INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

2024 Meeting of the IODE Management Group
IOC Project Office for IODE, Oostende, Belgium, 5-7 February 2024

REVISED WORK PLAN AND BUDGET 2024-2025

This document provides a full overview of the work plans, requested support from the UNESCO/IOC/IODE Regular Programme, identified extra-budgetary revenue and funding to seek for the year 2024 as well as projections for 2025-2027.
IODE Projects, which rely fully on extra-budgetary sources of funding, are not detailed.

Table of contents

Note: all project leads were also requested to identify IT support needs for 2024 (email sent on 18/12/2023). Only OBPS responded. (see Annex 1)

1. PROGRAMME COMPONENTS

2.1 OCEAN BIODIVERSITY INFORMATION SYSTEM (OBIS)

Does a Steering Group exist?: YES

Membership of the Steering Group: https://oceanexpert.org/group/230

Steering Group Leads (Co)-Chair(s):
*   Martha Patricia Vides C. martha.vides@invemar.org.co
*   Katherine Tattersall, katherine.tattersall@csiro.au

Is there a "Project" Manager (IODE staff or Consultant): YES (IODE staff)

Name and email: Ward Appeltans, w.appeltans@unesco.org

> Note: We would like to hire a part-time OBIS community engagement officer who will support the project manager with the various OBIS Coordination Group activities and establishment of partnerships. This position could possibly be combined with a new IODE Communication Officer position.

Objectives of the Programme Component:

*   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)

Vision statement of the Programme Component (what is the long-term target state to which the programme component is developing):

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.

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.

Work plan and budget for 2024 detailing all planned actions with milestones and required funding. If known, included timing of the action (e.g. a meeting).

Activity		2024	2025	2026	2027
Meetings (travel & subsistence)	SG-OBIS meeting 25-29 March 2024, South Korea, in person	15000			
	SG-OBIS meeting ?March? 2025, Colombia, back-to-back with IODE Committee meeting, in person		15000		
	SG-OBIS meeting 2026, TBD			15000	
	SG-OBIS meeting 2027, TBD				15000
	OBIS conference, bi-annually, in person, back-to-back with another major conference (e.g., IODC-3, WCMB 2026 in Ostend)		40000	40000	
	EC-OBIS meetings, quarterly, online	0	0	0	0
	OBIS Data Coordination Group meetings, monthly, online	0	0	0	0
	OBIS Product Coordination Group meetings, monthly, online	0	0	0	0
	OBIS Nodes Coordination Group meetings, quarterly, online	0	0	0	0
	OBIS coordination group workshops (data & products), time and place TBD, in person	20000	20000	20000	20000
	IODE MG meetings (e.g. 5-7 February 2024, Ostend, Belgium, in person), in-kind co-chairs	0	0	0	0
	GBIF/OBIS meetings (e.g. 8-9 February 2024, Ostend, Belgium in person	0	0	0	0
Staffing	Part-time consultant, community engagement officer, to assist the various OBIS Coordination Groups and partnerships	30000	30000	30000	30000
	Other OBIS staff (currently 6) covered by RP and XB projects	0	0	0	0
Technical infrastructure	OBIS website and portal developments. Covered by additional RP position	0	0	0	0
	Cloud, software and hardware	15000	20000	25000	30000
Capacity Development	OBIS training courses in collaboration with OTGA. Covered by XB funding (NORAD, FUST)	0	0	0	0
Communication and Outreach	OBIS branding material development and distribution	5000	5000	5000	5000
		85000	**130000**	**135000**	**100000**

<u>Have any extra-budgetary funds been identified and will they be available to co-fund the 2024 actions (explain):</u>

- In-kind contributions from OBIS nodes network are estimated to be around 1 million USD annually + about 50 FTE in staffing.
- The OBIS Secretariat is involved in several extra-budgetary projects (table below) and raised almost 5 million US$ in recent years.

Project	Source	Budget (US$)	Duration
PacMAN	Flanders	856,620	13/03/2020 to 30/06/2024
eDNA exp.	Flanders	890,649	08/12/2021 to 30/06/2024
MARCO-BOLO	EU	733,735	01/12/2022 to 30/11/2026
MPA Europe	EU	612,909	01/01/2023 to 30/04/2026
eDNAquaPlan	EU	192,808	01/09/2023 to 31/08/2026
DTO-BioFlow	EU	421,819	01/09/2023 to 28/02/2027
BioEcoOcean	EU	901,750	01/02/2024 to 31/01/2028
AtlantECO	EU	55,000	01/09/2020 to 31/08/2024
OBIS training	LifeWatch	21,000	01/09/2023 to 31/01/2024
OBIS training	Norway	66,000	01/01/2023 to 31/12/2023
EMODNET	VLIZ	100,000	2018-2023
		4,852,290	

These extra-budgetary projects are essential in reinforcing OBIS's role as a global leader in marine biodiversity data management by increasing capacity through training and tutorials, development of resources such as tools and manuals and by providing enhanced data flow, data access and standardization to support the creation of relevant marine information products.

An example is the development of models that use OBIS data to support the identification of priority areas to protect, including predictions for future climate change scenarios. A strong focus in several projects is the establishment of data workflows and streamlining protocols for biodiversity monitoring using environmental DNA. These projects allowed OBIS to develop the capacity and be one of the world leading data systems for this type of data.

However, the UNESCO regular program funding remains crucial for OBIS as it serves as the backbone for system development, technical maintenance, and global community engagement. It facilitates the solicitation of input and promotes the transfer and adoption of practices and know-how within the global community.

<u>What plans/perspectives do you have to mobilize funding in 2024:</u>

A concept note for funding from NORAD was submitted, called *OBIS "Propagules program" – training a new generation of OBIS users*. The requested budget is 100,000 USD.

We expect to submit at least one proposal to the next phase of FUST/Flanders. Currently no additional EU project proposals are in the pipeline.

Provisional work plan and budget for 2025-2027 detailing proposed actions with timing, milestones and required funding (this will be a first draft):

See workplan and budget table above.

Have any extra-budgetary funds been identified and will they be available to co-fund the 2025-2027 actions (explain):

Several of the extra-budgetary projects that involve OBIS continue into 2025-2027.

What plans/perspectives do you have to mobilize funding in 2025-2027:

No concrete plans yet, but we hope to have another FUST/Flanders funded project that will extend into 2025-2027.

2.2   OCEAN DATA AND INFORMATION SYSTEM (ODIS)

<u>Does a Steering Group exist?</u>: YES

<u>Membership of the Steering Group</u>: http://ww.oceanexpert.net/group/472

<u>Steering Group Leads (Co)-Chair(s)</u>:
- Pier Luigi Buttigieg for ODIS, pier.buttigieg@awi.de

<u>Is there a "Project" Manager (IODE staff or Consultant)</u>: YES (as OIH project manager)

<u>Objectives of the Programme Component</u>:

ODIS has demonstrated that a well-coordinated network of distributed and independent systems can interoperate and more effectively exchange ocean data and information for the benefit of all. As such, it has laid a foundation for a sustainable, co-developed, and open interoperability solution at the heart of a thriving digital ocean ecosystem. To achieve this future, the coordination and convention-building role of IODE is key: its ability to balance needs and capacities to ensure effective partnership will be central to the extension of ODIS into new frontiers.

During this process, ODIS has the potential to revolutionise, enhance, and streamline the **operations of the IODE** in pursuit of its mission. ODIS allows real-time monitoring of data and information exchange across its partners, a model which can be extended across IODE's core stakeholders to match the new demands of the digital revolution. Its current form has concretely demonstrated the feasibility of lightweight, but interoperable, data exchange and encourages further development and extension to new data, information, and other digital assets including software, modelling capacities, and digital twin components. These capacities also allow the identification of new opportunities, gaps, and new challenges in global ocean data sharing.

Furthermore, ODIS is a means to enhance and **unlock more value** from the >100 National Oceanographic Data Centres (NODCs), Associate Data Units (ADUs) and Associate Information Units (AIUs). These centres manage and make available millions of ocean observations that contribute to ocean data products and services developed and used by other IOC programmes. The technology that has been developed is easy to adopt, open and portable to new applications. ODIS offers a **long-term solution for NODCs, ADUs and new partners** to keep ownership and complete control over their data holdings, while choosing which (meta)data to share with a growing global ocean digital ecosystem. It is expected that in the coming years, **the further involvement of NODCs and ADUs** with direct technical support where needed, will facilitate their adoption of ODIS-Arch and thus benefit from their involvement in the ODIS global data ecosystem.

The OIH project's development of a proof-of-concept architecture for distributed and interoperable data sharing is vital to supporting **data exchange across basin-scale observing systems** noted in (ii) "comprehensive ocean observing system for all major basins". Further, the Ocean InfoHub will substantially contribute to outcomes (iv), "data and information portal" and (vi), "capacity building and accelerated technology transfer, training and education, Ocean literacy" by empowering local, national, regional and global actors to distribute capacity and information through harmonized portals, integrated into other solutions.

<u>Vision statement of the Programme Component (what is the long-term target state to which the programme component is developing):</u>

The overarching goal of the Ocean Data and Information System (ODIS) is to provide a sustainable and responsive digital ecosystem where users can discover data, data products, data services, information, information products and services provided by IOC Member States, independent projects, private sector partners, and other partners associated with the UN Decade of Ocean Science for Sustainable Development.

<u>Work plan and budget for 2024 detailing all planned actions with milestones and required funding. If known, included timing of the action (e.g. a meeting).</u>

During 2024, activities will focus on the transition from the Ocean InfoHub Project to the ODIS Project. The ODIS Project Manager will prepare a detailed work plan and budget for 2025-2030, including ODIS development and expansion, and seek additional support from funders.

1. ODIS will develop (as requested by IOC Regional Subsidiary Bodies and other groupings of member states or partner organizations/programmes) **additional regional data and information nodes** to meet the needs of their users.
2. The project will provide **technical and procedural guidance documentation as well as related training** to assist data/information providers as well as diverse user communities with the necessary capacity to actively and equitably participate in ODIS.
3. ODIS will develop **additional functionality to support end-users**.
4. ODIS will create a co-development model to bridge ocean data to other domains and secure sustainability and community-driven growth of the ODIS Architecture.
5. ODIS will support the OceanData-2030 Programme, registered under the UN Decade of Ocean Science for Sustainable Development.

2024 Budget (in USD)

$40,000 Full time project manager (five months)
$35,000 Graph Operations / Digital engineer / Backend developer
In Kind Digital Architecture and Strategist / Steering consultant, (including for Africa)
$35,000 Technical support and capacity development (including for Africa)
$40,000 Technical support for Africa front end portal
$25,000 Travel and communications
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$175,000 USD

<u>Have any extra-budgetary funds been identified and will they be available to co-fund the 2024 actions (explain):</u>

The Ocean InfoHub Project will run to June 2024 and will be co-funding these activities.

<u>What plans/perspectives do you have to mobilize funding in 2024:</u>

● Two proposals have been submitted for NORAD funding.

- Active discussions are underway with the Decade Coordination Unit and DCO for Data Sharing to identify other funding opportunities.

<u>Provisional work plan and budget for 2025-2027 detailing proposed actions with timing, milestones and required funding (this will be a first draft):</u>

The years 2025-2030 will focus on the expansion of ODIS with support for new partners, extension of the ODIS-architecture and support for front end portal development. Provision is also made in the budget for annual steering group meetings and other travel.

Minimal viable scenario: Annual budget

Regular programme component ($175,000 USD)
$80,000 Full time project manager
$30,000 Graph Operations / Digital engineer / Backend developer
$30,000 Digital Architecture and Strategist / Steering consultant for Africa
$35,000 Technical support and capacity development for Africa

Mobilized from extra-budgetary sources ($430,000 USD)
$80,000 Technical partnership lead(s) and assistance
$30,000 Graph Operations / Digital engineer / Backend developer(s)
$30,000 Digital Architecture and Strategist / Steering consultant (s)
$25,000 Project support
$80,000 Development of front end portal/s
$50,000 Communication materials, outreach and translation
$75,000 Technical support and capacity development for three additional regions ($25,000 per region)
$40,000 Steering group meeting
$20,000 Travel / other meetings
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$605,000 USD

Optimal scenario: Annual budget

Regular programme component ($175,000 USD)
$80,000 Full time project manager
$30,000 Graph Operations / Digital engineer / Backend developer
$30,000 Digital Architecture and Strategist / Steering consultant for Africa
$35,000 Technical support and capacity development for Africa

Mobilized from extra-budgetary sources ($875,000 USD)
$100,000 Technical partnership lead(s) and assistance
$90,000 Graph Operations / Digital engineer / Backend developer(s)
$90,000 Digital Architecture and Strategist / Steering consultant (s)
$50,000 Project support
$190,000 Development of front end portal/s
$70,000 Communication materials, outreach and translation
$125,000 Technical support and capacity development for five additional regions ($25,000 per region)
$40,000 Steering group meeting
$60,000 Travel / other meetings
$60,000 Development of online training course materials and in-person capacity development
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$1,050,000 USD

<u>Have any extra-budgetary funds been identified and will they be available to co-fund the 2025-2027 actions (explain):</u> None

<u>What plans/perspectives do you have to mobilize funding in 2025-2027:</u> Same as for 2024

2.3   OCEANTEACHER GLOBAL ACADEMY

Does a Steering Group exist?: YES

Membership of the Steering Group: https://oceanexpert.org/group/68

Steering Group Leads (Co)-Chair(s):
- Prof. Dr. Aidy M MUSLIM aidy@umt.edu.my
- Dr. Tata VS UDAYA BHASKAR uday@incois.gov.in

Is there a "Project" Manager (IODE staff or Consultant): YES (
- Dr. Ana Carolina MAZZUCO ac.mazzuco@unesco.org (IODE staff, VLIZ seconded)
- Mr. Greg REED g.reed@unesco.org (FUST funded until June 2024)

Objectives of the Programme Component:
- To develop a portfolio of packaged courses related to needs of IOC and other partners
- To deliver online, onsite and blended learning, on demand
- To designate Specialized Training Centres (topic focused) and Regional Training Centres (regionally focused)
- To focus on training needs of the 2030 Agenda and its SDGs
- To facilitate CD within the framework of the UN Decade of Ocean Science
- To further develop and implement quality procedures and maintain ISO certification as a learning services provider to ensure the highest quality of training is delivered by OTGA

Vision statement of the Programme Component

> To build equitable capacity related to ocean research, observations and services in all IOC Member States by delivering training courses on a range of topics addressing the priority areas of the UN Decade of Ocean Science for Sustainable Development and the 2030 Agenda and its SDGs as well as supporting the implementation of the IOC Capacity Development Strategy.

Work plan and budget for 2024 detailing all planned actions with milestones and required funding.

> The work plan and budget for 2024 based on the available RP resources are included below. Briefly, OTGA received more than 60 training course proposals to be delivered in 2024, keeping a realistic goal of 30 courses minimum per year. 2/3 of the courses should be open in the first semester and 1/3 in the second semester.
> One in-person steering group meeting is planned for June 2024 at the programme office in Oostende. From June 2024, there are no resources allocated for an additional project manager and staff assistance to course delivery (activity), which will require the mobilization of extra-budgetary funds to cover that cost (estimated to be approximately USD 36.000,00 per semester).

Outcome, output and key activity	Timeline	KPI	2024 Regular Programme	2024 Extra-budgetary FUST project
Outcome 1. Increased capacity and skills by ocean specialists to use standards and best practices tools towards achieving SDG 14.				
Output 1.1 Learners empowered to apply the skills learned and influencing the implementation and the use of standards and best practices widely accepted				
Activity 1.1.1 Organize and host training courses relevant to the Regions	ongoing	minimum of 30 training courses delivered	$5,000.00	
Activity 1.1.2. Provide travel grants to facilitate learner attendance at training courses	2024 work plan to be confirmed January	2024 workplan approved by Steering Group	$30,000.00	
Activity 1.1.3. Provide technical support eLearning platform	ongoing, funded by FUST extra-budgetary	elearning platform maintained and operational	$0.00	
Activity 1.1.4. Confirm certification of the Project Office as LSP (April)	April 2024, funded by FUST extra-budgetary	IODE Project Office certified as a LSP	$0.00	
Output 1.2. Production of new knowledge and training resources				
Activity 1.2.1. Design and develop new course content to address the capacity needs of IOC Programmes	ongoing	new course content developed	$25,000.00	
Activity 1.2.2. Update existing OTGA content to ensure it meets current OTGA course management guidelines	ongoing	existing course content updated	$20,000.00	
Activity 1.2.3. Upload training resources on the OTGA e-Learning Platform	ongoing	all training resources abailable on the elearning platform	$2,500.00	
Activity 1.2.4. Liaise with content providers on course design and presentation	ongoing	all content meets OTGA best practice guidelines	$2,000.00	
Output 1.3. Promote a network of support and community building				
Activity 1.3.1. Publish regular CD communication through social media, newsletters and other communication	ongoing	OTGA upcoming actitivties communicated	$2,000.00	
Outcome 2. Regional and Specialized Training Centres efficiently develop and manage the training programme				
Output 2.1. Increase capacity of Regional and Specialized Training Centres to develop and implement relevant training programmes				
Activity 2.1.1. Provide project governance framework through a steering group	June 2024, funded FUST	Steering Goup meeting report, workplan and budget	$0.00	
Activity 2.1.2. Create and deliver online training for RTC/STC personnel	January-June 2024, funded FUST	Maintain and update online DTOL training course	$0.00	
Activity 2.1.3. Update and publish OTGA Guidelines and Best Practices documentation	January-June 2024, funded FUST	Maintain and updatecourse guidleines documentation	$0.00	
Activity 2.1.4. Assist and facilitate training delivery and coordination	January-June 2024, funded FUST	Supporting staff to training management	$0.00	
Output 2.2. Increase awareness and understanding by MS on the benefits of supporting and promoting OTGA and the network of Training Centres				

Activity 2.2.1. Participate in conferences, meetings to promote OTGA	Ocean Decade Conference April 2024, IMDIS May 2024, others as applicable	Presentations on OTGA activities	$5,000.00	
		Sub-TOTAL	$91,500.00	$267,212.00
		TOTAL	$358,712	

<u>Have any extra-budgetary funds been identified and will they be available to co-fund the 2024 actions (explain):</u> -

<u>What plans/perspectives do you have to mobilize funding in 2024</u>:

OTGA has successfully mobilized USD 986,853.00 from the Flanders Government (FUST, 513GLO2046 project, 2021-2024) to increase capacity and skills by ocean specialists to use standards and best practices tools towards achieving SDG 14, to support Regional and Specialized Training Centres efficiently develop and manage the training programme. From this project, USD 267,212 is assigned as extra-budgetary funds to support OTGA training activities until June 2024, and it is included in the budget spreadsheet attached.

Besides, OTGA is committed to continuously raising additional resources by:
- Actively engaging with RTCs/STCs and other partners to mobilize funding through local and regional agencies/donors to deliver and support on-site training.
  - It is foreseen USD 6.600 from GEF/UNDP Small Grants Program to support a training course about marine litter in Cape Verde 2024 to a local partner (Pilot project total fund raised: $34.000). The agency is willing to replicate the project in other African countries if successful.
  - It is foreseen additional resources (amount not confirmed yet) to OTGA to support the development of training with the European Commission - Blue Clould 2026 initiative.
  - A project proposal for training to the Asia-Pacific community will be applied to the capacity development programme (CAPaBLE) call from the Asia-Pacific Network for Global Change Research, up to USD 40.000 per year, potentially scalable to multiyear.
- Leading and applying for additional funding through IOC/UNESCO donors to develop and implement new training activities
  - Training Internship project was applied to NORAD fund (total USD 120.000 for 2024).
  - It is already foreseen USD 99,577 from NORAD to support on-site and on-site training courses about ocean best practices in the Caribbean (joint project with Ocean Best Practices System in 2024).

*Note that extra-budgetary funds that are to be confirmed or will not be directly managed by OTGA were not included in the attached spreadsheet. To be reported throughout the year.

Provisional work plan and budget for 2025-2027 detailing proposed actions with timing, milestones and required funding (this will be a first draft):

Outcome, output and key activity	2025	2026	2027
Outcome 1. Increased capacity and skills by ocean specialists to use standards and best practices tools towards achieving SDG 14.			
Output 1.1 Learners empowered to apply the skills learned and influencing the implementation and the use of standards and best practices widely accepted			
Activity 1.1.1 Organize and host training courses relevant to the Regions	$5,000.00	$5,000.00	$5,000.00
Activity 1.1.2. Provide travel grants to facilitate learner attendance at training courses	$35,000.00	$35,000.00	$35,000.00
Activity 1.1.3. Provide technical support eLearning platform	$10,000.00	$10,000.00	$10,000.00
Activity 1.1.4. Confirm certification of the Project Office as LSP (April)	$3,500.00	$3,500.00	$3,500.00
Output 1.2. Production of new knowledge and training resources			
Activity 1.2.1. Design and develop new course content to address the capacity needs of IOC Programmes	$15,000.00	$15,000.00	$15,000.00
Activity 1.2.2. Update existing OTGA content to ensure it meets current OTGA course management guidelines	$5,000.00	$5,000.00	$5,000.00
Activity 1.2.3. Upload training resources on the OTGA e-Learning Platform	$2,500.00	$2,500.00	$2,500.00
Activity 1.2.4. Liaise with content providers on course design and presentation	$2,000.00	$2,000.00	$2,000.00
Output 1.3. Promote a network of support and community building			
Activity 1.3.1. Publish regular CD communication through social media, newsletters and other communication	$2,000.00	$2,000.00	$2,000.00
Outcome 2. Regional and Specialized Training Centres efficiently develop and manage the training programme			
Output 2.1. Increase capacity of Regional and Specialized Training Centres to develop and implement relevant training programmes			
Activity 2.1.1. Provide project governance framework through a steering group	$20,000.00	$20,000.00	$20,000.00
Activity 2.1.2. Create and deliver online training for RTC/STC personnel	$2,000.00	$2,000.00	$2,000.00
Activity 2.1.3. Update and publish OTGA Guidelines and Best Practices documentation	$2,000.00	$2,000.00	$2,000.00
Activity 2.1.4. Assist and facilitate training delivery and coordination	$0.00	$0.00	$0.00
Output 2.2. Increase awareness and understanding by MS on the benefits of supporting and promoting OTGA and the network of Training Centres			
Activity 2.2.1. Participate in conferences, meetings to promote OTGA	$5,000.00	$5,000.00	$5,000.00
TOTAL	$109,000.00	$109,000.00	$109,000.00

Have any extra-budgetary funds been identified and will they be available to co-fund the 2025-2027 actions (explain):-

What plans/perspectives do you have to mobilize funding in 2025-2027:
- No extra-budgetary funds were yet identified or confirmed for 2025-2027. Plans to raise resources are the same of 2024:
  - To lead and continuously apply for additional funding from international donors to develop and implement new training activities (at least 3 calls per year).
  - To actively engage with RTCs/STCs and other partners to mobilize funding through local and regional agencies/donors to deliver and support on-site training.

2.   PROGRAMME ACTIVITIES

2.4   AQUADOCS REPOSITORY

Parent Programme Component: **ODIS**

Describe how the Programme Activity contributes to the Programme Component:

AquaDocs contributes to the Programme Component Ocean Data and Information System (ODIS) which "provides an interoperability layer and supporting technology to allow existing and emerging ocean data and information systems, from any stakeholder, to interoperate with one another".

ODIS harvests metadata from AquaDocs, and through the Ocean InfoHub (OIH) search interface, provides access to almost 40,000 publications related to the marine, coastal, estuarine /brackish and freshwater environments. This increases the value of OIH as a search tool and provides additional visibility for AquaDocs and oceanographic literature.

In addition, AquaDocs supports other IODE Programme Activities and Projects, including the UN Ocean Decade by serving as a repository for project publications and documentation.

Does a Steering Group exist?: YES

Membership of the Steering Group: **https://oceanexpert.org/group/475**

Steering Group Leads Chair: **Angela Clark-Hughes** aclark@earth.miami.edu

"Project" Managers:
Ekaterina Kulakova, kulakova.kateryna@gmail.com
Sally Taylor, sally.taylor@ubc.ca

Objectives of the Programme Activity:

- Make aquatic and marine science information FAIR (Findable, Accessible, Interoperable, Reusable) for all.
- Make grey literature more easily and equitably discoverable and accessible.
- Offer a repository platform to those organizations and individuals without the infrastructure to support their own.
- Offer repository training and support.

Vision statement of the Programme Activity: N/A

Work plan and budget for 2024 detailing all planned actions with timing, milestones and required funding.

- **Upgrade** - Open Repository software must be upgraded from version 5.2 to version 7.6 codebase in order to proceed with migration. It is scheduled for Q1 or Q2 of 2024.

- **Migration** - AquaDocs repository must be migrated to an alternate DSpace-certified hosting solution because current host Atmire cannot accept the terms and conditions of UNESCO contracts.

- **OpenASFA** - Explore closer collaboration and potential future merger with OpenASFA database which now offers full text capability.

- **Operations** - During this year of transition, continue to maintain operations and continue to promote AquaDocs, train users, and accept deposits from UN Ocean Decade and other projects and organizations.

Timing	Milestones	Required funding
January - March 2024	**Upgrade** - Work with Atmire on upgrade of software from OR 5 to OR 7.6 codebase (Q1 or Q2 - tbd)	0
	IODE Management Group meeting (Feb, virtual attendance)	0
	Migration - RFP process to identify new DSpace-certified hosting provider (Feb/March)	
	OpenASFA - Conduct SWOT analysis of potential AquaDocs-OpenASFA merger. Consult with OpenASFA hosting provider for costs.	
	AquaDocs Steering Group extraordinary meeting (March, virtual)	0
April - June 2024	**Migration** - Enter into contract with new hosting provider and begin migration (April/May)	25,000 USD
	OpenASFA - Survey AquaDocs stakeholders re: future of AquaDocs as stand-alone repository or merger with OpenASFA	
July - Sept 2024	**Migration** - Launch AquaDocs on new platform (Sept)	0
	OpenASFA - Proposal to IAMSLIC and OpenASFA Boards (if merger desired)	
	AquaDocs Steering Group annual meeting (Sept, virtual)	
October - Dec 2024	AquaDocs presentation at IAMSLIC conference and Annual Report to IAMSLIC (Oct)	0
	AquaDocs Annual Report and Budget 2025 to IODE MG (Nov)	

<u>Have any extra-budgetary funds been identified and will they be available to co-fund the 2024 actions (explain):</u>   NO

Note: The fee of 18,619 USD for Atmire hosting from Oct 1 2023 to Sept 30 2024 was shared equally by IAMSLIC and IODE. This was a one-time arrangement. IAMSLIC does not currently have a revenue stream to pay 50% of the hosting fee on an annual basis. Funds came from the accumulation of "savings" over the past few years due to Covid and IAMSLIC regional groups not meeting in person.

<u>What plans/perspectives do you have to mobilize funding in 2024</u>:

We respectfully seek $25,000 in funding from IODE for migration and external hosting of AquaDocs in 2024 to avoid a gap in repository services.

In early 2024 we will investigate other payment arrangements and external hosting providers in an effort to find cost-savings. For example, we saved approximately $4000 (in tax) this year by having IAMSLIC pay the invoice and IODE transfer funds to IAMSLIC. We can consider alternate certified DSpace providers and hosts such as 4Science and the Texas Digital Library.

Also in 2024, we will investigate closer collaboration and a potential merger of AquaDocs with OpenASFA in the future. Should a decision be made to merge the two information resources, we would request permission to redirect IODE funding in 2025 to support the migration and development of this new information resource, which will require significant work.

<u>Provisional work plan and budget for 2025-2027 detailing proposed actions with timing, milestones and required funding (this will be a first draft):</u>

Timing	Milestones	Required funding
January - March 2025	IODE Management Group meeting (virtual attendance) (Feb) IODE XXVIII: Twenty-Eighth Session of the IOC Committee on International Oceanographic Data and Information Exchange meeting (March, in person attendance if hybrid is not an option)	0 4000 USD
April - June 2025	Renewal of vendor contract for external hosting of AquaDocs *or* Merger with OpenASFA	25,000 USD
July - Sept 2025	AquaDocs Steering Group annual meeting (Sept)	0
October - December 2025	AquaDocs Annual Report to IAMSLIC (Oct) AquaDocs Annual Report and Budget 2026 to IODE (Nov)	0

<u>Have any extra-budgetary funds been identified and will they be available to co-fund the 2025-2027 actions (explain):</u> No

<u>What plans/perspectives do you have to mobilize funding in 2025-2027</u>:

We respectfully seek $29,000 from IODE for hosting of AquaDocs and travel to IODE XXVIII (should hybrid attendance not be an option).

Should the decision be made to merge AquaDocs with OpenASFA we would request permission to redirect IODE funding to support this new information resource with IODE as a partner in the development.

In the event that IODE is unable to fund AquaDocs, we will investigate a consortial model similar to other open access community repositories like ArXiv and Dryad. Under this model, our open access repository infrastructure would be subsidized by consortial members under a fee structure that accommodates various levels and

types of members (e.g. universities, libraries, laboratories), affiliates (nonprofit institutions), and sponsors (for-profit companies). This shift would have significant implications for ongoing staffing and maintenance, and IAMSLIC would have to develop and implement a new management model to support it.

2.5   GLOBAL OCEANOGRAPHIC DATA ARCHAEOLOGY AND RESCUE (GODAR)

Parent Programme Component: ODIS

Describe how the Programme Activity contributes to the Programme Component:

The Global Oceanographic Data Archaeology and Rescue (GODAR) identifies and rescue historical oceanographic profile and plankton data that are at risk of being lost due to media decay and/or neglect important for documenting ocean climate variability. It contributes valuable research data to the World Ocean Database (WOD), and hence to ODIS.

Does a Steering Group exist?:   NO

If no steering group was established then explain why not and what remedial action will be taken in 2024:

GODAR is an IODE programme activity responsive to the IODE network. While GODAR has not established a steering group in the past, the moment might be ripe to invite others to join.

Is there a "Project" Manager (IODE staff or Consultant): NO

Objectives of the Programme Activity:

Identify and digitize oceanographic data in paper form or rescue data in obsolete digital formats and make them available for ocean climate research via the World Ocean Database and ODIS.

Vision statement of the Programme Activity:

The IOC IODE Global Oceanographic Data Archaeology and Rescue (GODAR) seeks to locate and rescue historical oceanographic profile and plankton data that are at risk of being lost due to media decay and/or neglect.

Provide a work plan and budget for 2024 detailing all planned actions with timing, milestones and required funding

1. Conduct a GODAR/WOD[1] hands-on workshop in South America at Regional Training Center (RTC) INVEMAR, Colombia. The course will be led by Tim Boyer and Hernan Garcia and in close collaboration with Dr. Paula Sierra (IODE co-chair, INVEMAR). The week-long course is planned to take place in the April-July 2024 time frame (hybrid). We seek to bridge open data access and scientific use of the data for regional problems and ODIS. The GODAR funds requested include: (a) travel support for as many selected South American students as

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[1] World Ocean Database: https://www.ncei.noaa.gov/products/world-ocean-database

possible which otherwise could not attend in person, and (b) travel support for Hernan Garcia to attend the course [December 2024]

2. Digitizing data from the 1929-30 Dutch *Snellius Expedition*[2] in Indonesian waters. This project will be led and administered by Mr. Taco de Bruin (former IODE co-chair), Royal Netherlands Institute for Sea Research. We expect to connect with Indonesian colleagues and make sure that they are involved and benefit from this digitization effort. The workflow developed may be used in similar future digitization efforts, such as for the 1899-1900 *Siboga Expedition*[3] also in Indonesian waters, and other relevant historical ocean data. The aim is to make the data FAIR-compliant and analysis ready. [December 2024].

3. In close collaboration with the IODE project office, develop and conduct a survey of historical oceanographic data at risk of being lost and not used for ocean climate research including biodiversity. A pareallel effort could potentially be made in collaboration with the World Data Service for Oceanography of the World Data System of which IODE has a long standing collaboration. This would be led by Hernan Garcia [December 2024].

   Data digitations needs have already been potentially identified such as:

   a. IOCARIBE data rescue (Peter Pissierssens, per. Comm.)
   b. Biodiversity critical data (OBIS, Ward Appeltans per. Comm.)
   c. Plankton and fish data in Costa Rica, Venezuela, Ecuador, and Chile (Ana Peralta, University of South Florida, USA, per. Comm.)

Budget

GODAR (2024): $15,000

- $12k: GODAR/WOD workshop at Regional Training Center (RTC) INVEMAR, Colombia.
- $3k: Digitizing historical Dutch oceanographic data in Indonesian waters.

Have any extra-budgetary funds been identified and will they be available to co-fund the 2024 actions (explain): no.

What plans/perspectives do you have to mobilize funding in 2024:

GODAR will seek possible funding and/or in kind support to digitize Essential Ocean Variable (EOV) data at risk of being lost.

Provide a provisional work plan and budget for 2025-2027 detailing proposed actions with timing, milestones and required funding (this will be a first draft):

1. Based on the results from the 2024 GODAR survey, identify and prioritize historical oceanographic profile and plankton data that should be digitized subject to the availability of funds. Create a new survey for 2025 to identify relevant GODAR data and provide data to WOD and ODIS [December 2025].

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[2] https://en.wikipedia.org/wiki/Snellius_Expedition
[3] https://en.wikipedia.org/wiki/Siboga_expedition

2. Conduct a week long GODAR/WOD hands-on workshop in Asia (West-Pac region) subject to availability of funds. This would a goal undertaken with Ocean Teacher in collaboration with our Asian colleagues [December 2025].
3. Connect GODAR data rescue efforts with ODIS and increase its visibility and use worldwide [December 2025].

Budget: $15,000

- $12k: GODAR/WOD workshop in Asia (TBD).
- $3k: Digitizing historical oceanographic data

Have any extra-budgetary funds been identified and will they be available to co-fund the 2025-2027 actions (explain): no

What plans/perspectives do you have to mobilize funding in 2025-2027:

GODAR will seek possible funding and/or in kind support to digitize Essential Ocean Variable (EOV) data at risk of being lost from U.S. sources.

2.6 UNDERWAY SEA SURFACE SALINITY DATA ARCHIVING PILOT PROJECT (GOSUD)

Parent Programme Component: ODIS

Describe how the Programme Activity contributes to the Programme Component: -

Does a Steering Group exist?: YES

Membership of the Steering Group: https://oceanexpert.org/group/350

Steering Group Leads (Co)-Chair(s):
- DROUINEAU Ludovic ludovic.drouineau@ifremer.fr
- PIERROT Denis denis.pierrot@noaa.gov
- WANG Zhankun zhankun.wang@noaa.gov

Is there a "Project" Manager (IODE staff or Consultant): NO

Objectives of the Programme Activity:
(i) Acquire, quality control, store and disseminate collected underway sea surface temperature and sea surface salinity data and metadata;
(ii) Maintain the database of sea surface salinity and temperature with appropriate metadata (including safeguarding high resolution delayed data);
(iii) Maintain and improve internationally agreed data management procedures and recommended practices, including metadata schemas, through close cooperation with relevant data centres (such as NCEI, SOCAT, OceanOps, SOOP,…);
(iv) Maintain, improve and implement procedures for the quality assessment of real time (RT) and delayed mode (DM) data, based on the GTSPP experience;
(v) Develop or adapt already existing, web interfaces to allow users to easily submit data and metadata, both in RT and DM;

(vi)   Provide user access to data and metadata using state-of-the-art
        technologies;
(vii)   Prepare proposals for the archival of additional underway data types;
(viii) Maintain a group of active experts involved in GOSUD.

What is the vision statement of the Programme Activity:

GOSUD aspires to serve as the Global Data Assembly Center (GDAC) for both ships
and uncrewed surface vehicles, specializing in the aggregation of underway
oceanographic parameters such as sea surface temperature, sea surface salinity,
and biogeochemical data

Work plan and budget for 2024 detailing all planned actions with timing, milestones and
required funding:

Expand GOSUD to biogeochemical variables is asked by many users. Such funds
will allow to add these new parameters to the scope of GOSUD.

Planned actions	Required funding
Expand GOSUD variables to include biogeochemical variables, such as pCO_2, O_2, PH,…	5 000 euros

Have any extra-budgetary funds been identified and will they be available to co-fund the
2024 actions (explain): -

What plans/perspectives do you have to mobilize funding in 2024: -

Provisional work plan and budget for 2025-2027 detailing proposed actions with timing,
milestones and required funding (this will be a first draft):

Planned actions	Required funding
Participate to IODE XXVIII 2025 in Colombia	3 000 euros
Participate to IODE XXIX 2027	3 000 euros
Continue to improve data management and the FAIRness of the data	10 000 euros / year
Participate to SOT (Ship Observations Team) bi-annual meetings 2025	3 000 euros
Participate to SOT (Ship Observations Team) bi-annual meetings 2027	3 000 euros

Participate to bi-annual SOT meetings would help to strengthen links between SOT
and GOSUD.
Improve data management and the FAIRness of the data would enable us to keep up
to date in terms of data management.

Have any extra-budgetary funds been identified and will they be available to co-fund the
2025-2027 actions (explain): -

What plans/perspectives do you have to mobilize funding in 2025-2027: -

2.7   GLOBAL TEMPERATURE AND SALINITY PROFILE PROGRAM (GTSPP)

Parent Programme Component: ODIS

Describe how the Programme Activity contributes to the Programme Component:

GTSPP provides public products for ocean profile data added to the Global Telecommunication System (GTS). These products include Real Time and Best Copy data sets with standardized quality assessment flags and reports.

Does a Steering Group exist?: YES

Membership of the Steering Group: https://oceanexpert.org/group/256

Steering Group Leads (Co)-Chair(s):
Christopher Paver, Christopher.paver@noaa.gov

Is there a "Project" Manager (IODE staff or Consultant): NO

Objectives of the Programme Activity:

The Global Temperature-Salinity Profile Program (GTSPP) is a cooperative international project. It seeks to develop and maintain a global ocean Temperature-Salinity resource with data that are both up-to-date and of the highest quality possible. Making global measurements of ocean temperature and salinity (T-S) quickly and easily accessible to users is the primary goal of the GTSPP. Both real-time data transmitted over the Global Telecommunications System (GTS), and delayed-mode data received by the U.S. NOAA National Center for Environmental Information (NCEI) are acquired and incorporated into a continuously managed database. Countries contributing to the project are Australia, Canada, France, Germany, Japan, Russia, and the United States. Canada's Department of Fisheries and Oceans (DFO) leads the project, and has the operational responsibility to gather and process the real-time data. DFO accumulates real-time data from several sources via the GTS. They check the data for several types of errors, and remove duplicate copies of the same observation before passing the data on to NCEI. The quality control procedures used in GTSPP were developed by DFO, who also coordinated the publication of those procedures through the Intergovernmental Oceanographic Commission (IOC). NCEI performs four functions for the GTSPP:
1.   Maintains the global database of temperature and salinity data and provides online access to the data.
2.   Adds realtime data supplied by DFO to the database.
3.   Processes delayed mode copies of data by performing the same data quality tests as DFO, then adds data to the database.
4.   Prepares monthly data sets and transfers them by network to participants in the U.S., Australia and France, as well as to requestors.
In addition to DFO and NCEI, three science centers participate in the project by independently evaluating the delayed-mode data sets for the Indian, Pacific, and Atlantic Oceans. Australia's Commonwealth Scientific, Industrial and Research Organization (CSIRO), the Scripps Institution of Oceanography (SIO), and NOAA's Atlantic Oceanographic & Meteorological Laboratory (AOML) perform this function as Data Assembly Centers for the World Ocean Circulation Program, which GTSPP supports.

<u>Vision statement of the Programme Activity:</u>

To provide public access to synthesized global temperature and salinity profile products: 1) Realtime and 2) Best Copy, from multiple international sources that undergo standard GTSPP quality control and assessment protocols.

<u>Work plan and budget for 2024 detailing all planned actions with timing, milestones and required funding:</u>

Milestone/deliverable/work package		
M1/D1/WP1: Include GTS BUFR formatted profile data into the operational pipeline.		
Activities (include start-end date if applicable)	**Responsible**	**Budget (requested from IODE) USD**
		2024
A1.1: Develop software to manage BUFR data.	Canada DFO	0
A1.2: Find GTS sources for redundancy.	US NOAA/NCEI	0
Assumptions and risks		
Member organizations will supply in-kind funding and resources to complete these milestones.		
Milestone/deliverable/work package		
M2/D2/WP2: Hold in-person biennium steering group meeting.		
Activities (include start-end date if applicable)	**Responsible**	**Budget (requested from IODE), USD**
		2024
A2.1: Travel support	US NOAA/NCEI	25,000
Assumptions and risks: -		
Total budget (requested from IODE)		25,000

<u>Have any extra-budgetary funds been identified and will they be available to co-fund the 2024 actions (explain):</u> No.

<u>What plans/perspectives do you have to mobilize funding in 2024</u>: -

<u>Provisional work plan and budget for 2025-2027 detailing proposed actions with timing, milestones and required funding (this will be a first draft):</u>

Milestone/deliverable/work package			
M1/D1/WP1: Hold in-person biennium steering group meeting.			
Activities (include start-end date if applicable)	**Responsible**	**Budget (requested from IODE), USD**	
		2025	2026	2027

A1.1: Travel support		0	25,000	0
Assumptions and risks				
Total budget (requested from IODE)		0	25,000	0

Note: The GTSPP SG will discuss 2025-2027 activities at the 2024 GTSPP SG meeting (Date: TBD)

Have any extra-budgetary funds been identified and will they be available to co-fund the 2025-2027 actions (explain): No.

What plans/perspectives do you have to mobilize funding in 2025-2027: -

2.8   INTERNATIONAL COASTAL ATLAS NETWORK (ICAN)

Parent Programme Component: ODIS

Describe how the Programme Activity contributes to the Programme Component:

ICAN operates at the grassroots level of the ODIS – connecting directly with projects around the world that help to bring ocean and coastal data directly to users and decision-makers, primarily utilizing Coastal Web Atlases (CWAs). Our work focuses primarily on networking and

Does a Steering Group exist?: YES

Membership of the Steering Group: https://oceanexpert.org/group/266

Steering Group Leads (Co)-Chair(s):
* Kathrin Kopke, k.kopke@ucc.ie
* Tanya Haddad, tanya.haddad@dlcd.oregon.gov

Is there a "Project" Manager (IODE staff or Consultant): NO

Objectives of the Programme Activity:

The mission/strategic aim of the IODE ICAN project is to share experiences and to find common solutions to CWA development (e.g., webinars, presentations, user and developer guides, handbooks and articles on best practices, information on standards and web services, expertise and technical support directories, education, outreach, and funding opportunities, etc.), while ensuring maximum relevance and added value for the end users.

Within the context of ODIS, the ICAN objectives are to conduct outreach activities with ICAN member projects on topic of data sharing and participation in the ODIS. This may take the form of hosted workshops, conference presentations, and direct assistance to member projects seeking to connect their projects to the wider ODIS community or knowledge graph. The ICAN Steering Group sees a direct connection between continued grassroots outreach in the coastal and marine spatial data communities that host CWAs, and future expansion of ODIS connections.

Vision statement of the Programme Activity

ICAN seeks to play a leadership role in forging international collaborations of value to the participating nations, thereby optimizing regional governance in coastal zone management and marine spatial planning. A major goal is to help build a functioning digital atlas of the worldwide coast based on the principle of shared distributed information. The long-term view is for global-level operational interoperability which will evolve as the ICAN project members strive to increase awareness of the opportunities that exist for increased coastal and marine data sharing among policy makers and resource managers as strategic users of CWAs. To reach this goal, ICAN has the following objectives:

- Ensure that ICAN has representation from coastal web atlas development and user groups from across the world.
- Develop technical and policy guidelines to assist coastal web atlas developers in acquiring data and engaging with data providers. Accordingly, collate and publish a set of best-practise guidelines for the development of coastal web atlases.
- Highlight the benefits of interoperability and standards-based systems to the coastal atlas developer communities.
- Develop collaborative projects for the sharing of know-how, implementation of technical solutions and demonstration of atlas benefits to users.
- Align the atlas efforts of the Network partners in order that interoperability can be facilitated.
- Engage with other relevant international IODE projects and developments as well as relevant activities outside of IODE.
- Involve representatives of the relevant user communities to help in tailoring coastal web atlases to their needs.

To further these objectives ICAN has identified a range of activities in the areas of technical implementation, atlas assessment, outreach, training, and participation in scholarly communities, and strategic planning and funding.

Work plan and budget for 2024 detailing all planned actions with timing, milestones and required funding :

Timing	Milestone	Required Funding
January 2024	• Application for Sea Grant Summer Scholar Due	• None Requested
February 2024	• IODE Management group meeting, Oostende • ICAN Steering Group Virtual meeting	• None Requested
March 2024	• Planning for ACMA training workshop • ICAN Steering Group Virtual meeting	• None Requested
April 2024	• ICAN Tech: ACMA Training Workshop, Mombasa	• $6,000
May 2024	• ICAN Steering Group Virtual meeting • IMDIS meeting, Bergen	• None Requested
June 2024	• ICAN Summer Scholar Projects • ICAN Steering Group Virtual meeting	• $7,000
July 2024	• ICAN Summer Scholar Projects	• None Requested
August 2024	• ICAN Summer Scholar Projects	• None Requested
September 2024	• Planning for ICAN 10 virtual workshop with full translations • ICAN Steering Group Virtual meeting	• None Requested
October 2024	• ICAN 10 virtual workshop with translations • GeoBluePlanet 2024	• $12,000 • (possible

		travel if not expended by ACMA travel)
November 2024	• ICAN Newsletter • OceanPredict 2024	• None Requested • (possible travel if not expended by ACMA travel)
December 2024	*No activities planned for December*	
Total Budget Requested		$25,000

Have any extra-budgetary funds been identified and will they be available to co-fund the 2024 actions (explain):

The Oregon Coastal Management Program supports the time of ICAN Co-Chair Tanya Haddad to provide the basic project management and communication support required by the Steering Group. Other Steering Group members are supported by their own institutions to contribute their time and resources to the stewardship and execution of the ICAN project activities. We expect all these sources of funds to continue throughout the 2024 work plan time period.

What plans/perspectives do you have to mobilize funding in 2024:

In addition to the institutional support detailed above, we expect to be able to leverage some funding from Oregon Sea Grant to sponsor at least one Sea Grant Summer Scholar to work with ICAN on tasks related to our website, directory of members, YouTube channel, and curation of workshop products.

Provisional work plan and budget for 2025 detailing proposed actions with timing, milestones and required funding:

Timing	Milestone	Required Funding
January 2025	• Application for Sea Grant Summer Scholar Due • ICAN Special Interest Group meeting at Coastal GeoTools • ICAN Steering in-person meeting co-located with Coastal GeoTools conference	• None Requested • $1,000 • $18,000
February 2025	• Preparation of ICAN Report • ICAN Steering Group Virtual meeting	• None Requested
March 2025	ICAN Steering Group Virtual meeting	• None Requested
April 2025	ICAN Steering Group Virtual meeting	• None Requested
May 2025	Publication of ICAN Report	• None Requested
June 2025	• ICAN Summer Scholar Projects • ICAN Steering Group Virtual meeting	• None Requested
July 2025	• ICAN Summer Scholar Projects	• None Requested
August 2025	• ICAN Summer Scholar Projects • ICAN Steering Group Virtual meeting	• None Requested
September 2025	• Preparation for ICAN 11 virtual workshop • ICAN Steering Group Virtual meeting	• None Requested
October 2025	• ICAN 11 virtual workshop with partial translations	• $6,000
November 2025	• ICAN Newsletter • ICAN Steering Group Virtual meeting	• None Requested
December 2025	*No activities planned for December*	
	Total Budget Requested	$25,000

<u>Have any extra-budgetary funds been identified and will they be available to co-fund the
2025-2027 actions (explain):</u>

> The Oregon Coastal Management Program supports the time of ICAN Co-Chair
> Tanya Haddad to provide the basic project management and communication support
> required by the Steering Group. Other Steering Group members are supported by
> their own institutions to contribute their time and resources to the stewardship and
> execution of the ICAN project activities. We expect all these sources of funds to
> continue throughout the 2025-2027 work plan time period.

<u>What plans/perspectives do you have to mobilize funding in 2025-2027:</u>

> In addition to the ongoing institutional support detailed above, the Oregon Coastal
> Management Program has applied to the NOAA Coastal Management Fellowship
> Program to host a full time 2-year Coastal Management Fellow to assist with Atlas-
> related tasks both in Oregon and at the ICAN level. The 2-year fellowship is entirely
> funded by NOAA, with a small amount of matching funds from the State of Oregon,
> USA. If our application is successful, the Atlas Fellow will begin work in September
> 2024 and extend to August 2026. We hope to use this fellow in conjunction with
> continued Sea Grant summer scholarships to support ICAN activities in the years
> 2025 and 2026, during which time ICAN expects to host it's 11th and 12th workshops.

2.9 INTERNATIONAL QUALITY-CONTROLLED OCEAN DATABASE (IQUOD)

<u>Parent Programme Component:</u> ODIS

<u>Describe how the Programme Activity contributes to the Programme Component</u>:

> The primary objective of IQuOD is to enhance the quality of oceanographic data
> through a dual approach: re-evaluating existing datasets and devising new methods.
> As a program activity, IQuOD not only significantly contributes to the Ocean Data
> and Information System (ODIS) by providing resources to enhance the quality of
> associated datasets but also has a direct impact on other program activities within
> ODIS. To illustrate, the World Ocean Database (WOD) is presently adopting the
> methodology developed by IQuOD, and the manual expert Quality Control (QC)
> endorsed by IQuOD will be integrated as a product within the WOD in 2024.

<u>Does a Steering Group exist?:</u> YES

<u>Membership of the Steering Group:</u> https://oceanexpert.org/group/323

> Note that in a recent in-person meeting, it was decided to restructure IQuOD,
> including a new Steering Group, so we expect changes by the end of this year, and
> IODE will be promptly updated.

> The current list of members can be found at: https://www.iquod.org/about.html
> Note secretariat: the above membership is different from the official IODE
> membership!

<u>Steering Group Leads (Co)-Chair(s)</u>:
- Guilherme Castelao, castelao@ucsd.edu (co-Chair)
- Lijing Cheng, chenglij@mail.iap.ac.cn (co-Chair)

<u>Is there a "Project" Manager (IODE staff or Consultant)</u>: NO

<u>Objectives of the Programme Activity</u>:

IQuOD, short for the International Quality-controlled Ocean Database, is dedicated to enhancing the quality, consistency, and comprehensiveness of the historical global subsurface ocean temperature profile record, primarily focusing on pre-1995 data. These historical ocean temperature profile observations play a crucial role in various ocean and climate research endeavours. They serve as vital inputs for seasonal-to-decadal prediction systems by providing initial conditions, contribute to the evaluation of past variations in sea level and Earth's energy imbalance, and support ocean state estimation for the study of variability and change, particularly in ocean heat content. Additionally, these observations are invaluable for climate model evaluation and development. The IQuOD initiative is a collaborative effort within the community, striving to construct the most globally comprehensive temperature profile dataset. This dataset includes extensive metadata and uncertainty information, aiming to propel advancements in the mentioned research areas.

<u>Vision statement of the Programme Activity</u>:

The IQuOD aims to be recognized as a welcoming, supportive, and efficient platform that fosters collaboration within the scientific community to enhance the quality of oceanographic data through ethical, esteemed, and forward-thinking initiatives.

<u>Work plan and budget for 2024 detailing all planned actions with timing, milestones and required funding</u> :

In the recent in-person meeting it was decided to reformulate IQuOD structure. One of the fundamental changes was to re-organize ourselves around activities with clear duration and products. The following list was presented in that meeting's report as the initial goals for 2024 but it must be first endorsed by the Steering Group which is currently being reformed. Therefore, this is a provisional list:

Activity	Time	Budget
Refresh the SG and develop a Road Map for IQuOD 2024-27	2024-1Q	none
IQuOD-2023 release containing AutoQC flags and any updates available to intelligent metadata and uncertainties.	2024-1Q	none
IQuOD-2023 data description/evaluation paper	2024-2Q	$3,100
Duplicate identification paper describing the methodology developed and benchmark dataset	2024-2Q	$2,450
XBT/MBT/Bottle/APB bias correction paper	2024-3Q	$2,450
Uncertainty definition/quantification update	2024-4Q	none
Improve AutoQC open source code for speed. It was identified by partners as a limiting factor	2024-2Q	none
Develop a partnership with OTGA to work towards the training of next	2024	none

generation QC experts		
Update and expansion of manual QC web application	2024	$2,000 (AWS)
In person meeting is considered for late 2024, potentially at Scripps Institute of Oceanography, USA	2024-3/4Q	$15,000

Have any extra-budgetary funds been identified and will they be available to co-fund the 2024 actions (explain):

> While certain members of IQuOD have secured individual funding to contribute part of their time to IQuOD, we have not yet identified alternative funding sources to support IQuOD's activities in 2024.

What plans/perspectives do you have to mobilize funding in 2024:

> We have decided to reformulate the structure of IQuOD, and we are currently awaiting the formation of a new Steering Group. This group will be responsible for defining priorities which will define the potential funding agencies. We expect an update on that by the end of 2023.

Provisional work plan and budget for 2025-2027 detailing proposed actions with timing, milestones and required funding (this will be a first draft):

> We are waiting on the formation of the new SG before providing this draft.

Have any extra-budgetary funds been identified and will they be available to co-fund the 2025-2027 actions (explain):

> Not yet. We plan to continue to explore funding options available to each individual's institute. Once the SG is in place, we expect more guidance for IQuOD funding.

What plans/perspectives do you have to mobilize funding in 2025-2027:

> We have decided to reformulate the structure of IQuOD, and we are currently awaiting the formation of a new Steering Group. This group will be responsible for defining priorities which will define the potential funding agencies. We expect an update on that by the end of 2023.

2.10 IOC OCEAN BEST PRACTICES SYSTEM (OBPS)

Parent Programme Component: ODIS

Describe how the Programme Activity contributes to the Programme Component:
> The Ocean Best Practices System (OBPS) provides a knowledge product for the Ocean Data and Information System(ODIS)/Ocean InfoHub (OIH). OBPS rich metadata is harvested by the ODIS to enhance its data and information offer and provide access to methods information through the OIH search interface. Building on this, the Ocean Practices Federated Network (OPFN), a strategic objective of the OBPS and its Ocean Practices for the Decade Programme, is an agreed ODIS thematic subsystem, which will leverage and benefit from the ODIS architecture but will be implemented as a separate portal. The OPFN will use the ODIS-Arch sub-pattern for documents and methods for establishing and sustaining interoperability in

the exchanges of (meta)data between OPFN nodes. Leveraging the ODIS interoperability framework (which in turn reuses generic web architectural patterns and structured data on the web practices) will promote interoperability across and beyond the ocean community.
OBPS also works across the Programme Components eg OTGA collaboration in course visibility and sub contract participation in Blue Cloud 2026, and with OBIS by introducing best practices approach into biodiversity.

Does a Steering Group exist?: YES

Membership of the Steering Group: https://oceanexpert.org/group/448

Steering Group Leads (Co)-Chair(s):
- Rene Garello, rene.garello@imt-atlantique.fr
- George Petihakis, gpetihakis@hcmr.gr

Is there a "Project" Manager (IODE staff or Consultant): YES

Name and email:
    Ms Pauline Simpson, p.simpson@unesco.org

If a paid Consultant, provide source of funds: 100% IOC (50% IODE & 50% GOOS)

Objectives of the Programme Activity:

Strategic Objective 01
    To secure the OBPS as a trusted system through which the ocean community persistently archives and converges their methods, standards, guides, and other methodological content into context-sensitive best practices.
Strategic Objective 02
    To accelerate the interoperability of observations, convergence of methodologies, and conventions across ocean communities into trusted, transparently-developed, context-sensitive and interoperable best practices and standards
Strategic Objective 03
    To foster community - led and equitable capacity development in ocean best practices.
Strategic Objective 04
    To facilitate the creation of a federated network of interoperating ocean practices systems across all rights-holders and stakeholders

Vision statement of the Programme Activity:

A future where there are agreed and broadly adopted methods across ocean research, operations and applications

Our Mission
To sustain an evolving system which fosters collaboration, consensus building, and innovation by providing coordinated and global access to best practices and standards across ocean sciences and applications.

<u>Work plan and budget for 2024 detailing all planned actions with timing, milestones and required funding:</u>

	RP 2024	2024 exb mobilzation target (green= confirmed)	RP 2025	2025 exb mobilization target (green= confirmed)	sum 2024-2025 RP	sum 2024-2025 exb target (green is confirmed)
OBPS						
OBP1 project manager/ repository manager	27,500		27,500			
OBP2 technology maintenance	8,500		8,500			
OBP3 AWS	3,500		3,500			
EU H20202 BLueCloud 2026.(2023-2026)		35,000		35,000		70,000
EU H2020 Iliad (2022-2025)		70,000		70,000		140,000
EU H2020 PbsSea4Clim**ObSea4Clim (**2024-2026**)**		130,000		130,000		260,000
IOC/NORAD ADAPT (2023-2024)		99,000				
Total OBPS	39,500	334,000	39,500	235,000	79,000	470,000

<u>Have any extra-budgetary funds been identified and will they be available to co-fund the 2024 actions (explain):</u>

> The following projects are available to provide 2024 extra-budgetary funding for OBPS development

Project or Activity	Major efforts	OBPS-SG Organizations engaged	approxa mount	Performance period
EU H2020 BlueCloud2026	BP Applications and outreach	IEEE, OTGA,	107K	2023-2026
EU H2020 Iliad: Digital Twins of the Ocean	BP/Stds for Digital Twins	IEEE, …	268K	2022-2025
EU H2020: ObsSea4Clim	BP & Standards for EOV; FedNet	GEOMAR, IEEE	380k	2024-2027
IOC/NORAD ADAPT	BP training Caribbean	OBPS//USF	99K	2023-2024

<u>What plans/perspectives do you have to mobilize funding in 2024:</u>

> See above table plus we expect to submit new proposals to NORAD and Flanders (for the OPFN)

Provisional work plan and budget for 2025-2027 detailing proposed actions with timing, milestones and required funding (this will be a first draft):

A new Strategic Plan will be implemented in 2026 - 2030 and it is difficult to project new directions.

Timing	Milestones	2025 OBPS PROPOSED BUDGET USD	2025 BUDGET IOC SPONSORS **IODE**	2025 BUDGET IOC SPONSORS **GOOS**	Notes
	MAINTAINING OBPS CORE SYSTEM				
Jan-Feb 2025	Project Manager / Repository Manager	55,000.00	27,500.00	27,500.00	
Jan-Feb 2025	AWS subscription	8,000.00	4,000.00	4,000.00	
Jan-Feb 2025	DSpace Repository & EDS Maintenance (OUTSOURCED)	20,000.00	10,000.00	10,000.00	
	TOTAL -MAINTAINING OBPS CORE SYSTEM	**83,000.00**	**41,500.00**	**41,500.00**	
	DEVELOPMENT OF OBPS CORE SYSTEM (EXB)				
Jan-Dec 2025	Travel (Chair, PM travel, others)	9,000.00	0.00	0.00	EXB
Jan-Dec 2025	AI translation of endorsed practices - ongoing exercise	15,000.00	0.00	0.00	EXB
Jan-Dec 2025	Autoingest of metadata (Journal) CrossRef sub	1,000.00	0.00	0.00	EXB
Sep 2025	OBPS Annual Workshop	25,000.00	0.00	0.00	EXB
Nov 2025	SG-OBPS Annual Meeting	25,000.00	0.00	0.00	EXB
Dec 2025	Repository Certification (3 year sub)	3,000.00	0.00	0.00	EXB
Dec 2025	Machine readable BP templates/auto ingest of metadata (Reports)	15,000.00	0.00	0.00	EXB
	TOTAL - DEVELOPMENT OF OBPS CORE SYSTEM	**93,000.00**			

Have any extra-budgetary funds been identified and will they be available to co-fund the 2025-2027 actions (explain):   Yes

What plans/perspectives do you have to mobilize funding in 2025-2027:

Funding is key to ensure long term and stable operations and further development of the Ocean Best Practices System (OBPS)

Some of the projects listed will provide funding through to 2026 and the Ocean Best Practices System has already submitted new project proposals which will extend the availability of extra-budgetary funds support to and beyond 2027. Particularly OBPS will submit proposals to NORAD and to Flanders (for the OPFN)

The OBPS has instigated an action to become an OceanPractices AISBL (Association internationale sans but lucratif) which is expected to be completed early 2024.

2.11 OCEANEXPERT

Parent Programme Component: ODIS

Describe how the Programme Activity contributes to the Programme Component:

OceanExpert serves as the main repository to manage information we have on experts, institutes, IOC events and other relevant information. This makes OceanExpert being the connector between several IODE programme components (mainly ODIS being a data distributor) and IODE Programme Activities avoiding a multiplication for the information shared between them.
E.g. the Single Sign On possibility provided by OceanExpert, permitting to log in to different Programme Activity sites using the same email/password combination as used for the OceanExpert website (e.g. OTGA, OBIS, ODISCatalogue).

Does a Steering Group exist?: YES

Membership of the Steering Group: https://oceanexpert.org/group/473
(status 7 November 2023)

Steering Group Leads (Co)-Chair(s): no chair assigned (yet)

Is there a "Project" Manager (IODE staff or Consultant): YES (IODE staff)

Name and email: Sofie de Baenst / s.de-baenst@unesco.org

Objectives of the Programme Activity:

OceanExpert being a crosscutting activity is contributing to all 3 IODE Programme components (ODIS, OTGA, OBIS), offering the option for people to connect and log in to several IOC websites.

OceanExpert wants to
- be the leading repository containing information about experts, institutes and events that are related to all IOC and IODE Programme Components/Activities.
- be the connection between all IODE Programme Components/Activities
- provide an easy access to all information that can be shared between all IODE Programme Components/Activities
- be the trusted source of all the information that it contains, especially regarding info about experts, institutes and training events

What is the vision statement of the Programme Activity :

OceanExpert should facilitate IODE to connect to all IOC stakeholders, being persons, institutes, programmes or projects. It should do so by gathering the needed information and making that information available in a human or machine readable manner.
OceanExpert will do this by :
- maintaining a database with information that can easily be found somewhere else
- providing a user friendly (web)interface
- providing machine usable API's

Work plan and budget for 2024 detailing all planned actions with timing, milestones and required funding

Activity	RP budget
OE1 redesign OE mailing system and testing (contractor)	5,000
OE2 redesign of privileges (users rights) (contractor)	5,000
OE3 upgrade to latest Symfony framework (contractor)	6,500
OE4 improve the visibility of the OceanExpert Programme activity	4,800
OE5 OE promotion in Decade	3,000
Total OceanExpert	**24,300**

Have any extra-budgetary funds been identified and will they be available to co-fund the 2024 actions (explain):

Currently, the only extra-budgetary funds are provided by Flanders, (through the MoU with VLIZ) which provides detached staff time. No other extra-budgetary funds have been identified for 2024.

What plans/perspectives do you have to mobilize funding in 2024:

If other Programme Components/Activities or IOC programmes/projects/activities use the OE resources provided to them it would be an option if they also contribute by either paying some small fee or provide some in kind staff time.

Provisional work plan and budget for 2025-2027 detailing proposed actions with timing, milestones and required funding (this will be a first draft):

Activity	RP budget
OE3 upgrade to latest Symfony framework (contractor)	7,500
OE4 improve the visibility of the OceanExpert Programme activity	5,500
OE6 cleanup database	7,000
OE 7 Training IT manager on PhP updates	6,500
Total OceanExpert	**26,500**

Have any extra-budgetary funds been identified and will they be available to co-fund the 2025-2027 actions (explain):

For the time being, the only extra-budgetary funds are provided by Flanders, (through the MoU with VLIZ) which provides seconded staff. (MoU is confirmed till end 2026)

What plans/perspectives do you have to mobilize funding in 2025-2027:

We hope to rely on the provided seconded staff time through the MoU with VLIZ. OE maintenance would benefit if some costs could be recovered by other IOC/IODE partners.

2.12 ODISCAT

This activity is now included in the ODIS programme component

2.13 IODE QUALITY MANAGEMENT FRAMEWORK

No work plan and budget required

2.14 WORLD OCEAN DATABASE (WOD)

Parent Programme Component: ODIS

Describe how the Programme Activity contributes to the Programme Component:

The World Ocean Database is an aggregation point for global ocean profile data from National Oceanographic Data Centers and other components of the observing system data flow. As such it allows for one stop search and discovery for ODIS tools and a specific submission point for data for inclusion in an ODIS element.

Does a Steering Group exist?: NO

If no steering group was established then explain why not and what remedial
action will be taken in 2024:

While the World Ocean Database is an IODE programme activity is managed and funded mainly by NOAA/National Centers for Environmental Information. Close association to IODE activities GTSPP and IQuOD, the WOD is responsive to the recommendations from these activities steering groups.

Is there a "Project" Manager (IODE staff or Consultant): NO

Objectives of the Programme Activity:

Aggregation and dissemination of a complete as possible historic and recent uniformly formatted and quality controlled set of ocean profile data.

Vision statement of the Programme Activity:

The World Ocean Database strives for compilation of a complete as possible global dataset of historic and recent ocean profile data with FAIR and equitable distribution for research, ocean monitoring, model input, for the generation of ocean climate information for decision making.

Work plan and budget for 2024 detailing all planned actions with timing, milestones and required funding :

- Update WOD quarterly from Argo profiling floats, OceanSITES moored buoys – including the tropical moored buoy array, the Global Temperature and Salinity Profile Program (GTSPP) and ice-tethered profilers [4 times in 2024]
- Reestablish quarterly data flow from the International Council for the Exploration of the Seas ocean profile database (February, 2024)
- Implementation of JSON-LD search capabilities of cloud based WOD utilizing ODIS supplied software (June, 2024)
- Release in conjunction with the WOD of IQuOD 2024 (concurrent with IQuOD program activity) [March, 2024]
- Complete transfer of WOD to internal cloud at NOAA/NESDIS [April, 2024]

- Work with SEADATANET and EMODNET on combined (and non-duplicate) availability of ocean profile data (December, 2024)
- Develop, in conjunction with the Argo program, a cloud ready parquet format for the WOD and other ocean profile data for optimized cloud tool use (November, 2024)

Budget

$10,000 travel to IQuOD and GTSPP workshops and steering group meetings for coordination. Travel to IODE meetings, and for coordination of ODIS/WOD discovery tools. Travel to UN Decade of the Ocean meeting

Have any extra-budgetary funds been identified and will they be available to co-fund the 2024 actions (explain): no.

What plans/perspectives do you have to mobilize funding in 2024:

The World Ocean Database Cloud and OpenGTS project has been accepted by the U. N. Decade of the Ocean. It is hoped that this plan will attract international attention and possible funding and/or in kind support to realize the cloud availability of historic and near-real time ocean profile data in one system.

Provisional work plan and budget for 2025-2027 detailing proposed actions with timing, milestones and required funding (this will be a first draft):

None provided

Have any extra-budgetary funds been identified and will they be available to co-fund the 2025-2027 actions (explain): no

What plans/perspectives do you have to mobilize funding in 2025-2027: -

3. SUMMARY BUDGET TABLE 2024-2025

	RP 2024	2024 exb mobilzation target (green= confirmed)	RP 2025	2025 exb mobilization target (green= confirmed)	sum 2024-2025 RP	Comments
PROGRAMME COMPONENTS						
ODIS						
REGULAR PROGRAMME						
OD1 programme manager (consultant, 100%, 5m)	40,000		80,000			
OD2 Graph Operations / Digital engineer / Backend developer (consultant)	35,000		30,000			
OD3 Tech support and CD (incl for Africa) (consultant)	35,000		30,000			African OIH Hub
OD4 Technical support for Africa front end portal (consultant/contractor)	40,000		30,000			African OIH hub
OD5 Travel	15,000		5,000			
OD6 Communications (contractor)	10,000		0			
OIH FUST Project (until 6/2024)		143,659				
NORAD 2023: Capacity development for the regionally focused expansion of the Ocean Data and Information System (ODIS) (1/2024-12/2024) - submitted 23/11/2023		100,000				
NORAD 2023: An ODIS/OIH Hub for BBNJ (1/2024/12/2024) - submitted 23/11/2023		100,000				
EXTRABUDGETARY PROJECT CONCEPT NOTE						
ODX25.1 Technical partnership lead(s) and assistance				80,000		
ODX25.2 Graph Operations / Digital engineer / Backend developer(s)				30,000		
ODX25.3 Digital Architecture and Strategist / Steering consultant (s)				30,000		
ODX25.4 Project support				25,000		
ODX25.5 Development of front end portal/s				80,000		
ODX25.6 Communication materials, outreach and translation				50,000		
ODX25.7 Technical support and capacity development for three additional regions ($25,000 per region)				75,000		
ODX25.8 Steering group meeting				40,000		
ODX25.9 Travel / other meetings				20,000		
Total for ODIS	**175,000**	**343,659**	**175,000**	**430,000**	**350,000**	note: RP incl additional $75,000 for africa
OTGA						
OT 1 Organize and host training courses relevant to the Regions	5,000		5000			
OT 2 Provide travel grants to facilitate learner attendance at training courses	30,000		35000			
OT 3 Provide technical support eLearning platform	0		10000			
OT 4 Confirm certification of the Project Office as LSP (April)	0		3500			
OT 5 Design and develop new course content to address the capacity needs of IOC Programmes	25,000		15000			
OT 6 Update existing OTGA content to ensure it meets current OTGA course management guidelines	20,000		5000			

	RP 2024	2024 exb mobilzation target (green= confirmed)	RP 2025	2025 exb mobilization target (green= confirmed)	sum 2024-2025 RP	Comments
OT 7 Upload training resources on the OTGA e-Learning Platform	2,500		2500			
OT 8 Liaise with content providers on course design and presentation	2,000		2000			
OT 9 Publish regular CD communication through social media, newsletters and other communication	2,000		2000			
OT 10 Provide project governance framework through a steering group			20000			
OT 11 Create and deliver online training for RTC/STC personnel			2000			
OT 12 Update and publish OTGA Guidelines and Best Practices documentation			2000			
OT 14 Participate in conferences, meetings to promote OTGA	5,000		5000			
OTGA FUST project 2024 alloccation		267,212				
OTX 1 OceanTraining Internships to enhance global human capacity in the operationalization of information systems and delivery of specialized training.		120,000				submitted 11/2023/ Jointly with IOC CD
Total for OTGA	**91,500**	**387,212**	**109,000**	**0**	**200,500**	
OBIS						
OB 1 SG-OBIS meeting	15,000		15,000			
OB 2 OBIS coordination group workshops (data & products),	20,000		20,000			
OB 3 OBIS conference			40,000			
OB 3 Part-time consultant, community engagement officer, to assist the various OBIS Coordination Groups and partnerships	30,000		30,000			
OB 4 Cloud, software and hardware	15,000		20,000			
OB 5 OBIS branding material development and distribution	5,000		5,000			
OBX1 NORAD 2023: OBIS (Ocean Biodiversity Information System) "Propagules program" – training a new generation of OBIS users (1/2024/12/2024) - submitted 23/11/2023		100,000				
Total for OBIS	**85,000**	**100,000**	**130,000**	**0**	**215,000**	
PROGRAMME ACTIVITIES						
AquaDocs						
hosting and maintenance expenses AquaDocs (contract)	25,000		25,000			
participation in IODE-28			4,000			
Total AquaDocs	**25,000**	**0**	**29,000**	**0**	**54,000**	
GODAR						
GODAR/WOD workshop at Regional Training Center (RTC) INVEMAR, Colombia.	12,000	0				
Digitizing historical Dutch oceanographic data in Indonesian waters.	3,000	0				
GODAR/WOD workshop in Asia (TBD).			12,000	0		
Digitizing historical oceanographic data			3,000	0		
Total GODAR	**15,000**	**0**	**15,000**	**0**	**30,000**	
GOSUD						
Expand GOSUD variables to include biogeochemical variables, such as pCO2, O2, PH,…	5,500					

	RP 2024	2024 exb mobilzation target (green= confirmed)	RP 2025	2025 exb mobilization target (green= confirmed)	sum 2024-2025 RP	Comments
Continue to improve data management and the FAIRness of the data			11,000			
participate in IODE-28			3,300			
Participate to SOT (Ship Observations Team) bi-annual meetings 2025			3,300			
Total GOSUD	**5,500**	**0**	**17,600**	**0**	**23,100**	
GTSPP						
Hold in-person biennium steering group meeting.	25,000	0	0	0		
Total GTSPP	**25,000**	**0**	**0**	**0**	**25,000**	
ICAN						
IC1 ICAN Tech: ACMA Training Workshop, Mombasa (April 2024)	6,000					
IC2 ICAN Summer Scholar Projects & ICAN Steering Group Virtual meeting (June n2024)	7,000					
IC3 ICAN 10 virtual workshop with translations (October 2024 and October 2025)	12,000		6,000			
IC4 ICAN Special Interest Group meeting at Coastal GeoTools (January 2025)			1,000			
IC5 ICAN Steering in-person meeting co-located with Coastal GeoTools conference (January 2025)			18,000			
Total ICAN	**25,000**	**0**	**25,000**	**0**	**50,000**	
IQuOD						
IQ1 IQuOD-2023 data description/evaluation paper	3,100		0			
IQ2 Duplicate identification paper describing the methodology developed and benchmark dataset	2,450		0			
IQ3 XBT/MBT/Bottle/APB bias correction paper	2,450					
IQ3 Update and expansion of manual QC web application (AWS)	2,000		0			
IQ4 In person meeting late 2024, potentially at Scripps Institute of Oceanography, USA	15,000		0			
Total IQuOD	**25,000**	**0**	**0**	**0**	**25,000**	
OBPS						
OBP1 project manager/ repository manager	27,500		27,500			
OBP2 technology maintenance	8,500		10,000			
OBP3 AWS	3,500		4,000			
EU H20202 BLueCloud 2026		35,000		35000		
EU H2020 Iliad		70,000		70000		
EU H2020 PbsSea4Clim		130,000		130000		
IOC/NORAD ADAPT		99,000				
Total OBPS	**39,500**	**334,000**	**41,500**	**235,000**	**81,000**	
OceanExpert						
OE1 redesignOE mailing system and testing (contractor)	5,000					
OE2 redesign of privileges (users rights) (contractor)	5,000					
OE3 upgrade to latest Symfony framework (contractor)	6,500		7,500			
OE4 improve the visibility of the OceanExpert Programme activity	4,800		5,500			
OE5 OE promotion in Decade	3,000					

	RP 2024	2024 exb mobilzation target (green= confirmed)	RP 2025	2025 exb mobilization target (green= confirmed)	sum 2024-2025 RP	Comments
OE6 cleanup database			7,000			
OE 7 Training IT manager on PhP updates			6,500			
Total OceanExpert	**24,300**	**0**	**26,500**	**0**	**50,800**	
QMF						
no cost	0	0	0	0		
Total QMF	**0**	**0**	**0**	**0**	**0**	
WOD						
WO 1 travel to meetings	10,000		0	0		
Total WOD	**10,000**	**0**	**0**	**0**	**10,000**	
PROGRAMME MANAGEMENT COSTS						
PM1 IODE Management Group Meeting (February 2024)	20,000		0			
PM2 IT purchases and software	5,000		5,000			
PM3 IODE project office operational costs	16,000		18,000			
PM4 IODE officers/staff travel	20,000		22,000			
PM5 IODE regional coordination (participation in regional events)	10,000		11,000			
PM6 IODE communication	10,000		11,000			
PM7 Decade contributions	5,000		5,000			
PM8 IODE-28 costs	0		40,000			
PM9 admin staff cost (essential)		40,000		80,000		
Total Programme Management Costs	**86,000**	**40,000**	**112,000**	**80,000**		
GRAND TOTALS	**631,800**	**1,204,871**	**665,600**			
REVENUE EXPECTED	**648,540**		**648,540**			
BALANCE	**16,740**		**-17,060**			
after c/f 2024-2025			-320			

Annex I: IT SUPPORT REQUIREMENTS 2024

OBPS

1. IF the Oostende office **hosts** one or more **web sites** for your programme component or programme activity then **please indicate here the URLs**:
   https://www.oceanbestpractices.org/
   a. Please indicate if you have an external contractor provide **maintenance** or if this is done by Arno: **ARNO**

2. IF the Oostende office **hosts** one or more online **databases** for your programme component or programme activity then **please indicate here the URLs**:
   OBPS Repository: https://repository.oceanbestpractices.org;
   OBPS Metrics Dashboard: http://dashboard.oceanbestpractices.org/
   a. Please indicate if you have an external contractor provide **maintenance** or if this is done by Arno:
      Repository DSpace : ARNO with addition of external for significant enhancements;
      Metrics Dashboard : ARNO with Cristian

3. IF you are planning to develop new web sites or databases and wish to have these hosted by the Oostende Office then please provide details here:
   The Ocean Practices Federated Network (OPFN) in 2024, is to be hosted under ODIS/OIH and plans to implement a portal, separate from OIH.

[end of document]