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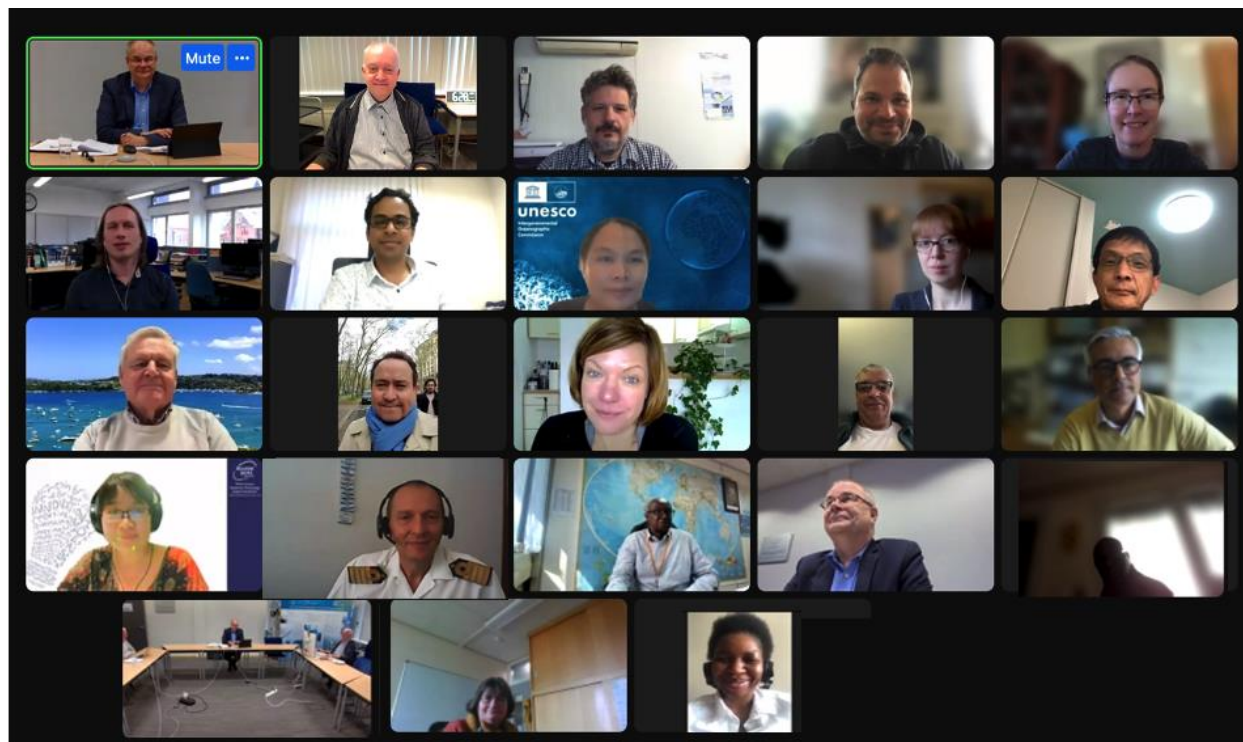
**INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION**  
(of UNESCO)

**First meeting of the IOC Inter-sessional Working  
Group on the Revision of the IOC Oceanographic Data  
Exchange Policy (IWG-DATAPOLICY-I)**

IOC Project Office for IODE, Oostende, Belgium (and online)  
5-6 April 2022

**SUMMARY REPORT**

IOC/IWG-DATAPOLICY-I/3  
Oostende, 6 April 2022  
Original English



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- Annex I: Agenda  
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# 1. OPENING OF THE MEETING/ ADOPTION OF AGENDA AND TIMETABLE

## 1.1. Adoption of the agenda and timetable

The meeting was opened on 5 July 2022 at 13h00 CET by **Mr Peter Pissierssens, IOC/IODE Secretariat**. He invited the Group to review the Provisional Agenda for the meeting (Document IOC/IWG-DATAPOLICY-I/1) and Annotated Agenda (Document IOC/IWG-DATAPOLICY-I/2) available [online](#), provide amendments and its adoption.

**The Group adopted the Agenda for the meeting.** It is attached to this report as [Annex I](#).

## 1.2. Introduction of participants

**Mr Pissierssens** invited all participants to introduce themselves briefly. The list of participants is attached as [Annex II](#).

## 1.3. Election of (Co-)Chair(s) of the Group

**Mr Pissierssens** informed the Group of candidates that had come forward to (co-)Chair the group. He informed the Group that he had sent an email to all members on 30 March, inviting candidate Chairs to come forward. Only one candidate came forward, i.e. Mr Taco De Bruin.

**The Group elected Mr Taco De Bruin as Chair of the Group.**

# 2. THE CURRENT IOC DATA POLICY (2003-2019)

This agenda item was introduced by **Mr Taco De Bruin, Chair IWG-DATAPOLICY**. He recalled the Policy as adopted by the IOC Assembly during its twenty-second session (24 June - 4 July 2003) and slightly revised (clause 5) by its 30th Session (June-July 2019):

### IOC OCEANOGRAPHIC DATA EXCHANGE POLICY (2019)

The Intergovernmental Oceanographic Commission,

**Recalling** Resolution XX-11 on Oceanographic Data Exchange Policy (1999),

**Noting:**

(i) WMO Resolution 40 (Cg-XII) which defined a policy and practice for the international exchange of meteorological and related data and is intended to promote the free and unrestricted exchange of basic data,

(ii) The “Statement on Data Management Policy for Global Ocean Programmes” as submitted by the IOC Committee on IODE (Recommendation IODE-XIV.6, December 1992) and adopted by the IOC Assembly at its 17th Session (Paris, 25 February–11 March 1993) (para. 220 of the Summary Report of the Session),

**Considering** the reports of deliberations of:

(i) The Ad hoc Working Group on Oceanographic Data Exchange Policy (Paris, 15–17 May 2000),

(ii) The First Session of the Intergovernmental Working Group on IOC Oceanographic Data Exchange Policy (Brussels, 29–31 May 2001),

(iii) The Second Session of the Intergovernmental Working Group on IOC Oceanographic Data Exchange Policy (Paris, 17–18 June 2002),

**Adopts** the IOC Oceanographic Data Exchange Policy as detailed in the Annex to this Resolution.

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Financial implications: none

### **Annex to Resolution XXII-6 IOC Oceanographic Data Exchange Policy**

#### **Preamble**

The timely, free and unrestricted international exchange of oceanographic data is essential for the efficient acquisition, integration and use of ocean observations gathered by the countries of the world for a wide variety of purposes including the prediction of weather and climate, the operational forecasting of the marine environment, the preservation of life, the mitigation of human-induced changes in the marine and coastal environment, as well as for the advancement of scientific understanding that makes this possible.

**Recognising** the vital importance of these purposes to all humankind and the role of IOC and its programmes in this regard, the Member States of the Intergovernmental Oceanographic Commission agree that the following clauses shall frame the IOC policy for the international exchange of oceanographic data and its associated metadata.

#### **Clause 1**

Member States shall provide timely, free and unrestricted access to all data, associated metadata and products generated under the auspices of IOC programmes.

#### **Clause 2**

Member States are encouraged to provide timely, free and unrestricted access to relevant data and associated metadata from non-IOC programmes that are essential for application to the preservation of life, beneficial public use and protection of the ocean environment, the forecasting of weather, the operational forecasting of the marine environment, the monitoring and modelling of climate and sustainable development in the marine environment.

#### **Clause 3**

Member States are encouraged to provide timely, free and unrestricted access to

oceanographic data and associated metadata, as referred to in Clauses 1 and 2 above, for non-commercial use by the research and education communities, provided that any products or results of such use shall be published in the open literature without delay or restriction.

#### **Clause 4**

With the objective of encouraging the participation of governmental and non-governmental marine data gathering bodies in international oceanographic data exchange and maximizing the contribution of oceanographic data from all sources, this Policy acknowledges the right of Member States and data originators to determine the terms of such exchange, in a manner consistent with international conventions, where applicable.

#### **Clause 5 (\*)**

Member States shall, to the best practicable degree, use data centres linked to the World Data System (WDS) and IODE's NODCs, such as the World Ocean Database (WOD) and the Ocean Biogeographic Information System (OBIS), as long-term repositories for oceanographic data and associated metadata.

#### **Clause 6**

Member States shall enhance the capacity in developing countries to obtain and manage oceanographic data and information and assist them to benefit fully from the exchange of oceanographic data, associated metadata and products. This shall be achieved through the non-discriminatory transfer of technology and knowledge using appropriate means, including IOC's Training Education and Mutual Assistance (TEMA) programme and through other relevant IOC programmes.

#### **Definitions**

**'Free and unrestricted'** means non-discriminatory and without charge. "Without charge", in the context of this resolution means at no more than the cost of reproduction and delivery, without charge for the data and products themselves.

**'Data'** consists of oceanographic observation data, derived data and gridded fields.

**'Metadata'** is 'data about data' describing the content, quality, condition, and other characteristics of data.

**'Non-commercial'** means not conducted for profit, cost-recovery or re-sale.

**'Timely'** in this context means the distribution of data and/or products, sufficiently rapidly to be of value for a given application

**'Product'** means a value-added enhancement of data applied to a particular application.

(\*) previous version read: " Member States shall, to the best practicable degree, use data centres linked to IODE's NODC and WDC network as long-term repositories for oceanographic data and associated metadata. IOC programmes will co-operate with data contributors to ensure that data can be accepted into the appropriate systems and can meet quality requirements."

### 3. TERMS OF REFERENCE OF THE GROUP

This agenda item was introduced by **Mr Taco De Bruin, Chair IWG-DATAPOLICY.**

It was recalled that IODE-XXVI had discussed the need for revision of the IOC Data Policy (2003) and had stated the following:

- 160 “The 2021 meeting of the IODE Management Group recommended the establishment of a pre-committee working group. The membership of the group can be found on <http://www.iode.org/iode26>. The group met on 17 February 2021. Its main objective was to discuss the need for a revision of the IOC Oceanographic Data Exchange Policy and, if the group agreed, to draft a recommendation, including objectives and terms of reference, to establish a new IOC intersessional working group on the revision of the IOC Oceanographic data exchange policy, to be submitted to IODE-XXVI.
- 161 The working group agreed that there are enough elements that warrant a revision of the IOC data policy. The result should be an ambitious new data policy that further promotes and supports free and open exchange of data. However, concerns were raised to carefully consider what needed to change, taking into account the amount of effort that went into building consensus on the current policy, especially with respect to acknowledging the rights of countries and the non-binding nature of the policy. Suggestions were made to build on other models such as the data policy of WMO that has a main policy with core principles, and modular extensions pertaining to specific data types or applications and products. This way the scope of the policy could be further expanded more easily if needed without opening a debate on the core elements.
- 162 The Representative of WMO invited IODE members invited to support the WMO unified data policy in making the ocean data available on free and unrestricted basis. Further it is suggested that IODE consider aligning its data policy as appropriate.
- 163 The group also felt that a longer-term cross-agency group should be established to periodically meet to ensure alignment of policies and scope collective changes. The ultimate goal is to increase global cooperation, improved sharing and uptake of data. It is therefore important that data policies should not hamper, but streamline this within commonly agreed terms (e.g., use of a Creative Commons licence). The IOC data policy, which was developed 20 years ago, will therefore be reviewed to ensure alignment with data policies at national, regional and international level as well as those from other sectors, and should reflect current international principles, which did not yet exist in 2003.
- 164 The IWG could also share experiences and provide advice to the UN Ocean Decade, but it was not felt within the group’s remit to propose a data policy for the Decade, because of the broader scope of data types (e.g. socio-economic data) and the involvement of many other partners beyond IOC. The WG6 group agreed that the membership of this IWG should include representatives from other agencies such as WMO, UNEP and UNSD.
- 165 The representative of the World Meteorological Organization (WMO), Ms Champika Gallage briefly informed the Committee about WMO’s actions related to data policy. WMO has promoted free and open exchange of weather, climate and water data since 1873, and has created a global standardized network, which is the cornerstone of weather, climate and hydrological services. Lack of data from several regions has a negative impact on accuracy of early warning services globally, but especially in data sparse regions on land and ocean. The international data exchange practice and policy, which defines the free flow

of observations around the globe, has evolved significantly over this period. WMO is working on a Unified Data Policy which will replace the decades old and sectoral data policies on meteorological, hydrological and climate data. New unified data policy will be submitted for approval at the next WMO Congress in October 2021 and will be enforced thereafter. The new WMO Unified data policy covers Earth system data exchanged among Members, including ocean domain and defines the discipline and domain-specific practice for mandatory data that are necessary for the provision of services in support of the protection of life and property and for the well-being of all nations, and recommended data that are required to support Earth system monitoring and prediction activities at the global, regional and national levels. IODE Members are invited to support the WMO unified data policy in making the ocean data available on free and unrestricted basis. Further it is suggested that IODE consider aligning its data policy as appropriate. Link to WMO Unified data policy brochure (<https://meetings.wmo.int/INFCOM-1-III/SitePages/Update%20on%20WMO%20Data%20Policy.aspx> )

- 166 **The Committee noted** that the current data exchange policy does not refer to information as used by IODE. The Committee referred to (iv) of the objectives of the inter-sessional working group.
- 167 **The Committee noted** that this policy would also pertain to information and information products.
- 168 **The Committee adopted** Recommendation IODE-XXVI.6.4"

IODE-XXVI had adopted Recommendation IODE-XXVI.6.4 which reads as follows:

#### **Recommendation IODE-XXVI.6.4**

#### **REVISION OF THE IOC OCEANOGRAPHIC DATA EXCHANGE POLICY (2003, 2019)**

The IODE Committee,

**Recalling** that the IOC Oceanographic Data Exchange Policy was published in 2003 (IOC Resolution XXII-6, 2003) and since then has only had one minor change: Clause 5 revised in 2019 by Decision IOC-XXX/7.2.1(II) of the Assembly at its 30<sup>th</sup> session, Paris, 26 June–4 July 2019.

#### **Recognizing that:**

- (i) the timely and unrestricted international exchange of oceanographic data is essential for the efficient acquisition, integration and use of ocean observations gathered by the countries of the world for a wide variety of purposes including the prediction of weather and climate, the operational forecasting of the marine environment, the preservation of life, the mitigation of human-induced changes in the marine and coastal environment, as well as for the advancement of scientific understanding that makes this possible,
- (ii) the global digital data, information, and knowledge ecosystem has radically changed since 2003,
- (iii) rapidly advancing technologies have altered the Data Stewardship paradigm (IWG-SODIS Report),



- (iv) a large amount of effort went into building consensus on the current IOC data policy, so deciding what needs to change should be considered carefully, especially with respect to acknowledging the rights of countries and the non-binding nature of the policy,
- (v) there is a need to improve interoperability and align the IOC data policy with those at national, regional, and international levels,
- (vi) more and more Public-Private Partnerships are being established. To allow the best use of the data in this context as well as in the context of using data in journals from private publishers, the IOC data policy should provide clear guidance for commercial use of data.

**Noting that** partner and sister organizations are changing their data policies, which can serve as a model for updating the IOC data policy,

**Noting further** that principles of data sharing and licensing are becoming globally recognized and adopted, e.g., FAIR Principles and Creative Commons licences,

**Recommends** establishing the IOC inter-sessional working group on the Revision of the IOC Oceanographic Data Exchange Policy 2003 (2019) with terms of reference as included in Annex A to this recommendation.

#### **Annex A to Recommendation IODE-XXVI.6.4**

##### **Terms of Reference of the IOC inter-sessional working group on the revision of the IOC Oceanographic Data Exchange Policy 2003 (2019) (IWG-DATAPOLICY)**

Objectives: This working group will:

- (i) Create an inventory of existing international, national and organizational data policies,
- (ii) Review and compare existing international, national and organizational data policies
- (iii) Develop a glossary with clear definitions (e.g., open vs free and unrestricted; data vs metadata vs information, licence options),
- (iv) Investigate the expansion of scope and name of the IOC Oceanographic Data Exchange Policy,
- (v) Gather advice from partner/sister organizations and recognized data provider/manager organizations,
- (vi) Organize a broad consultation on the proposed revised IOC Ocean Data Policy with Member States, IOC global and regional programmes,
- (vii) Submit a revised IOC Oceanographic Data Exchange Policy to the 32nd Session of the IOC Assembly (2023).

Modalities: The IWG-DATAPOLICY aims to have at least 3 meetings (second half 2021, first half 2022). The group may meet online, face-to-face or mixed as appropriate. For face-to-face meetings participation will be self-funded.

Membership: The IOC intersessional working group on the revision of the IOC Oceanographic Data Exchange Policy 2003 (2019) will be composed, *inter alia*, of:

- (i) Chair of the working group (to be designated by the group)
- (ii) Invited experts from the global data and information communities including UN agencies
- (iii) Representatives of IOC programmes and projects
- (iv) IOC (including IODE) Secretariat

The initial membership will include:

1. WMO
2. United States of America – Mr Hernan Garcia
3. Expert- Pier Luigi Buttigieg
4. GOOS OCG (Kevin O'Brien) – (tentatively volunteered: will confirm name of participant after next OCG executive meeting)
5. OBPS – Pauline Simpson
6. Canada ADU (OBIS) – Ms Lenore Bajona
7. IOC/Tsunami Unit – Mr Bernardo Aliaga
8. Frederico Antonio Saraiva Nogueira

The Secretariat will start up the process for the group to meet as soon as possible.”

The 31<sup>st</sup> Session of the IOC Assembly (2021) subsequently adopted Decision A-31/3.4.2 (International Oceanographic Data and Information Exchange) including its Annex 3 that provides the objectives, modalities and membership of the Group:

Annex 3 to Dec. A-31/3.4.2

**Terms of Reference of the IOC Inter-sessional Working Group on the Revision of the IOC Oceanographic Data Exchange Policy (IWG-DATAPOLICY)**

Objectives: This working group will:

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- (vi) organize a broad consultation on the proposed revised IOC Ocean Data Policy with Member States, IOC global and regional programmes,
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Modalities: The IWG-DATAPOLICY aims to have at least three meetings (second half 2021, first half 2022). The group may meet online, face-to-face or mixed as appropriate. For face-to-face meetings participation will be self-funded.

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- Chair of the working group (to be designated by the group)
- Invited experts from the global data and information communities including UN agencies
- Representatives of IOC programmes and projects
- IOC (including IODE) Secretariat

## 4. STEPS TOWARDS A NEW IOC DATA POLICY

This agenda item was introduced by **Mr Peter Pissierssens (IOC/IODE Secretariat)**.

Reference was made to IOC Circular Letter No. 2864 of 9 November 2021 which outlined the process to facilitate the work of the IWG-DATAPOLICY and timeline:

- STEP 1: (December 2021–February 2022): implementation of desk study on existing policies (IOC, UN, non-UN) by the IOC/IODE Secretariat
- STEP 2: (December 2021–February 2022): The IOC/IODE Secretariat will invite the following IOC regional subsidiary bodies and IOC programmes and projects to designate representatives to the IWG-DATAPOLICY as follows:
  - IOCAFRICA: 1-2 representatives
  - IOCARIBE: 1-2 representatives
  - IOCINDIO: 1-2 representatives
  - WESTPAC: 1-2 representatives
  - IODE: 1-2 representatives
  - Ocean Science (HAB, Ocean Acidification and GOSR): 3 representatives
  - GOOS: 1-2 representatives
  - Marine Policy and Regional Coordination: 1-2 representatives
  - Tsunami: 1-2 representatives.

All IOC global programmes and regional sub-commissions and regional committee were invited to designate representatives in the Group. The current membership has been composed based on these designations and is as follows with a total of 12 members:

- IOCAFRICA: Z. Sohou; C. Sete (2)
- IOCARIBE: no members designated yet
- IOCINDIO: no members designated yet
- WESTPAC: A. T. Hwai, K. Ando (2)
- IODE: S. Belov (1)
- OCEAN SCIENCE (3): HAB: E. Bresnan/ OA: B. Pfeil/ GOSR: K. Isensee
- GOOS: J. Buck (1)
- MARINE POLICY AND REGIONAL COORDINATION: no members designated
- TSUNAMI: F. Bravo Cuvi; M. Charalampakis/ GLOSS: E. Bradshaw (2)

In addition members of the IOC Secretariat as well as the IOC Chair have been invited to the Group.

- STEP 3: (March–May 2022): The IWG-DATAPOLICY will be invited to discuss the issue and draft a first version of the new policy (the group will be invited to elect a Chair and possibly a Co-Chair)
- STEP 4: (May–July 2022): The IWG-DATAPOLICY will share the draft with selected UN and non-UN organizations and partners and seek their comments
- STEP 5: (August/September 2022): An information session will be organized (online) for IOC Member States (national focal points) to collect feedback
- STEP 6: (September–November 2022): The IWG-DATAPOLICY will revise the first draft of the new IOC data policy based on input from steps 4 and 5.
- STEP 7: (February/March 2023): The IWG-DATAPOLICY will submit the first draft of the new IOC data policy to IODE intergovernmental Committee at its 27th session
- STEP 8: (May/June 2023): The IWG-DATAPOLICY will submit the final draft of the new proposed policy to the IOC Assembly at its 32nd session for adoption.

The objectives of the working group state:

- (i) Create an inventory of existing international, national and organizational data policies,  
 >>> *This task has been carried out by Mr Greg Reed and this inventory is discussed under agenda item 5.*
- (ii) Review and compare existing international, national and organizational data policies  
 >>>> *This task has been carried out by Mr Greg Reed and this inventory is discussed under agenda item 5.*
- (iii) Develop a glossary with clear definitions (e.g., open vs free and unrestricted; data vs metadata vs information, licence options),  
 >>>> *This task has been carried out by Mr Greg Reed and this inventory is discussed under agenda item 5.*
- (iv) Investigate the expansion of scope and name of the IOC Oceanographic Data Exchange Policy,  
 >>> *this needs to be addressed by the Group*
- (v) Gather advice from partner/sister organizations and recognized data provider/manager organizations,  
 >>> *this will be addressed through STEP 4 (see above)*
- (vi) Organize a broad consultation on the proposed revised IOC Ocean Data Policy with Member States, IOC global and regional programmes,  
 >>> *this will be addressed by STEP 5 (see above)*

- (vii) Submit a revised IOC Oceanographic Data Exchange Policy to the 32nd Session of the IOC Assembly (2023).  
>>> *this will be addressed by STEP 8 (see above)*

## 5. DESK STUDY ON EXISTING DATA POLICIES

This agenda item was introduced by **Mr Greg Reed, IODE Consultant**. He referred to [Document IOC/IWG-DATAPOLICY-I/5](#) (Desk Study on existing data policies (IOC, UN, non-UN)).

Mr Reed noted the IOC Oceanographic Data Exchange Policy was adopted by the IOC Assembly during its twenty-second session (2003) with Clause 5 being slightly revised by the 30th Session of the IOC Assembly (2019) to include OBIS as a long-term repository. He also noted that the data sharing landscape has changed considerably in the twenty years since the IOC Assembly adopted the IOC Oceanographic Data Exchange Policy and many data policies now include statements on data licensing and FAIR data principles and a number of data centres and international organizations currently specify "open by default" policies.

Sharing of data promotes scientific progress and is actively promoted by different groups including governments, data centres, researchers and funding agencies. Sharing data also encourages a culture of openness and accountability in scientific research. Specifically, it provides improved access to, and sharing of, data by:

- Reinforcing open scientific inquiry
- Encouraging diversity of analysis and opinion
- Promoting new research
- Making possible the testing of new or alternative hypotheses and methods of analysis
- Supporting studies on data collection methods and measurement
- Facilitating the education of new researchers
- Enabling the exploration of topics not envisioned by the initial investigators
- Permitting the creation of new data sets when data from multiple sources are combined.

Open data can be freely used, modified and shared by anyone for any purpose. Open data can generally be defined as data that is:

- freely available to download in a reusable form
- licensed with minimal restrictions to reuse
- well described with provenance and reuse information
- available in convenient, modifiable and open formats
- managed by the data custodian on an ongoing basis

Document IOC/IWG-DATAPOLICY-I/5 reviewed a number of intergovernmental, international and national organisations data policies and many of these policies have the following common elements:

- (i) Open data

- (ii) Data licensing
- (iii) FAIR principles

The IWG reviewed each of these elements.

- (i) Open data. Data from publicly funded research should be open by design order to release their full potential as a primary resource for knowledge discovery. Full, free, and open access to data is considered the norm for many of the data policies reviewed. The UN Ocean Decade of Ocean Science for Sustainable Development will deliver seven key outcomes, one of which is “*An accessible ocean with open and equitable access to data, information and technology and innovation*”. The EU Open Data Directive has established the principle that research data resulting from publicly funded research must be Open by default.
- (ii) Data licensing. Open access to data requires that the rights to reuse the data are made clear to the user and this can be achieved through the use of a common-use data licence. A data licence is a legal instrument that specifies the terms and conditions under which data can be accessed, used, shared and attributed to the original data owner. The most commonly and widely used data licences are the suite of Creative Commons licences which provides a simple, standardized way to share data that allows the user to re-use, re-mix and share content legally. The European Commission, for example, stresses the importance of open data licensing and has decided to standardize the usage of Creative Commons licences as the standards for open licences under the European Commission’s re-use policy.
- (iii) FAIR principles. Another common element of the reviewed policies is/are the FAIR principles. FAIR simply states that data should be Findable, Accessible, Interoperable and Reusable and places specific emphasis on enhancing the ability of machines to automatically find, access and use the data. Making data FAIR provides a range of benefits to the wider research community by enabling researchers to publish, share, cite and reuse research data. The FAIR principles enjoy broad recognition through the ocean data community and increasingly in the ocean observing community.

The desk study reviewed 9 international and intergovernmental data policies as well as 21 data policies implemented by IODE data centres and projects. The study identified:

- 28 data policies that specified open access/open data
- 21 policies that specified the use of a data licence and 12 of these identified the use of Creative Commons licences
- 10 policies that specified FAIR principles

Full details of the desk study can be found in Document IOC/IWG-DATAPOLICY-I/5.

The IWG was invited to comment.

**The Group recommended that:**

- CARE principles should be taken into account in the new policy;
  - o specific cases are taken into account. Example: eg the OCG AniBOS (animal telemetry network) which needs data restriction to protect marine species so access cannot be fully open. (see OCG feedback for IOC data policy working group: [https://docs.google.com/spreadsheets/d/1mfNGv-s-mS-h6RZPgm-v-0lxa5dtuwR9ChBGs\\_Cqz4w/edit#gid=0](https://docs.google.com/spreadsheets/d/1mfNGv-s-mS-h6RZPgm-v-0lxa5dtuwR9ChBGs_Cqz4w/edit#gid=0) );
- the policy should address biological as well as geophysical and biogeochemical data, in addition to physical data;
- data requirements for climate applications are taken into account. Special reference was made in this regard to “timely” as used in the current policy, as timely varies widely depending on the application;
- the policy should be concise and should not aim to be legally binding (which it cannot be as an IOC decision);
- the policy should take into account limitations to sharing, imposed by national legislation (eg related to national defence);
- the policy should take into account data other than “scientific” data, taking into account the ambitions of the Decade;
- the policy “lifespan” should at least cover the current UN Decade of Ocean Science for Sustainable Development;
- the policy should include reference to quality of the data and “fit-for-purpose” and drive the need for standardization of metadata/data;
- from a policy point of view, it may not be necessary nor relevant to distinguish between data and metadata.
- the policy should cover data and information
- the policy should use the term: ‘data sharing’ instead of ‘data exchange’
- the policy should be actionable and used by the community

## Reference was made to:

- publications by Christine Borgman <http://christineborgman.info/publications/>
- UK Government blog on the Q-FAIR concept: <https://geospatialcommission.blog.gov.uk/2021/06/25/byte-ing-back-better-introducing-a-q-fair-approach-to-geospatial-data-improvement/?msclkid=9dc9f837b4dc11eca0429fa066faf840>

**The Group noted** that the data requirements and need for specific “licensing” will be quite varied and covering all in a single policy will be difficult or impossible.

**The Group recommended** to develop a “general” policy with a number of annexes, each of which can be developed by and will target specific communities/communities of practice. These annexes will be “guidelines” to be used by the communities (as data providers).

## 6. REQUIRED REVISIONS TO THE IOC DATA POLICY (2003)

### 6.1. Data policy and Data terms of use/licensing

This agenda item was introduced by **Mr Greg Reed, IODE Consultant**. Mr Reed explained that the current IOC data policy describes the obligations by IOC Member States as data providers. While IOC cannot enforce the policy it has been adopted as an agreement between IOC Member States to facilitate the work of the IODE programme. The final decision on the sharing of data with other parties remained largely under the control of the provider during the pre-WWW era as data were shared on physical media (magnetic tapes, disks etc). However, since the mid-1990s data and information were increasingly made available through the Internet. While some data are available only after registration and/or approval by the provider upon request, many are shared on a “free and open” basis. This implies that anyone can download the data and use them for any purpose, commercial or non-commercial and without any need for citing the owner/provider or for providing the provenance metadata.

The Group was invited to discuss whether the IOC data policy should maintain its focus on the obligations by IOC Member States as data providers or whether it should also include terms of use of the data/information.

**The Group noted** that citation will be difficult to impossible for large, aggregated data sets. At a certain stage it is impossible to credit all data providers but will need to go to the next level.

**The Group noted** that IOC cannot and should not try to enforce the compliance (by data users) with licences.

**The Group noted** that many of the IODE data centres do not apply licences to their data sets and **recommended** the IODE data centre network to agree on licences to be applied at least nationally but preferably IODE network wide, stating that this would be a “good practice”.

**The Group recommended** that “open data” should not be combined with “closed data” for the development of a product.

**The Group recommended** that the use of “open data” by the commercial sector to development for-profit products should be considered as such a product may compete with products developed by the data centres to cover their own costs.

**The Group noted** that a similar formulation as the one used in the current policy (i.e. applicable to IOC programmes/activities whilst at the same time encourages Member States to apply it to other data) could be explored.



## 6.2. Drafting of revision: timetable and assigning of responsibilities

This agenda item was introduced by **Mr Taco De Bruin, Chair IWG-DATAPOLICY**.

Mr De Bruin recalled the timing of the steps as described in agenda item 4. Mr De Bruin invited members of the IWG to volunteer as writers for the new policy document. He further proposed that the work should be done online (Google document) with regular discussions with the entire IWG online and by email. The work plan was further discussed under agenda item 8.

## 7. IDENTIFICATION OF UN AND NON-UN ORGANIZATIONS AND OTHER PARTNERS

This agenda item was introduced by **Mr Greg Reed, IODE Consultant**. He referred to Document IOC/IWG-DATAPOLICY-I/5.5 which reviewed and compared the data policies of WMO, EU, UNESCO, WDS, CLIVAR, GEOSS and OECD and also looked at declarations and principles:

- WMO Unified Data Policy
- EU Open Data Directive
- UNESCO Recommendation on Open Science
- WDS Data Sharing Principles<sup>13</sup>
- CLIVAR Data Policy
- GEOSS Data Sharing Principles (2015)
- OECD Principles and Guidelines for Access to Research Data from Public Funding
- The Beijing Declaration on Research Data
- Principles for Polar Data policies
- UN Decade of Ocean Science for Sustainable Development

He also recalled the two workshops that had been held in 2020:

- 1- **“Workshop on data sharing between UN agencies as a contribution to the UN decade of ocean science for sustainable development”** (20 April 2020) with participation from: IOC, FAO, ISA, UN ESCAP, UN statistics, UNDP, UNEP, UNFCCC, WCMC and WMO.
- 2- **“International data sharing workshop for non-UN IGOs, Global and Regional organizations and projects, NGOs and private sector”** (12 October 2020) with participation from AADC (Australian Antarctic Data Centre), AKER Biomarine, AMAZON web services, ASDI (Amazon Sustainability Data Initiative), BPPS, BSC PS (Black Sea), C4IR, CIESM, CODATA, CORDIO, EMODNET, ESRI, EUROCEAN, EuroGOOS, GEO Blue Planet, FUGRO, HELCOM, iAtlantic, IEEE, IHO, IIOE2, International Council for Environmental Law, IORA, ISC, IUCN, Leibniz Centre for Tropical Marine Research (ZMT), MARIS, MBA, MBON, Mercator, Microsoft, OECD, PICES, POGO, REVOcean, Schmidt Ocean Institute, SCOR, Seabed2030, SeaDataNet, SOOS, WDS, WIOMSA, World Ocean Council.

He invited the Group to review these lists and agree on a list of UN agencies, non-UN IGOs, Global and Regional organizations and projects, NGOs and private sector with whom we will share the draft under STEP 4 (“with selected UN and non-UN organizations and partners and seek their comments”).

**The Group decided to start with the list as mentioned under 1- and 2- above but to invite IWG members to add additional organizations as needed. It was agreed that the list will remain open until planning of the meeting referred to under STEP 4 (see agenda item 8) starts.**

**The Group decided, in order to ensure the best possible involvement of the various IOC communities in the drafting of the policy, to invite all IOC programmes (represented in the IWG-DATAPOLICY) to inform their communities on the planning for STEP 5 (information session for IOC Member States (national focal points) to collect feedback) so they can discuss their views with their respective national focal points prior to the information session.**

The Group was informed that a search in the OBPS (on 6 April 2022) resulted in 561 hits.

**The Group recommended to add the IOC data policy to OBPS once adopted.**

**The Group recommended to take relevant OBPS document (that relate to data policies) into account when communities of practice develop guidelines that can be annexed to the new policy.**

**The Group recommended to investigate which data policy is referenced most of the OBPS document that relate to, or mention a data policy. The Group invited the SG-OBPS to assist with this investigation.**

## 8. WORK PLAN 2022

This agenda item was introduced by **Mr Taco De Bruin, Chair IWG-DATAPOLICY**. He summarized the actions agreed upon during previous agenda items.

**The Group agreed on the following action items and timing**

**- Outcome of STEP 3:**

- Greg Reed will communicate with members of the IWG to coordinate writing (throughout April)
- The first step will be a skeleton structure. Hernan Garcia has started drafting this in the Google document and will be joined by Justin Buck, Mr Greg Reed and Mr Taco De Bruin. The skeleton will be completed by 20 April.
- 2<sup>nd</sup> meeting of the IWG: early May (2 hour max meeting). This will also be an occasion to finetune the structure.
- First draft of the new policy should be ready by end May
- Lines of the document should be numbered for easy feedback referencing

- **STEP 4:** (May–July 2022): The IWG-DATAPOLICY will share the draft with selected UN and non-UN organizations and partners and seek their comments
  - Meeting to be held early June
  - Feedback welcomed until beginning of August
- **STEP 5:** (August/September 2022): An information session will be organized (online) for IOC Member States (national focal points) to collect feedback
  - Meeting to be held early-mid September
- **STEP 6:** (September–November 2022): The IWG-DATAPOLICY will revise the first draft of the new IOC data policy based on input from steps 4 and 5.
  - Meeting of the IWG-DATAPOLICY: early-mid October 2022 to discuss feedback from step 4 and 5.
  - Deadline for final version of policy: beginning December 2022.
- **STEP 7:** The IWG-DATAPOLICY will submit the first draft of the new IOC data policy to IODE Committee at its 27th session (February/March 2023)
  - Deadline: Document should be ready by 1 December 2022
- **STEP 8:** The IWG-DATAPOLICY will submit the final draft of the new proposed policy to the IOC Assembly at its 32nd session for adoption (June 2023).
  - Deadline: Document should be ready by 1 April

Doodles will be sent out for the meetings as soon as possible.

## 9. CLOSING OF THE MEETING

The meeting was closed by **Mr Taco De Bruin, Chair IWG-DATAPOLICY** on 6 April 2022 at 14:20 CEST.

He requested the Secretariat to finalize the report and share it by email to all members of the Group by 10 April.



## ANNEX 1. AGENDA AND TIMETABLE

5 April 2022 (13h00-15h00)

1. **OPENING OF THE MEETING AND ADOPTION OF THE AGENDA/TIMETABLE (20')**
  - 1.1. Adoption of the agenda and timetable (5 min)
  - 1.2. Introduction of participants (10 min)
  - 1.3. Election of (Co-)Chair(s) of the Group (5 min)
2. **THE CURRENT IOC DATA POLICY (2003-2019) (10')**
3. **TERMS OF REFERENCE OF THE GROUP (15')**
4. **STEPS TOWARDS A NEW IOC DATA POLICY (10')**
5. **DESK STUDY ON EXISTING DATA POLICIES (20')**

6 April 2022 (13h00-15h00)

6. **REQUIRED REVISIONS TO THE IOC DATA POLICY (2003) (30')**
  - 6.1. Data policy and Data terms of use (15')
  - 6.2. Drafting of revision: timetable and assigning of responsibilities (15')
7. **IDENTIFICATION OF UN AND NON-UN ORGANIZATIONS AND OTHER PARTNERS (20')**
8. **WORK PLAN 2022 (15')**
9. **CLOSING OF THE MEETING (5')**



## ANNEX 2: LIST OF PARTICIPANTS

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