

Report of the First meeting of the IODE Intersessional Working Group on the Health of NODCs

Online, 29 September 2023

1 OPENING OF THE MEETING

The meeting was opened by Dr. Lesley Rickards, Chair IWG-NODCHHealth. She welcomed participants and introduced the agenda, attached as Annex I. Ms Iona had informed the Secretariat in advance that she was unable to attend.

2 BACKGROUND OF THE IWG

The IODE Committee through the Decision IODE-XXV.3.2.4 established an Intersessional working group (further, IWG) on the review of NODC health status within the IODE network. According to the Annex A of the Decision IODE-XXV.3.2.4 the objectives of the WG were:

- (i) propose metrics and processes for determining the health status of NODCs in the IODE network
- (ii) propose a process to assist NODCs in improving their health status
- (iii) recommend updates to the IOC Manuals and Guides No. 5 as appropriate
- (iv) submit an intermediate report to the 2020 meeting of the IODE Management Group
- (v) implement a provisional health status check of all NODCs
- (vi) submit its final report including the provisional health check report to IODE-XXVI (April 2021).

During the January 2020 meeting of the IODE Management Group it was recommended that IWG will propose the changes to IOC M&G 5 taking into account the following circumstances:

- (i) disbandment of JCOMM
- (ii) NODC and ADU relations
- (iii) WDC system superseded by WDS
- (iv) ODISCat and other data & information related IODE activities and projects

It was also proposed the following sample categories for the NODC metrics:

- (i) amount of data received/processed/archived
- (ii) data available online
- (iii) metadata availability
- (iv) QA/QC implemented
- (v) long term preservation
- (vi) interlinkages established with ADUs (if any)
- (vii) IODE QMF
- (viii) contribution of data to OBIS/ODP
- (ix) contribution of information to ODISCat
- (x) publications to OBPS
- (xi) capacity development plans and activities

- (xii) funding
- (xiii) participation in the international projects
- (xiv) sustainable operations strategy (if any)

As no action had taken place on this issue since IODE-XXV (Feb 2019), the IODE management group, at its January 2021 meeting had decided to establish a pre-committee working group (group 1) on this subject. The group met on 18 February 2021. It discussed necessary changes to IOC Manuals and Guides No. 5 and 67 and also recommended the drafting of IODE data centre health check procedures. Taking into account information and the checklist used by the OBIS Steering Group to check the health of OBIS nodes, the pre-committee working group suggested that it is valuable to be able to check the status independently and consider the full range of data management tasks of an NODC (see IOC M&G 5, page 5). Dr Lesley Rickards offered to prepare a short document with a preliminary checklist for the health status of NODCs for use by the inter-sessional working group. Some of the items require input from the NODC, but other items can be checked by IODE. Further work is needed to determine the NODC health check process, how frequently it should be carried out, precisely which checks need to be met for an NODC to be considered active and how inactive NODCs can be assisted to become active.

IODE-XXVI, noting with regret the lack of progress, decided to extend the Inter-sessional working group on the review of NODC health status within the IODE network and instructed it to provide:

- (i) a revision of IOC Manuals and Guides No. 5 (Guide for Establishing a National Oceanographic Data Centre);
- (ii) a revision of IOC Manuals and Guides No. 67 (IODE Quality Management Framework for National Oceanographic Data Centres and Associate Data Units (Revised edition)); and
- (iii) finalise IODE data centre health check procedures, for submission to the IODE Management Group for its January 2022 meeting.

IODE-XXVI instructed the Secretariat to publish and circulate the documents subsequent to their approval by the IODE Management Group.

Dr Lesley Rickards (UK) informed the Committee at IODE-XXVI that the brief document referred to above was available to the Intersessional Working Group.

Initial membership of the group included:

- United Kingdom of Great Britain and Northern Ireland - NODC-Ms Lesley Rickards
- Mozambique- Ms Clousa Maueua
- France - NODC – Ms Michèle Fichaut
- Germany - NODC – Ms Susanne Tamm

During the intersessional period between IODE-XXVI and IODE-XXVII (Mar 2023) the following work had been carried out:

- a revised version of IOC Manuals and Guides No. 5 (Guide for Establishing an IODE National Oceanographic Data Centre, IODE Associate Data Unit or IODE Associate Information Unit (3rd revised edition)) was published on <https://oceanexpert.org/document/30863>
- the revision of IOC Manuals and Guides No. 67 (IODE Quality Management Framework for National Oceanographic Data Centres and Associate Data Units

(Revised edition)) was published in 2019 on <https://oceanexpert.org/document/12661>

- a revision of IOC Manuals and Guides No. 73 (Guidelines for a Data Management Plan) was published in 2022 on <https://oceanexpert.org/document/31418>.

However the IODE data centre health check procedures was not finalized as planned and was not submitted to the IODE Management Group held in March 2022.

At IODE-27 it was noted that for a number of IODE NODCs and ADUs no response had been received to requests to update contact information (e.g. through IOC Circular Letter 2892 of 2 June 2022 and follow-up emails of 18 August 2022). In some cases, no contact had been made for over four years.

IODE-27 noted the slow progress on the IODE data centre health check procedures, although a short progress report has been made available very recently, decided to extend the “Inter-sessional working group on the review of NODC health status within the IODE network” for another inter-sessional period and instructed the working group to (i) provide a status report on the procedures to the IODE Management Group (2024); and (ii) finalize the procedures for submission to the 28th Session of the IODE Committee (2025).

IODE-27:

1. instructed the IODE Management Group to take into account the procedures used by the SG-OBIS as a possible model in their deliberations.
2. invited experts to join the working group and welcomed Sissy Iona (Greece), Sheldon Carter (OBIS ADU ISA, Jamaica), Lotta Fyrberg (Sweden), Lennert Tyberghein (OBIS SG), Yang Jinkun (China) and Mark Hebden (UK) as members of the group.
3. decided that, once a year, the IODE Secretariat should send out an IOC Circular Letter to all IOC Member States, inviting them to designate or update information on IODE national coordinators (data management and information management) and update the list on the IODE web site.
4. noted the revision of IOC Manuals and Guides No. 5 (Guide for Establishing an IODE National Oceanographic Data Centre, IODE Associate Data Unit or IODE Associate Information Unit) and thanked contributors for their work.
5. noted the revision of IOC Manuals and Guides No. 67 (IODE Quality Management Framework for National Oceanographic Data Centres and Associate Data Units (Revised edition)) and thanked contributors for their work.
6. noted the revision of IOC Manuals and Guides No. 73 (Guidelines for a Data Management Plan) and thanked contributors for their work.

3 ACTIONS TAKEN SINCE IODE-27 (MARCH 2023)

The brief document, referred to above by Dr Lesley Rickards, was updated by Dr Rickards in July 2023. The group was invited to take this document into consideration during its discussions under agenda item 5.

4 REQUIRED ACTIONS

The group was invited to recall its terms of reference:

- (i) propose metrics and processes for determining the health status of NODCs in the IODE network
- (ii) propose a process to assist NODCs in improving their health status
- (iii) recommend updates to the IOC Manuals and Guides No. 5 as appropriate
- (iv) submit an intermediate report to the 2020 meeting of the IODE Management Group
- (v) implement a provisional health status check of all NODCs
- (vi) submit its final report including the provisional health check report to IODE-XXVI.

Reference was also made to the OBIS node health check (<https://manual.obis.org/nodes.html#obis-node-health-status-check-and-transition-strategy>) which outlines a procedure for regular health checks and remedial measures.

5 DISCUSSIONS

The group was invited to draft a structure of the document that will include (i) metrics and processes for determining the health status of NODCs in the IODE network; and (ii) a process to assist NODCs in improving their health status.

This document should be submitted to the next session of the IODE management group (January/February 2024) as an intermediate report which will then enable a first provisional health status check of all NODCs to be implemented in 2024.

The revised document (taking into account the experience with the provisional health status check) will then be submitted for approval to IODE-28 (March 2025).

The Chair invited Mr Ward Appeltans to introduce the meeting to the health status check criteria of OBIS. He explained that 6 criteria were identified for OBIS. Only one condition (publishing data to OBIS) is one that OBIS nodes struggle with. There are other criteria like attending meetings, responding to emails, etc. Inactive nodes are contacted, followed by discussions. However, OBIS nodes that do not publish data can still be active in OBIS. A shift has been observed from publishing data as main criteria to e.g. building capacity in a region. So it was concluded that the reality of local situations in the OBIS nodes need to be taken into account when assessing health.

The Chair then recalled the July 2023 document and outlined the 6 preliminary NODC health status checklist:

Table: Preliminary NODC health status checklist (Version 2)

	NODC Status Check	Rationale	Comments / questions
1.	The NODC contact point does not respond to e-mails/CLs/other communications, etc. Followed up by IODE Secretariat contacting the NODC host institution or IOC Action Address.	No response from the NODC contact point may indicate that the NODC is not active. A timescale needs to be agreed – e.g. no replies received over the last two years. If no reply from the host institution or Action Address, then NODC is considered inactive. A reply clarifies whether the NODC is active or inactive, and whether capacity development is required.	Currently the IODE Secretariat sends a Circular Letter every year or two years to the IOC focal points and for cases where there was no answer we follow up with emails to the IODE contacts concerned. This provides an independent check with the IODE secretariat holding the information. Suggest that a positive response within past 4 years means that the NODC is active. 5 points for response from NODC or host institution/IOC Action Address.
2.	Has the NODC participated in IODE Committee meetings?	Can be checked independently from IODE Committee list of participants/meeting report. An NODC could be considered active if a representative has attended the most recent meeting (or one of the last two meetings).	This depends heavily on financial capacity of the NODC. Further discussion needed on the period. For example, do we consider the past 2 sessions (4 years) or can they have participated 15 years ago and then not anymore? Initial suggestion is to give 1 point/session going back 10 years max (so the NODC could gain a max of 5 points). Other questions needing discussion: (1) Will there be opportunities for remote participation in the future? That will help those who have no travel funds. (2) Should there be something included about responding to the IODE Survey? It's possible that an NODC might respond, but be unable to attend the IODE Committee due to lack of travel funds.
3.	Does the NODC have a website with information about the NODC, contact points, services provided?	Request website address if not already known. Active website indicates an active NODC. Can be checked independently.	This requires some manual work in checking for websites, or perhaps we could request the website address when checking the NODC contact point details? 2 points for an active website/up to date.
4.	Does the NODC contribute to IODE global data projects (e.g. WOD, GTSP, GOSUD,	Can be checked independently with the project leaders/steering groups. Need to agree a timescale –	This is important. Suggest give 10 points. Questions: (1) What is the best way of allocating the points? Does the NODC get

	GODAR) and/or to OBIS (through its national/regional node)? Or does the NODC contribute to regional projects.	e.g. data supplied in the last one or two years.	<p>10 points if it contributes to just one project, or should there be a scale?</p> <p>(2) What period should this cover? Is one to two years sufficient or should it be longer – e.g. 5 years?)</p> <p>(3) Is a list of regional projects needed? And are there contact points for these available?</p> <p>Note: Need to check that the right answers can be obtained. For example BODC contributes to Argo and these data go to WOD, but because of the way they arrive from the Argo Global Data Assembly Centres, I don't think that they are tagged with BODC - it is possible that they are NOC or just UK.</p>
5.	Has the NODC contributed to ODIScat?	Can be checked with ODIScat. Need to agree on timescale (i.e. information last reviewed/ updated or new entries added. 1 or perhaps 2 years ago).	<p>Need to agree on timescale, i.e. for when information last reviewed/updated or new entries added. Maybe somewhere between 1 and 5 years?</p> <p>Information will be in ODIScat and can be provided by the coordinator?</p> <p>5 points for active contribution</p>
6.	Capacity development plans and activities – has the NODC attended at OTGA training courses?	Can be checked independently against OTGA course attendance records and information provided by the OTGA Coordinator.	<p>As this is currently stated then Member States/NODCs that do not need the training are disadvantaged. However it can be re-phrased to include capacity development plans/activities as provider or recipient. Need to indicate how an NODC can get involved as a provider. Needs a timescale – maybe 5 years?</p> <p>Assign 3 points.</p>

The meeting discussed and revised the table as follows:

Table: Preliminary NODC health status checklist (Version 3)

	NODC Status Check	Rationale	Comments / questions
1.	The NODC contact point does not respond to e-mails/CLs/other communications, etc. Followed up by IODE Secretariat contacting the NODC host institution or IOC Action Address.	No response from the NODC contact point may indicate that the NODC is not active. A timescale needs to be agreed – e.g. no replies received over the last two years. If no reply from the host institution or Action Address, then NODC is considered inactive. A reply clarifies	<p>Currently the IODE Secretariat sends a Circular Letter every year to the IOC focal points and for cases where there was no answer we follow up with emails to the IODE contacts concerned. This provides an independent check with the IODE secretariat holding the information.</p> <p>Suggest that failure to respond to the Circular Letter and subsequent</p>

		whether the NODC is active or inactive, and whether capacity development is required.	communications within the past 2 years means that the NODC is inactive. 5 points for response from NODC or host institution/IOC Action Address.
2.	Has the NODC participated in IODE Committee meetings?	Can be checked independently from IODE Committee list of participants/meeting report. An NODC could be considered active if a representative has attended the most recent meeting (or one of the last two meetings).	Give 1 point/session attended going back 10 years max (so the NODC could gain a max of 5 points).
3	Has the NODC participated in inter-sessional group activities including surveys	Can be checked independently through lists of participants in online meetings and associated reports	Give 1 point per event/survey in which the NODC participated within the past 2 years with a maximum of 4 points .
4.	Does the NODC have a website with information about the NODC, contact points, services provided?	Request website address if not already known. Active website indicates an active NODC. Can be checked independently.	As part of the IOC circular letter and contacting NODCs the URL of the NODC will be requested (and checked by the IODE Secretariat) and included in the IODE web site. 2 points for an <u>active</u> website/up to date.
5.	Does the NODC web site mention its role as NODC in the IODE programme (with link to the IODE web site)	Check NODC web site for reference and link	1 point for a reference and link to IODE in the NODC web site
6.	Does the NODC contribute to/participate in IODE programme components, programme activities or projects	Can be checked independently with the project leaders/steering groups. Need to agree a timescale – e.g. data supplied in the last one or two years.	Give 10 points if the NODC has participated in one or more IODE programme components, activities or projects within the past 2 years. Example: membership of a steering group, providing data or information on a regular basis, providing training, ... Questions: (4) What is the best way of allocating the points? Does the NODC get 10 points if it contributes to just one project, or should there be a scale? This needs more consideration (5) The definition of “participation” need scoping

7.	Has the NODC contributed to ODIScat?	Can be checked with ODIScat. Need to agree on timescale (i.e. information last reviewed/ updated or new entries added. 1 or perhaps 2 years age).	<p>5 points for active contribution</p> <p>Need to agree on timescale, i.e. for when information last reviewed/updated or new entries added. Maybe somewhere between 1 and 5 years?</p> <p>Information will be in ODIScat and can be provided by the coordinator?</p>
8.	Capacity development plans and activities – has the NODC attended any internal or external training or other capacity development activities	Can be checked through survey (which will not be independent unless certification is provided)	<p>Assign maximum 3 points.</p> <p>Need to discuss points depending on number and/or internal/external. Time: within past 2 years.</p>
9	Does the NODC have accreditation (IODE or other)	<p>Certificate should be requested (for non-IODE accreditation)</p> <p>Examples: CTS, ISO,...</p> <p>For CTS, a list of certified repositories is available from their website (https://amt.coretrustseal.org/certificates)</p>	Assign 3 points

It was agreed that further reflection was needed to finalize the table. It was decided that the table would be provided as a GDocs document and that the IWG members would provide further comments after which an agreement could be made on the final version.

It was suggested that if an NODC has fewer than 15 points it is considered inactive and remedial measures need to be taken. This would also benefit from some further discussion as there was no unanimous agreement on this matter.

6 WORK PLAN

It was agreed that the draft document (that will include (i) metrics and processes for determining the health status of NODCs in the IODE network; and (ii) a process to assist NODCs in improving their health status) should be completed by December 2023. It was agreed that members of the group would provide further comments on the revised table (in the Gdoc) with the objective of agreeing on a final version by December 2023.

An additional meeting may be planned to look at how to assist NODCs on improving their health status.

7 CLOSING OF THE MEETING

The Chair of the group closed the meeting at 14:55.

ANNEX I

Agenda of the Meeting

1. OPENING OF THE MEETING
2. BACKGROUND OF THE IWG
3. ACTIONS TAKEN SINCE IODE-27 (MARCH 2023)
4. REQUIRED ACTIONS
5. DISCUSSIONS
6. WORK PLAN
7. CLOSING OF THE MEETING

ANNEX II

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