**Decision A-33/3.4.3**

**Development of an IOC data architecture**

The Assembly,

1. Having examined the concept proposal as outlined in IOC/A-33/3.4.3.Doc(1) and detailed in IOC/INF-1550,
2. Recalling:
3. the acceptance of the Global Ocean Observing System Strategy (Decision IOC-XXX/7.1.1), which identified Strategic Objective 7 as ‘ensure GOOS ocean observing data and information are FAIR with appropriate quality and latency’, with key outcomes around open data access and products based on essential ocean variables (EOVs), and the 13th GOOS Steering Committee Meeting, April 2024, had an action to ‘create and adopt a cross GOOS Digital Infrastructure/Ecosystem Strategy in alignment with IODE, Ocean Decade Data Strategy and other partners’ (GOOS Reports, 299),
4. the establishment, by the IOC Assembly at its 31st session, through Annex II to Decision A-31/3.4.2, of the IOC Ocean Data and Information System Project (ODIS),
5. the adoption, of the *IOC Strategic Plan for Ocean Data and Information Management (2023–2029)*, published as IOC Manuals and Guides, 92, by the by IOC Assembly during its 32nd session (A-32/3.4.2),
6. that the IODE Committee, at its 27th session, March 2023, instructed its Co-Chairs to ‘engage with the GOOS Observations Coordination Group Data Strategy Implementation Plan to ensure that it is fit for purpose from the ocean data management community standpoint’,
7. that the IOC Executive Council at its 57th session requested GOOS to provide a proposal to it at its 33rd session to evolve GOOS (EC-57/4.1.) and identified ‘Create a functioning Digital Ecosystem to enable end user applications’ as one of five key elements of this work,
8. Recognizing that an integrated data ecosystem will underpin delivery on all IOC Medium Term Strategy High Level Objectives (IOC/INF-1412), including the IOC-wide Strategy on Sustainable Ocean Planning and Management (SOPM), as defined in documents IOC/A-32/4.7.Doc(1),
9. Welcomes the outcomes of the First IODE/GOOS Data Workshop (IOC Workshop Reports, 311), that agreed:
   1. on a basic schema for the IOC Data Architecture, linking key IOC components into a holistic data ecosystem;
   2. to develop a proposal for the IOC Data Architecture that can be presented to the 33rd session of the IOC Assembly in June 2025;
   3. to establish an interim [Germany] IOC Data Architecture Working Group to write a proposal for a cross IOC data architecture/space, with Terms of Reference as noted in IOC Workshop Reports, 311;
10. [Germany]Notes that the 14th session of the GOOS Steering Committee in February 2025, welcomed the results of the IODE-GOOS Data Workshop and the proposal to develop an IOC Data Architecture;
11. Also notes that the IODE Committee, at its 28th session (March 2025):
12. welcomed the development of the IOC Data Architecture as an important collaboration within IOC to position the IOC in its leadership role to support Member States in achieving the high-level objectives under the IOC Medium Term Strategy;
13. also welcomed the alignment of the proposed IOC Data Architecture with the core digital architecture of the UN Ocean Decade;
14. agreed on the important role of ODIS and OBIS as systems, and requested that the role of NODCs and ADUs are recognized in the emerging IOC data architecture;
15. Endorses the IOC Data Architecture concept as outlined in IOC/A-33/3.4.3.Doc(1);
16. Establishes the IOC Data Architecture Working Group with the Terms of Reference in the Annex to this decision; [Germany]
17. [Germany]Requests the IOC Data Architecture working group of experts to deliver a detailed implementation plan and minimum viable product demonstrators for the consideration of the IOC Executive Council at its 59th session in June 2026.

Annex to Decision A-33/3.4.3

**Intersessional Working Group on the development of the IOC Data Architecture**

Terms of Reference

Taking into account the tasks as outlined in the IODE-GOOS Data Workshop report1 and feedback from the 14th session of the GOOS Steering Committee and IODE-28, the IOC Data Architecture working group of experts will undertake the following set of synthesised tasks.

Tasks:

1. Consult with a range of stakeholders on the proposal concept and integrate the feedback into a revised document;
2. Develop a detailed implementation plan for Phase 1 of an IOC data architecture to be submitted to the IOC Executive Council at its 59th session in June 2026;
3. Develop a limited set of minimal viable product demonstrators, that are feasible for implementation within a year and that will demonstrate the value of an integrated IOC Data Architecture to the IOC Executive Council in 2026;

(iv) Communicate with, and seek feedback from, stakeholders, including Member States, on the implementation plan for an IOC data architecture prior to the 59th session of the IOC Executive Council.

(1) The tasks defined at the IODE-GOOS Data Workshop are available in the final report (IOC Workshop Reports, 311), Section 13, subsection 13.1, under point 2. Establish and start the work of the IOC Data Architecture Working Group.

Membership

Membership of the intersessional Working Group on the development of the IOC Data Architecture consists of focal points from relevant IOC and Ocean Decade structures and components:

* IODE Ocean Data Information System
* IODE Ocean Biodiversity Information System / GOOS BioEco Panel
* GOOS Observations Coordination Group
* WMO-IOC Operational Centre—OceanOPS
* GOOS Management Team
* IOC Ocean Science Section
* GOOS Biogeochemistry Panel
* IODE Management Ocean Decade: Coordination Office for Ocean Observing, Coordination Office for Ocean Data Sharing, Collaborative Centre for Ocean Prediction, corporate Data Group
* Marine Policy and Regional Coordination Section (IOC Working Group on Sustainable Ocean Planning and Management)
* With additional experts invited as required.