officer (consultant)			\$60,000	\$120,000
Total		\$120,000	\$150,000	\$1,092,000	\$1,880,900

9. Adoption of the Report and Closure of the Meeting

The **EC-OBIS requested** the SG-OBIS Co-Chairs and Secretariat to further review and edit the report for clarity, and then ask for comment and endorsement from the EC-OBIS.

Katherine Tattersall closed the meeting at 17:56 on the 16th October and thanked the EC-OBIS members for their enthusiasm, engagement and commitment over the three days of the meeting.

The **EC-OBIS also thanked** IODE and the staff at the secretariat for their support and for making this meeting possible.

Annex 1. Agenda and Timetable

	Monday 14/10	Tuesday 15/10	Wednesday 16/10
	OBIS-EC	OBIS-EC	OBIS-EC
09:30-11:00	New OBIS website - present and discuss	Branded materials and website project planning and budget development	OBIS/IOC poster review Meetings & Events - IODE28, IODC3 - Living Data, SG-OBIS-13
break			
11:30-12:30	Plan for regional and global impact stories (for sharing by Secretariat)	Product Coordination Group Discussion and Planning	Review workplans for OBIS CGs, is budget required Communications and website budget planning
Lunch			
13:30-15:00	Strategy for development of OBIS comms material (package of text/images/ppt/etc for regions)	Data Coordination Group Discussion and Planning	Prepare OBIS workplan and budget preparation for 2025 for IODE MG
break			
15:30-17:00	Branding	Node Coordination Group Discussion and Planning	Workplan and budget 2025 adoption

Annex 2. OBIS new website functions and content

Below is a summary of the discussion on the new website resulting from the OBIS secretariat retreat with input from the EC-OBIS:

Functions of a new OBIS website

Data-centred functionalities

- users should know what is available
- easy to use download options & filters
- better described licences / attributions
- Information about how to cite, complete metadata
- make EMOF more visible
- explain the quality control for transparency
- search option on metadata for datasets
- set a filter-based notification system which users can subscribe to, to receive a notification when new data is published on an area of interest (e.g. species, taxon group, eDNA etc)

Information products

- users should know what products are available
- users should know what is *possible*: i.e. what we provide and what we don't e.g. we provide full datasets & raw data, we provide EOVs, we provide statistics and summaries
- we need to share example cases in a catalogue of products, and allow people to publish their products on our catalogue and give them an OBIS label/certification/stamp of endorsement (CKAN)
 - communicate & promote the interoperability of OBIS and GBIF data, and that we can leverage GBIF data in OBIS products)
 - highlight the importance of the Jupyter Notebooks and what you can do with them, e.g. <https://notebooks.prod.wekeo2.eu/>
 - Investigate whether we can embed bibliographic information to provide to CKAN
- most requested product: Maps.
 - Increasing the number of maps > increase capacity
 - Maps could have labels, added info
 - Map generation is super important: for SEC, Nodes
 - Maps could be shared more easily for all the network to benefit
 - create a map production interface?
 - Consideration of ArcGIS online as a platform, though there are licensing costs
 - Also consider AGOL Living Atlas of the World
- all products centralised on a page
 - centralise notebooks, dashboards, use guides
 - menu with links to topics (eDNA, conservation, capacity building, deep sea, ..) to gather thematic collections. Could also lead to info products.

Home page

- The home page should have news, tools and datasets

Content

Governance & decision making

- better visibility for OBIS' mission/role: role in GOOS, EOVs, historical data, Mapper
- better visibility for the OBIS governance: data policy, structure, nodes, history
- actionable content: use cases, nodes work, policy briefs/ white papers / keynotes on pressing / trending topics, content that resonate with the audience
- involvement: OBIS projects

Narrative & education

- showcase about a specific species
- audience-adapted storytelling
- integration/partnering with news agencies
- state of the ocean report turned into a story
- show what the community is doing
- every dataset is a story
- page with citizens' questions: "What is the state of biodiversity?", ...
- Kids and general public adapted content
- Inspire: show what scientists do
- data-rich long stories that journalists can use & bite-sized info

Training & courses

- educational kits for different student groups
- content to train the trainers
- OBIS node on-boarding
- accessing data
- FAQ/Al to help find answers
- modular course content to be (re)used
- standards and vocab
- learning platform where modules can be picked by users to generate a tailored course
- certification OBIS certified teacher
- Refresher course
- Course needs to be assessed

Annex 3. Product Coordination Group

Group Purpose

Coordinate data and information products, from any type of analysis (e.g. description, data visualisation, etc.) that synthesise and generate new information from data hosted on OBIS and other sources.

Group Responsibilities

Per [SG-OBIS-12 Meeting Report](#), each of the coordination groups will have one or two Co-Chair(s) who will:

1. Chair meetings according to the group's agreed-upon schedule.
2. Ensure that tasks are appropriately distributed amongst the group members.
3. Coordinate their activities with the other coordination groups.
4. Report to and represent their group at the SG-OBIS.
5. Participate/report in OBIS Executive Committee meetings.

Each group should also **maintain a secretary position** to promote consistent notetaking across meetings. All coordination groups should **use the same collaborative tools**, proposed by the Secretariat and available in all countries, to **maintain a clear record of group activities** and progress accessible to the Secretariat and members of the OBIS Coordination Groups. The Coordination Group reports will be made public.

Terms of Reference (ToR)

Adopted at SG-OBIS-12, per [SG-OBIS-12 Meeting Report](#)

The OBIS Products Coordination group (PCG) is a collaborative and interdisciplinary group that is **driven by the importance of creating data and information products** (i.e. indicators) that are scientifically sound, practical, and relevant to decision-makers in government, industry, and civil society.

PCG focuses on OBIS Priority Area 2: Data application and output.

The PCG will consist of one or two co-chairs and a body of voluntary members. There will be no limit to the number of members who can join. **Members can include OBIS Sec, node staff, as well as interested or invited experts.**

We consider **data and information products any type of analysis (description, data visualisation, etc.) that synthesises and generates new information from data hosted on OBIS** and other sources.

The OBIS Products Coordination Group will:

1. Identify, prioritise, and coordinate the development of data and information products that are of interest to our user community.

2. Advise on how best to showcase and catalogue data and information products developed by the wider OBIS community, in line with the OBIS data policy, including proper acknowledgment of other formats of resources (e.g. software applications, workflows, papers, etc.).
3. Set minimum metadata and quality requirements for data and information products.
4. Propose and develop tools, pipelines, and documentation that can bolster the development of products based on OBIS data.
5. Support groups/institutions working on products development (e.g. early warning systems, ecological synthesis groups, etc.) to identify potential collaborations.
6. Propose a process for frequent expert validation of data and information products by consulting with local scientific experts and end-users (including local communities and indigenous people).
7. Engage with activities of other relevant bodies by identifying representatives and report back to the group

Annex 4. Data Coordination Group

Group Purpose

To coordinate and support the effective adoption of standards to enable data flow and the mobilisation of new data into the OBIS network and beyond.

Group Responsibilities

Per [SG-OBIS-12 Meeting Report](#), each of the coordination groups will have one or two Co-Chair(s) who will:

1. Chair meetings according to the group's agreed-upon schedule.
2. Ensure that tasks are appropriately distributed amongst the group members.
3. Coordinate their activities with the other coordination groups.
4. Report to and represent their group at the SG-OBIS.
5. Participate/report in OBIS Executive Committee meetings.

Each group should also **maintain a secretary position** to promote consistent notetaking across meetings. All coordination groups should **use the same collaborative tools**, proposed by the Secretariat and available in all countries, to **maintain a clear record of group activities** and progress accessible to the Secretariat and members of the OBIS Coordination Groups. The Coordination Group reports will be made public.

Terms of Reference (ToR)

Adopted at SG-OBIS-12, per [SG-OBIS-12 Meeting Report](#)

The DCG will consist of one or two co-chairs and a body of voluntary members. There will be no limit to the number of members who can join. **Members can include OBIS Sec, node staff, as well as interested or invited experts.**

The OBIS Data Coordination Group (DCG) will focus on topics/issues related to OBIS Priority Area 1: Data mobilisation and input, more specifically:

- Identify, prioritise, and propose solutions for issues around the following topics:
 - Data and metadata standards and formats
 - Data QC
 - Taxonomy
 - Vocabularies
 - Methods of bringing new data into the system
- Identify data gaps and, in collaboration with the OBIS Nodes Coordination group, prioritise and coordinate data mobilisation efforts.
- Ensure the fitness of quality metrics for assessing the current status of OBIS data (e.g. spatial and taxonomic completeness).
- Maintain the OBIS Manual; especially regarding standards or methods.
- Engage with activities of other relevant bodies (e.g. TDWG, GBIF, GOOS, SCOR) by identifying representatives who will report back to the group.

Annex 5. Nodes Coordination Group

NCG Group Purpose

The Nodes Coordination Group (NCG) provides a forum for all OBIS nodes to discuss ongoing activities, priorities, and barriers they may be facing. Membership to this group is mandatory for all OBIS nodes, with at least one representative from each node participating. Meetings will occur every two months. There is no maximum number of members. We aim for max participation. Chairs will lead the membership in pursuing methods to promote communication from all parts of the world and overcome the challenge of time-zone coordination (e.g. leveraging asynchronous communication methods).

Group Responsibilities

Per [SG-OBIS-12 Meeting Report](#), each of the coordination groups will have one or two Co-Chair(s) who will:

1. Chair meetings according to the group's agreed-upon schedule.
2. Ensure that tasks are appropriately distributed amongst the group members.
3. Coordinate their activities with the other coordination groups.
4. Report to and represent their group at the SG-OBIS.
5. Participate/report in OBIS Executive Committee meetings.

Each group should also **maintain a secretary position** to promote consistent notetaking across meetings. All coordination groups should **use the same collaborative tools**, proposed by the Secretariat and available in all countries, to **maintain a clear record of group activities** and progress accessible to the Secretariat and members of the OBIS Coordination Groups. The Coordination Group reports will be made public.

Terms of Reference (ToR)

Adopted at SG-OBIS-12, per [SG-OBIS-12 Meeting Report](#)

The Nodes Coordination group (NCG) provides a forum for all OBIS nodes to discuss ongoing activities, priorities, and barriers they may be facing.

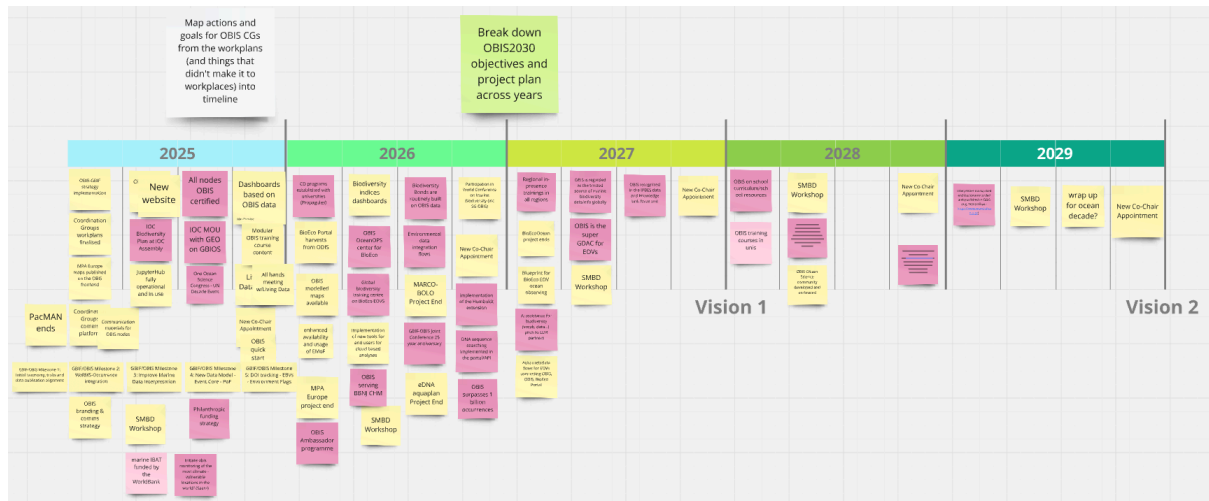
Membership to this group is mandatory for all OBIS nodes, with at least one representative from each node attending. Meetings will occur every two months. Chairs will lead the membership in pursuing methods to promote communication from all parts of the world and overcome the challenge of time-zone coordination (e.g. leveraging asynchronous communication methods).

The OBIS Nodes Coordination Group will:

6. Facilitate inter-node communication and exchange of expertise.
7. Define priority objectives to guide the efforts of OBIS Nodes.
8. Coordinate and distribute the work related to mobilisation of datasets.

9. Provide advice to SG-OBIS on the OBIS science mission, policy, and management relevance and strategic priorities.
10. Identify and pursue new directions, potential pilot projects, potential resources, and areas of development for data-driven research and ocean policy and management applications, as well as investigate timely topics to help set future strategic directions.
11. This will be done in coordination with the Data Coordination Group and Products Coordination Group.
12. Coordinate communication of node successes and achievements.
13. Provide annual OBIS node activity reports and mutual support for the challenges of individual nodes.
14. Identify and resolve training needs within the community.
15. Coordinate and implement any inter-Node related activities agreed upon by the SG to achieve the OBIS mission.

Annex 6. OBIS timeline



The original Miro board is accessible [here](#) at the time of writing.

The items were colour coded to reflect aspirational (pink) and planned (yellow) activities, events and milestones.

These items are transcribed as text below, with the aspirational items in italics.

2025

Q1

- OBIS-GBIF strategy implementation
- Coordination Groups workplans finalised
- MPA Europe maps published on the OBIS frontend
- PacMAN ends
- Coordination Groups comms platform
- Communication materials for OBIS nodes
- GBIF/OBIS Milestone 2: WoRMS-Occurrence integration
- GBIF/OBIS Milestone 1: Initial taxonomy, traits and data publication alignment
- OBIS branding & comms strategy

Q2

- OBIS Website overhaul complete
- New website
- IOC Biodiversity Plan at IOC Assembly*
- JupyterHub fully operational and in use
- GBIF/OBIS Milestone 3: Improve Marine Data Interpretation
- SMBD Workshop
- marine IBAT funded by the WorldBank*

Q3

- All nodes OBIS certified*

IOC MOU with GEO on GBIOS

One Ocean Science Congress - UN Decade Event

GBIF/OBIS Milestone 4: New Data Model - Event Core - PoF

Philanthropic funding strategy

Initiate obis monitoring of the most climate - vulnerable locations in the world? (Saara)

Q4

Dashboards based on OBIS data

Modular OBIS training course content

Living Data 2025

All hands meeting w/Living Data

New Co-Chair Appointment

OBIS quick start

GBIF/OBIS Milestone 5: DOI tracking - EBVs - Environment Flags

2026

Q1

CD programs established with universities

(Propagules)

BioEco Portal harvests from ODIS

OBIS modelled maps available

enhanced availability and usage of EMoF

MPA Europe project end

OBIS Ambassador programme

Q2

Biodiversity indices dashboards

OBIS OceanOPS center for BioEco

Global biodiversity training centre on BioEco EOVS

Implementation of new tools for end users for cloud based analyses

OBIS serving BBNJ CHM

SMBD Workshop

Q3

Biodiversity Bonds are routinely built on OBIS data

Environmental data integration flows

MARCO-BOLO Project End

GBIF-OBIS Joint Conference 25 year anniversary

eDNA aquaplan Project End

Q4

Participation in World Conference on Marine Biodiversity (inc SG-OBIS)

New Co-Chair Appointment

Implementation of the Humboldt extension

DNA sequence searching implemented in the portal/API

OBIS surpasses 1 billion occurrences

2027

Q1

Regional in-presence trainings in all regions

BioEcoOcean project ends

Blueprint for BioEco EOVS ocean observing

AI assistance for biodiversity (vocab, data...) pitch to LLM partners

Auto metadata flows for EOVS connecting OBIS, ODIS, BioEco Portal

Q2

OBIS is regarded as the trusted source of marine biodiversity data/info globally

OBIS is the super GDAC for EOVS

SMBD Workshop

Q3

OBIS recognized in the IPBES data and knowledge task force unit

Q4

New Co-Chair Appointment

2028**Q1**

OBIS on school curriculum/school resources

OBIS training courses in unis

Q2

SMBD Workshop

OBIS practices and standards are widely implemented in data capture tools and widely used in industry, academic, and government data providers.

OBIS Citizen Science community developed and embraced

Q3

-

Q4

New Co-Chair Appointment

Increase engagement with museum sector (eg <https://www.dissco.eu/>). Identification/flagging of voucher specimens (via BasisOfRecord?) visible via OBIS

2029**Q1**

Interpretive transcribed archival data recorded and published to OBIS (e.g. Transcribus - <https://www.transcribus.org/>)

Q2

SMBD Workshop

Q3

Wrap up for Ocean Decade?

Q4

New Co-Chair Appointment

Annex 7. EC-OBIS-6 Participants list

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