GEBCO

GENERAL BATHYMETRIC CHART OF THE OCEANS



First 2021 Intersessional Meeting of the GEBCO Guiding Committee (GGC-IS01)

26 – 27 May 2021, Virtual Remote Meeting

(Paragraph numbering is the same as the Agenda Item numbering and does not necessarily reflect the order in which matters were discussed.)

Session 1 - 39 participants Session 2 - 35 participants

1. **Opening**

1.1 Opening Remarks and Introductions

The Chair welcomed all and noted that this was a continuation of the informal virtual meeting held in March, at which a number of issues were discussed for further consideration and decisions at GGC-IS01. He confirmed that it had been agreed and endorsed by the IHO and IOC Secretariats that GEBCO should be rebranded as a Programme rather than a Project due to its long verity and time unlimited nature. The Chair requested the Secretary make the necessary amendments to all relevant documents. **Action 1 - Secretary**

1.2 Adoption of the Agenda (GGC-IS01/1/2)

The agenda was adopted without change.

Decision 1: GGC-IS01 meeting agenda adopted

1.3 Approval of report from GGC37 (GGC-IS01/1/3)

The report of the GGC37 was approved as published.

Decision 2: GGC37 meeting report approved

1.4 Progress update on Action Items from GGC37 (GGC-IS01/1/4)

The Secretary proposed that, as many actions were covered by agenda items, it would be more efficient to provide an updated version of the GGC37 list of actions at the end of the meeting. He noted the continuous actions, which needed to be considered and enacted as necessary throughout the intersessional periods. All participants were urged to keep the Chair, Vice-Chair and Secretary informed on progress of actions for which they were responsible.

2. GGC Management and Governance

2.1 GEBCO Management and Governance Principles (GGC-IS01/2/1)

The Chair introduced the discussions with a request that participants provide proposals and suggested to improve the management of meetings and the GEBCO Programme.

The Chair highlighted an initial observation that it appeared to him inconsistent for GGC members to have leadership roles within the Seabed 2030 Project at the same time. The Director Seabed 2030 Project, Jamie McMichael-Phillips, (JMcMP) highlighted the issues as he perceived them with the structure of GEBCO and Seabed 2030 and the positions of some members. There were no comments from the participants; the Chair proposed that, due to the limited resources of personnel available and willing to commit time and effort to GEBCO, it was acknowledged that dual roles would be inevitable and be accepted at present; he highlighted that those affected would be expected to be conscious and mindful of their position and to act accordingly and to take particular care to avoid any perception of conflict of interest, either internally or externally. Sam Harper (SM) noted the unusual structure of the GEBCO Programme and that it was always better resolve issues before they occurred. Luigi Sinapi (LS) indicated that it was important to follow the ToRs and RoPs as agreed by the parent bodies. Jennifer Jencks (JJ) agreed that the work being led by the Vice-Chair was important and the correct route to take to put in place the necessary guidance for the future participation of all. David Millar (DM) noted that circumstances concerning the recent Acting-Director were particular and temporary and that it had been acknowledged that the situation was not ideal, he also noted that the individual involved was particularly conscious of the situation and always delayed his position or removed himself from the final decision making processes. Martin Jakobsson (MJ) supported the proposed actions.

Decision 1 – Maintain the current state and individual roles with expectation that individuals would be mindful of perceptions of their actions

2.2 GEBCO Management Structure (GEBCO Principals)(GGC-IS01/2/2)

The Chair noted the efforts he had made to engage with all GGC members individually after GGC37. He highlighted the term GEBCO Principals and where the group fitted into the governance structure of GEBCO. Robin Falconer (**RF**) questioned the Group's reason, mandate and legitimacy, he considered that it had not been endorsed. The Secretary provided the background on the creation of the group, who were included and the reasons for its creation, in particular he highlighted that it had been created in early 2016 to improve the administration and management of GEBCO, as well as streamline the communication within the leadership of the Programme, all issues which had been identified as needing significant improvement as the GEBCO Programme moved to being a more professionally operated and governed activity. He noted that it had been identified there was a need for a group between the GGC and general GEBCO community for distribution of information which needed a wider audience than the GGC but should not be published to the global GEBCO community. A number of participants suggested the list should be maintained by the Secretary and included as an annex of the report. **Action 2 - Secretary** Thierry Schmitt (**TS**) supported the idea of GEBCO Principals and suggested a schema graphic could be generated to clarify the structure and relationships within GEBCO, including Seabed 2030.

JMcM highlighted the need to communicate issues that needed to be resolved and not brought up in meetings, he raised concerns that there appears to be a division between GEBCO and Seabed 2030. The Chair invited the Chairs and Vice-Chairs of the Sub-Committees to discuss the engagement and communication with all elements of the Seabed 2030 Project to identify areas which could be improved, including nominating individuals to participate in appropriate Seabed 2030 Project meetings. **Action 3 - Chairs/Vice-Chairs/JMcMP**

TS raised the issue of the position of the Sub-Committees and how they engage with equivalent Seabed 2030 bodies. Helen Snaith (**HS**) noted that the development of the Seabed 2030 Technical Group ToRs had been halted to await the outcomes of the Code of Conduct work as it was felt this needed to be taken into consideration.

Decision 2 – Secretary to maintain the list of GEBCO Principals and include it as annex to the meeting report

2.3 GEBCO Code of Conduct (GGC-IS01/2/3)

The Vice-Chair provided some background to the work being undertaken and the individuals' involved. She explained the areas to be addressed and the proposed deliverables covering governance, code of conduct and

structure of the GEBCO Programme. She indicated it was anticipated that the final document would expand on the current GGC ToRs and RoPs to provide more details and guidance; she invited all to provide input to help develop a more comprehensive guideline document. **Action 4 - All** Kim Picard (**KP**) suggested that the Code of Conduct document should be referenced in the ToRs of subordinate bodies.

3. Current GEBCO-related Efforts

3.1.1 SCUFN Report (GGC-IS01/)

The Chair SCUFN, Han Hyun-Chul (**HHC**), provided a brief report on the activities of SCUFN and the outcomes from the meeting held. He noted that there was no significant update since the report provided to GGC37.

3.1.2 TSCOM Report (GGC-IS01/3/1/2)

The Chair TSCOM, Thierry Schmitt (**TS**), provided a brief report on the activities of TSCOM and the outcomes of the meeting sessions held. He highlighted the main items noted in the submitted report, which included increased membership, activities of Working Groups established under TSCOM, the use of the SRTM and the GEBCO 2021 grid review progress. He noted the ongoing work on the website, web services and the opportunity mapping app. The Chair asked whether the app would be of benefit to Regional Hydrographic Commissions and their members to help identify areas. Vicki Ferrini (**VF**) provided additional details on the app and what it will provide. The Chair asked for further details on the Website Working Group and who was leading it. **TS** agreed that the majority of issues raised regarding the relationship of TSCOM with Seabed 2030 Project had been discussed.

3.1.3 SCRUM Report (GGC-IS01/3/1/3)

The Chair SCRUM, Vicki Ferrini (**VF**), provided a brief overview report the activities of SCRUM and outcomes of the recent intersessional meeting sessions. She noted that the work of the SCRUM was looking to be more widely distributed amongst the regional mapping efforts with an objective to have those involved not being members of Regional Centers to broaden engagement and expanding the community.

3.1.4 SCOPE Report (GGC-IS01/3/1/4)

The Chair SCOPE, Hyo Hyun Sung (**HHS**), provided an overview of SCOPE activities, and the outcomes of the meeting sessions held. She noted that there have been a number of intersessional meetings. She highlighted the various activities related to the Communications Strategy; these included the engagement of a commercial specialist to develop the communications strategy, the generation of different generic presentation templates, the updating of B-10 and progress on a more coordinated use of social media.

The Chair noted the need to agree on a GEBCO presentation template. The Chair supported the proposal to engage external specialist support to develop the communications strategy.

Decision 3 – SCOPE to continue, in collaboration of the Funding Work Group, to progress the engagement of external specialist communications support for the development of the GEBCO Communications Strategy

The three different proposed generic GEBCO presentation templates were displayed for consideration. **JMcM** noted that it was important that the required permissions were held to use photographs. It was suggested that a poll was conducted to gain a consensus on the preferred version. **HHS** noted that the SCOPE members preferred option 1. It was noted that the idea was to enhance the GEBCO brand, which needed to be reinforced with a harmonised and unique look. **VF** noted that the colours and layout should complement Seabed 2030 but not be confused with it. The Chair invited all to indicate by email to him, the Vice-Chair and Secretary before Day 2 their preference of the proposed three options, as well as make any additional comments.

The Chair provided an alternative proposed version for consideration. It was agreed that the presentation template needed to be consistent with the website colours and look. It was agreed that further development

was necessary as well as creation of GEBCO owned images. It was proposed that use could be made of the IHO and UNESCO-IOC PR-Communications staff. It was noted that there was a need to provide a full set of slides and not just the title slide, agreement need to be reached on the fronts to be used. Chair SCOPE was requested to lead the development and to gain comment and input from all GEBCO Principals with an objective of presenting proposed versions to the wider SCOPE membership and then to the GGC for final approval and endorsement. Action 5 - HHS

Decision 4 – SCOPE, in collaboration with VF and IHO and IOC Secretariats, to continue development work for presentation of alternative options by September

3.1.5 Metadata Working Group Report (GGC-IS01/3/1/5)

The Chair of the Metadata WG, Federica Foglini (**FF**), provided a brief overview of the WG activities and outcomes of its work since GGC37. In particular she highlighted additional members, a request from the IHO DCDB to have the metadata template available, the revision of the metadata template prepared for Seabed 2030, the publication of the schema guidelines, future amendment of the schema and the potential to assist the Global and Regional Centers on different approaches to managing the storage, processing and analysis of data.

She highlighted a number of challenges to be addressed, which included better links with the various elements of the Seabed 2030 structure, advertising the use of the schema by the Global and Regional Centers, obtaining feedback on the use of the schema and the possible impacts of a future revision of the TID. She noted that focus needed to be on improved communication with Seabed 2030 elements, commence discussions with TSCOM and SCRUM on the TID and considering the different options for managing data within the Global Center.

The Chair asked how aligned GEBCO metadata was with EMODNet and that quality of data should not be overlooked in the efforts to increase coverage. **FF** confirmed there was good alignment; however improved quality assessments could be undertaken. Serge Lévesque (**SL**) noted the importance of interoperability and identifying the uses and users of bathymetry, **FF** confirmed that the standards were comparable with EMODNet and the metadata schema was compatible with other internationally used standards.

3.1.6 Funding Working Group Report (GGC-IS01/3/1/6)

The Chair provided some background and outcomes of the recent Sponsors (IHO, IOC, Seabed 2030 and Nippon Foundation) meeting and that there was a recognition that there was a need to increase funding. He noted the NF has confirmed that the initial phase of the Seabed 2030 Project was to raise global awareness and that now was the time to look at funding and how to increase funds available to support operational activities. The Chair of the Funding WG, David Millar (**DM**), provided a brief overview of the WG activities, and outcomes of the engagement with external consultants and the strategy documents provided. He noted that there were two strands to the work – fund raising efforts and legal and governance aspects. He noted that the Funding WG needs to study the document and the list of activities which could be undertaken to select the most appropriate activities to be recommended to the GGC, noting the general endorsement of the report by the GGC. It was recognised that the Funding Strategy was reliant upon a good Communications Strategy.

Decision 5 – Funding WG to continue with its current identified tasks

3.1.7 Cookbook Editorial Board Report (GGC-IS01/3/1/7)

The Chair of the Cookbook Editorial Board, Karen Marks (**KM**), provided a brief overview of the Editorial Board activities, and outcomes of work being undertaken. She proposed that a Vice-Chair should be appointed to share the work; she also noted that four individuals had volunteered, although there was a need of additional volunteers. The Chair invited all to consider this request and to contact KM to identify in what capacity they could contribute. **Action 6 – All** She highlighted the next task was to develop the Editorial Board ToRs and commence work on the conversion into an e-publication, which should allow the use of video clips to improve the Cookbook and its use.

Decision 6 – Proposal to appoint a vice-Chair of the Cookbook Editorial Board was endorsed and the call for additional members of the Board was supported

3.2 Seabed 2030 Quarterly Report (GGC-IS01/3/2)

The Director Seabed 2030, Jamie McMichael-Phillips (McMP), provided a comprehensive brief of the Project activities since GGC37. He noted the impacts of the global pandemic as the Year 4 phase neared its conclusion. He highlighted the engagement in the Schmidt Ocean Institute Science symposium and IOCAFRICA-Seabed 2030 webinar, which had been identified as a template for future engagement with other regions. He noted the feedback received from the IOC on the application to be a UN Decade recognised major programme. He highlighted the approach from the Paris Peace Forum and the request to become a supporting ocean governance programme. He noted the Wind in the Sails community survey and some of the initial results and outcomes, which had included the potential provision of new datasets due to the raised awareness. He noted the use of some of the Shell XPrize money to progress the Ocean Frontiers Mapping initiatives with the placement of sonar operators onto vessels to gather data. He noted that the anticipated increase in coverage for Year 4 would be 2%. He provided an update on the successful Alumni Coordinator recruitment and that the job title had been amended to be 'Head of Engagement and Development' to better cover the expanded tasks to be addressed. JMcMP requested all GGC members to engage with their administrations to release data for use by GEBCO, the Chair noted it was a task for IOC and IHO appointees to engage with their governments and administrations to avoid re-surveying areas for which the data is already held. JJ asked how the provision of reduced resolution datasets would impact on the calculation of coverage. It was suggested that it should be technically possible to accommodate this situation, particularly if it was known that the data was gathered at a higher resolution. **KP** provided an update on discussions held with the Hydrographer AHO and the impact the question raised in the IHO Circular Letter has had on the national approach to data availability. The Chair highlighted the outstanding action on him with the Secretary General IHO and Executive Secretary IOC to generate a statement letter to encourage data contributions. HS noted that there was a contributions statement on the GEBCO website which should cover the requested recognition to the GEBCO grid.

4. Communications and Outreach

4.1 Communications and Website Update (GGC-IS01/)

HHS noted that no progress with the Communications Strategy had been made and a further progress update would be provided at the next GGC meeting. **HS** noted that the Website Working Group had not met and that identification of suite dates to meet was proving to be a challenge. The Chair asked whether the updating was a technical issue or a communications/content issue and whether engagement with an external consultant was necessary. **HS** noted that an external consultant had been engaged for the initial work and as the technical work was being addressed, it would be the opportunity to review and harmonise the look and fonts for which the input of SCOPE was required. **Action 7 - HHS/HS**

Decision 7 – SCOPE and Website WG to progress the upgrade of the GEBCO website

Tim Kearns (**TK**) indicated that communications was a wider topic than presentation templates, he asked if there had been progressed on other items such as the revision of B-10 – *History of GEBCO* – and coordinated management of social media. Eunmi Chang (**EC**) provided some details of the proposed revision of B-10 and the intension to bring the format up to date. **TK** asked whether there was a strategy to address the task and whether ideas already provided were being considered and taken forward. It was agreed that the wider SCOPE membership should be involved and that different formats could be considered, including a story map version. The Chair requested SCOPE to progress the work, working on content initially and then address the presentation of the information. **Action 8 - HHS**

Decision 8 – SCOPE to progress the task through engagement of the wider membership and ensure a broad spectrum of inputs is reflected

The Chair observed that there had been a number of intersessional meetings to progress the work and tasks of SCOPE; however it appeared that not all SCOPE members had been involved in the meetings or the

subsequent discussions and therefore there was limited awareness of the progress amongst the membership. He urged that the Chair and Co-vice-Chairs made every effort to increase the participation of the wider SCOPE membership in intersessional meetings and the decision making process. Action 9 - HHS/EC/TK

Decision 9 – SCOPE to follow an inclusive approach to intersessional meetings to ensure engagement with the wider SCOPE membership

4.2 GEBCO Service and User Experience (GGC-IS01/)

The Vice-Chair provided details of the IOC Working Group on User Requirements and Contributions to GEBCO and the survey circulated amongst the IOC member states, she noted that the results would be reported to the IOC A-31 in June. The Vice-Chair noted she was the GGC representative on the WG and that other GGC members had been nominated by their individual administrations. She highlighted some of the initial comments received, in particular the need for web services and higher resolution data for shallow and coastal waters. Toshihiko Chiba (TC) provided an update on the progress of the report generation and the reporting process to the IOC A-31. It was confirmed that the survey had been circulated to IOC member states only as it was focused on obtaining their views and input. The Chair asked whether there was a feedback mechanism on the GEBCO website to capture user requirements and whether the extent of the user community was being identified and captured. HS confirmed that this was an area which needed to be upgraded and improved.

4.3 Progress on Establishment of SCET (GGC-IS01/4/3/1 and GGC-IS01/4/3/2)

KP and Karolina Zwolak (KZ) provided a brief on the progress of the work being undertaken in the drafting of the proposed SCET ToRs and some of the changes that had been considered to make the ToRs more generic. Recognising the sensitivity of including titles of individual organizations in official GEBCO documents, it was proposed to create a separate document which articulated the proposed oversight functions of SCET for the Nippon Foundation-GEBCO programmes and engagement. It was agreed that the drafting process and identification of potential members should continue and that all were encouraged to provide feedback on a revised version to be circulated. **Action 10 - KP/KZ**

Decision 10 – Continue the drafting work with the objective of seeking endorsement and approval at the next GGC meeting

5. Close

5.1 Any Other Business

The Chair highlighted a number of meetings that were coming up at which GEBCO and data availability will be highlighted.

Rochelle Wigley (**RW**) noted that funding for the next Ocean Mapping course had been received and that 69 applications had been submitted, for which the selection process was underway.

5.2 Next Meeting

HS confirmed that NOC, Southampton, was prepared to host a meeting either later this year or next year. The Chair noted that it had been discussed at GGC36 to reorganise the meeting formats, he proposed that a format of three days sub-committees followed by two days symposium with the GGC over three days of the following week could be considered to minimise travel and allow continued engagement across the GEBCO community. TK understood that the decision to separate the meetings had been made and that planning had started for a series of virtual symposium events over the November period, he noted that IOCAFRICA had offered to act as a host. Concerns were raised over the division of the meeting and the impact on the community engagement. It was proposed that an intersessional GGC meeting could be planned as well as a physical GGC meeting. JMcM noted that the GGC needed to consider how the financial challenge will be managed in the future, if substantial increases in funds are provided. The Chair noted that the current focus needed to be the reporting task to the IHO and IOC as there was minimal input to the Seabed 2030 budget

process and additional funding had not been secured. He suggested that a GGC physical meeting could be planned for January, Secretary to identify suitable dates, and a fiscal virtual meeting be planned for later in the year. **Action 11 - Secretary**

Decision 11 – Progress the November symposium and sub-committee meeting plans with GGC38 to be held at the IHO in Monaco in January

Decision 12 – The NOC, Southampton, offer should be progressed for the meetings and symposium in 2022

5.3 Review of List of Actions and Decisions for GGC-IS01

The Secretary indicated that he would generate a draft list of actions as an updated version of the GGC37 list, which would be circulated with the draft meeting report for comment. All Action Items are marked in this report and are collated together at Annex D. An updated list of the Action Items will be maintained on the GGC-IS Remote Meetings document webpage and all those who have actions to complete should keep the Chair, Vice-Chair and the Secretary informed of any progress. **Action 12 - All**

5.4 Closure of the Meeting

The Chair closed the meeting.

The following Annexes are attached:

- A. GGC-IS01 List of Participants.
- B. GGC-IS01 Agenda
- C. GGC-IS01 List of Documents
- D. GGC-IS01 List of Actions
- E. GGC-IS01 List of GEBCO Principals

LIST OF PARTICIPANTS

Country	Name	Organization	E-mail
Australia	Kim Picard	Geoscience Australia	kim.picard@ga.gov.au
Brazil	RodrigodeSouzaObino	Diretoria de Hidrografia e Navegação (DHN)	obino@marinha.mil.br
Canada	Tim Kearns	Great Lakes Observing System	tim@glos.org
France	Thierry Schmitt	Service hydrographique et océanographique français (Shom)	thierry.schmitt@shom.fr
Germany	Boris Dorschel	Alfred Wegener Institute	boris.dorschel@awi.de
Ireland	Aileen Bohan	Integrated Mapping for the Sustainable Development of Ireland's Marine Resource (INFOMAR)	aileenbohan@gmail.com
India	Prashant Kumar Srivastava	Ministry of Earth Sciences	srivastava.pks@gov.in
Italy	FedericaFoglini	Istituto di Scienze Marine (ISMAR) Consiglio Nazionale delle Ricerche (CNR)	federica.foglini@bo.ismar.cnr.it
Italy	MarziaRovere(vice-chair)	Istituto di Scienze Marine (ISMAR)Consiglio Nazionale delle Ricerche (CNR)	m.rovere@ismar.cnr.it
Korea	Eunmi Chang	University of Seoul (UoS)	emchang21@gmail.com
Korea	Han Hyun-Chul	Korea Institute of Geoscience and Mineral Resources	han@kigam.re.kr
Korea	Hyo Hyun Sung	EwhaWomen'sUniversity (EWHA)	hhsung@ewha.ac.kr
New Zealand	Robin Falconer	GEBCO	robinfalconerassociates@gmail.com
New Zealand	Kevin Mackay	National Institute of Water and Atmospheric Research (NIWA)	kevin.mackay@niwa.co.nz
Norway	Evert Flier(chair)	Norwegian Mapping Authority (NMA)	Evert.Flier@kartverket.no
Philippines	Jaya Roperez	Center for Coastal and Ocean Mapping/Joint Hydrographic Center – University of New Hampshire (CCOM/JHC - UNH)	jroperez@ccom.unh.edu
Poland	Karolina Zwolak	Polish Naval Academy	karolina.zwolak1@gmail.com
South Africa	Rochelle Wigley	Center for Coastal and Ocean Mapping/Joint Hydrographic Center – University of New Hampshire (CCOM/JHC - UNH)	rochelle@ccom.unh.edu
Sweden	Martin Jakobsson	Stockholm University (SU)	martin.jakobsson@geo.su.se

UK	Sam Harper	United Kingdom Hydrographic Office (UKHO)	samuel.harper@ukho.gov.uk
UK	Jamie McMichael-Phillips	Seabed 2030	director@seabed2030.org
UK	Helen Snaith	British Oceanographic data Centre (BODC) - National Oceanograph Centre (NCO)	h.snaith@bodc.ac.uk
UK	Pauline Weatherall	British Oceanographic data Centre (BODC) - National Oceanograph Centre (NCO)	paw@bodc.ac.uk
USA	Vicki Ferrini	Lamont Doherty Earth Observatory, Columbia University	ferrini@ldeo.columbia.edu
USA	Jennifer Jencks	National Oceanographic and Atmospheric Administration (NOAA) - National Centers for Environmental Information (NCEI)/Director IHO Data Centre for Digital Bathymetry (DCDB)	jennifer.jencks@noaa.gov
USA	Karen Marks	National Oceanic and Atmospheric Administration (NOAA)	karen.marks@noaa.gov
USA	David Millar	Fugro	DMillar@fugro.com
USA	Caitlyn Raines	Environmental Systems Research Institute (Esri)	craines@esri.com
USA	Larry Mayer	Center for Coastal and Ocean Mapping/Joint Hydrographic Center – University of New Hampshire (CCOM/JHC - UNH)	larry@ccom.unh.edu
-	Julian Barbière	Intergovernmental Oceanographic Commission of UNESCO (IOC)	J.Barbiere@unesco.org
-	Toshihiko Chiba	Intergovernmental Oceanographic Commission of UNESCO (IOC)	t.chiba@unesco.org
-	Luigi Sinapi	International Hydrographic Organization (IHO)	luigi.sinapi@iho.int
-	David Wyatt (secretary)	International Hydrographic Organization (IHO)/ GEBCO Secretary	adso@iho.int
Observers and Indust	try Experts		
Canada	SergeLévesque	Canadian HydrographicService (CHS)	serge.levesque@dfo-mpo.gc.ca
Canada	Denis Hains	H2i	dhains@h2i.ca
Russian Federation	Yulia Zarayskaya	Seabed 2030 Strategic Advisory Group (SAG)	yulya.zarayskaya@gmail.com
UK	Jennifer Cheveaux	Seabed 2030	admin@seabed2030.org
USA	David Armstrong	National Geospatial Agency (NGA)	david.a.armstrong@nga.mil
USA	Kilaparti (Rama) Ramakrishna	Seabed 2030 Strategic Advisory Group (SAG) Chair	Kilaparti.Ramakrishna@gmail.com

J	USA Heather	ner Stafford	National Geospatial Agency (NGA)	Heather.stafford@nga.mil
---	-------------	--------------	----------------------------------	--------------------------

Bold names – GGC

Virtual Meeting

26 - 27 May 2021

1. <u>Instructions</u>

Please join the GGC Intersessional meeting from your computer, tablet or smartphone using the link provided in the covering email.

Country or Region	Start Time (Local Time)	GMT (+/-)
GMT	11:00	-
United Kingdom (BST)	12:00	+1
Europe (CEST)	13:00	+2
USA (EDT)	07:00	-4
USA (MDT)	05:00	-6
USA/Canada (PDT)	04:00	-7
Japan (JST) & S. Korea (KST)	20:00	+9
Australia (AEDT)	21:00	+10
New Zealand (NZDT)	23:00	+12

2. Read-ahead Materials

See GGC IS01 Document list for download of all documents (https://iho.int/en/ggc-intersessional-meetings). For efficiency purposes, participants are invited to read beforehand:

Day 1:

- a. GGC-IS01 agenda (*GGC-IS01-1.2*)
- b. GGC37 Report (GGC-IS01-1.3-Meeting Report)
- c. GGC37 Actions Chair Comments (GGC-IS01-1.4-Action List)
- d. GGC management and governance (GGC-IS01-Day1 Folder)
- e. Draft GEBCO Code of Conduct (GGC-IS01-Day 1 Folder)
- f. Summary of Current Projects/Updates (GGC-IS01-Day1 Folder)
 - SCUFN
 - o TSCOM
 - SCRUM
 - o SCOPE
 - MetadataWG
 - FundingWG
 - Cookbook Editorial Board

Virtual Meeting

26 - 27 May 2021

Day 2:

- f. Summary of Current Projects/Updates (GGC-IS01-Day1 Folder)
 - o SCUFN
 - o TSCOM
 - o SCRUM
 - o SCOPE
 - MetadataWG
 - FundingWG
 - Cookbook Editorial Board
- g. Seabed 2030 quarterly report (GGC-IS01-Day2 Folder)
- h. Communications and website update (GGC-IS-01- Day2 Folder)
- i. GEBCO services and user experience (GGC-IS01- Day2 Folder)
- j. SCET draft ToRs (GGC-IS01- Day2 Folder)

3. Draft Agenda

Day 1: 26 May 2021 All times in Monaco

Day 1 Goal: Understanding where we are

13:00 - 13:30 - **Welcome**

- 1.1 Welcome, Opening Remarks and Meeting Expectations Chair
- 1.2 Approval of agenda (Read ahead) Secretary
- 1.3 Approval of GGC37 report^b (Read ahead) Secretary
- 1.4 Progress update on GGC37 actions^c (Read ahead) Chair/All

13:30 – 15:00 – *GGC Management and Governance*

- 2.1 Overarching GEBCO management and governance principles (including GGC expectations)^d (consider how to conduct intersessional meetings and their frequency, taking into account the Seabed 2030 quarterly reporting cycle) Chair/Director
- 2.2 Proposed wider management structure (GEBCO Principals)^d (propose formalising a wider GEBCO management structure, who should be included and why) Chair
- 2.3 Draft Code of Conduct^e (presentation of initial draft with feedback received) Vice-Chair

15:00 – 15:45 – Update on Current GEBCO-related Efforts

3.1 Sub-committee and Working Groups rapid briefs^t (Read ahead) (Chairs to provide clarifications and answers on read ahead submissions resulting from wider participant questions and comments, no presentations) - Chairs

Virtual Meeting

26 - 27 May 2021

- 3.1.1 SCUFN
- 3.1.2 TSCOM
- 3.1.3 SCRUM
- 3.1.4 SCOPE
- 3.1.5 MetadataWG
- 3.1.6 FundingWG
- 3.1.7 Cookbook Editorial Board

15:45 – 16:00 – Wrap-up - Chair

Day 2: 27 May 2021

All times in Monaco

Day 2 Goal: Looking ahead to improving our message

13:00 – 13:10 – *Introduction* - Chair

13:10 – 14:15 – Update on Current GEBCO-related Efforts (cont.)

- 3.1 **Sub-committee and Working Groups rapid briefs**^f (Read ahead material to cover current issues, challenges, items on which GGC input/decision/action is required and opportunities to widen scope of WP, including any resource requirements) (*Chairs to provide clarifications and answers on read ahead submissions resulting from wider participant questions and comments, no presentations*) Chairs
 - 3.1.4 SCOPE
 - 3.1.5 MetadataWG
 - 3.1.6 FundingWG
 - 3.1.7 Cookbook Editorial Board
- 3.2 Seabed 2030 quarterly report⁹ Director

14:15 – 15:30 – *Communications & Outreach*

- 4.1 Communications and website update^h (review of progress on communications strategy, including harmonisation with Seabed 2030 message, next steps on website development) Chair SCOPE
- 4.2 GEBCO service and user experienceⁱ (improving GEBCO products and services, and enhancing the customer interface to provide better access for and interaction with all users; brief report on IOC Regular Working Group on user Requirements and Contributions to GEBCO Products and IODE XXVI) Chair/Vice-Chair
- 4.3 Progress on establishment of SCET (considerations on identification of tasks, roles and responsibilities, including UNH-NF programme interaction; review of draft ToRs) Chair/Interim-Chair SCET

15:30 - 16:00 - *Close*

Virtual Meeting

26 – 27 May 2021

- 5.1 Any other business Chair
- 5.2 Confirm date of next intersessional meeting (GGC IS02) information Secretary
- 5.3 Review of List of Actions and Decisions for GGC IS01 Secretary
- 5.4 Discussion on outstanding issues and post-meeting expectations/focus Chair

GGC IS01 Attendees

See List of Participants document

Read-ahead submission deadline - notified in covering email, 14 May.

Meeting output – list of actions and decisions with limited supporting comments

GGC-IS01 - List of Documents

Document No	Document Title	Date uploaded
GGC-IS01/2021	Document Template (Word version)	22 March 2021
GGC-IS01/2021	Day 1 Read Ahead.zip	24 May 2021
GGC-IS01/2021	Day 2 Read Ahead.zip	25 May 2021
GGC-IS01/2021	List of Participants v1.0	24 May 2021
GGC-IS01/2021- 1.2	Draft Agenda v6.0	12 May 2021
GGC-IS01/2021- 1.3	GGC37 Meeting Report	22 March 2021
GGC-IS01/2021- 1.4	GGC37 List of Actions - updated 29 April 2021	22 March 2021
GGC-IS01/2021- 2.1	Overarching GEBCO management and governance principles (Notes from informal intersessional meeting)	29 March 2021
GGC-IS01/2021- 2.2	List of GEBCO Principals	30 April 2021
GGC-IS01/2021- 2.3	Draft GEBCO Code of Conduct	
GGC-IS01/2021- 3.1	Sub-Committee briefs - See Day 1 Read Ahead.zip	
GGC-IS01/2021- 3.2	Seabed 2030 quarterly report - See Day 2 Read Ahead.zip	
GGC-IS01/2021- 4.1	Communications and website update	
GGC-IS01/2021- 4.2	GEBCO service and user experience	
GGC-IS01/2021- 4.3	SCET draft ToRs - See Day 2 Read Ahead.zip	
GGC-IS01/2021- 5.3	List of Actions and Decisions	23 June 2021

LIST OF ACTIONS – Updated 25 June 2021

Agenda Item S		Subject	Status/Date	Comments	Action	
Continu	Continuous					
	-	Participation at IHO RHC meetings	On going	Published and maintain list of RHC meetings on the GEBCO website	Secretary/BODC	
	-	Participation at IOC Regional meetings	On going	IOC to provide and maintain list of regional IOC meetings for consideration of GEBCO representation	IOC/BODC	
	-	IHO RHC and IOC Regional meetings	On going	Coordinate direct engagement with IOC and IHO regional meetings	Chair/Vice-Chair SCRUM/ Director Seabed 2030	
	-	IHO RHC and IOC Regional meetings	On going	Provide suitable material for inclusion in generic GEBCO presentation	IOC	
	-	GEBCO engagement	On going	Identify organizations and conferences at which GEBCO should represented; provide brief comments on attendance to the BODC to keep the community informed of the awareness actions/activities being undertaken	All/BODC	
	-	Participation at IHO RHC meetings	On going	Attendees representing GEBCO at meetings to provide short report for publication on GEBCO website	All/BODC	
	-	TSCOM-SCRUM membership	On going	Invited new participants to join the gebco_folk email contact list to maintain their engagement and keep them informed of GEBCO activities	Chairs TSCOM- SCRUM/Symposium conveners	
GGC35	5					
12	5.3	IHO Resolutions	28 Dec 17Jan 29 Jan	Provide track change versions for Seabed 2030 Project Team input	Secretary/Director Seabed 2030	
GGC36	6					
2	2.3	Finance Report	GGC37 GGC38	Include annex to report with details of expenditure of allocated funds	Chairs TSCOM, SCRUM, SCUFN, SCOPE	
4	2.5	DCDB Report	IOC EC 53 A-31	Raise issue with coastal states to allow the collection and publication of data gathered in their waters of national jurisdiction in support of Seabed 2030 and the CSB initiatives	IOC	

5	2.5	DCDB Report	GGC37 GGC38	Develop joint statement in support of data gathering in support of GEBCO	IOC/IHO
6	2.5	DCDB Report	On going	Coordinate direct engagement with IOC and IHO regional meetings	Chair/Vice-Chair SCRUM/ Director Seabed 2030
7	2.9	SCOPE Report	GGC37 GGC38	Incorporate Outreach website content into GEBCO website	BODC/Chair SCOPE
8	3.2	NF Programmes	29 Jan	Provide a copy of the Map the Gaps articles of incorporation to the GGC	Tim Kearns
16	7.2	Seabed 2030	GGC37 GGC38	Generate two year rolling calendar of hosts for subordinate bodies and symposium	Chairs TSCOM/SCRUM/SCOPE, Symposium co-conveners
19	7.2	Seabed 2030	17 Jan 30 Apr	Develop GGC position on CSB and draft GGC paper in cooperation with appropriate subordinate bodies	DCDB/Evert Flier/David Millar
20	7.2	Seabed 2030	17 Jan 30 Apr	Develop implementation plan for the communication of the CSB position	DCDB/Evert Flier/David Millar
GGC3	7				
3	4.1	Seabed 2030	GGC38	Conduct in-depth assessment for calculating 'Y' component in 'X+Y+Z=100%' equation	тѕсом
4	4.1	Seabed 2030	GGC38	Investigate embargoed data holdings by national HOs	Seabed 2030
5	4.1	Seabed 2030	26 Feb	Propose to Chair intersessional reporting meeting dates	Seabed 2030
6	5.2	GEBCO Communications and Outreach Strategy	2 Jul	Transition SCOPE website to GEBCO website	SCOPE/BODC
7	6.1.1.2	TSCOM WP	2 Apr	Confirm cost of converting B-11 to e- Publication format and commence process	TSCOM
11	10	Next Meeting	26 Mar	Investigate and provide dates and location for next Sub-Committee and Symposium meetings	Secretary/S-C Chairs/Symposium
12	11.1	AOB	26 Feb	Investigate way forward for NF Programme Management Committee (see Action 1)	Chair

13	10	GEBCO Week 2021	26 Mar	Identify host and dates for 2021 Sub- Committee and Symposium	Chairs TSCOM/SCRUM/SCOPE, Symposium co-conveners
14	10	GGC38	29 Jan	Confirm dates for GGC38 in Monaco	Chair/Secretary
15	12	Action List	GGC37	Keep IHO and the Chair and vice-Chair informed of progress with allocated actions	All
GGC-I	S01				
1	1.1	Opening	GGC38	Update all relevant documents to reflect change from 'GEBCO Project' to 'GEBCO 'Programme'	Secretary
2	2.2	GEBCO Management Structure	25 Jun Complete	Include list of GEBCO Principals as annex to GGC-IS01 meeting report	Secretary
3	2.2	GEBCO Management Structure	GGC38	Nomination of individuals to participate in Seabed 2030 meetings	Chairs TSCOM/SCRUM/SCOPE/JMcMP
4	2.3	GEBCO Code of Conduct	GGC38	provide input to help develop a more comprehensive guideline document	All
5	3.1.4	SCOPE Report	24 Sep	GEBCO presentation template development	Chair SCOPE
6	3.1.7	Cookbook Editorial Board Report	GGC38	Volunteers to contact Chair of the Cookbook Editorial Board to identify in what capacity they can contribute	All
7	4.1	Communications and Website Update	GGC38	GEBCO development	Chair SCOPE/HS
8	4.1	Communications and Website Update	GGC38	B-10 revision	Chair SCOPE
9	4.1	Communications and Website Update	GGC38	Increase participation of wider SCOPE membership	Chair/Co-vice-Chairs SCOPE
10	4.3	Establishment of SCET	GGC38	Circulate revised draft ToRs and seek input and feedback	KP/KZ
11	5.2	Next-meeting	25 Jun Complete	Identify suitable dates for GGC38	Secretary
12	5.3	Review of Actions	GGC38	Keep IHO and the Chair and vice-Chair informed of progress with allocated actions	All
13	5.3	GGC-IS01 Draft Report	4 Jun Complete	Draft to be circulated for comment	Secretary
14	5.3	GGC-IS01 Draft Report	18 Jun Complete	All to provide comments on draft report	All

15	5.3	GGC-IS01 Final Report	25 Jun Complete	Publish final report	Secretary
---------------	-----	--------------------------	--------------------	----------------------	-----------

LIST OF DECISIONS – 28 May 2021

Agenda Item	Number	<u>Decision</u>
1.2	1	GGC-IS01 meeting agenda adopted
1.3	2	GGC37 meeting report approved
3.1.4	3	SCOPE to continue, in collaboration of the Funding Work Group, to progress the engagement of external specialist communications support for the development of the GEBCO Communications Strategy
3.1.4	4	SCOPE, in collaboration with VF and IHO and IOC Secretariats, to continue development work for presentation of alternative options by September
3.1.6	5	Funding WG to continue with its current identified tasks
3.1.7	6	Proposal to appoint a vice-Chair of the Cookbook Editorial Board was endorsed and the call for additional members of the Board was supported
4.1	7	SCOPE and Website WG to progress the upgrade of the GEBCO website
4.1	8	SCOPE to progress the task through engagement of the wider membership and ensure a broad spectrum of inputs is reflected
4.1	9	SCOPE to follow an inclusive approach to intersessional meetings to ensure engagement with the wider SCOPE membership
4.3	10	Continue the drafting work with the objective of seeking endorsement and approval at the next GGC meeting
5.2	11	Progress the November symposium and sub-committee meeting plans with GGC38 to be held at the IHO in Monaco in January
5.2	12	The NOC, Southampton, offer should be progressed for the meetings and symposium in 2022

LIST OF GEBCO PRINCIPALS

Country	Name	Organization	E-mail
Australia	Kim Picard	Geoscience Australia	kim.picard@ga.gov.au
Brazil	RodrigodeSouzaObino	Diretoria de Hidrografia e Navegação (DHN)	obino@marinha.mil.br
Canada	Tim Kearns	Great Lakes Observing System	tim@glos.org
France	Thierry Schmitt	Service hydrographique et océanographique français (Shom)	thierry.schmitt@shom.fr
Germany	Boris Dorschel	Alfred Wegener Institute	boris.dorschel@awi.de
Ireland	Aileen Bohan	Integrated Mapping for the Sustainable Development of Ireland's Marine Resource (INFOMAR)	aileenbohan@gmail.com
India	Prashant Kumar Srivastava	Ministry of Earth Sciences	srivastava.pks@gov.in
Italy	FedericaFoglini	Istituto di Scienze Marine (ISMAR) Consiglio Nazionale delle Ricerche (CNR)	federica.foglini@bo.ismar.cnr.it
Italy	MarziaRovere(vice-chair)	Istituto di Scienze Marine (ISMAR)Consiglio Nazionale delle Ricerche (CNR)	m.rovere@ismar.cnr.it
Japan	Shin Tani	Japan Hydrographic Association (JHA)	soarhigh@mac.com
Korea	Eunmi Chang	University of Seoul (UoS)	emchang21@gmail.com
Korea	Han Hyun-Chul	Korea Institute of Geoscience and Mineral Resources	han@kigam.re.kr
Korea	Hyo Hyun Sung	EwhaWomen'sUniversity (EWHA)	hhsung@ewha.ac.kr
New Zealand	Robin Falconer	GEBCO	robinfalconerassociates@gmail.com
New Zealand	Kevin Mackay	National Institute of Water and Atmospheric Research (NIWA)	kevin.mackay@niwa.co.nz
Norway	Evert Flier(chair)	Norwegian Mapping Authority (NMA)	Evert.Flier@kartverket.no
Philippines	Jaya Roperez	Center for Coastal and Ocean Mapping/Joint Hydrographic Center – University of New Hampshire (CCOM/JHC - UNH)	jroperez@ccom.unh.edu
Poland	Karolina Zwolak	Polish Naval Academy	karolina.zwolak1@gmail.com
South Africa	Rochelle Wigley	Center for Coastal and Ocean Mapping/Joint Hydrographic Center – University of New Hampshire (CCOM/JHC - UNH)	rochelle@ccom.unh.edu

Bold names – GGC

Sweden	Martin Jakobsson	Stockholm University (SU) martin.jakobsson@geo.su.se	
UK	Sam Harper	United Kingdom Hydrographic Office (UKHO)	samuel.harper@ukho.gov.uk
UK	Jamie McMichael-Phillips	Seabed 2030	director@seabed2030.org
UK	Helen Snaith	British Oceanographic data Centre (BODC) - National Oceanographic Centre (NCO)	h.snaith@bodc.ac.uk
UK	Pauline Weatherall	British Oceanographic data Centre (BODC) - National Oceanographic Centre (NCO)	paw@bodc.ac.uk
USA	Vicki Ferrini	Lamont Doherty Earth Observatory, Columbia University	ferrini@ldeo.columbia.edu
USA	Jennifer Jencks	National Oceanographic and Atmospheric Administration (NOAA) - National Centers for Environmental Information (NCEI)/Director IHO Data Centre for Digital Bathymetry (DCDB)	jennifer.jencks@noaa.gov
USA	Karen Marks	National Oceanic and Atmospheric Administration (NOAA)	karen.marks@noaa.gov
USA	David Millar	Fugro	DMillar@fugro.com
USA	Caitlyn Raines	Environmental Systems Research Institute (Esri)	craines@esri.com
USA	Larry Mayer	Center for Coastal and Ocean Mapping/Joint Hydrographic Center – University of New Hampshire (CCOM/JHC - UNH)	larry@ccom.unh.edu
-	Julian Barbière	Intergovernmental Oceanographic Commission of UNESCO (IOC)	J.Barbiere@unesco.org
-	Luigi Sinapi	International Hydrographic Organization (IHO)	luigi.sinapi@iho.int
-	David Wyatt (secretary)	International Hydrographic Organization (IHO)/GEBCO Secretary	adso@iho.int