



# Triennial Review of the Working Group on User Requirements and Contributions to GEBCO Products (2024)



Item 4.4 of the Provisional Agenda

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Intergovernmental  
Oceanographic  
Commission



**2021** United Nations Decade  
**2030** of Ocean Science  
for Sustainable Development

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IOC Vice Chair

# Rationale

- GEBCO provides global bathymetric data which is crucial to the work of the IOC Community both from a user and contributor perspective
- EC Decision XLIX.4.4 (2014) to strengthen IOC engagement in GEBCO
- Regular mechanism established to assess user requirements needs as it relates to GEBCO products, from the IOC perspective, and identify ways to strengthen potential IOC contributions to GEBCO data and products (Terms of reference defined through Decision EC-XLIX/Dec.4.4 (2016) and Decision A-31/3.5.1 (2021))
- Previous Assessment conducted in 2017, 2021 building on an international questionnaire
- 2024 assessment based on inputs of MS representatives, national institutions working with ocean mapping products, IOC technical bodies but also industry and non-governmental organisations (using the global network of the GEBCO-Nippon Foundation Seabed 2030 Project)
- Assessment product transmitted to IHO and GEBCO Guiding Committee to inform their work and future developments

# Summary of findings

- A total of 59 responses from 39 countries were received, to the questionnaire circulated through IOC Circular Letter and Seabed 2030 networks (Opened from 14 March-19 April 2024)

Type of organisations	Geographical origin (IOC Groups)
Government other (24) Government hydrographic agencies (10) University (12) Industry (8) NGO (4) Other (1)	Group 1 (North America & Western Europe) 23 Group 2 (Eastern Europe / Russian Federation) 1 Group 3 (Central & South America, Caribbean) 8 Group 4 (Asia & Oceania) 12 Group 5 (Africa & Middle East) 13

- Respondents are highly supportive of GEBCO, with over 90% valuing the GEBCO gridded bathymetry datasets, over 70% valuing the GEBCO web services, and over 60% valuing the undersea feature names and capacity development aspects of GEBCO's work.
- Less interest in availability of hard copy products or in the *History of GEBCO*.



# Summary of findings

- Demand for higher resolution products, with considerable interest in expanding the scope of GEBCO data products to include a larger number of parameters and data layers, notwithstanding that some of these lies outside GEBCO's current remit.
- Demand for greater choice of file formats and improved compatibility with state-of-the-art software products used in the geospatial sector, including better visualisation tools.
- Concerns about security within coastal zones and EEZs, with a greater awareness of risks to subsea infrastructure from malevolent actors.
- Suggestion to create an international seabed data users group is a commonly requested feature, that would help transfer skills and promote knowledge exchange and capacity development.
- Provision of specialist training sessions and workshops identified as a priority

# Summary of findings

- Concept of rewards and incentives for sharing data emerged from several respondents, particularly where this might encourage industry to share data more widely.
- Working Group, further recommended to integrate the GEBCO capacity development needs and priorities within the IOC Capacity Development Strategy and delivery mechanism such as the Ocean Teacher Global Academy.
- Connecting the GEBCO data infrastructure with the IOC Ocean Data Information System was also highlighted.
- For future assessments of GEBCO user needs, the Working Group recommended that the results should be more granular in order to identify needs by type of users or by regional groups.
- The Working Group welcomed the increased diversity of respondents compared to the 2021 previous exercise but highlighted the lack of responses from specific IOC programmes.
- More in-depth discussion/needs assessment to be conducted with IOC programmes in the future.



# Thanks to the Member of the Working Group

Australia, Bangladesh, China, Colombia, Ecuador, Egypt, Mexico, Morocco, Norway, Qatar, Republic of Korea, Russian Federation, Senegal and USA



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And to the GEBICO-Nippon Foundation-Seabed  
2030 project team for their technical support !!





GEBCO

# Governance Review – IOC Executive Council

IHO Assistant Director Sam Harper  
GEBCO Secretary

# Recap of Work Undertaken to date

Status of work items:

- Map organizational and functional structure – **Complete**
- Identify relationships and conduct governance instrument gap analysis – **Complete**
- Assess instruments and work plans of GEBCO bodies to identify initial findings – **Complete**
- Financial review – **Initial review complete**
- Legal review – **Initial consultation undertaken**
- Final summary report and **continuous improvement process development** – **Complete**



# Key Considerations/Clarifications

- The Governance review report is meant to be a tool to assist GEBCO in adapting its working practices to become more efficient and able to meet the objectives set out in the strategy
- It is up to the GGC to decide how to take this forward in terms of implementation
- In some cases, recommendations are already being worked upon and in some case complete
- The strategy and Governance review have been done in parallel and this has limited its depth
- Some elements have been left out of scope (SCUFN, SB2030 etc.)
- A key feature is the proposal of a continuous improvement process to allow the routine review and adjustment of processes and ways of working.

# Governance Framework

In undertaking this governance review, it was essential to draw upon standardized best practice that exists as relates to programme management and delivery. Whilst there is a huge amount of literature on the subject, and many different approaches to programme governance, two principle sources were referenced:

- **ISO 21500:2021 (Guidance on project management), and ISO 21502:2020 (Guidance on program management)**
- **The UK Government Functional Standard for Project Delivery**

These two references were chosen on the basis that the ISO standards are by definition generic and cross cutting, whilst the UK Government Functional Standard for Project Delivery has proven utility (from the experience of the author) for the implementation and delivery of projects using the principles set out in the ISO Standards.

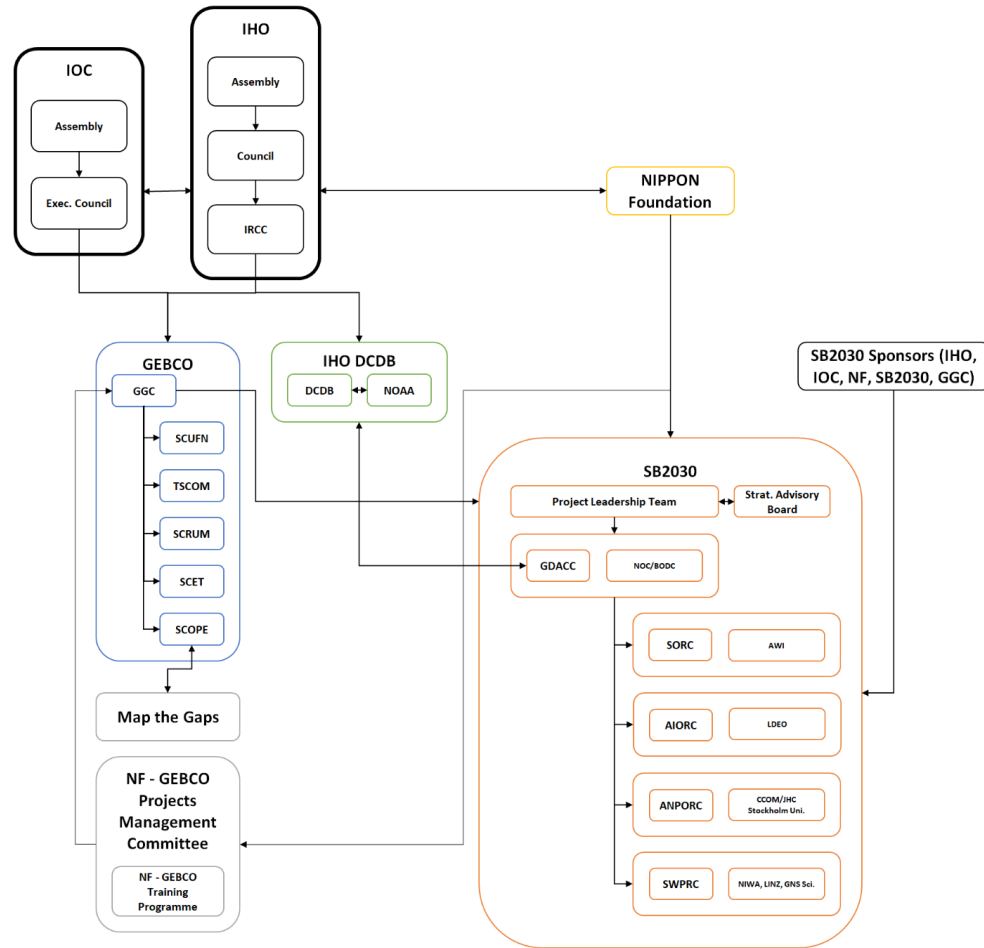
# Financial Review

The following activities have been undertaken:

- Review of internal IHO management processes
- New procedures developed
- Full audit of the GEBCO fund(s)
- Assessment and adoption of recommendations of the Funding Strategy – subject to strategy development
- Consideration of IHO Project team on Seeking External Funding Sources



# GEBCO Organisational Mapping



## Summary

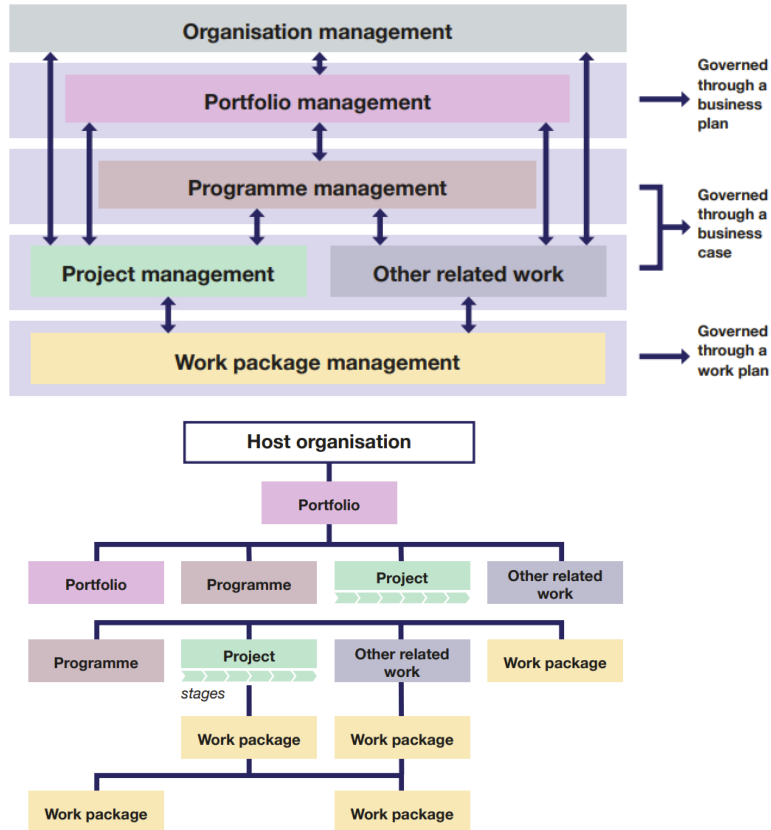
- All relationships codified
- Relationships bounded in red have been described and analyzed
- Findings listed with potential solutions provided if appropriate

# Analysis of GEBCO Bodies – Methodology

In order to identify the initial set of findings presented in this paper, a series of guiding questions were developed to assist in the review of governance instruments and work plans:

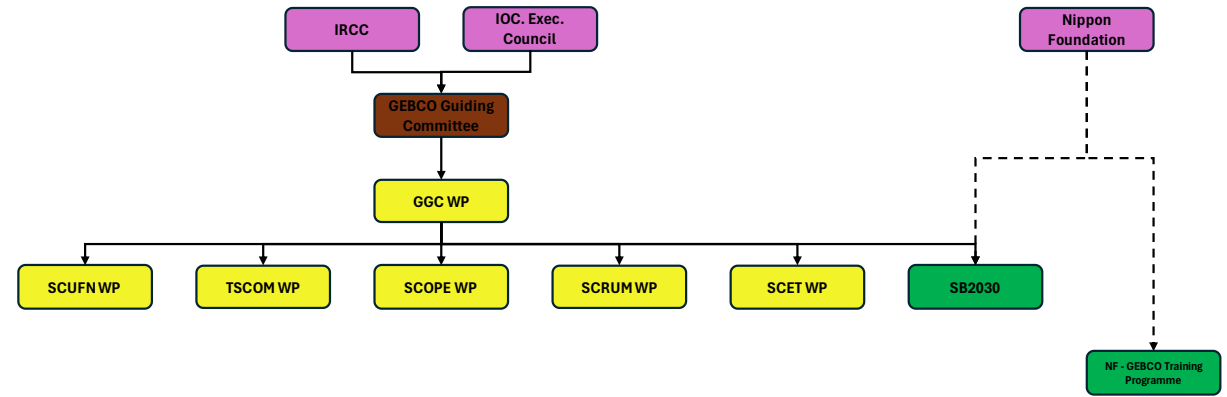
- Do the relevant governance instruments exist?
- Are the governance instruments up to date and adequately support the work of the group or committee?
- Is the work plan clear, current and logically structured?
- Is the work of the GGC and SCs appropriately structured in terms of programme delivery hierarchy?
- Is the membership of the group or committee appropriate and are there any barriers to effective contribution?
- Are any relevant working practices sufficiently clear, formalised and fit for purpose?

# GEBCO Programme Work Structure



Source: UK Government Functional Standard for Project Delivery

## Current Programme Structure



## New Recommendations

- Programme Management Board
- Finance Committee



# Key Cross-Cutting Findings

The key cross-cutting findings that have been identified are summarized as:

- The *potential* need for a Programme Management Board/dedicated resource
- The *potential* need for a finance committee
- The need for discipline in the structuring of work plans to observe programme hierarchy norms
- Review how the membership/structure of the GGC is constituted
- Implementation of a continuous improvement process/framework

# Next Steps

- At the 16<sup>th</sup> Session of the IHO Inter-Regional Coordination Committee (IRCC16) (10 – 12 June 2024), IHO Members States unanimously endorsed the GEBCO Governance Review Report.
- Subject to similar endorsement by the 57<sup>th</sup> IOC Executive Council, IHO IRCC16 also invited the GEBCO Guiding Committee to develop an implementation plan for the recommendations contained in the report, and to report back to future IRCC sessions as required.
- Subject to endorsement of the report, the 41<sup>st</sup> Meeting of the GEBCO Guiding Committee will prioritise the recommendations contained in the report and develop an implementation plan.

# Actions requested of the 57<sup>th</sup> IOC EC

Respectfully, the Executive Council is asked to:

1. Note the contents of the report and the key findings;
2. Endorse the Governance Review report;
3. Task the GGC to develop and implementation plan for the review findings;
4. Take any other action it deems necessary.