

G E B C O

GENERAL BATHYMETRIC CHART OF THE OCEANS



Thirty Eighth Meeting of the GEBCO Guiding Committee (GGC39)

NOC, Southampton, UK

30 October – 1 November 2022

Meeting Report

1 OPENING REMARKS AND ADMINISTRATIVE ARRANGEMENTS

.1 Opening Remarks and Introductions

Chair welcomed participants both in person and virtually and noted that the GGC was quorate. He noted the challenges presented by the fire the week before and thanked the National Oceanography Centre as hosts for being so accommodating. Introductions were conducted in the room and online.

.2 Opening remarks by parent bodies

IHO Director Luigi Sinapi (**LS**) provided opening remarks on behalf of the IHO, welcomed participants and acknowledged that this was the second GGC meeting in 6 months due in part by the desire to reset the timing of the meeting to the northern hemisphere autumn, as well as the need to make progress on the GEBCO Strategy and governance review.

Julian Barbière (**JB**) provided some opening remarks on behalf of IOC. He cited the full work programme with the governance review and strategy updates and noted that the work of GEBCO has never been so relevant to broader ocean policy.

.3 Working Arrangements

IHO Secretary went through the working arrangements and general administration for the meeting. He noted that all documents received had been uploaded and requested that outstanding material be supplied as soon as possible.

The Chair raised the issue of the difficulty in finding information on the IHO website, especially for those who weren't used to working with IHO working groups. He suggested that GEBCO should be given more prominence in terms of location. It was agreed that the IHO website should be the document repository and location for meeting information and administration. These pages could be

linked to the dedicated GEBCO website and this should act as the ‘front door’ for those wishing to engage with GEBCO.

Action 1. IHO website to be linked more effectively to GEBCO website

.4 Administrative Arrangements

Covered in previous agenda item.

.5 Adoption of the Agenda and approval of report from GGC38

The agenda and GGC38 report were approved.

Decision 1. GGC39 meeting agenda adopted

Decision 2. GGC38 meeting report approved

.6 Review of Action Items from GGC38

Action Items from previous GGC meeting were reviewed with actions identified that would be covered in the following agenda items.

.7 Report from IRCC14 ([report](#)) and IOC EC-55

The Chair provided an update on what was reported back to IRCC. Key issues included:

- Creation of SCET
- Creation of the Governance review project team
- Creation of the strategy drafting team

He noted that the GGC report to IRCC14 was available on the IHO website. It was noted that the IRCC report included mention of the Marine Spatial Data Infrastructure Working Group (MSDIWG) and that this group of experts could be interesting for the group and perhaps a relevant topic for future Map the Gaps (MtGs) Symposia.

Action 2. Invite rep from MSDIWG to next MtGs Symposium

JB gave a verbal update on the outcome of IOC EC-55. Key issues included:

- EC 55 endorsement of the Governance review
- Reinvigoration of the ABE-LOS (Advisory Body of Experts on the Law of the Sea) and consideration of how UNCLOS MSR provision impacts data gathering in waters under national jurisdiction
- The publication of the State of the Ocean report that many GEBCO colleagues contributed to.

2 REPORTS FROM PARENTAL AND SUBORDINATE BODIES

.1 IHO update - [Report](#)

Director Sinapi provided an update on relevant outcomes from the IHO Council (see presentation). Key items included:

- The appointment of Ms Yerinelys Santos BARRERA to the vacant IHO GGC position
- The latest Membership status of the IHO
- Recap of IHO strategic priorities as relate to GEBCO
- Requirement for GEBCO contribution to metrics for IHO SPI 3.2.3 and SPI 2.2.1
- The announcement of the theme for World Hydrography Day 2023 – “hydrography – underpinning the digital twin of the ocean”
- The IHO Empowering Women in Hydrography (EWH) project and its inclusion as an Ocean Decade Action
- The publication of Ed. 3.0.0 of Publication B-12 Guidance on Crowdsourced Bathymetry

The presentation was noted. The issue of using maps in presentations that are European centric thus obscuring Pacific Island Countries (PICs) or NZ can be considered highly offensive to PICs or at the least, act as a barrier to wider participation. It was decided that this should be investigated so that future GEBCO material does not include such graphics.

With regard to the EWH Project, it was noted that the GEBCO Alumni has many female hydrographers that would be willing to get involved. This was noted and Director Sinapi undertook to pass this on to the project team.

With regard to the IHO SPIs, there was a discussion about how these were calculated and it was noted that the method had recently been updated. It was agreed that updated figures will be passed to the IHO for inclusion in their annual report.

Action 3. Provide recommendation for standard map projection to be used in GEBCO communication material to observe geographic sensitivities

Action 4. Provide information on methodology for calculating % adequately surveyed for SB2030

.2 IOC update

JB provide an update on IOC activities. Key items included:

- He highlighted key components of the Medium term priorities
- He gave an orientation of the marine science value chain upon which the strategic priorities are identified
- He reported on IOC developments following Exec Council
- This included the inclusion of GEBCO and SB2030 in the state of the Ocean report
- Development of the Tsunami Programme
- Two new IOC affiliated members to SCUFN
- He covered the discussion re. sustained ocean observation in areas under national jurisdiction
- He identified relevant work of GOOS and indicated that this is where the work on depth as an EOVS would sit
- He gave an update on the UN Decade, including the work on the decade challenges and the latest call for submission of contributions
- He went through the development of the infrastructure to support the Ocean Decade including the creation of the Digital Twin
- He covered the presence of IOC at the UN Ocean Conference and the pathway to the second international Ocean Decade conference in April 2024

- He highlighted the intention create a new corporate group to support/advocate for access to ocean data. Group chaired by the CEO of Fugro and the IOC Executive Secretary

.3 Digital Atlas Manager - [Report](#)

Pauline Weatherall (**PW**) gave an update on the work of BODC to support the creation of the GEBCO digital grid. She noted that the 2022 grid was released in July which included ice surface elevation and sub-ice topography/bathymetry versions of the grid. She covered the maintenance of the GEBCO website including the migration and showed some statistics highlighting the increased demand and downloads of the various GEBCO grids and products. Finally she gave a summary of the various stats that are collected regarding traffic to the GEBCO website.

.4 DCDB update, including relevant CSBWG and ASMIWG issues - [Report](#)

Director DCDB provided an update on activity since GGC38, noting that in the last year they had received bathy from 206 surveys, from 24 sources. She noted the various updates to the DCDB Map viewer including the IHO Regional Hydrographic Commission boundaries. Under the auspices of the CSB data ingest pipeline, work has been undertaken on the pre-approval system that allows caveats provided by Member States (MS) to be taken into consideration. In terms of planned developments, added functionality to generate custom grids had been developed. With regard to the CSBWG, she noted that B-12 ed3.0.0 has entered into force. She requested the GGC establish guidance to determine the best way for the seabed 2030 data centres to report on their data sources and consider developing an inventory.

Action 5. All members to connect with their national research institutes to enquire whether their vessels are contributing bathy data to SB2030/DCDB and GEBCO

Action 6. Generate a 'call to action' slide based upon an inventory of research institutes that are contributing data to DCDB

.5 SCUFN - [Report](#)

The chair recounted the key issues from SCUFN report in the absence of the SCUFN Chair. He noted that the issue of political involvement in naming decisions is not going away. He suggested that this cannot be ignored and needs to be tackled. The options for escalation were discussed as well as the GGCs role in supporting any change to the ToRs.

Action 7. Discuss issue of political interference at next SCUFN meeting and request specific change to the ToRs/RoPs to support decision making

.6 TSCOM - [Report](#)

The TSCOM Chair gave an update on the work of the group. This included updates on:

- Metadata working group
- Cookbook editorial board
- Website working group
- DCDB industry day
- Opportunistic mapping resources working group
- Applied Discrete Global Grid systems

- Deep Argo float profiles as validation

One key item that was discussed was the designation of an official publication number to the GEBCO Grid now the digital atlas has been retired. It was explained that this was important for reasons of ownership and its authoritative nature, however it was also acknowledged that care would need to be taken regarding the extra admin burden to comply with IHO publications that this could place upon BODC.

The issue of membership was raised in the context of finding the balance between having a range of technical experts from a diverse background vice a very large group that would be difficult to coordinate or ensure meetings were quorate. It was also noted that this was not a situation unique to TSCOM. The IHO Secretary reminded members that their ToRs implied that a core group of voting members would normally be made of representatives of the other SCs, but these could be augmented with any number of invited expert contributors.

Action 8. Sub-Committees to discuss issue of membership (too large to be quorate) to develop a proposal to GGC40 for potential standard guidelines and associated changes to ToRs

.7 SCRUM - [Report](#)

Chair of SCRUM gave an overview and the work that has been undertaken. This included updates on:

- 2022 GEBCO grid review
- Prioritisation discussions between TSCOM and SB2030
- Wind in the sales workshop
- Virtual SCRUM meeting held in September
- Seabed mapping session at MSI workshop in Colombia under the auspices of the IHO CB programme at the SEPRHC
- The active engagement in all RHCs that have happened so far in 2022

A question was asked regarding how the percentage coverage figures were generated and how routinely they are conveyed to the RHCs. After a discussion it appears that the figures are supplied to RHCs in some cases but not all.

It was also noted that there is no formal guidance for RHC coordinators to help inspire best practice/minimum level of expectations. Director DCDB/Chair CSBWG undertook to coordinate a group to look into this.

Action 9. Ensure % mapped by RHC to be supplied to each RHC coordinator

Action 10. Develop RoPs/Guidelines for RHC SB2030/CSB coordinators

.8 SCOPE - Report

Chair SCOPE gave an update on the work of SCOPE. He recapped key work items and GEBCO products that SCOPE is responsible for including:

- MtGs symposium
- Design of the updated GEBCO World Map
- B10 – History of GEBCO update and progress to date

- Development of a statement of work for a Communications strategy

On the MtGs symposium he noted that the cost of running the symposium is around 30-60k. For this year 500+ registered virtual participants with approximately 100 people attending in person. He reflected that preparations for this year's symposium had started late and this had proposed some challenges that had been overcome. It was noted that help from the wider group was available and that perhaps a wider coordinating group could be developed for future years.

The Chair noted that Dr Eunmi Chang (EC) was elected for a second term as Vice Chair and that she was leading on the update of B-10. EC gave an update on the progress with B-10. She noted that there are two new chapters to write and the initial introduction needs to be reviewed. GGC Chair proposed the idea of having a digital update to book rather than a costly re-edit and re-print. A counter proposal to have a printed short version/executive summary brochure. It was also noted that the new chapters should have the input from those who have corporate history with the Nippon Foundation.

.9 SCET – [Report](#)

Chair of SCET gave an update of work on SCET and reflected on his vision for SCET, in that eventually GEBCO could become an ocean mapping education hub. He described the initial recruitment process and that SCET had held its inaugural meeting. A work plan has been developed but it still has a heavy focus on refining the direction of the group and undertaking a significant amount of discovery work. After a discussion it was felt that if the concept of a global education hub for ocean mapping, it would in turn provide visibility to other ocean mapping resources.

.10 NF related activities and programmes - [Report](#)

Rochelle Wigley provided an overview and update of Nippon Foundation related activities and programmes (detail contained in the report).

She noted that GEBCO had a relationship with the Nippon Foundation since 2014 which represented more than 35 million dollars' worth of investment. She noted that if wider support to the IHO was considered such as the GEOMAP course, then this figure would be significantly higher.

She noted that the Nippon Foundation wants to see increased social interaction and to be recognised for their contribution. This was acknowledged by all.

The Chair reflected that one of the key tasks of SCET is to unify the oversight of the full spectrum of education, training and capacity building activities.

Action 11. Chair to write thank you letter to the NF for their continued and significant support

3 DOCUMENTS AND PUBLICATIONS

.1 Document Review Status

The Chair asked for updates relating to the Bathymetric publications that GEBCO is responsible for. He noted that the intention was to report by exception, given that a full report was given at GGC38.

B-9 – GEBCO Digital Atlas. With the cancellation of B-9 digital Atlas, an issue has been identified with regard to the formal designation of the GEBCO digital Grid. It should be possible to add B-9 to the Digital Object Identifier (DOI).

Action 12. Initiate a working group to investigate the implications, in terms of governance etc., of assigning an IHO publications number to the GEBCO Digital Grid

Cookbook Editorial Board. Christie Reiser has been appointed as the Chief of the Editorial Board. She provided an update on the background to the Cookbook and work undertaken to date. A full break down is included in the [report](#). The key issue that was raised was the idea of moving the format of the cookbook to an e-publication. Various solutions are being explored and colleagues have begun migrating the content in to InDesign. This will still allow the content to be published as a PDF but will give far more flexibility in terms of format. Key work items for the coming year are:

- The Editorial Board will put out a call for new material
- Each chapter without an assigned author to be evaluated
- Remove or combine outdated chapters/sections based on this evaluation
- Look for new authors to take over chapters deemed still relevant.

Review of relevant IHO Resolutions. It was concluded that none of the relevant IHO resolutions need to be adjusted at this stage. It was noted that this may change once the Strategy and Governance review have been concluded.

- .2 ToRs and RoPs review, to include annual check of GGC ToRs and approval of any proposed amendments to subordinate body ToRs

No comments received however likely that ToRs will need to be reviewed following the completion of the strategy. Plan is to incorporate changes identified in strategy and governance work.

Decision 3. GGC/SCs ToRs and RoPs confirmed

4 GEBCO GOVERNANCE REVIEW

- .1 Update on governance review with initial findings and recommendations – [Report - Presentation](#)

IHO Sec provided a brief on the work undertaken to date on the proposed GEBCO Governance Review. He recapped the status of the work in the Project team work plan to date and identified some of the challenges encountered. He noted that as part of the organisational mapping exercise, it had become apparent quite how complex GEBCO has become. Over 27 functional relationships have been identified, and that conducting this work in parallel with the development of the Strategy has limited the depth of the analysis.

He noted that the External Advisory Panel had been appointed apart from the Industry/Private Sector Representative. He reflected that it had been hard to find volunteers who would be willing to do this on a gratis/pro bono basis.

He explained the methodology that had be used to analyse the governance instruments and work plans for each of the subcommittees. He then went through each of the initial findings noting that these had been discussed with the respective chairs and would now be validated further.

He indicated that the next steps were:

- Complete governance instrument gap analysis and codifying relationships – Dec 22
- Complete review of SCUFN and SB2030 governance interactions and produce initial findings – Nov 22
- GGC members to review initial findings and pass comments back to GRPT – Nov 22
- Undertake Finance review – Nov/Dec 22
- Undertake Legal Review – Nov/Dec 22
- Draft Summary report submitted to EAP for review – Beginning Jan 23
- Final summary report and continuous improvement process development submitted to GGC for review – End Jan 23
- Final report reviewed and endorsed by GGC at inter session meeting – March 23

5 GEBCO STRATEGIC PLAN

- .1 Update on strategic plan and next steps – [Paper](#) – [Strategy Draft](#) – [Presentation](#) – [Workshop Presentation](#)

Chair of the Project team gave an overview of work completed to date. He noted the importance of aligning to IHO/IOC existing strategies and re-iterated the need for a strategy in and of itself.

He gave an overview of the workshop that would be run during GGC39 and what the objectives would be. He went through the structure of the proposed strategic framework which comprised - vision – mission – outcomes – goals and objectives.

Strategy workshop

<A separate summary of the strategy workshop outcomes will be provided in a separate document produced by the Project team>

The strategy workshop was held in two breakout sessions. The first session focused on what is missing from the draft strategy, and the second session focused on reviewing the draft Outcomes and Objectives. Following each of the breakout session, the group returned to share their findings. These session were moderated by the Project team and the findings recorded for inclusion in the next steps for the strategy development.

In terms of next steps, it was agreed that a final draft would be circulated to the GGC by the end of Jan 2023, ahead of a virtual intersession meeting in March to endorse the strategy.

6 GEBCO CHARTER

- .1 Presentation of the GEBCO Charter – [Report - Charter](#)

The Vice chair gave a recap of the work done first on the code of conduct and latterly the GEBCO Charter. She recapped the process that had been undertaken and submitted the Charter for endorsement.

After a discussion it was suggested to add reference to the UN Charter for ease of reference as well as to have the same process for escalation of an issue for both a victim or a witness of an act against someone else. There was a question over to what extent confidentiality can be maintained – should the principle of Chatham House Rules is employed instead? There was general agreement that this principle should be adopted and that line 26 should be adjusted accordingly.

Action 13. Add comments to GEBCO Charter and circulate for out of committee approval

7 GEBCO 120th ANNIVERSARY AND PRESENCE AT IHO AND IOC ASSEMBLIES

- .1 Discussion on plans for celebrating 120 years of GEBCO and presence at IHO and IOC Assemblies

Chair recapped the conversation had at SCOPE4. He noted that there may be many opportunities that haven't yet be identified. IO Director provided an overview of the planning for IHO Assembly. He suggested that the GGC should establish a project team to plan the 120th anniversary of GEBCO presence at the 3rd IHO Assembly. In response, it was noted that it is in SCOPE work plan.

8 SEABED 2030

Progress brief on activities of Seabed 2030 Project against agreed Business Plan, including funding state, Center activities, outcomes from interaction with IOC and IHO Secretariats and endorsement of Work Plan 2022-2023:

- .1 Present Year 5 report and budget for GGC approval, highlighting main deliverables and communications – [Report](#)

Director Seabed 2030 provided an update of Year 5 activities by each of the 5 work pages:

WP1 – Data. Key activities:

- GEBCO 2022 Grid released; 23.4% (2.8% increase on 2021 figure). Equivalent to an area the size of Europe/slightly larger than the Sahara Desert.
- IBCAO 4.2 made available for download.
- IBCSO 2.0 published in Scientific Data & on PANGAEA.
- Data ingestion via:
 - o Data exchange with NZ, Palau, Kiribati, Japan, Philippines, South Africa and more.
 - o New data sets identified at Arctic Antarctic N. Pacific Mapping Meeting, March 2022
 - o Ongoing QA/QC and integration of newly shared data via IHO DCDB.
 - o Large data contribution from Portugal received (>2 million km²).
 - o Cleaning of multibeam data backlog ongoing.

WP2 – Process improvements. Key activities:

- Process improvements at Centers including:
 - o Statistics routines developed on Amazon Web Services (AWS)
 - o Collaboration with Scripps on SRTM+ base grid improvements
- Surveying System Bathy Data Uploader:
 - o Collaboration with Kongsberg Maritime MOU partner
 - o Beta version developed

- Successfully delivered data in polar stereographic projection coordinates through the download app.
- Further development of statistical calculation routines using Amazon Web Services (AWS).
- Initial discussions underway on integrating generation of multiple resolution products into common workflow.
- GEBCO Globe updated with 2022 data (via UNH)

WP3 – Innovation. Key activities:

- Gridding Statistics improvements across Centres
- Refined/demonstrated new generation CSB loggers (UNH)
- Establishing Global Centre as a CSB Trusted Node (data receiver)
- Proved viability of autonomous data gathering on Saildrone’s Pacific crossing (Two Oceans Two Technology)
- Arctic Centre working on a new approach to gridding
- SDB training module under development
- Technology Innovation White Paper work completed by Just Innovation –internal checking
- Delivery of functionality in SeaKoMaPpilot project (with Kongsberg –bottom left). Cloud-based, modular platform for the secure visualization, processing and sharing of ocean data.
- Development and testing of automatic data upload/automatic update of IBCAO grid ongoing through fall/winter.

WP4 – Mapping activities. Key Activities:

- Data from wider Ocean Frontier activities:
 - o RV Polarstern in Atlantic & Southern Ocean
 - o RV Tangaroa TESMaP voyage + opportunity to fill gaps during transit
 - o USV Maxlimer TESMaP data acquisition Jul/Aug 22.
 - o Ifremer transit data delivered July 2022.
 - o GO-MARIE Summer 2022
 - o DSSV PRESSURE DROP
- Satellite Derived Bathymetry (SDB)
 - o Mauritius/Maldives/Fed States of Micronesia
 - o Palau (Helen Reef)
 - o French Polynesia (with SHOM)
 - o Philippines (ongoing)
- CSB activities increasing:
 - o South Africa/Greenland/Palau Samoa, Kiribati and Papa New Guinea
 - o Seakeepers
 - o Support to IHO-Yacht Club of Monaco MoU
- Collaboration with Terradepth established to use their Absolute Ocean platform (bottom right) to provide visualization of submitted CSB data for contributors.
- Lots of Alumni engagement at IHO RHC & Regional Mapping meetings.
- Fugro transit bathy -2 million sq km milestone

WP5 – Management. Key activities:

- Wind-in-the-Sails Survey and global prioritisation work ongoing
- Contribution to GEBCO Code of Conduct
- Alumni Engagement:
 - o Ocean Frontier Mapping Project

- TESMaP
 - GO-MARIE
 - DSSV PRESSURE DROP
- SeaKoMaP remote data processing development
- Head of Engagement chair of 2022 Alumni Seminar organizing committee
- Media activity:
 - ‘in-depth’ e-newsletters
 - Media releases widely circulated
 - 352 media items
 - Extensive articles submitted to Marine Technology Society Journal focused on the UN Ocean Decade
 - Other articles in Sea Technology Magazine, Ocean News & Technology
- Social media –1982+ Twitter followers

WP5 – Management Q4 activity – Key activities:

- Successful submission of Year 6 funding bid.
 - Successful side event at UNOC22, Lisbon –approx. 55 in person attendees and 178 live viewers online. Session has since been promoted online and has over 300 additional views.
 - Wind-In-The-Sails work ongoing to produce global mapping prioritization model.
 - Ongoing engagement of alumni in Project-related activities including data contribution through CSB activities.
 - Launch of Year 6 Communications Strategy –Sept. 22. Ongoing communications and outreach work –highlights from Q4 included interview on ‘Naked Scientist’ (BBC flagship prog.) and featured in ‘Scientific American’ (10 million readers per month across all platforms).
 - MOU and supporters growing:
 - 31 MOUs to end of Y5 (up from 17 in previous year)
 - 21* MOUs under negotiation (various stages)
 - 192 supporters total (up from 175 at end of Q3)
- .2 Presentation of draft Year 6 Work plan and proposed funding bid - [Report](#)

Director SB2030 presented a summary of the draft Year 6 work plan and noted that it has been posted on the GEBCO website for GGC members to review. He also noted that the quarterly reports were now being shared via the GEBCO secretary and it was requested that these be posted on the IHO website.

A question was posed as to the availability of SB2030 governance documents and that these should be freely available. Following a discussion it was agreed that the GEBCO Sponsors should consider how and where to make these documents available.

Relating to an earlier discussion, it was also agreed that the SB2030 data centres should provide an inventory of data sources and to provide the data to the DCDB.

The Chair sought endorsement from the GGC which was granted.

Decision 4. The GGC endorsed the Year 6 Work Plan and budget SB2030

Action 14. SB2030 Quarterly reports to be published on the IHO GEBCO Website

Action 15. SB2030 sponsors to consider how to make available the SB2030 business plan

Action 16. SB2030 data centre to 1) provide an inventory 2) provide data to DCDB

9 GEBCO COMMUNICATIONS AND OUTREACH STRATEGY

.1 Review of GEBCO Communications, Education and Outreach activities

Chair SCOPE gave an update on the proposal that had been provided by a company named Oxygen Communications. It was acknowledged that due diligence needs to be done when contracting out work and that multiple quotes should be sought before work was commissioned. Ultimately, Oxygen had withdrawn their proposal and the SCOPE Chair advised that he will work with the IHO/IHO rep plus SB2030 Communications lead to map a new way ahead.

Relating to an earlier discussion, it was again suggested that in light of the limited GEBCO budget, wider support from SCOPE members and the GGC was available. Further, the funding model should be considered as it may not be sustainable to keep it as a free to all event, however this may have unintended consequences.

Kira Coley (KC) gave a verbal update on the SB2030 communications strategy. She stated she will share in due course for comment and gave some highlights/themes on where focus would be placed. She noted it will be important to have a forward looking calendar and having a conference and event strategy. She asked for support in identifying industry or other relevant publications and media in regions that are currently underrepresented. It was noted that SCOPE/Alumni could assist with this.

Action 17. Use SCRUM/Alumni to identify relevant publications/media outlets in under-represented regions

Action 18. Produce an option paper for future symposium arrangements and funding

10 GEBCO WORK PLANS AND FUNDING

.1 GGC Subordinate bodies' Work Plans 2023-2024

- .1 Approve funding requests and Work Plans of Subordinate bodies, including outputs/deliverables for next period

The IHO Secretary introduced process and available budget. He noted that the annual income is currently 26k from IHO with 20k from IOC on a biennial basis. He suggested there was a strong justification for at least a 6 monthly finance board to re-allocate funds but regardless, we need more frequent reporting. He reported that we have only spent or projected to spend by the end of 2022 30,750 Euros of 108k. As a consequence the starting point is for existing budgets to take us through to the end of 23, and that existing budget allocations and work plans. Where new requirements have been identified, SCs have been asked to indicate in the first instance where they can reallocate funds to meet changing requirements. However, he noted that there are some new budget requests and the requests total 123,500 EUR with a maximum allocation envelope of 105,945 EUR.

With this in mind he suggested the key questions to ask when looking at budget requests are:

- Does the activity represent a commitment to onward routine spend?
- What are the onward costs associated with the activity?
- Can the activity be paused?
- Is the activity still relevant to the work plan and aims of GEBCO?

.1 SCUFN – [Approved Work Plan and Budget](#)

The SCUFN Secretary presented the work plan and associated budget lines.

Decision 5. The GGC approved the SCUFN Work Plan and budget allocations

.2 TSCOM – [Approved Work Plan and Budget](#)

The TSCOM Chair presented the work plan and associated budget lines. Budget currently allocated to investigate a new E-Pub format for B-11 was re allocated to the DCDB industry day.

Decision 6. The GGC approved the TSCOM Work Plan and budget allocations with amendments

.3 SCRUM – [Approved Work Plan and Budget](#)

The SCRUM Chair presented the work plan and associated budget lines. Budget allocation to develop material to highlight activities and initiatives was reallocated to the promotion of data contribution by supporting participation at regional mapping meetings.

Decision 7. The GGC approved the SCRUM Work Plan and budget allocations with adjustments

.4 SCOPE – [Approved Work Plan and Budget](#)

The SCOPE Chair presented the work plan and associated budget lines. A provisional allocation of 15k EUR for MtGs 2023, along with 5k EUR underspend from MtGs 2022 was agreed, subject to finance review meeting in March 2023 and outcome of other relevant actions. A new bid for funding for B-10 additional chapters was not supported. New bids for printing GEBCO world maps and GEBCO booth materials for 120th anniversary were supported.

Decision 8. GGC approved the SCOPE Work Plan and budget allocations with amendments

.5 SCET – [Approved Work Plan and Budget](#)

The SCOPE Chair presented the work plan and associated budget lines. A new budget request of 10k EUR was requested to support the identification of the core activities of SCET. This was not supported but noted that this could be revisited at next finance review meeting.

Decision 9. GGC approved the SCOPE Work Plan but not the budget request

.2 GGC Work Plan 2022-2023

- .1 Approve GGC funding requests and Work Plans including outputs/deliverables for next period

It was agreed that the GGC work plan will be refreshed post meeting taking into account the updated and approved sub-committee work plans. In doing so, appropriate lines would be updated to reflect the budget allocation decisions and current timelines of the governance review and development of the strategy.

The IHO Secretary proposed that 6 monthly budget review meetings were installed. This was supported.

A question over the availability of the Funding Strategy report was tabled and the virtues of making this publically available was discussed. **Post Meeting Note** – The Chair Team decided that until further action on funding has been decided, that this report should not be made public and should be circulated amongst the GGC only.

It was acknowledged that the budget allocation process had not been comfortable and that it is obvious that GEBCO badly needs more funding in order for it to meet its ambition. In the first instance, the parent organisations undertook to discuss this further.

Decision 10. GGC agreed to hold intersession budget review meeting

Action 19. Update GGC Work plan and budget

Action 20. Publish fundraising strategy on IHO GEBCO website

Action 21. Parent organisations to consider GEBCO contribution/funding

11 SECRETARY RESPONSIBILITIES

- .1 Confirm responsibilities

The Chair reflected on the significant growth of GEBCO, now having 5 Sub Committees and multiple meetings per year. The GGC secretary has not traditionally supported SCs as their secretary but this was a fairly modern phenomenon. He proposed that SCs staff their own secretaries which would allow the GGC Secretary to participate in an advisory capacity and support with process. This was agreed by all.

Decision 11. The GGC confirmed the current duties undertaken by the Secretary but noted the impact of the governance review

Action 22. SCs to identify their own secretaries and propose associated changes to ToRs/RoPs

12 GGC MEMBERSHIP - [Document](#)

- .1 Identification of individuals, whose terms are due to complete within the next two years

The IHO Sec reviewed the Membership list and noted that Mr Shin Tani would finish his second terms in 2023 and that Mr David Millar and Dr Karolina Zwolak would finish their first terms in 2023. Further, it was noted that and Dr Marzia Rovere would finish her second term in 2024 and Mr Evert Flier would finish his first term in 2024.

.2 Discussion on role of Director Seabed 2030 within GGC

This item was not discussed during the meeting and will be progressed out of committee.

13 NEXT MEETING

.1 Dates and venue for GGC40

The Chair indicated that the intention is to hold GGC40 outside of Europe and that a number of options are being considered. In addition, the Chair Team are working hard to identify location for a rolling 3 year period to aid future planning.

.2 Draft Agenda for GGC39

To be developed post meeting and circulated in due course

14 ANY OTHER BUSINESS

A discussion surrounding the policy for funding travel for GGC members was led by the Chair. He explained that this year, two participants had been supported as they had assumed SC Chairpersonships, and the level of support had not been clear. He proposed that going forward, the ability to support your own travel was harmonised across all GGC members. This proposal was not passed and it was agreed further discussion was required.

Action 24. Consider a position on supporting travel across GGC Members

15 Review of Action Items from GGC39

See list of agreed actions [here](#).

16 CLOSURE OF THE MEETING

The chair closed the meeting and thanked all for their participation.