INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

2021 Meeting of the IODE Management Group
(Pre-Committee meeting)

Online
12-14 January 2021, 13:00-15:00 UTC

SUMMARY REPORT
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# Table of Contents

1. OPENING OF THE MEETING/ ADOPTION OF AGENDA AND TIMETABLE ................................................. 4
2. REVIEW OF THE IODE-XXV ACTION SHEET ....................................................................................... 4
   2.1. Project reporting review ................................................................................................................. 4
   2.2. IODE-XXV Action sheet ............................................................................................................... 6
   2.3. Proposed new Projects .................................................................................................................. 11
3. STATUS OF IMPLEMENTATION OF THE IODE-XXV RECOMMENDATIONS AND DECISIONS ........... 11
4. PREPARATIONS FOR IODE-XXVI ........................................................................................................... 20
   4.1. Review and adoption of IODE-XXVI agenda and timetable .......................................................... 20
   4.2. Decision on timeslots and number of plenaries per day .............................................................. 21
   4.3. Decision on the need for interpretation ....................................................................................... 22
   4.4. Planning of preparatory workshops ............................................................................................. 22
   4.5. Planning for preparations for draft decisions, draft resolutions .................................................. 23
   4.6. Performance Review of the IOC Project Office for IODE ........................................................... 24
   4.7. IODE achievement award 2021 .................................................................................................... 24
5. CONTRIBUTION OF IODE TO THE UN DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT IWG-SODIS .................................................................................... 25
   5.1. Updating of the IOC Strategic Plan for Data and Information Management (2022-2026) .............. 25
   5.2. Revision of the IOC Oceanographic Data Exchange Policy (2003 and 2019 revision) ................... 25
   5.3. Role of IODE in the development and implementation of proposed UN Decade Data Strategy .... 25
   5.4. Cooperation of IODE and Centre for the Fourth Industrial Revolution – Ocean and Ocean Data Foundation 27
6. IODE FINANCIAL AND HUMAN RESOURCES 2021-2022 .............................................................. 29
   6.1. Status of UNESCO regular programme ....................................................................................... 29
   6.2. Status of unearmarked and earmarked extra-budgetary sources ................................................ 30
       6.2.1 Unearmarked contributions .................................................................................................. 30
       6.2.2 Earmarked ......................................................................................................................... 30
   6.3. Overview of financial requests by IODE projects ....................................................................... 31
   6.4. Overview of new proposals received ........................................................................................... 32
   6.5. Expected staffing IODE for 2021-2023 ...................................................................................... 32
   6.6. Draft work plan and budget for submission to IODE-XXVI ......................................................... 33
7. PREPARATIONS FOR 1ST INTERNATIONAL OCEAN DATA CONFERENCE (NOVEMBER 2021) ....... 34
8. ADOPTION OF THE REPORT ............................................................................................................. 37
9. CLOSING OF THE MEETING .............................................................................................................. 37

# ANNEXES

Annex 1: Agenda and Timetable
Annex 2: List of participants
Annex 3: Provisional Agenda and Timetable of IODE-XXVI
1. **OPENING OF THE MEETING/ ADOPTION OF AGENDA AND TIMETABLE**

The meeting was opened on 12 January at 13:00 UTC by Dr Sergey Belov, Co-Chair. Dr Belov invited the Management Group to review the Provisional Agenda for the meeting ([Document IOC/IODE-MG-2021/1](#)) available online, provide amendments and its adoption.

Dr Belov noted that Sessions of the IODE Management Group are attended by project leaders and SG chairs (non-executive members) and invited the meeting to be productive and fruitful.

He further noted that, due to the Covid pandemic this Session of the Management Group had to be organized as an online event.

Dr Belov informed the Management Group that the meeting of the Group would be held over three days (12, 13 and 14 January) with sessions of two hours every day between **13:00 UTC and 15:00 UTC**. He apologized that this timing was not very comfortable for all participants despite all efforts to find time slots that would not be too inconvenient for anyone.

The provisional agenda and timetable are provided in [Annex I](#).

Regarding the IODE-XXVI Session rescheduling he referred to [agenda item 4.1](#).

*The Management Group adopted* the Agenda and timetable for the meeting.

2. **REVIEW OF THE IODE-XXV ACTION SHEET**

2.1. **Project reporting review**

This Agenda item was introduced by Mr Greg Reed through a brief video presentation.

Mr Reed explained that all IODE projects must meet the specified evaluation criteria and are evaluated by the IODE-MG Executive annually, based on the reports provided by each project. The criteria for evaluation ongoing project performance are described in IOC Manuals and Guides No. 81 ([Procedures for Proposing and Evaluating IODE Projects and Activities (Revised edition)](#)). Ongoing projects that do not receive a positive evaluation (<60% of maximum score) will be notified of what actions need to be taken to improve performance and given an appropriate time frame for improvement. The Management Group discussed the IODE project reports.
The Management Group expressed concern about the level of performance of the ODINs and recommended that the future of the ODINs should be discussed in-depth at IODE-XXVI.

The Management Group requested the Co-Chairs to discuss this matter with the IOC regional secretariats and Co-Chairs of the IOC regional subsidiary bodies, and to report back to the Management Group as soon as possible, with the view of strengthening links between IODE as a global programme and the needs and requirements as well as equitable participation of the regional programmes in the area of ocean data and information management.

The Management Group noted that training activities requested by the regions should be discussed and implemented through OTGA2 and invited the regional secretariats to discuss this matter with the IODE Secretariat (OTGA Secretariat).

The Management Group requested the Secretariat to contact Mr Loic Petit de la Villéon to inquire about the future arrangements for GOSUD which will need to be discussed at IODE-XXVI.

The Management Group noted that the report for ODP had not been received in time for the MG meeting but is available. This will be included in the consolidated report that will be submitted
to IODE-XXVI. It was further noted that the issue of the Partnership Centre is being discussed under agenda item 2.2.

Mr Reed further explained that due to the very limited time available it would not be possible for each project leader to report verbatim but instead invited members of the Management Group to ask substantive questions or make comments as needed which would be summarized in the report of the Management Group meeting.

He informed the Management Group that the evaluation of projects had not been completed. D Belov clarified that the ODP report was not included in the list as it had been submitted by Tobias Spears on 4 January 2021. The situation with GOSUD is reported on later.

Dr Belov noted that the project review would be carried out later, in time for IODE-XXVI. Reporting documents for all projects were made available in Document IOC/IODE-MG-2021/2.1

2.2. IODE-XXV Action sheet

This agenda item was introduced by Mr Greg Reed through a brief video presentation.

The Action Sheet has been posted online at https://www.iode.org/index.php?option=com_content&view=article&id=455&Itemid=100198. The page includes the status as on 27 August and as on 15 December 2020. These action items were discussed in detail in the next agenda item.

The Management Group was requested to recommend action for items that were not or only partially implemented. This concerned the following:

<table>
<thead>
<tr>
<th>Action item</th>
<th>To be implemented by</th>
<th>status</th>
<th>Action requested by MG</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4.2 Joint IODE/IAMSLIC Group of Experts on Marine Information Management in a transitional capacity (GEMIM)</td>
<td>IAMSLIC</td>
<td>All effort has been put into a new joint repository AquaDocs. This has overtaken MOU discussions but Letters of Agreement are likely to be agreed with IAMSLIC and FAO-ASFA for AquaDocs</td>
<td>n/a</td>
</tr>
<tr>
<td>3. invited the IAMSLIC to jointly seek new and innovative ways to collaborate on the promotion of marine information management as an essential component in the &quot;ocean knowledge&quot; value chain.</td>
<td>Marine libraries</td>
<td>5 registered as AIU</td>
<td>Invites IAMSLIC to send out a 3rd email call for its members to make an application to register as AIU</td>
</tr>
</tbody>
</table>
5. requested the IOC/IODE Secretariat and IAMSLIC to consider and further discuss the establishment of a new MoU focusing on specific targets and deliverables.

| 3.5.1 Ocean Biogeographic Information System | IOC Exec Sec | No action taken | - |
| 1. requested the IOC Executive Secretary to prepare the documentation to the UNESCO Director-General to create a regular programme post for the OBIS Data Manager at the earliest opportunity, and preferably within the 40C/5 (2020-2021). | Member States | Funds received from Flanders/ no other member states | - |
| 2. urged member states and non-governmental partners to provide extra-budgetary resources to the IOC Special Account for OBIS in order to support the implementation of the OBIS work plan and secure the continuation of OBIS beyond 2019. | OBIS | No action taken | Mr Appeltans reported that this study will be undertaken in time for IODE-XXVI, possibly in cooperation with WOD |
| 3. instructed OBIS undertake a study to fit NODCs into the OBIS network construct and characterize the shared data management responsibility between NODCs, ADUs, and OBIS Nodes in fulfilling this mission for the biological data appropriate for OBIS. | |

3.5.2 World Ocean Database (WOD)

1. The Committee expressed its appreciation for the work achieved.

2. The Committee urged NODCs and ADUs to continue submitting data for inclusion in WOD.

| NODCs/ADUs | No progress. Starting through collaboration with Ocean Data Foundation. | Dr Boyer noted that data flow was lost from ICES. The MG regretted this and hoped that this will be restored. | - |
3.5.5 Global Ocean Surface Underway Data Project (GOSUD)

2. The Committee recommended a closer relationship with the JCOMM/OCG and the SOT.

3. The Committee urged the SG-GOSUD to elect a new Chair by the end of 2019.

| OCG and SOT | No information | Dr Belov reported that OCG has moved to GOOS. |
| SG-GOSUD | No information | |

3.6.1 Centre/Information Centre accreditation: status and way forward

2. The Committee urged all IODE NODCs and ADUs to apply for accreditation.

5. The Committee instructed the SG-QMF to develop the necessary criteria for AIU accreditation, and invited IAMSLIC to assist with this.

| NODCs/ADUs | Only 1 new ADUs registered in 2020 | - |
| SG-QMF | Not done | Ms Simpson reported that criteria is available and would discuss with Mr Reed |

6.3 CONFIRMED EXTRA-BUDGETARY FINANCIAL RESOURCES

2. ... invited Japan as well as other Member States to provide interns or seconded staff.

| Member states | No new internships or secondments in 2019/2020 | Prof Michida reported that there were no applications in 2019. Internships were now postponed due to Covid19. He expressed the hope to resume in 2022. |

Under this agenda item the Management Group also discussed the issue of the renewal of the MoU for the “Partnership Centre for IODE Ocean Data Portal” that had been requested by IODE-XXV (paragraph 148 of the IODE-XXV summary report).

Dr Belov referred to Document IOC/IODE-MG-2021/2.2 (Concept Note – IODE Partnership Centre for ODIS). He recalled the history of the IODE Ocean Data Portal project that was adopted by IODE-XIX in 2007. In addition, IODE-XIX adopted terms of reference for the Partnership Centre for the IODE Ocean Data Portal which was established at RIHMI-WDC of Roshydromet (Obninsk, Russian Federation) in 2013. In 2018 a review of the Centre was carried out and submitted to IODE-XXV in 2019. The 2019 review document noted that the ODP network has only a few
operational nodes outside Europe. In addition, the reviewers recommended that IOC/IODE clarify the respective roles of ODP and ODIS and be clear on the roadmap of the two systems. They also advised that close contacts should be taken with the ODIS task team to address the following items: “agree on following meta-data structure and on vocabularies”, this should be done also in close cooperation with the international bodies working on this subject (e.g. SeaDataNet standards should be taken into account). IODE-XXV recommended to renew the MoU of the Partnership Centre for IODE Ocean Data Portal and requested the IOC Secretariat to inform Roshydromet about this decision.

However, it has been noted that technology has evolved considerably since 2007. While central portals were considered as the best way to improve regional or global data access and management, today’s data sharing aims at interoperability technology making use of existing data systems, leveraging the web as the platform. A result of these technological and standards related advances is that the current minimum investment is hosting resources in a web accessible location, along with discovery metadata conforming to some published standard, such as that to be developed as ODIS Arch.

A second result/impact is that central portals are no longer desired and even discouraged. It is for this reason as well as further considerations discussed below that the renewal of the MoU of the Partnership Centre for IODE Ocean Data Portal was postponed and its remit reconsidered.

The IOC Assembly, at its 29th Session (June 2017) expressed its support for the proposed development of an Ocean Data and Information System (ODIS) concept paper and stressed that ODIS should focus on leveraging existing efforts. The concept paper states “The IOC Ocean Data and Information System (ODIS) will be an e-environment where users can discover coastal and ocean data, information and associated products or services provided by IOC Member States, projects and other partners of IOC. The system will aim to align itself with accepted community data management principles, such as the FAIR (Findable, Accessible, Interoperable and Reusable) principles (Wilkinson et al.) and, where feasible, interoperable with existing data solutions”.

As a first step towards the development of ODIS, the Ocean InfoHub (OIH) project was proposed: a new initiative to streamline access to ocean science data and information for management and sustainable development. The OIH will establish and anchor a network of regional and thematic nodes that will improve online access to and synthesis of existing global, regional and national data, information and knowledge resources. The project will center on an openly accessible web platform designed to support interlinkages and interoperability between distributed resources including existing clearinghouse mechanisms. OIH will develop a 2-way data and information stream: within each region the partners and users will contribute data and information to the “data/information ecosystem”, while they will in return get access to the full data and information collective of the global data and information ecosystem (facilitated by the ODIS architecture).

Within IODE it has been widely recognized that many of the 150 Member States currently do not have the required human and technical capacity to host online data and information services even
when an NODC or ADU is present. As the stakeholder focus of OIH goes beyond the “traditional” IODE community it is fair to assume that the number of potential data and information sources that cannot host their own online services will be substantially higher than those we are aware of today. As such we risk missing out on a huge amount of “hidden” data and information available from potential stakeholders. It looks obvious that the efforts of Partnership Center for IODE Ocean Data Portal should be concentrated now on OIH/ODIS rather than standalone tools only as it was before.

It is proposed that the IOC Partnership Centre for ODIS will assist this large group of stakeholders/providers as follows:

1. Provide an ODIS software tool that enables ingestion, description (metadata), quality control and transmission (to the Partnership Centre) of data/information held by the stakeholder/provider;
2. Provide training support as well as documentation for the use of the ODIS software tool;
3. Provide secondary quality control of data/information received from stakeholders/providers through the ODIS software tool;
4. Archive and make available online of the data sets received from the stakeholders/providers;
5. Provide a secure archival/mirror of all stakeholders/providers who cannot ensure/assure the long-term and secure archival of their data/information;
6. Make all data and information available globally through the ODIS interoperability network;
7. Coordinate, with their respective secretariats hosts, the submission of data held by the Partnership to the World Ocean Database (WOD) and Ocean Biodiversity Information System (OBIS);
8. Make all data and information available through a mirror site at the IOC Project Office for IODE, Oostende, Belgium;
9. Report on activities to the IODE Management Group, including list of member state contacts, status of work (data hosting, data sharing, ODIS integration, data use, etc.)

The Partnership Centre for ODIS will furthermore contribute to the data as well as CD chapters of the UN Decade of Ocean Science for Sustainable Development.

**The Management Group welcomed** the proposal to establish the Partnership Centre for ODIS and **requested** Dr Belov to prepare a working document for IODE-XXVI including background, objectives, expected results and deliverables, work plan and budget as well as a draft Recommendation for consideration by IODE-XXVI.
2.3. Proposed new Projects

This agenda item was introduced by Mr Ward Appeltans. He informed the Group that three new projects have been submitted:

1. Ocean InfoHub (OIH) – FUST funded project
2. Pacific Islands Marine Bioinvasions Alert Network (PacMAN) – FUST funded project
3. AquaDocs - to replace OceanDocs and Aquatic Commons (IAMSLIC)

Note: OTGA is an approved IODE project (Decision IODE-XXIII.4). OTGA 2 is the next phase of OTGA and should not be considered a new project.

Details on the projects are included in Document IOC/IODE-MG-2021/2.3. It was further noted that the financial implications of the AquaDocs project would be discussed under agenda item 6.4. Both the OIH and PacMAN projects are funded through an extrabudgetary source.

The Management Group thanked the submitters of the new projects and congratulated the authors of the OIH, PACMan and OTGA2 proposals with the approval and funding of their projects.

The Management Group referred discussions on AquaDocs to agenda item 6.4.

3. STATUS OF IMPLEMENTATION OF THE IODE-XXV RECOMMENDATIONS AND DECISIONS

This agenda item was introduced by Mr Ward Appeltans.

IODE-XXV Decisions

3.2.4 ESTABLISHMENT OF AN INTER-SESSIONAL WORKING GROUP ON THE REVIEW OF NODC HEALTH STATUS WITHIN THE IODE NETWORK

STATUS: at the time of the January 2020 Management Group meeting no progress was reported. In preparation for the January 2021 Management Group meeting reminders were sent to the membership of the group: Canada (Mr. M. Ouellet), India (Mr Patthabi Rama Rao), IODE Co-Chairs, SeaDataNet (Ms Michèle Fichaut).

UPDATED STATUS: Dr Belov reported that this group has not appointed a Chair and did not meet. He suggested that the 2 Co-Chairs will now take the lead and he invited Management Group members to work on this topic to report to IODE-XXVI as requested. Mr Ward Appeltans volunteered to contribute the views and information from OBIS.
The Management Group requested the two Co-Chairs to take the lead and contact experts (including OBIS (Anton Van De Putte), Herman Garcia, Ward Appeltans, Greg Reed) to collaborate on this subject, in order to report to IODE-XXVI. (see Action sheet item 3.5.1 (3)).

5.1 IODE MANAGEMENT STRUCTURE
STATUS: COMPLETED

5.2.3 ESTABLISHMENT OF THE INTER-SESSIONAL WORKING GROUP TO DEVELOP THE IMPLEMENTATION PLAN AND COST-BENEFIT ANALYSIS FOR THE IOC OCEAN DATA AND INFORMATION SYSTEM
STATUS: PARTIALLY COMPLETED

This group has completed its work through Document IOC-XXX/2 Annex 6 (IOC Ocean Data and Information System (ODIS): Concept, Implementation Plan and Cost Benefit Analysis). The IOC Assembly commented as follows:

The Assembly expressed its strong support for the proposed development of the IOC Ocean Data and Information System (ODIS) and welcomed the prototype ODIS Catalogue of Sources (ODISCat).

The Assembly stressed the need to develop ODIS with involvement from the widest possible range of stakeholders, ensuring active participation from IOC Member States but also from other UN agencies, NGOs, national and regional programmes and projects, as well as the private sector.

The Assembly noted that the IOC ODIS would form a solid and scalable basis for a UN Decade data system.

The Executive Secretary, while thanking Member States for the wide support of the proposed development of ODIS, called on Member States to assist IOC through providing staff, financial and in-kind support to enable the development of ODIS.

The representative of the WMO welcomed the development of ODIS and expressed his Organization’s desire to actively collaborate and participate.

However, the IOC Assembly at its 30th Session, through Decision IOC-XXX/7.2.2 (Ocean Data and Information System (ODIS)):

“Endorses the ODIS Concept, Implementation Plan and Cost Benefit Analysis;
Invites the IODE Committee to prepare a fully detailed and costed project proposal for the IOC Ocean Data and Information System (ODIS) for submission to the IOC Executive Council at its 53rd session in 2020.”

The Management Group was requested to consider the necessary actions to provide the “fully detailed and costed project proposal for the IOC Ocean Data and Information System (ODIS”).

**UPDATED STATUS:** Mr Tobias Spears reported that the original ODIS concept was established in 2016 and has been incrementally evolved and elaborated on through multiple working groups and supporting investigations. The vision for a lightweight, web-centric architecture (ODISArch) was agreed upon and carried forward as a foundational component of the Ocean InfoHub initiative that was established in April, 2020. The technical direction taken on ODISArch, specifically, the implementation of the architecture based on Schema.org and using the web (search engines, browsers) aligns with the original vision and is funded in part under the Ocean InfoHub project.

However, an outstanding action that has persisted since the inception of the original ODIS concept, was the development of a fully costed proposal to carry the concept through to demonstrated value for the IODE community. In essence, the discoverability of resources across the IODE community. Through the Ocean InfoHub project, we have a more clear picture of what demonstrated value means:

1) Improved discoverability of resources published to the web which can be achieved using metadata that is recognized by web search engines/harvesters – ODISArch
2) Embracing a distributed architecture where resource providers are not asked to ‘feed another system’
3) Implementing a lightweight established catalogue of resources with value added reporting, etc. by leveraging metadata published in alignment with ODISArch – essentially an Ocean InfoHub portal having a broader scope (across IODE member states) and populated through harvesting (pull) as opposed to resource owners registering resources manually (push)

The key point is that by publishing metadata aligned with ODISArch makes 2) and 3) easier with no undue hardship on resource providers.

IODE established the ODISCat catalogue of sources as a project and this resource is valuable for identifying resources, resource themes, metadata attribution requirements, and stakeholders. However, this has always been seen as an interim step for use in planning the full ODIS implementation.

To complete the implementation of ODIS, a full ODIS project is required:
1) Continue development on ODISArch in collaboration with the Ocean InfoHub team
2) Plan and support (technical, training, etc) the implementation of ODISArch by IODE member states
3) Implement lightweight catalogue built upon ODISArch

If supported, a more detailed workplan with costing should be completed by the end of March.

In addition, ODIS will need to be created as an IODE Project. For this a fully detailed and costed project proposal is required and this, together with a draft recommendation, will be prepared for IODE-XXVI.

5.4 ESTABLISHMENT OF AN INTER-SESSIONAL WORKING GROUP TO REVISE THE IOC STRATEGIC PLAN FOR OCEANOGRAPHIC DATA AND INFORMATION MANAGEMENT

STATUS: at the time of the January 2020 Management Group meeting no progress was reported. Dr Hernan Garcia, Ms Pauline Simpson and the IODE Co-Chairs (as initial members of the working group) were invited to report on the proposed way forward.

This subject was further discussed under agenda item 5.1.

Draft Decisions for IOC Assembly (IOC-XXX)

5.6 REVISION OF THE IOC OCEANOGRAPHIC DATA EXCHANGE POLICY (Assembly agenda item 7.2.1)

STATUS: COMPLETED

The Policy has been updated online on http://www.iode.org/policy

7.1.1 ESTABLISHMENT OF THE IOC OCEAN BEST PRACTICES SYSTEM PROJECT (OBPS) (Assembly agenda item 7.2.1)

STATUS: COMPLETED

The IOC Assembly, at its 30th Session, established the Ocean Best Practices System Project (OBPS) as element III of Decision IOC-XXX/7.2.1 (International Oceanographic Data and Information Exchange). The project started implementation immediately after the Assembly.

IODE-XXV Recommendations

3.2.2 JCOMM/IODE GLOBAL DATA ASSEMBLY CENTRES (GDACs)

STATUS: at the time of the January 2020 Management Group meeting Dr Sergey Belov, IODE Co-Chair was invited to report on the proposed way forward with this Recommendation.

UPDATED STATUS: WMO has had subsidiary body reform. WMO INFCOM created Study Group on Ocean Observations and Infrastructure Systems (SG-OOIS). The SG-OOIS will propose and help establish efficient functional connections between the GOOS and the Global Climate Observing System (GCOS), the Global Cryosphere Watch (GCW), the Global Atmosphere Watch (GAW), the WMO Integrated Global Observing System
(WIGOS), the WMO Information System (WIS), the IOC International Oceanographic Data and Information Exchange (IODE) and the Global Data Processing and Forecasting System. (GDPFS). IODE has a membership in SG-OOIS (WMO Study Group on Ocean Observations and Infrastructure Systems) and will discuss the future of the MCDS and IOC GDACs. As for now, MCDS has no communication structure, it’s unclear who is now responsible for the accreditation of new centres, for monitoring / reviewing the activities of existing centers for approving changes in structures / technical issues (i.e. data formats) that are part of WMO / IOC regulations. This discussion will have to take place through the JCB.

The Management Group recommended that further discussions on this topic would be needed with the JCB (action by Sergey Belov).

3.4.1 REVISION OF THE TERMS OF REFERENCES OF THE JCOMM/IODE EXPERT TEAM ON DATA MANAGEMENT PRACTICES (ETDMP)

STATUS: at the time of the January 2020 Management Group meeting Dr Sergey Belov, IODE Co-Chair was invited to report on the proposed way forward with this Recommendation.

UPDATED STATUS: Dr Belov reported that, as JCOMM has ceased to exist, also the Joint JCOMM/IODE ETDMP ceases to exist. Ms Simpson noted that the ETDMP had taken on a responsibility to provide an Expert Panel for Endorsement and Convergence of Data Management best practices and inquired about who would take this on. Dr Boyer noted that the WMO has an Expert Team on Information Management (ET-IM) looking at the activities on data & information management, including MCDS. Mr Appeltans suggested that IODE should consider forming Expert Panels for Endorsement and Convergence of Data Management best practices for OBPS (as GOOS have already done).

The Management Group decided to close the ETDMP and invited IOC to discuss with WMO through the JCB the form of future collaborations on data and information management and ocean best practices aspects via the joint projects, ETs, other forms. (action by Sergey Belov).

5.2.1 ESTABLISHMENT OF THE IOC OCEAN DATA AND INFORMATION SYSTEM CATALOGUE OF SOURCES PROJECT (ODISCat)

STATUS: While the ODISCat project has been established and a prototype of the system is available on https://catalogue.odis.org the Steering Group has not been formally composed and has not had any meetings. At the time of the January 2020 Management Group meeting Mr Arno Lambert, acting Project Manager of ODISCat was invited to propose a way forward.

UPDATED STATUS: Mr Lambert reported that the steering group is expected to be established next month. He invited candidates to join the group.
5.3 **ESTABLISHMENT OF AN INTER-SESSIONAL WORKING GROUP TO PROPOSE A STRATEGY ON OCEAN DATA AND INFORMATION STEWARDSHIP FOR THE UN OCEAN DECADE (IWG-SODIS)** (see 5.1)

**STATUS**: at the time of the January 2020 Management Group meeting the working group had just started its work.

**UPDATED STATUS**: see agenda item 5.3

7.3 **IODE WORK PLAN AND BUDGET FOR 2019-2020**

It was recalled that the work plan and budget adopted by IODE-XXV (year 2020) had been revised by the IODE Management Group at its January 2020 Session shown in the table below:

<table>
<thead>
<tr>
<th>PROJECT/ WORK PLAN ELEMENT</th>
<th>REQUESTED FROM RP</th>
<th>PROJECT TOTALS (IN US$)</th>
<th>REQUESTED FROM PO</th>
<th>PROJECT TOTALS (IN US$)</th>
<th>OTHER RESOURCES (IN US$)</th>
<th>PROJECT TOTALS OTHER</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. OBIS (was 15K)</td>
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<tr>
<td>SG-OBIS-9 meeting</td>
<td>25,000</td>
<td>20,000</td>
<td>20,000</td>
<td></td>
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<td></td>
<td>self-funding</td>
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<tr>
<td>OBIS-SATT meeting</td>
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<td>20,000</td>
<td>0</td>
<td></td>
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<tr>
<td>OBIS Train the trainers</td>
<td>0</td>
<td>0</td>
<td>10,000</td>
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<td>FUST-OTGA</td>
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<td></td>
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<td>40,000</td>
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<td>2. WOD/GODAR (was 4800 RP/20K PO)</td>
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<td>IMARPE data rescue</td>
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<td>3. GTSSPP</td>
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<tr>
<td>SG-GTSSPP-VI (OCTOBER 2020) (Paris, joint with XBT)</td>
<td>20,000</td>
<td>20,000</td>
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<td>4. GOSUD (was 0)</td>
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<td>5. ICAN (was 15000)</td>
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<td>SG-ICAN meeting June 2020</td>
<td>12,000</td>
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<td>ICAN workshop 2020 + brochures</td>
<td>3,000</td>
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<td>ICAN other resources</td>
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<td>6. IQuOD</td>
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<td>7. ODP (was 3000)</td>
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<td>Meeting attendance</td>
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<td>SG-ODP (30 Sep 2020) - maybe not required</td>
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<thead>
<tr>
<th>8. OBPS (was 5400 RP/10000 PO)</th>
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<tr>
<td>SG-OBPS (Nov 2020)</td>
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<tr>
<td>Staff/IODE co-chair travel to Nov meetings</td>
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<tr>
<td>Consultant contract PM Jan-Dec 2020</td>
</tr>
<tr>
<td>Software enhancements (DSpace)</td>
</tr>
<tr>
<td>Certification</td>
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<tr>
<td>Outreach material</td>
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<td>Total</td>
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<tr>
<th>9. OEANDOCS/JOINT REPOSITORY (was 900 RP/12000 PO)</th>
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<tbody>
<tr>
<td>Joint repository software consultancy contract</td>
</tr>
<tr>
<td>Planning meeting</td>
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<td>Total</td>
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<table>
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<tr>
<th>9a. IAMSLIC (was 3000)</th>
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<tr>
<td>Participants support / travel grants</td>
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<td>Total</td>
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<tr>
<th>10. OCEANEXPERT (was 1800)</th>
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<tr>
<td>Outsourcing cloud hosting for 24/7 services</td>
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<tr>
<td>Total</td>
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<tr>
<th>11. IODE QMF (was 0)</th>
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<tr>
<td>Certification</td>
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<td>Total</td>
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<tr>
<th>12. OTGA (EXB)</th>
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<tr>
<td>Work plan in OTGA2 proDoc</td>
</tr>
<tr>
<td>Cloud hosting OT</td>
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<td>Total</td>
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<tr>
<th>13. ODISCa (EXB)</th>
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<tr>
<td>Work plan in Ocean Infohub work plan</td>
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<td>Total</td>
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<tr>
<th>14. ODINBlackSea (was 3000)</th>
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<tr>
<td>ODP Training by Russian NODC at IODE Project Office (6/20)</td>
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<tr>
<td>Steering Group meeting (Nov 2020)</td>
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<td>Total</td>
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<tr>
<th>15. ODINWESTPAC (was 24000) (S Shi mailed)</th>
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<td>Total</td>
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<td>Course</td>
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<td>15. ODINAfrica (was 15000)</td>
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<td>17. ODINCARSA-LA (was 2700) (c.Toro mailed)</td>
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<tr>
<td>18. ODINCINDIO (was 9000) (Atmanand mailed)</td>
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<tr>
<td>19. ODINECET (was 3600)</td>
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<tr>
<td>Project Office</td>
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<tr>
<td>Ocean Infohub (EXB)</td>
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<td>PACMAN (EXB)</td>
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<td>UN decade</td>
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Mr Appeltans informed the Group that due to the Covid-19 pandemic this work plan had to be totally revised due to the inability to organize face-to-face meetings. This cancelled all meeting-related expenditures.

Some of the unspent funds were (with agreement from the IODE Co-Chairs) used to recruit consultants to assist with some of the projects.

Substantive expenditure in 2020 was limited to the following:

- Recruitment Consultant (Cristian Munoz) as ODISCat editor $14,100
- IOCAFRICA contribution to Consultant (John Ngathia) $ 6,000
- Contribution to CD consultant (Johanna Diwa) $ 3,500
- Contract OBPS DSpace enhancements $15,390
- Miscellaneous admin (translation of docs, travel, e-purchases,) $ 7,625

Total $46,615

In July 2020 the IODE Secretariat contacted all IODE project leaders to inquire about any funding requirements for activities that could otherwise not be implemented. No requests were received (until October/November 2020). These requests are discussed under agenda item 6.3.

See further discussion on financial resources under agenda items 6.1 and 6.2.
4. PREPARATIONS FOR IODE-XXVI

4.1. Review and adoption of IODE-XXVI agenda and timetable

Dr Sergey Belov introduced this item. They referred to Document IOC/IODE-XXVI/1 prov, and IOC/IODE-XXVI/1 add.prov.

Dr Belov recalled that the IODE-XXVI Session and Scientific Conference had been planned to take place in Sopot, Poland between 22 and 26 February 2021. Due to the Covid-19 pandemic that started in February/March 2020 and which will probably prevent face-to-face meetings as well as international travel until well into 2021 it was first decided to reschedule the Session to November 2021 in Sopot, Poland. However, it was considered that this timing would not allow reporting to the 31st Session of the IOC Assembly which is scheduled in June/July 2021. In these circumstance IODE would only be able to report to the 32nd Session of the IOC Assembly in 2023 which would cause considerable delays in implementation and would also prevent IODE from actively participating in the UN Decade of Ocean Science for Sustainable Development.

For these reasons the IODE Co-Chairs and IODE Secretariat, in consultation with the IODE Management Group, IOC Chair, IOC Executive Secretary and the local host (Dr Marcin Wichorowski), had decided to organize the 26th Session of the IODE Committee as an online event between 20 and 23 April 2021. In addition, it was decided to organize the “First International Ocean Data Conference” in Sopot, Poland between either 15-19 November 2021 or 22-26 November 2021 (dates are provisional). The Management Group was invited to comment and revise the proposed agenda and timetable as needed.

The Management Group requested that the Ocean Data Standards (project) should be included in the agenda item 3.3.11 to report and clarify its relationship to the Ocean Best Practices System.

Regarding the Conference, Dr Marcin Wichorowski noted that the hybrid mode is possible. He expected that most people would need to wait until mid-2021 for vaccination. Therefore, it was unclear whether all participants would be able to participate in person. Dr Wichorowski confirmed the ability to host the Conference and requested the IODE Secretariat to discuss the requirements as soon as possible. Mr Leadbetter recommended to check with the IMDIS organizers and learn from their experience as they will organize their conference as an online event. Dr Wichorowski informed that his own institute also had organised a large online conference and offered to share all expertise.

The Management Group decided to organize IODE-XXVI between 20-23 April 2021 and adopted the provisional agenda and timetable for the IODE-XXVI Session (as attached in Annex 3).

The Management Group thanked Poland for its kind invitation to host the “First International Ocean Data Conference” in Sopot, Poland in November 2021.
The Management Group requested that the IOC data policy (2019) should be adjusted to reflect the name change of OBIS.

The Management Group decided to add item “6.4. REVISION OF THE IOC OCEANOGRAPHIC DATA EXCHANGE POLICY” to the agenda of the IODE-XXVI Session.

The Management Group stressed the need to have draft recommendations and decisions that are agreed upon by Member States prior to the Committee meeting so they can be included in the annotated agenda and which will not generate discussion during the plenary, noting that in view of the short time available for the plenary, there will be no time for such discussions.

The Management Group requested the Secretariat and Co-Chairs to explain to the participants of the pre-Committee working groups that the plenary will be intended to share and formally endorse the draft decisions and recommendations.

The Management Group noted that only Member States that have registered for participation in the Session should be invited to the pre-Committee working groups.

The Management Group decided that the working language of the pre-Committee working groups will be English (taking into account the substantial cost of interpretation).

4.2. Decision on timeslots and number of plenaries per day

Mr Taco De Bruin introduced this item. He explained that, based on experience throughout 2020, online meetings should not have a duration exceeding two hours. It was proposed that plenary sessions of the online IODE-XXVI should have a duration of two hours. Mr Taco De Bruin then discussed the time zones. Considering that participating experts will range from the US West Coast to Fiji (time zones spanning 20 hours) it will be impossible to organize the session at times that are comfortable for all participants. In addition, if the plenaries should be held on weekdays only (Monday-Friday) then this also limits the options.

Based upon the time zones the following groupings could be made:

1. From NE Pacific up to Moscow: (from UTC -8 to UTC +4) : 15:00 UTC - 17:00 UTC
2. From Pakistan to Suva): (from UTC +5 to UTC +12) : 07:00 UTC – 09:00 UTC

It was therefore proposed to have 2 sessions of each of the daily plenaries:

Monday 19 April up to Friday 23 April
- 07:00 UTC (09:00 CET) – 09:00 UTC (11:00 CET) for zone UTC+5 to UTC+12
- 15:00 UTC (17:00 CET) – 17:00 UTC (19:00 CET) for zone UTC-8 to UTC +4

The Management Group decided to organize two daily plenaries, between 07:00 UTC and 09:00 UTC, and between 15:00 UTC and 17:00 UTC.
It was noted that any participant can participate in any (or both) of the two sessions.

4.3. Decision on the need for interpretation

This agenda item was introduced by Mr Taco De Bruin. He informed the Management Group that the IODE Secretariat had sent out a first announcement of the new dates for IODE-XXVI on 9 November 2020. The email included “We propose to use English as the working language. If this is a problem for you then please let us know.”. In response to this email only one request for interpretation was received, requesting for French interpretation.

He further informed the Management Group that some experience was gathered with real-time interpretation services during online meetings. This experience is based on the use of the Zoom platform which is the platform proposed for the Session and all related meetings.

The cost of interpretation including English, French and Spanish will cost approx. $2500/day (2 hours/day, En-Es, En-Fr) or approx. $10,000 for 4 days. This will apply only for the group 07:00 UTC (09:00 CET) – 09:00 UTC (11:00 CET) for zone UTC+5 to UTC+12 (including Americas, Europe, Africa, Middle East). The other group will use English.

The Management Group was requested to consider the need to include interpretation services during the IODE-XXVI Session.

The Management Group decided that English would be the working language for the Session.

The Management Group recommended that documents for the plenary meetings could be translated but requested that the Secretariat should investigate the cost (for translation of draft decisions and recommendations and other action text, without introductory text).

The Management Group requested that the IODE Secretariat polls the provisional participants about the need for translation (and what languages).

The Management Group recommended that participants not comfortable with English, could consider inviting a colleague with English language skills to join them for the pre-Committee and plenary meetings to assist with personal language interpretation.

4.4. Planning of preparatory workshops

This agenda item was introduced by Dr Sergey Belov.

Dr Belov explained that due to the short time available for the plenary sessions (4 sessions x 2 hours/session = 8 hours) instead of the usual time (3 days x 6 hours = 18 hours) it would not be possible to deal with all substance discussions in the plenary sessions. Instead, it is proposed to organize pre-session working groups to discuss selected agenda items in depth, propose actions,
decisions or recommendations and then submit those to the plenary sessions. This would be especially important for strategic agenda items.

The Management Group decided to establish the following pre-Committee working groups:

- **3.2.2** Review of NODC health status within the IODE network  
  (lead: Sergey Belov, Taco De Bruin)

- **3.4.2** IODE Project and activity performance evaluation: status and way forward  
  (lead: Sergey Belov, Taco De Bruin)

- **6.1** FURTHER DEVELOPMENT OF ODIS  
  (lead: Taco De Bruin, Tobias Spears, Arno Lambert, Pieter Provoost)

- **6.2.** IODE CONTRIBUTION TO THE UN DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT  
  (lead: Hernan Garcia)

- **6.3.** IOC STRATEGIC PLAN FOR DATA AND INFORMATION MANAGEMENT (2022-2026)  
  (lead: Sergey Belov, Taco De Bruin, Marcin Wichorowski)

- **6.4.** REVISION OF THE IOC OCEANOGRAPHIC DATA EXCHANGE POLICY  
  (lead: Hernan Garcia)

- **8.5** (draft) WORK PLAN AND BUDGET 2021-2022  
  (lead: Greg Reed, Kristin de Lichtervelde)

The Management Group noted that there are some similarities/overlaps between 6.1, 6.2 and 6.3 but also differences and therefore agreed that they should be discussed by separate groups.

The Management Group noted however that experts can participate in multiple groups to deal with the overlaps.

The Management Group invited the leads to prepare short terms of reference for their group, and to formulate emails that can be sent to all provisional participants. In this regard it was noted that the IODE Secretariat needs to send out the formal Circular Letter regarding IODE-XXVI as soon as possible.

4.5. Planning for preparations for draft decisions, draft resolutions

This agenda item was introduced by Dr Sergey Belov.

Dr Belov recalled that IODE-XXV had adopted:
- 4 IODE Committee decisions
- 2 draft decisions for the next session of the IOC Assembly
- 5 IODE Committee recommendations (including one on the work plan and budget for
It was noted that the pre-session working groups defined under 4.4 would also need to draft relevant draft decisions and recommendations so these could then be briefly discussed and adopted during the plenary sessions.

4.6. Performance Review of the IOC Project Office for IODE

This Agenda Item was introduced by Mr Adam Leadbetter (also representing Mr Loic Petit de la Villéon) who carried out the performance review. They referred to Document IOC/IODE-MG-2021/4.6.

The Management Group was invited to comment on the results of the review.

The Management Group instructed the Secretariat to submit the report to the IODE-XXVI Session as a working document.

The Management Group expressed its great appreciation to Dr Adam Leadbetter and Dr Loic Petit de la Villéon for carrying out the review free of charge as a service to IODE.

4.7. IODE achievement award 2021

This agenda item was introduced by Mr Taco De Bruin. He recalled that IODE Sessions have been bestowing "IODE Achievement Awards" since the twentieth Session of the IODE Committee in 2009 in order to express special appreciation to some of these experts who contributed time and effort to the IODE programme. Between 2009 and 2019 a total of 32 awards have been given. The award ceremony was traditionally held during the Session Dinner.

Mr Taco De Bruin noted that as there would not be a Session Dinner at the 26th Session the Management Group may consider skipping the 26th Session and continue the award tradition at the 27th Session in 2023. Alternatively, the award ceremony could be organized during a social event at the 1st International Ocean Data Conference (see agenda item 7).

The Management Group decided to give the awards at the 2021 Session “virtually” (naming the recipients) at IODE-XXVI and hand them over “physically” at IODE-XXVII in 2023.

The Management Group decided to discuss possible recipients of the award in 2021 by email in time for IODE-XXVI.(lead: Taco de Bruin)

The Management Group decided to issue a separate award for early career experts in data and information management. Criteria will need to be agreed.

The Management Group noted that 2021 will be the 60th anniversary of IODE and decided to discuss this further as a possible topic (with associated event) for the Conference.
5. CONTRIBUTION OF IODE TO THE UN DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT IWG-SODIS

5.1. Updating of the IOC Strategic Plan for Data and Information Management (2022-2026)

This agenda item was introduced by Mr Taco De Bruin. He recalled that this item was discussed under agenda item 3 and recalled that no progress had been made. Further discussion on this item was referred to agenda item 5.3.

5.2. Revision of the IOC Oceanographic Data Exchange Policy (2003 and 2019 revision)

This agenda item was introduced by Mr Taco De Bruin. He recalled that this agenda item was briefly discussed under agenda item 3 as a follow-up to the draft decision for IOC-XXX, which had been approved and the necessary modifications had been made (see http://www.iode.org/policy).

He further referred to the progress report of the inter-sessional working group to propose a strategy on ocean data and information stewardship for the UN Ocean Decade (IWG-SODIS) (see agenda item 3).

The Management Group requested for IODE-XXVI to recommend to the IOC Assembly that a working group on the IOC data policy is established, composed of Member States and partner organizations to discuss the revision of the policy.

The Management Group decided that a pre-Committee working group needs to be established to draft the terms of reference of the data policy working group (and draft decision) and to add the policy as an agenda item for IODE-XXVI.

5.3. Role of IODE in the development and implementation of proposed UN Decade Data Strategy

This agenda item was introduced by Mr Taco De Bruin. He recalled that the IODE had already started its contribution to the Decade at IODE-XXV by including the Decade as a main topic of the Scientific Conference preceding IODE-XXV.

In addition, IODE-XXV adopted recommendation IODE-XXV.5.3 on the establishment of the inter-sessional working group (Chaired by Dr Hernan Garcia) to propose a strategy on ocean data and
information stewardship for the UN Ocean Decade (IWG-SODIS) which, inter alia, was instructed to “Prepare a proposed Ocean Data and Information Stewardship Strategy”. Furthermore IODE organized two online workshops in 2020: (i) Workshop on data sharing between UN agencies as a contribution to the UN decade of ocean science for sustainable development (20 April 2020); and (ii) International data sharing workshop for non-UN IGOs, Global and Regional organisations and projects, NGOs and private sector (12 October 2020). The main objectives of these two events were: (i) to organize a meet-and-greet for the invited organizations so they can familiarize themselves with IODE; (ii) to invite the participating organizations to join the IWG-SODIS; (iii) to invite the participating organizations to provide input to ODISCat; and (iv) to invite the participating organizations to collaborate on ocean data sharing under the UN Ocean Decade umbrella.

After the approval of the Implementation Plan of the UN Decade of Ocean Science for Sustainable Development and its chapter entitled “DATA, INFORMATION AND DIGITAL KNOWLEDGE MANAGEMENT” the Decade Secretariat at the IOC Secretariat has invited IODE to work on the development of a “decade data strategy”.

Dr Hernan Garcia was invited to briefly introduce Document IOC/IODE-MG-2021/5.1 (Proposed Data and Information Strategy for the Ocean Decade). The proposed Ocean Decade data and information strategy is comprehensive and covers ocean data and information from all sources, at all spatial and temporal scales, and for all purposes. The vision is to achieve timely and openly discoverable, accessible, and adaptable digital data and information of known quality about the ocean. This would enable the rapid and equitable development of solution-oriented value-added products and services by and for the Ocean Decade community for relevant decision-making. Central to this strategy is to achieve the greatest public good.

This strategy aligns, leverages, and builds on (i) existing national, regional, and international human capacity and cyber-infrastructure as much as possible; (ii) the expertise of national and international efforts for data and information sharing and exchange; and (iii) the collaborative use of community-adopted standards and best practices.

This strategy provides two forward-looking and actionable goals enabling the Ocean Decade community to work towards accomplishing the vision of this strategy: (1) Deploy a globally distributed, reliable, and interoperable high-volume network; and (2) Adopt a science-based quality requirements framework for data and information. Both goals are ideally needed to mitigate the challenge of discovery, access, and adaption of the immense and growing volume of globally distributed data and information. The Ocean Decade community (data and information users and providers) can decide on protocols for best implementing and executing these goals in the framework of an international collaborative requirements-based process. This strategy supports data sharing and exchange in line with international data policies such as those from GEO, IOC, WMO, and WDS. This strategy also supports data principles such as FAIR, CARE, and TRUST.

The Management Group thanked the IWG-SODIS and Chairs for drafting the Document IOC/IODE-MG-2021/5.1 (Proposed Data and Information Strategy for the Ocean Decade). and
recommends that this should be submitted to the proposed Ocean Decade Data Coordination Platform as well as to IODE-XXVI.

The Management Group further requested the IWG-SODIS to continue its work on its other targets and to submit also these documents to IODE-XXVI.

At this juncture Mr Pissierssens informed the Management Group that discussions are ongoing regarding the establishment of an “Ocean Decade Data Coordination Platform” in order to coordinate the collaboration between the vast number of partners that will contribute data to, as well as use data and products from the “digital ecosystem”. It is further proposed that the Platform will have two components: (i) The Ocean Decade Data Coordination Group: this group will be focused on strategic exchange and coordination between key actors – including data generators, managers and users. It will provide guidance and instructions to the Ocean Decade Data Technical Implementation Coordination Group; and (ii) The Ocean Decade Data Technical Implementation Coordination Group: this group will be focused on technical collaboration to develop the technical elements required to build the “digital data ecosystem” foreseen under the Ocean Decade. He noted that the work of the Platform will be closely aligned with the IODE ODIS, IWG-SODIS and following the principles of the ODIS concept paper.

The Management Group welcomed the proposed “Ocean Decade Data Coordination Platform” and looked forward to an active collaboration between the Platform and IODE’s relevant projects.

5.4. Cooperation of IODE and Centre for the Fourth Industrial Revolution – Ocean and Ocean Data Foundation

This agenda item was introduced by Mr Taco De Bruin. He recalled that discussions had started in 2019 between IOC and REVOcean (http://www.revocean.org). REVOcean is a not-for-profit company created with one overarching purpose and ambition: To make the ocean healthy again. The company was established on July 20th, 2017 and funded by Norwegian businessman Kjell Inge Røkke. In 2019 REVOcean management contacted the IOC Secretariat with the objective to seek collaboration. This led to the signing of a partnership agreement between REVOcean and IOC in February 2020. Areas of collaboration under this agreement are: (i) Cooperation on Ocean Data; (ii) Cooperation on the use of the REVOcean research vessel; (iii) UN Decade of Ocean Science for Sustainable Development (2021-2030); (iv) Ocean Literacy and Capacity Development.

Under “Cooperation on Ocean Data” the following was included in the agreement:

*The parties will cooperate to develop an "Ocean Data and Information System". This element of the Agreement will be implemented through joint activities between the IOC and the Ocean Data Foundation (ODF) acting on behalf of REVOCEAN and assisted by the financial contribution of REV OCEAN and by in-kind contributions by IOC and ODF. Working in accordance with the IOC Data Policy, the common objective of this cooperation will be to significantly improve and increase the availability of ocean data and information and to enable open source products and services reflecting the needs of a broad*
community of users. The parties will facilitate the open and free use of ocean data. A program of work will be developed involving additional partners with expertise in data and information handling and use, including academia, ocean data and information centres, international organizations, private sector and NGOs. A plan for specific activities for 2020 will be developed through a meeting between IOC and its IODE experts and REVOCEAN/ODF”.

Mr De Bruin informed the meeting that he, accompanied by Mr Peter Pissierssens, had visited the offices of the Ocean Data Foundation in Norway in February 2020 to discuss the “plan for specific activities”. It is added that REVOcean established the “Ocean Data Foundation”: “a non-compete, not-for-profit organization committed to liberating data for one healthy ocean. The ODF is established by REV Ocean and built with private sector technology, scientific know-how, and a small but growing core staff that combines agile, pragmatic thinkers and doers from the maritime and offshore energy tech sector, academia, conservation, and government”.

At the heart of the ODF is the Ocean Data Platform (ODP). ODP will offer powerful solutions for uploading, aggregating and navigating vast amounts of ocean data by liberating and contextualizing the data. Furthermore, it offers a community portal and powerful solutions for visualizing data in 2D, 3D and 4D, as well as a robust infrastructure for running data-smart solutions using machine learning and artificial intelligence. The data will be drawn from a variety of sources including traditional open institutional ocean data as well as data from industry, independent scientists, and even private citizens. ODP are built around the Cognite Data Fusion technology that comes from Cognite, the fastest growing software company in Northern Europe since 2016. The ODP is being built intentionally to meet the needs of those who demand more and better ocean data – specifically app and tool builders. By being the best and most trusted source of ocean data, we want to empower others to create new knowledge and find new ways of unleashing the power of ocean data. The ODF will be a hub for ideas about how to measure the ocean and how to use these data in new and innovative ways. Using the data freely shared within the ODF, users will be able to develop and share ideas, code, comments, and criticism - creating a social ecosystem of individuals and organizations sharing information about the ocean. Through access to data and a wide set of perspectives, the ODF will help governments, non-profit organizations, corporations and private citizens to make data-driven decisions to address and reverse the decline of the ocean biosphere.

During the February meeting IODE and ODF discussed the development of a first demonstrator for ODP starting with the import of the data in the World Ocean Database, hosted by NCEI, United States. This led to discussions on a redevelopment of WOD into WOD Cloud, a cloud version of WOD. Progress with this initiative is included in the WOD report under agenda item 2.1.

Mr De Bruin further informed the meeting that, in addition to the Ocean Data Foundation, an additional entity has been established by the Aker group (the parent company behind REVOcean and ODF): the Centre for the Fourth Industrial Revolution – Ocean (C4IR Ocean), dedicated to harnessing the advances of technology to preserve our ocean and improve the environmental footprint of ocean industries. Through public-private partnerships, the Centre will develop
governance frameworks and solutions for a sustainable and profitable ocean economy, using
digital technology ranging from Artificial Intelligence (AI) to Blockchain. The below diagram
illustrates the linkages between C4IR Ocean, ODF/ODP and related entities.

Dr Linwood Pendleton recently invited IODE to co-write a proposal entitled “Breaking Down
Barriers to Data Flow in UNESCO/IOC’s Global Databases: International Data and Information
Exchange and Ocean Biodiversity Information System” and the related document “Improving data
flow and availability within the IODE network of data centres as a contribution to the UN Decade
of Ocean Science for Sustainable Development 2021-2030”.

The Management Group welcomed the emerging collaboration between IODE and the Ocean
Data Foundation/C4IR Ocean as an additional channel to disseminate ocean data managed
under IODE, and to increase the visibility of the IODE network of data centres.

6. IODE FINANCIAL AND HUMAN RESOURCES
   2021-2022

6.1. Status of UNESCO regular programme

This agenda item was introduced by Peter Pissierssens. He explained that the UNESCO General
Conference, recently held at UNESCO Headquarters, Paris had adopted the $534.6M budget for
the biennium 2020-2021 (40 C/5). For the funding provided to IODE from the UNESCO regular
programme this results in the following allocations for each of the 3 IOC functions for the biennium:

FUNCTION B: Observing systems & data
   IODE & OBIS core systems $ 82,000

FUNCTION D: Assessments & info for Policy
This was split into $117,000 for 2020 and $117,000 for 2021.

It is recalled that the available budget from UNESCO Regular Programme was $117,000 so, deducting the expenditure in 2020 the implementation rate was only 40%.

A balance of approx. $68,000 remains from the 2020 budget and was carried forward to 2021. This amount may change slightly after the complete consolidation of accounts on 15 January 2021.

6.2. Status of unearmarked and earmarked extra-budgetary sources

This agenda was introduced briefly by Peter Pissierssens. He explained that this item was “for information only” and he referred to the annotated agenda without opening discussions.

6.2.1 Unearmarked contributions

$72,136 ($34,770 for IODE all and $37,366 for OBIS) is still available from non-earmarked extrabudgetary sources. These funds should be taken into account when preparing the work plan and budget for 2021-2022 under agenda item 6.6. However, these amounts may change after accounts are fully consolidated.

6.2.2 Earmarked

It was noted that earmarked funding can only be used for the projects concerned and cannot be re-allocated for other purposes.

FUST projects:

**Ocean Infohub: 2020-2022 (31/12/2022)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Allocated</th>
<th>Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$460,000</td>
<td>$96,462</td>
</tr>
<tr>
<td>2021</td>
<td>$328,500</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>$305,000</td>
<td></td>
</tr>
<tr>
<td>Total budget (excl. UNESCO management costs)</td>
<td>$1,093,500</td>
<td></td>
</tr>
</tbody>
</table>

**OceanTeacher Global Academy - Phase 2- 2020-2022 (31/12/2022)**

<table>
<thead>
<tr>
<th>Allocated</th>
<th>Used</th>
</tr>
</thead>
</table>
2020  $ 291,000  $ 82,147
2021  $ 294,000
2022  $ 294,000
Total budget (excl. UNESCO management costs)  $ 897,000

**PacMAN: 2020-2022 (31/12/2022)**

<table>
<thead>
<tr>
<th></th>
<th>Allocated</th>
<th>Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$ 129,060</td>
<td>$ 81,553</td>
</tr>
<tr>
<td>2021</td>
<td>$ 297,060</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>$ 359,955</td>
<td></td>
</tr>
<tr>
<td>Total budget (excl. UNESCO management costs)</td>
<td>$ 786,075</td>
<td></td>
</tr>
</tbody>
</table>

Total confirmed extra-budgetary contributions

<table>
<thead>
<tr>
<th></th>
<th>Allocated</th>
<th>Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$ 880,060</td>
<td>$ 260,162</td>
</tr>
<tr>
<td>2021</td>
<td>$ 919,560</td>
<td></td>
</tr>
</tbody>
</table>

It was noted that the real expenditure in 2020 was only 29.5% of planned. This was caused by the Covid-19 pandemic which prevented us from organizing project related face-to-face meetings, workshops and training courses.

### 6.3. Overview of financial requests by IODE projects

This agenda item was introduced by Greg Reed (by video). He provided an overview of the financial request for each project as reflected in the table below: (RP: UNESCO Regular Programme; PO: Project Office funds – Flanders direct contribution).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ocean Biodiversity Information System (OBIS)</td>
<td>8000</td>
<td>30000</td>
<td>15000</td>
<td>0</td>
</tr>
<tr>
<td>DIPS-4-Ocean Assessments (*)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Global Ocean Surface Underway Data Pilot Project (GOSUD)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Global Temperature and Salinity Profile Programme (GTSSP)</td>
<td>50000</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>International Coastal Atlas Network (ICAN)</td>
<td>25000</td>
<td>14000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>International Quality Controlled Database Project (IQeOD)</td>
<td>0</td>
<td>25000</td>
<td>3000</td>
<td>3000</td>
</tr>
<tr>
<td>IOC Ocean Data Practices System (OBPS)</td>
<td>7000</td>
<td>7000</td>
<td>21500</td>
<td>21000</td>
</tr>
<tr>
<td>IODE Ocean Data Portal (ODP)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IODE OceanDocs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
6.4. Overview of new proposals received

This agenda item was introduced by Mr Greg Reed (video). He recalled the overview of the new projects received and briefly discussed under agenda item 2.3.

1. Ocean InfoHub (OIH) – FUST funded project
2. Pacific Islands Marine Bioinvasions Alert Network (PacMAN) – FUST funded project
3. AquaDocs - to replace OceanDocs

He noted that only AquaDocs (which replaces OceanDocs and support to Aquatic Commons) would require funding and the requested budget is as reflected in the table below:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IODE/IAMSLIC AquaDocs</td>
<td>18300</td>
<td>19300</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

He then provided a total of requested funds:

| TOTALS REQUESTED | 409800 | 255800 | 99500 | 54000 |

6.5. Expected staffing IODE for 2021-2023

This agenda item was introduced by Mr Taco De Bruin. He noted that staff at the IOC Project Office for IODE has increased to 12 as shown in the table below.
However, most of the staff is paid through projects. General management of IODE including the IODE global projects not funded from extra-budgetary projects is carried out by Peter Pissierssens on an 80% FTE basis. This is insufficient. In addition, it is expected that Mr Pissierssens will retire sometime between June 2022 and December 2023.

In order to provide a long-term stable staffing level for IODE at least four additional and full-time staff will be needed. Full details and justification is provided in document IOC/IODE-MG-2021/6.5.

The Management Group noted the staffing and staffing requirements for 2021-2022 and called on Member States to consider secondments (in Oostende or working from their usual place of work).

6.6. Draft work plan and budget for submission to IODE-XXVI

This agenda item was introduced by Mr Greg Reed (video). He recalled the discussions under agenda item 6.3 and 6.4.

He recalled that UNESCO Regular Programme funds available for 2021 (balance of unspent funds 2020: US$ 68,000 and RP revenue 2021: US$ 117,000) are expected to be US$ $185,000, and for 2022 a total of US$ 117,000 (if there is no change as compared to the 2020-2021 biennium).

Funds expected to be available from the Project Office (direct contribution from Flanders) are expected to be $160,000 for 2021 $150,000 for 2022.

He concluded by remarking that the available funds would not cover the requested project funds, adding that the budget did not yet include costs for the planned Data Conference in November 2021, the 2022 IODE Management Group meeting, any travel costs, etc.

It was noted that, while the Government of Poland will kindly offer most of the costs associated with the event, some costs will need to be covered by IODE. In this regard it was proposed to set aside the amount of $30,000.

<table>
<thead>
<tr>
<th>Name</th>
<th>Type/level/</th>
<th>Funding source</th>
<th>Funding assured until</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr Peter Pissierssens</td>
<td>RP/P-5/0.80</td>
<td>UNESCO RP</td>
<td>permanent (ret. 2022-2024)</td>
</tr>
<tr>
<td>Mr Ward Appeltans</td>
<td>RP/P-3/0.90</td>
<td>UNESCO RP</td>
<td>permanent (OBIS)</td>
</tr>
<tr>
<td>Ms Claudia Delgado</td>
<td>loan/-1.00</td>
<td>VLIZ</td>
<td>permanent (OTGA)</td>
</tr>
<tr>
<td>Ms Kristin de Lichtervelde</td>
<td>loan/-1.00</td>
<td>VLIZ</td>
<td>permanent (Admin coordination)</td>
</tr>
<tr>
<td>Mr Arno Lambert</td>
<td>loan/-1.00</td>
<td>VLIZ</td>
<td>permanent (IT)</td>
</tr>
<tr>
<td>Ms Saara Suominen</td>
<td>loan/-1.00</td>
<td>VLIZ/EXB</td>
<td>14/09/2021 (OBIS)</td>
</tr>
<tr>
<td>Ms Sofie De Baenst</td>
<td>PA/G-3/1.00</td>
<td>EXB</td>
<td>12/2022 (PacMAN, OIH, OTGA)</td>
</tr>
<tr>
<td>Mr Pieter Provoost</td>
<td>PA/P-3/1.00</td>
<td>EXB multi</td>
<td>12/2021 (PacMAN project)</td>
</tr>
<tr>
<td>Mr Greg Reed</td>
<td>cons/-1.00</td>
<td>EXB OTGA</td>
<td>12/2022 (OTGA project)</td>
</tr>
<tr>
<td>Ms Pauline Simpson</td>
<td>cons/-0.50</td>
<td>EXB IODE/GOOS</td>
<td>12/2021 (OBPS project)</td>
</tr>
<tr>
<td>Mr Cristian Munoz</td>
<td>cons/-0.50</td>
<td>EXB 191</td>
<td>06/2021 (ODISCat project)</td>
</tr>
<tr>
<td>Ms Lucy Scott</td>
<td>cons/-1.00</td>
<td>EXB OIH</td>
<td>12/2022 (OIH project)</td>
</tr>
</tbody>
</table>
It was further noted that, if the IOC Assembly is organized at UNESCO HQ in Paris as usual, some staff and possibly Co-Chair travel costs need to be set aside in the budget. It was proposed to set aside $5,000 for this purpose.

Funds would also need to be set aside for the end of 2021 IODE Management Group (approx. $20,000) unless the decision was made to organize the meeting as an online meeting.

The Management Group, noting that the funds required to fully cover the expected costs for 2021-2022 were not available, decided to establish a pre-IODE-XXVI working group for work plan and budget to review the cost estimates and to prepare a work plan and budget that fits within the available expected revenue. The Management Group further requested the working group to provide a working document for submission to IODE-XXVI.

Mr Greg Reed was requested to contact all project leaders to discuss a revision of their budget request. Subsequently an online meeting will be organized to finalize the draft work plan and budget for submission to IODE-XXVI.

7. PREPARATIONS FOR 1ST INTERNATIONAL OCEAN DATA CONFERENCE (NOVEMBER 2021)

This agenda item was introduced by Mr Taco De Bruin. He recalled that as a result of the Covid-19 pandemic that started in February/March 2020 it was decided to organize the “First International Ocean Data Conference” in Sopot, Poland between either 15-19 November 2021 or 22-26 November 2021 (dates are provisional).

This event was initially considered as a postponed IODE Scientific Conference (as was organized prior to the past few IODE Sessions) but it was realized that this event could be the first of a series of biannual major conferences on ocean data and information, contributing also to the UN Decade.

As it was yet unclear whether it would be possible to organize the event as fully face-to-face or mixed with online options were left open. The target would be to reach a few hundred participants (mixed face-to-face/online).

Mr De Bruin introduced a first draft of a list of topics for consideration:

1. The Global Ocean Data Ecosystem: status and way forward
2. Data system networking and interoperability technology and methodology: status report
3. Identifying data and information user needs at the national level
4. Joining multi-sectoral data: experiences and required action
5. Best practices in data and information management
6. Global data sharing: changes in data sharing policies
7. The IOC Ocean InfoHub: experiences and next steps
8. The future of global databases: what’s next for WOD, OBIS,…
9. Data products and services: new developments
10. The small island dilemma: collecting, managing, sharing and using data with minimum resources
11. Including indigenous and citizen science data into the global data ecosystem
12. IODE 60th anniversary

The Management Group noted that scope notes for each of the topics should be added.

The Management Group requested the planning committee to define the expected outcome of the Conference, possibly a “Sopot statement”.

For the conference planning, programme and implementation the following arrangements were proposed:
- Planning Committee
- Scientific Committee
- Local Organizing Committee

Planning Committee

The Planning Committee will:
(i) Agree on the topics (sessions) of the conference
(ii) Agree on the format(s) of the conference (presentations, flash presentations, posters, side events,…)
(iii) Identify target audiences of the sessions
(iv) Provide scope descriptions for each of the sessions
(v) Agree on the report/publication of conference outcomes

The following MG members volunteered:
- Marcin Wichorowski
- Sergey Belov, Taco De Bruin
- IOC Decade coordination unit
- Pauline Simpson
- Jay Pearlman
- Yutaka Michida
- Lucy Scott
- IODE Secretariat (Sofie De Baenst,…)

The Management Group recommended that the following should also be invited to the Group:
- Pier Luigi Buttigieg
- Kateryna Kulakova
- Maxime Sweetlove (msweetlove@naturalsciences.be; Molecular data, Antarctic OBIS, Royal Belgian Institute for Natural Sciences? Brussels, Belgium)

It was proposed that the Planning Committee should start its work as soon as possible (January 2021).
**Scientific Committee**

The scientific committee will:

(i) Publish the calls for abstracts
(ii) Publish the calls for papers
(iii) Review submitted abstracts and decide on accepted abstracts as papers, posters, etc.

The following MG members volunteered:

- Marcin Wichorowski
- Sergey Belov, Taco De Bruin
- IOC Decade coordination unit
- Adam Leadbetter
- Johannes Karstensen
- Lucy Scott

The Management Group recommended that the following should also be invited to the Group:

- Dan Lear (dble@MBA.ac.uk; UK OBIS, Marine Biological Association of the United Kingdom; Plymouth, UK, https://www.iode.org/index.php?option=com_oe&task=viewMemberRecord&memberID=23316)
- John Nicholls (John.Nicholls@tcd.ie; Historic data, Trinity College, Dublin, Ireland, https://www.iode.org/index.php?option=com_oe&task=viewMemberRecord&memberID=27029)
- Hanieh Saeedi (hanieh.saeedi@senckenberg.de; Deep Sea OBIS, Senckenberg Research Institute and Natural History Museum. Frankfurt, Germany, https://www.iode.org/index.php?option=com_oe&task=viewMemberRecord&memberID=31273)
- Linwood Pendleton (ODF/C4IR)
- Sky Bristol
- Pier Luigi Buttigieg

The Management Group recommended to send out an invitation to the IODE community to attract membership with an interest and expertise in one or more of the conference topics.

**Local Organizing Committee**

The local organizing committee will:

(i) Make the necessary arrangements for the rental of conference room(s), catering, accommodation options
(ii) Liaise with the IODE Secretariat, planning committee and scientific committee on practical matters
(iii) Arrange for local and international press coverage of the event
(iv) Arrange for production of conference publicity including logo, posters, banners etc.

The local organizing committee will comprise:
- Mr Marcin Wichorowski (IOPAN, Sopot, Poland): head of the local organizing committee
- Other members to be designated by Marcin Wichorowski
- IODE Secretariat (liaison)
- Taco De Bruin

Mr De Bruin further noted that the IODE Secretariat would need to verify whether a Host Agreement between UNESCO/IOC and Poland would be needed for the Conference (which was the case for hosting IODE-XXVI). This would depend on whether UNESCO/IOC was the main host or whether Poland would be the main host.

The Management Group invited Mr Wichorowski to prepare a presentation on the venue and on the conference for presentation at IODE-XXVI.

The Management Group asked Mr Wichorowski to inform all participants about Covid19 related precautions and regulations (access to Poland, access to the venue, rules to follow at the venue,…)

8. ADOPTION OF THE REPORT

The Management Group reviewed the summary report and requested the Secretariat to circulate the revised draft by email for final edits (only spelling and edits of introductory text) by Monday 18 January 2021.

9. CLOSING OF THE MEETING

Dr Sergey Belov and Mr Taco De Bruin closed the meeting on 14 January 2021 at 15:00 UTC.
## ANNEX 1. AGENDA AND TIMETABLE

<table>
<thead>
<tr>
<th>Time</th>
<th>Tuesday 12 January</th>
<th>Wednesday 13 January</th>
<th>Thursday 14 January</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:00 UTC</td>
<td>1. OPENING OF THE MEETING/ ADOPTION OF AGENDA AND TIMETABLE</td>
<td>2. continued</td>
<td>7. PREPARATIONS FOR 1ST INTERNATIONAL OCEAN DATA CONFERENCE (NOVEMBER 2021) (continued)</td>
</tr>
<tr>
<td></td>
<td>2. REVIEW IODE-XXV ACTION SHEET</td>
<td>5. CONTRIBUTION OF IODE TO THE UN DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT</td>
<td>8. ADOPTION OF THE REPORT</td>
</tr>
<tr>
<td></td>
<td>2.1 Project reporting review</td>
<td>5.1. Updating of the IOC Strategic Plan for Data and Information Management (2022-2026)</td>
<td>9. CLOSING OF THE MEETING</td>
</tr>
<tr>
<td></td>
<td>2.2 IODE-XXV action sheet</td>
<td>5.2. Revision of the IOC Oceanographic Data Exchange Policy (2003 and 2019 revision)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.3 Proposed new projects</td>
<td>5.3. Role of IODE in the development and implementation of proposed UN Decade Data Strategy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. STATUS OF IMPLEMENTATION IODE-XXV RECS AND DEC.</td>
<td>5.4. Cooperation of IODE and Centre for the Fourth Industrial Revolution – Ocean and Ocean Data Foundation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3.2.4, 3.2.2, 3.4.1, 5.2.1, 5.3)</td>
<td>6. IODE FINANCIAL AND HUMAN RESOURCES 2021-2022</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. PREPARATIONS FOR IODE-XXVI</td>
<td>6.1. Status of UNESCO Regular Programme</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.1. Review and adoption of IODE-XXVI agenda and timetable</td>
<td>6.2. Status of unearmarked and earmarked extra-budgetary sources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.2. Decision on timeslots and number of plenaries per day</td>
<td>6.3. Overview of financial requests by IODE projects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.3. Decision on need for interpretation</td>
<td>4. Overview of new proposals received</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.4. Planning of prep workshops</td>
<td>6.5. Expected staffing IODE for 2021-2023</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.5. Planning for preparations for draft decisions, draft resolutions</td>
<td>6.6. Draft work plan and budget for submission to IODE-XXVI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.6. Performance Review of the IOC Project Office for IODE</td>
<td>7. PREPARATIONS FOR 1ST INTERNATIONAL OCEAN DATA CONFERENCE (NOVEMBER 2021)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.7. IODE achievement awards 2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15:00 UTC</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEX 2: PARTICIPANTS LIST

IODC Co-Chairs

Mr. Sergey BELOV
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Scientific Data Manager
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IODC MG members

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ANNEX 3: PROVISIONAL AGENDA AND TIMETABLE OF IODE-XXVI

Twenty-sixth Session of the IOC Committee on International Oceanographic Data and Information Exchange (IODE-XXVI)
Online, 20-23 April 2021

PROVISIONAL AGENDA

1. OPENING

1.1. INTRODUCTIONS BY THE CO-CHAIRS

2. ADMINISTRATIVE ARRANGEMENTS

2.1. ADOPTION OF THE AGENDA
2.2. DESIGNATION OF A RAPPORTEUR
2.3. SESSION TIME TABLE AND DOCUMENTATION
2.4. ESTABLISHMENT OF SESSIONAL WORKING GROUPS
2.5. TECHNICAL ARRANGEMENTS

3. REPORT ON THE PAST INTER-SESSIONAL PERIOD (2019-2021)

3.1. PROGRESS REPORT ON THE IODE-XXV WORK PLAN

3.2. STATUS OF THE IODE NETWORK
3.2.1. Reporting summary of NODCs, ADUs and AIUs
3.2.2. Review of NODC health status within the IODE network
3.2.3. Possible actions to expand the network

3.3. PROGRESS REPORTS OF GLOBAL IODE PROJECTS

3.3.1. Ocean Biodiversity Information System (OBIS)
3.3.2. Global Oceanographic Data Archaeology and Rescue Project (GODAR)
3.3.3. World Ocean Database (WOD)
3.3.4. Global Temperature and Salinity Profile Programme (GTSSPP)
3.3.5. Global Ocean Surface Underway Data Project (GOSUD)
3.3.6. International Coastal Atlas Network project (ICAN)
3.3.7. International Quality Controlled Database project (IQuOD)
3.3.8. ODIS Catalogue of Sources (ODISCat)
3.3.9. IOC Ocean Data and Information System (ODIS)
3.3.10. IOC Ocean Data Portal (ODP)
3.3.11. IODE Ocean Best Practices System (OBPS)
3.3.12. IODE OceanDocs (AquaDocs)
3.3.13. IODE OceanExpert
3.3.14. Ocean InfoHub (OIH)
3.3.15. OceanTeacher Global Academy (OTGA) (see 4.1)
3.3.16. PacMAN
3.4. IODE QUALITY MANAGEMENT FRAMEWORK IMPLEMENTATION

3.4.1. Data Centre/Information Centre accreditation: status and way forward
3.4.2. IODE Project and activity performance evaluation: status and way forward
3.4.3. IODE Manuals, Guidelines and other advisory materials

3.5. PROGRESS REPORTS OF JOINT ACTIVITIES WITH OTHER IOC PROGRAMMES AND OTHER PARTNERS

3.5.1. IOC global programmes
   3.5.1.1. Ocean Science
   3.5.1.2. GOOS
   3.5.1.3. MPR
   3.5.1.4. Tsunami

3.5.2. IOC regional programmes (sub-commissions and regional committees)
   3.5.2.1. IOCAFRICA
   3.5.2.2. IOCARIBE
   3.5.2.3. IOCINDIO
   3.5.2.4. IOC/WESTPAC
   3.5.2.5. 2nd International Indian Ocean Expedition (IIOE-2)
   3.5.2.6. Pacific SIDS

3.5.3. Post JCOMM

3.5.4. European Commission Projects
   3.5.4.1. EMODNET
   3.5.4.2. SEADATACLOUD
   3.5.4.3. ECOPOTENTIAL

3.5.5. ICSU World Data System (WDS)

3.5.6. C4IR: Ocean Data Platform

3.5.7. Aquatic Sciences and Fisheries Abstracts (ASFA)

3.5.8. Cooperation with IAMSLIC

4. IODE CAPACITY DEVELOPMENT

4.1. CONTRIBUTIONS OF IODE TOWARDS THE IMPLEMENTATION OF THE IOC CAPACITY DEVELOPMENT STRATEGY

4.1.1. OceanTeacher Global Academy
4.1.2. Other potential IODE contributions towards the CD strategy
5. IODE COMMUNICATION AND OUTREACH

5.1. NEED FOR A IODE COMMUNICATION STRATEGY
5.2. NEED FOR RE-DEVELOPMENT OF THE IODE WEB SITE

6. THE FUTURE OF IODE

6.1. FURTHER DEVELOPMENT OF ODIS
6.2. IODE CONTRIBUTION TO THE UN DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT
6.3. IOC STRATEGIC PLAN FOR DATA AND INFORMATION MANAGEMENT (2022-2026)
6.4. REVISION OF THE IOC OCEANOGRAPHIC DATA EXCHANGE POLICY
6.5. PERFORMANCE REVIEW OF THE IOC PROJECT OFFICE FOR IODE (agreement expiring 31/12/2021)

7. INTRODUCTION TO WORK PLAN AND BUDGET (FINANCIAL RESOURCES 2021-2022)

7.1. UNESCO REGULAR PROGRAMME FINANCIAL RESOURCES REMAINING FOR THE BIENNium 2020-2021
7.2. UNESCO REGULAR PROGRAMME FINANCIAL RESOURCES EXPECTED FOR THE BIENNium 2022-2023
7.3. IODE HUMAN RESOURCES (CURRENT AND REQUIRED)
   7.3.1. UNESCO Regular Programme staff
   7.3.2. Government of Flanders staff contribution
   7.3.3. Extra-budgetary project staff
   7.3.4. Internships and Secondments
7.4. CONFIRMED EXTRA-BUDGETARY FINANCIAL RESOURCES
   7.4.1. Government of Flanders (VLIZ)
      7.4.1.1. Financial contribution
      7.4.1.2. New building
   7.4.2. Government of Flanders FUST projects
   7.4.3. Other
7.5. OTHER RESOURCE OPPORTUNITIES FOR 2021-2022

8. PROPOSED WORK PLAN FOR THE NEXT INTER-SESSIONAL PERIOD (2021-2022)
8.1. FIRST INTERNATIONAL OCEAN DATA CONFERENCE (November 2021)
8.2. CURRENT PROJECTS
8.3. NEW INITIATIVES
8.4. IODE PROMOTION OPPORTUNITIES 2021-2022
8.5. WORK PLAN AND BUDGET 2021-2022

9. ANY OTHER BUSINESS

10. DATE AND PLACE OF THE NEXT SESSION (IODE-XXVII, 2023)
11. ELECTION OF THE CO-CHAIRS
12. IODE ACHIEVEMENTS AWARDS (virtual ceremony)
13. ADOPTION OF DECISIONS AND RECOMMENDATIONS
14. ADOPTION OF THE SUMMARY REPORT
15. CLOSURE

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