Ocean Observatories Initiative Facility Board Charter

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1. General Purpose

The Ocean Observatories Initiative Facility Board (OOIFB) is tasked with representing the science community and users of the Ocean Observatories Initiative (OOI) Facility.

2. Mandate

- a. The OOIFB is a conduit and takes a leadership role in developing a community OOI Science Plan.
- b. The OOIFB stimulates and engages the user community through workshops, community meetings, and/or other community interactive mechanisms to provide the OOI and the NSF with current and forward-looking community input on the cutting-edge science and technological innovation that the OOI Facility can support.
- c. The OOIFB represents the science community supporting the OOI. It develops and implements strategies to help expand scientific and public awareness of the unique scientific and technological opportunities of the OOI.
- d. The OOIFB helps identify collaborative relationships with potential governmental, industrial,

- educational, and international partners where appropriate.
- e. The OOIFB provides information about community established best practices that address issues such as short- and long-term instrument performance, calibration, sampling schemes, incorporation of novel technologies, expansion of technological upgrades, as well as other items as appropriate.
- f. The OOIFB ensures fair and consistent access to the OOI by all sectors of the user community.

3. OOIFB Membership

- a. Membership of the OOIFB includes:
 - i. Seven members from the oceanographic community who are not considered in conflict with the operations of the OOI, one of whom will be Chair, and one who may be Chair- Elect or Immediate Past Chair. An institution may have only one member on the OOIFB at any given time. Although members are not Special Government Employees, standard NSF conflict rules will be used as a guide for any related concerns. The members will represent all career stages, including member(s) from industry and education fields where appropriate, and reflect the breadth of scientific inquiry and technological capability of the OOI. The seven non-conflicted members will be the voting body of OOIFB.
 - ii. Two additional non-voting members of the OOIFB from the OOI team will be appointed by the OOI operator. There are no term limits for the two OOI members.
 - iii. OOIFB Sub-committee chairs, if not already members of the OOIFB, will be considered as "non-voting" Members.
- b. *OOIFB Chair*: The Chair of the OOIFB is selected for their scientific, engineering and/or managerial leadership. The selection is made by the OOIFB and approved by NSF. The Chair represents OOIFB throughout the oceanographic community, calls, and presides over OOIFB meetings. The OOIFB Chair works with and provides direction to the OOIFB Administrative Support Office. The Chair may attend meetings of the OOIFB committees (if any) and select national and international scientific conferences as appropriate.

 The Chair will serve for two years in this role and is eligible for a second two-year term. Prior to the last full year of the Chair's final term, the OOIFB will either appoint their successor from one of the non-conflicted scientific Members on the OOIFB or may choose to seek nominations (including self-nominations) from the U.S. scientific community. The OOIFB will vote to select the Chair-Elect with the concurrence of NSF. The Chair-elect will serve for one year to overlap with the outgoing Chair's final year. At the conclusion of the Chair's term, if willing, the person may serve one more year as the immediate Past Chair (returning to a one-year member role).
- c. *Chair-Elect:* The duties of the Chair-Elect shall include preparing to assume the office of Chair under the schedule set forth in section 3.b. Normally the Chair-elect will come from the OOIFB. The Chair-elect will serve for one year to overlap with the outgoing Chair's second (final) year.
- d. *Non-Officer*, *non-conflicted OOIFB Members*: The OOIFB non-officer, voting members (this excludes the Chair and Chair-Elect) are selected to serve on the OOIFB for 3-year staggered rotations. They may serve two consecutive 3-year terms. The OOIFB appointments will be made

by the OOIFB with NSF's concurrence. An open nomination process (including self-nominations) with outreach to the broad oceanographic science, education, and engineering communities will be employed for new members.

- e. *Unexpired Terms* A vacancy appointment shall be made for the remainder of the unexpired term of the vacancy, and an individual so appointed may subsequently be appointed for two full 3-year terms if the remainder of the unexpired term is less than 1.5 years. After rotating off the OOIFB or a committee, a person will not be eligible for membership for a period of three years (one term).
- f. *Liaisons and Observers* Non-Member liaisons to the OOIFB, as approved by the OOIFB, could include the Chair(s) of any bodies providing internal advice to the OOI Operator (if not included in the formal representation described above), and appropriate UNOLS representative(s).
- g. **Non-Member observers** to the OOIFB will include representatives from NSF and may include representatives from other institutions not covered above, such as other federal funding agencies or international entities with significant investments in ocean observing.

4. Committees Structure

The OOIFB will be responsible for establishing and/or continuing sub-committees (either standing or ad hoc), and determining their mandates (technical, regional, etc.), representation, schedules, etc. Such sub-committees will report directly to the OOIFB, which will monitor their functionality and composition regarding expertise, training, demographics, and other parameters.

The Terms of Reference for each OOIFB standing committee will be included as an annex to this Charter.

Committee members will be appointed by the OOIFB in collaboration with NSF. An institution may have only one Member on a given committee at any given time. Perceived conflicts for sub-committee members may be considered subordinate to specifically valued technical and scientific expertise in the sub-committee appointment process.

OOIFB standing committees shall remain in effect for no longer than three years, after which time they shall be dissolved, unless they are reaffirmed by the OOIFB. The OOIFB shall review all Committee's terms of reference and activities as a basis for affirmation, change or dissolution.

OOIFB ad hoc committees shall be formed to address specific issues. The OOIFB will determine the membership, terms of reference and date of expiration of the ad hoc committee.

5. Meetings, Decisions, and Reporting

The OOIFB will convene at least once annually to execute its mandate. The OOIFB may convene meetings (in-person or virtual) as appropriate. Meetings will be announced on the OOIFB website.

A quorum for the OOIFB meetings (in-person and web/phone) requires a minimum of four non-conflicted members and a minimum of one OOI member. The OOIFB will operate via consensus of the voting members present, provided a quorum is represented. Such consensus need not be unanimous, as defined. When consensus cannot be reached in a timely manner the Chair may call for a vote. Simple majority rules apply. In the case of a tie, the Chair is the deciding vote. When dissenting opinions are expressed, they must be clearly indicated in the appropriate record of the discussion.

Minutes of each meeting of the OOIFB and any (sub) committees of the external OOI Advisory Structure will be taken by the OOIFB Administrative Support Office, and the draft (provisional) minutes will be made publicly available within one month of a meetings occurrence.

At the end of each calendar year, the OOIFB will provide a public summary of that year's activities to be distributed widely.

6. Modification and Discontinuation

NSF may adjust or discontinue the OOIFB as needed, to address changes in OOI operations, partnerships, or scientific and technical representation.

7. Record of Adoption and Amendments

- Charter adopted May 8, 2018
- Amended on July 25, 2018 Addition of Annex I, DDCI Terms of Reference
- Revised on October 30, 2018 Annex I DDCI Membership Update
- Revised on January 28, 2021 Annex I DSC replaces the Data Dissemination and Cyberinfrastructure (DDCI) Committee. The DSC Terms of Reference replace the DDCI Terms of Reference as Annex I.
- Revised on December 11, 2023 Major editorial revision and document re-organization. Relationship with NSF better defined. Chair-Elect position and terms inserted. Annex I revised as described in Annex I document history.

ANNEX I: Data Systems Committee (DSC) Terms of Reference

ANNEX I

Data Systems Committee (DSC) Terms of Reference

1. Introduction

The NSF Ocean Observatories Initiative Facility Board (OOIFB) established the Data Systems Committee (DSC) to help ensure timely and reliable access to high-quality OOI data.

2. Purpose

The DSC evaluates and recommends improvements to the data services policies and practices of the OOI Facility that will lead to more efficient and effective scientific use of OOI data. The DSC communicates its recommendations to the OOIFB. While there are numerous, and synergistic interactions between the DSC and the OOI Facility, the DSC does not directly task the OOI Facility, nor does the OOI Facility task the DSC. The DSC provides critical reviews of data systems and cyberinfrastructure plans, identifies short-term priorities, and suggests longer-term strategic actions on an ongoing basis through the OOIFB.

3. Organization / Membership

The DSC is composed of nine relevant subject matter experts, which includes the Chair and an Associate Chair. The members of the committee are drawn primarily from academia to reflect the interests of scientists, but membership may also include representatives from the government or private sector who can provide key advice about events and conditions that could affect the program. Typically, two representatives of the OOI Marine Implementing Organizations (MIOs) are also included as members. Conflicts will not necessarily preclude participation, in particular when the required expertise of any potential member outweighs any such conflict.

- a. *Chair* The DSC Chair represents the committee in all matters deemed necessary in the interest of the committee. The Chair presides over the committee meetings. Unless the Chair is already a member of the OOIFB, the Chair participates in OOIFB meetings as a non-voting member. The Chair cannot be an employee of an OOI MIO.
- b. *Chair-Elect* The DSC Chair-Elect is elected six months to a year before the current DSC Chair rotates off the committee. Normally, the Chair-elect will come from the DSC. The duties of the Chair-Elect shall include preparing to assume the office of Chair under the schedule set forth in section 3.a.
- c. *Ex-officio members*: Ex-officio (non-voting) representation on DSC will include the:
- i. OOIFB Chair and Chair-Elect
- ii. OOI Data Delivery Manager or equivalent OOI person.

- d. *Liaisons* Representatives of the OOI Cyberinfrastructure (CI) team are asked to participate as liaisons as needed. They are non-voting.
- e. *Appointment Process* Applications/nominations for membership (non-OOI MIO member positions) on the DSC and for the DSC Chair, Chair-Elect, and Associate Chair are reviewed and voted on by the standing DSC members. An open nomination process (including self-nominations) with outreach in the public domain is employed. The standing DSC selects one nominee for each open position and forwards the nomination to the OOIFB Chair. The OOIFB Chair, with the endorsement of the OOIFB, shall appoint the DSC members and Chair(s) from the nominations put forward by DSC. All appointments are made in collaboration with NSF.

The OOI Program Management Office (PMO) appoints up to two representatives of the OOI MIOs to serve as non-voting members of the DSC. The PMO can make replacement appointments of the MIO representatives at will.

5. *Term Lengths* – The DSC Chair and members are appointed with terms of staggered rotation. The Chair and members may serve up to two consecutive 3-year terms.

The OOI MIO appointments to the DSC have no designated term limits. Appointment lengths for these positions are determined by the OOI PMO.

6. *Unexpired Terms* - A vacancy appointment shall be for the remainder of the unexpired term of the vacancy, and an individual so appointed may subsequently be appointed for two full 3-year terms if the remainder of the unexpired term is less than 1.5 years.

4. Objectives

The objectives of the committee may include, but are not limited to, the following:

- Keeping abreast of the current state of the OOI cyberinfrastructure and data services with the goal of helping to promote maximum scientific use of OOI data. These efforts are informed by the FAIR Guiding Principles for scientific data management and stewardship, such that data are:
 - a) Findable
 - b) Accessible
 - c) Interoperable
 - d) Reusable

Further information on the FAIR Guiding Principles for scientific data management and stewardship can be found at https://www.go-fair.org/fair-principles/

- Encouraging the use of best practices, standards, and naming conventions established by the oceanographic community, including standards such as COARDS and CF conventions, as well as standard data access platforms such as ERDDAP.
- Engaging with the user community through meetings, surveys, and other means, to gauge user needs regarding OOI data systems, and to facilitate the promotion of a positive user experience that includes in part:

- a) Data systems that are reliable and easy to navigate
- b) Data that include well-organized and informative metadata
- c) The use of well-defined QC procedures (and flags)
- d) Documentation and user training information (e.g., code examples, cookbooks, tutorials)
- e) Implementation of best practices for data security, disaster recovery, and version control
- Staying current on potential new modes of data service and access, data analysis methodologies, and related technologies that facilitate the use of OOI data through engagement with the broader data science community, and promoting best practices by the OOI as such technologies emerge and develop.
- Engaging with the OOI PMO and MIOs in constructive interactions, subject to the limitations described above, regarding the priorities and plans of the OOI cyberinfrastructure groups.
- Making recommendations for data products, usage metrics, and improving the user experience on the OOI Data Explorer as well as other data service systems employed by the OOI.

5. Meetings/Reports

The DSC convenes at least once annually. The DSC may convene meetings (in-person or virtual) as appropriate. Minutes and reports are posted on an OOIFB-supported website.

A quorum for the DSC meetings (in-person and web/phone) requires a minimum of five members, at most, one being a representative from the OOI MIO. The DSC will operate via consensus of the voting members present, provided a quorum is represented. Such consensus need not be unanimous, as defined. When consensus cannot be reached in a timely manner the Chair may call for a vote. Simple majority rules apply. In the case of a tie, the Chair is the deciding vote.

Reports of DSC meetings, activities, and recommendations are made to the OOIFB. The DSC provides an annual report to the OOIFB on February 1 of each year.

6. Document History

- July 25, 2018 OOIFB adopts the DDCI Terms of Reference as Annex I.
- Annex I revised on October 30, 2018 DDCI Membership is updated.
- Annex I revised on January 28, 2021 The OOIFB endorses the DSC Terms of Reference.
- Annex I is replaced with the DSC Terms of Reference.
- Annex I revised on December 11, 2023 The DSC Chair, Associate Chair and Chair-Elect positions and appointment process are clarified. DSC purpose is updated, and quorum defined.