#### GEBCO MINIMUM METADATA WORKSHOP

14-15 MARCH 2024
IHO Data Centre for Digital Bathymetry
National Oceanic & Atmospheric Administration

# Workshop Summary & Goals

The metadata workshop brought together multiple metadata experts to focus on overall interoperability and to consider additional metadata needs. Participants included representatives from Seabed 2030, GEBCO, IHO-DCDB, NOAA OCS, EMODnet, and IFREMER.

To achieve workshop goals, participants focused on two primary activities

- Comparison and discussion of metadata across systems and organizations to identify both consistencies and inconsistencies
- Consideration of metadata use-cases in the context of the data continuum concept that was central to the 2023 workshop series.

Workshop outcomes include a proposal of minor adjustments to the GEBCO metadata schema and a table that identifies metadata fields that are important for data stewardship use-cases - archiving, discovery and access, synthesis.

# Comparison of Metadata Definitions - Suggested Mods to GEBCO Schema

The group reviewed terms, definitions, and concepts to identify consistencies and ambiguities and developed a set of proposed changes to the GEBCO metadata schema. These changes are summarized in Table 1 and are expected to provide better clarity and consistency with other metadata schemas.

The most significant change is to rename "source\_\*\*" metadata fields in the GEBCO schema to "survey\*" metadata fields. This renaming remains consistent with the original metadata definitions presented in the GEBCO schema but removes the potential for confusion when data are sourced from the DCDB. DCDB uses the term "survey" to refer to the field program, which was the intent of the "source" field in the GEBCO metadata schema. This removes any confusion related to the DCDB metadata term "source" (which refers to contributing organization).

The other potential changes that can be made to the GEBCO schema have to do with simplifying the fields that are currently repeated across the different concepts of source (survey) and compilation. In theory the prefix "contrib\_" and "source\_" could be dropped and the fields could be folded together.

- Survey this is the metadata related to the source-level bathymetric survey data sets
- Compilation this is metadata for grids/compilations and the institution who created the compilation or grid.
  - When reviewing other metadata schemas, the group recognized that "composite product" is the term used in EMODnet for what is referred to in GEBCO as "compilation"
- Contributor this is metadata related to who is giving the data to GEBCO

Table 1: Metadata definition (concept) compared with current GEBCO metadata field name and proposed GEBCO metadata field name

Metadata Definition	Current GEBCO metadata field	Proposed GEBCO metadata field		
data_set_name	source_id	survey_id		
Org where resource originated	source_org	survey_org		
Country where resource originated	source_country	survey_country		
Date created	source_date	survey_date		
Device type (e.g. TID)		survey_device_type		
Device Make/Model	source_device	survey_device		
Platform Name	source_platform	survey_platform		
Platform Type	source_platform_type	survey_plaform_type		
Resource type: - RawSurvey, ProcSurvey, - SurveyProduct, - CompositeProduct	dataset_proc_status	data_resource_type		
Accessibility: - direct download, - on request, - not accessible		data_accessibilty		
Data license - are there use restrictions? - CC license?	dataset_restrictions	data_license		
Landing page for learning more about data and/or downloading items. ( If dataDOI exists, use this with its url.)	source_URL	data_access_url		
Data DOI	source_DOI	data_doi		
Geometry for display/search	source_shapefile/geom Geospatial geometry			

### Review of Metadata Use Cases

The outcomes of this exercise can help inform the development of interfaces and services to ensure that all necessary metadata for complementary aspects of the data continuum are collected and provided. This information can also help to distinguish between "required" and "suggested" metadata.

Table 2: Review of metadata definition and use-case

	Use-Cases						
Metadata Definition	contrib	discovery	download	credit	metrics	synthesis	
data_set_name	У	у	У	У		у	
Org where resource originated	У	У	У	У	У	У	
Country where resource originated		у		У	у		
Date created	У	у	У		У	у	
Device type (e.g. TID)	У	у	У		У	у	
Device Make/Model	У	у	у	У	У	у	
Platform Name	У	у		У	У	у	
Platform Type	У	у	у		У	у	
Resource type: - RawSurvey, ProcSurvey, - SurveyProduct, - CompositeProduct	y	у	у	y	у	у	
Accessibility: - direct download, - on request, - not accessible	у	у	у		у	у	
Data license - are there use restrictions? - CC license?	У	У	у	У	у	у	
Landing page for learning more about data and/or downloading items. ( If dataDOI exists, use this with its url.)		У	у	У		у	
Data DOI		У	У	У			
Geometry for display/search		у	у		У	У	

### **Next Steps**

- Metadata WG to review and confirm support and to supply to TSCOM leadership for approval (mid June)
- TSCOM Chair and Vice Chair review and recommendation of next steps
  - SB2030 Technical Team to review and comment (early July)
  - TSCOM review and endorse to promote to GGC for review/endorsement (early July)

## Requested Action

• GGC review and endorse via email correspondence (early September)

### Workshop Attendees

Federica Foglini - GEBCO Metadata Working Group Chair, TSCOM Vice Chair Pauline Weatherall - GEBCO Data Manager, Seabed 2030 Global Center Vicki Ferrini - TSCOM Member, Seabed 2030 Atlantic-Indian Regional Center Jess Nation - IHO Data Centre for Digital Bathymetry Data Manager Miya Pavlock - NOAA Office of Coast Survey, External Source Data Team Lead Cécile Pertuisot, Ifremer