

**1.1. IHO-IOC GEBCO Technical Sub-Committee on Ocean Mapping (TSCOM) Work Plan 2022-2023**

**1.1 TSCOM Tasks**

- B Ensure conduct of TSCOM meeting in 2021 (IHO Task 3.6.1)
- C Ensure effective operation of IHO DCDB (IHO Task 3.6.2)
- D Develop and maintain tools to facilitate the contribution of bathymetric data to the IHO DCDB (IHO Task 3.6.3)
- E Maintain IHO bathymetric publications (IHO Task 3.6.6) including: B-4, B-9, B-10 and B-11
- F Develop the on-line function of B-4 (Information concerning recent bathymetric data) (IHO Task 3.6.6)
- G Support SCOPE in its outreach and education about ocean mapping (IHO Task 3.6.7) by development and dissemination of IHO-IOC GEBCO products such as the Global Gridded Product and Printed World Map
- H Ensure IHO-IOC GEBCO Web site is kept current and updated regularly (IHO Task 3.6.8)
- K Provide technical support, advice, and review to Seabed 2030 Project Director, RDACCs and GDACC
- L Provide support and advice to developing and validating emerging technologies for compiling and disseminating bathymetry

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard	Funding Bid (€)	GGC Decision
B	Ensure conduct of TSCOM meeting	H	Report of TSCOM meeting to GGC	2022	2023	P	Chair TSCOM			
C	Ensure effective operation of IHO DCDB	H	Conduct review	Continuous		O	Director DCDB			
D1	Document dataflow processes	H	Cookbook instructional chapter	Continuous		O	Chair TSCOM Director DCDB Director Seabed 2030			
D3	Conduct DCDB Industry Day and Data Contribution Workshop	H	Conduct virtual workshop and industry day	2020	2023	P	Chair TSCOM Director DCDB		15k (2023)	
E1	Maintain IHO bathymetric publications	M H		Continuous		O	All members of GEBCO GC through the Chair	B-4 - Information concerning recent bathymetric data B-9 - GEBCO digital atlas (discontinued as of 2022) B-11 - GEBCO Cookbook		

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E2	Add and update instructive chapters in IHO-IOC GEBCO Cook Book	H	Maintain B-11  Add section related to Seabed 2030  Investigate e-Publication format for B-11  Seek instructive chapters on contributing data, metadata requirements, platforms for viewing gaps and coverage, CSB, etc.  Form Cookbook editorial board	Continuous  2019  2020  Continuous  2021	  2022  2022  2030  2022	O  O  P  O  C	Chair TSCOM Chair, Cookbook editorial board	B-11 GEBCO Cookbook	5k	
F	Develop, review, and maintain the on-line function of B-4	M	Conduct review	Continuous		O	Director DCDB			

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard	Funding Bid (€)	GGC Decision
H3	Review, Update and Maintain IHO-IOC GEBCO and Seabed 2030 Websites	M	Update website with meeting documents	2019	2023	O	BODC		7.5k	
			Validate members and contact information for SCRUM, TSCOM, and SCOPE	2019	2023	O	Chairs TSCOM, SCRUM, SCOPE			
			Review and maintain all working links	2019	2023	O	Chair TSCOM, BODC			
			Provide technical and content review of both websites	2019	2023	O	Chairs TSCOM, SCRUM, SCOPE			
			Set up Google workspace for GGC and Sub committees.	2022	2023	P	Chair TSCOM, BODC	1.5k		
			Investigate possible integration of SCOPE website into main GEBCO website	2022	2023	P	Chairs TSCOM, SCOPE, BODC	5k		

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K1	Support Seabed 2030	H	Provide scientific expertise and outreach	2018	2030	O	Chair TSCOM,			
			Proposal for multi resolution grids	2022	2023	P	Chair TSCOM			
			Proposal to optimize use of map projections	2022	2023	P	Chair TSCOM			
K2	Travel to assist gathering technical needs from RDACCs and GDACC	H	Attend RMCs for RDACCs	2019	2023	O	Chair TSCOM		4k	
K3	Provide oversight and review of Seabed 2030 web services, methodologies and applications in accordance with TSCOM ToRs	H	Conduct regular reviews and participate in technical meetings	2019	2030	O	Chair TSCOM			

L1	Develop template for seafloor mapping route optimization application	H	Conduct requirements survey	2019	2023	C	Chair TSCOM		10k	
	Monitor and advice (on) use of metadata based on outcome of metadata working group		Prototype and document web app			O				
			Optimal use of metadata schema	2022	2030	O				

## 1.2 Remarks

### B. Ensure conduct of TSCOM meeting in 2021 (IHO Task 3.6.1)

TSCOM is expecting to have one (face to face) meeting in 2022. Possibly aligned with the activities of the GEBCO symposium. Today (April 2022) no dates have been set for this event. Also the final date depends on timing of GGC39 as it is the intention to have the workplan and budget for 2023 ready at least a few weeks before GGC39. The venue is yet to be determined but will most likely take place in Europe.

In addition to the face to face meeting, at least one virtual meeting will be held early summer 2022.

### D. Develop and maintain tools to facilitate the contribution of bathymetric data to the IHO DCDB (IHO Task 3.6.3)

The DCDB industry day was originally scheduled for 2022. This has now been postponed to 2023 and the allocated (requested) budget has also been moved to 2023. DCDB will organize one or more (virtual) Data Contribution Workshops in 2022 instead.

### E. Maintain IHO bathymetric publications (IHO Task 3.6.6) including: B-4, B-10 and B-11

TSCOM asks GGC38 to formally approve the discontinuation of B-9 (GEBCO digital Atlas). The product is no longer maintained.

**K.** Provide technical support, advice, and review to Seabed 2030 Project Director, RDACCs and GDACC

Seabed 2030 has requested TSCOM to investigate options for use of multi resolution grids and to optimize the use of map projections in the GEBCO grid. TSCOM has the intention to set up two separate working groups for this. First milestone for both working groups will be a literature review by the end of 2022. In 2023 the intention is to set up a test bed to gain practical experience with the various option. No budget is needed for 2022 but for 2023 a budget request will be put forward to GGC.

**L .** Provide support and advice to developing and validating emerging technologies for compiling and disseminating bathymetry

In order to avoid duplication of efforts (both for the development of tools and actual survey work), the development of tools, applications and data layers needs to be coordinated and stream-lined. Goal is to create an environment within GEBCO and Seabed 2030 that is easy accessible by all stakeholders (on-line and off-line). Currently multiple initiatives are underway or have been completed without or with little coordination between them. This is far from ideal. In 2022 various meetings took place to improve this. As a result a first step is made to create a data layer based on the A+B+C=100% paradigm where A is what we have, B is what is available or on its way but not yet published and C is unsurveyed. Proposal is that TSCOM will take the lead for this and the outcome will be made available through Seabed 2030 (with respective budgets utilized).

**1.3 TSCOM Meetings (IHO Task 3.6.1 refers)**

<b>Date</b>	<b>Location</b>	<b>Activity</b>
1-4 October 2012	IHB, Monaco	XXVIII <sup>th</sup> Meeting
7&9 October 2013	Venice, Italy	XXIX <sup>th</sup> Meeting
11-13 December 2014	Mountain View, California, USA	XXX <sup>th</sup> Meeting
5-7 October 2015	Kuala Lumpur, Malaysia	XXXII <sup>th</sup> Meeting
10-12 October 2016	Viña del Mar, Chile	XXXIII <sup>th</sup> Meeting
13-14 November 2017	Busan, Korea	XXXIV <sup>th</sup> Meeting
5-6 November 2018	Canberra, Australia	XXXV <sup>th</sup> Meeting
4-5 November 2019	Portsmouth, NH, USA	XXXVI <sup>th</sup> Meeting
11&14 January 2021	Remote VTC	XXXVII <sup>th</sup> Meeting
9&19 November 2021	Remote VTC	XXXVIII <sup>th</sup> Meeting
June 2022	Remote VTC	Intermediate meeting
Winter 2022	tbd	XXXIX <sup>th</sup> meeting

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