

Report of IOC Review into Future GEBCO Engagement

Submitted by Marine Policy and Regional Coordination Section, Intergovernmental
Oceanographic Commission of UNESCO

SUMMARY

Executive Summary: The document contains details of the IOC Review into future GEBCO engagement and the discussions at the IOC Executive Council.

Action to be taken: Please refer to paragraph 14

Related documents: GGC33-4.3b: Review of IOC's role and involvement in the General Bathymetric Chart of the Oceans (GEBCO) project

GGC33-4.3c: Summary Report of the 49th Session of the IOC Executive Council, Paris, UNESCO, 7 - 10 June 2016 (item 4.4)

Summary of Review of IOC's Role and Involvement in GEBCO Project

1. The Review Group with regard to IOC's Role and Involvement in the GEBCO Project was established during the 2015-2016 intersessional period, following Dec.6.2(II) of the IOC Assembly at its 28th session (Paris, 18–25 June 2015). Accordingly, the Review Group conducted the review of the GEBCO project during the intersessional period by correspondence. The objectives of the Review Group were as follows:

- a. Generally, consider IOC's role and involvement in the GEBCO project, and specifically identify the user needs in bathymetry from the relevant IOC programmes and regional subsidiary bodies in relation to the GEBCO bathymetric dataset and products;
- b. Consider IOC's role and involvement in the GEBCO project, based upon needs identified under (i) above;
- c. Recommend key elements for future governing mechanism of the GEBCO project in relation to IOC's role and involvement.

2. The Review Group was comprised of 15 IOC Member State representatives and 8 experts each nominated by the GEBCO Guiding Committee and 7 IOC technical and regional subsidiary bodies: Global Ocean Observing System (GLOSS), WMO-IOC Joint Technical Commission for Oceanography and Marine Meteorology (JCOMM), International Oceanographic Data and Information Exchange (IODE), Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (TOWS-WG), IOC Sub-Commission for Africa and the Adjacent Island States (IOCAFRICA), IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE) and IOC Sub-Commission for the Western Pacific (WESTPAC). Dr Alexander Postnov, IOC Vice-Chair, representing TOWS-WG, was elected as Chair of the Review Group.

3. The Review Group conducted a questionnaire survey among its members to collect inputs concerning potential and existing user needs for GEBCO datasets and products. The above-mentioned 7 IOC technical and regional subsidiary bodies were requested to provide their responses to the questionnaire, and Member State representatives were also able to provide their inputs. Total 16 members of the Review Group responded to the questionnaire.

4. The Review Group evaluated the results of the survey, focusing on the relevance of the existing GEBCO products to relevant IOC activities, user's needs for GEBCO datasets and products, relevant capacity development needs, and possible cooperation among GEBCO and IOC technical and regional subsidiary bodies.

5. The Review Group concluded that the majority of the IOC technical and regional subsidiary bodies were interested in the GEBCO products and found them useful for their relevant activities. In this light, the Review Group recommended that IOC should continue its involvement in the GEBCO project and collect and integrate the IOC user requirements to GEBCO products, on a regular basis.

6. The report was prepared by the Review Group and submitted to the IOC Executive Council as working document: [IOC/EC-XLIX/2 Annex 8](#) and its [Addendum](#). The electronic version of the document is available online at IOC Executive Council website: <http://www.ioc-unesco.org/EC-49>

Decision of 49th IOC Executive Council

7. The outcome of the review was examined by the Executive Council at the 49th session (Paris, 7-10 June 2016) under item 4.4: "IOC role in support of the General Bathymetric Chart of the Oceans (GEBCO) Project, State of Progress in the Associated Review". The Executive Council stressed the significance of IOC's enhanced involvement in the GEBCO project, which produces bathymetric data and products indispensable to activities promoted by IOC and its Member States. The Council further stressed the importance of contributions made by IOC and Member States to GEBCO activities. In this light, the Executive Council adopted Decision EC-XLIX/4.4. (Please see attachment 1.)

Way Forward

8. To implement Decision EC-XLIX/4.4, the following main actions will be pursued:

IOC Working Group on user requirements and contributions to GEBCO products:

9. IOC regular working group will be established to collect, integrate and assess the user requirements to GEBCO products, in accordance with the terms of reference of the working group contained in the Annex to decision EC-XLIX/4.4. In this regard, relevant IOC technical and regional subsidiary bodies and GOOS Regional Alliances, GEBCO Guiding Committee, and IOC Member States will be invited to nominate experts to serve on the Working Group. Also, IHO representative is invited to participate in the Working Group.

10. The Working Group will work, where appropriate, in close cooperation with GEBCO Guiding Committee, and IOC Secretariat will be in constant communication with IHO secretariat.

IOC funding to GEBCO:

11. IOC will explore the possibility of seeking additional funds to GEBCO, including extrabudgetary sources, at the 29th session of IOC Assembly in June 2017, where IOC's financial matters including draft programme and budget for 2018–2021 will be discussed by the Assembly.

Potential support from Member States:

12. IOC Member States are encouraged to: (i) cooperate to advance basin-scale, campaign mapping and accelerate the delivery of GEBCO objectives and general knowledge of the ocean; and (ii) facilitate GEBCO capacity development including training opportunities.
13. IOC Secretariat requests GEBCO Guiding Committee to develop guidelines, which will be used by scientist communities of IOC Member States in order to advance basin-scale, campaign mapping and contribute to GEBCO data. The guidelines will be distributed to IOC Member States through IOC Secretariat and will be available at the relevant website.

Actions Required of GEBCO Guiding Committee

14. GEBCO Guiding Committee is invited to:
 - a. Note the contents of the report, particularly the outcomes of the Review and the IOC Executive Council decision (IOC/EC-XLIX, Dec.4.4);
 - b. Cooperate with IOC for the work of IOC Working Group on user requirements and contributions to GEBCO products, in particular through nomination of an expert to serve as a member of the Working Group; and
 - c. Develop guidelines for use by scientists in the IOC community in order to advance basin-scale, campaign mapping and contribute to GEBCO data.

IOC/EC-XLIX, Dec.4.4

**IOC Role in Support of the General Bathymetric Chart of the Oceans (GEBCO) Project,
State of Progress in the Associated Review**

The Executive Council,

1. Having examined documents IOC/EC-XLIX/2 Annex 8 and Addendum,
2. Recalling decision IOC-XXVIII/6.2(II) on the review of IOC's role and involvement in the General Bathymetric Chart of the Oceans (GEBCO),
3. Noting the finding of the Review that GEBCO's "traditional" and "shallow water" products are indispensable to IOC activities,
4. Further noting the conclusion of the Review Group with regard to IOC's role and involvement in the GEBCO Project,
5. Decides to:
 - (i) Enhance the IOC involvement in the GEBCO project;
 - (ii) Establish a regular working group tasked to collect, integrate and assess the user requirements to GEBCO products; and
 - (iii) Address ways of potential contributions to GEBCO data and products;
6. Encourages Member States to:
 - (i) Cooperate to advance basin-scale, campaign mapping and accelerate the delivery of GEBCO objectives and general knowledge of the ocean; and
 - (ii) Facilitate GEBCO capacity development including training opportunities;
7. Requests the Executive Secretary to:
 - (i) Convey this decision to the International Hydrographic Organization (IHO) and the GEBCO Guiding Committee;
 - (ii) Establish the working group in accordance with the terms of reference of the working group contained in the Annex to this decision, in consultation with IHO and GEBCO Guiding Committee; and
 - (iii) Explore the possibility of seeking additional funds to GEBCO, including extrabudgetary sources.

Terms of Reference
of the IOC Working Group on user requirements and contributions to GEBCO products

Mandate

1. The Working Group shall:
 - i. Collect, integrate and assess the user needs and requirements to GEBCO data and products.
 - ii. Facilitate and guide the use of GEBCO datasets and products through the user communities that represent relevant IOC technical and regional subsidiary bodies.
 - iii. Identify potential contributions to GEBCO data and products.
2. The Working Group shall take into account:
 - i. The goals of the IHO-IOC GEBCO Project;
 - ii. Capacity-development needs in relation to GEBCO products;
 - iii. Possible ways to strengthen cooperation between GEBCO and IOC technical and regional subsidiary bodies and GOOS Regional Alliances;
 - iv. Possible mechanism to identify user needs in GEBCO datasets and products and provide input to GEBCO Guiding Committee.
 - v. Possible contributions of data from Member States to GEBCO.

Modus operandi

3. The bulk of the Working Group's work will be done by correspondence, co-ordinated by the Executive Secretary IOC.
4. The Working Group should work, where appropriate, in close cooperation with GEBCO Guiding Committee.
5. The Working Group will produce a document assessing and summarizing the needs and requirements and potential contributions of the IOC community in bathymetric data and products.
6. The assessment will be conducted every two years, unless otherwise decided.
7. The document reporting the assessment is reviewed and finalized by IOC governing bodies and forwarded by the Executive Secretary to the Secretariat of the International Hydrographic Organization and GEBCO Guiding Committee.

Membership

8. The Working Group shall consist of:
 - i. Experts nominated by chairs of relevant IOC technical and regional subsidiary bodies and GOOS Regional Alliances.
 - ii. Experts nominated by the chair of GEBCO Guiding Committee.
 - iii. Experts nominated by interested IOC Member States.
9. The Chair shall be elected by the Working Group members.
10. The representative of the International Hydrographic Organization / other partners and stakeholders may participate in activities of the Working Group on a specific item, if deemed appropriate.