

IOC-IHO/GEBCO-V/3  
Ottawa, 26 April 1978  
English and French only

INTERGOVERNMENTAL OCEANOGRAPHIC  
COMMISSION  
(of UNESCO)

INTERNATIONAL HYDROGRAPHIC  
ORGANIZATION

Fifth Session of the Joint IOC/IHO Guiding Committee  
for the General Bathymetric Chart of the Oceans (GEBCO)

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Ottawa, 24-26 April 1978

SUMMARY REPORT

SUMMARY REPORT

1. Opening of the session

The fifth session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans (GEBCO) was opened by the Chairman, Professor E.S.W. Simpson, at 10:00 on Monday 24 April 1978 in Canadian Hydrographic Service Headquarters, Ottawa.

After welcoming the participants, the Chairman recalled that shortly after the fourth session of the Committee, Dr. Bruce Heezen, an active supporter of, and participant in, the GEBCO programme had died at sea whilst working on the Reykjanes Ridge. The Committee rose for a minute's silence in respect for the memory of Dr. Heezen.

The Chairman announced that apologies had been received from five members of the Committee :

Dr. Werner Bettac (IHO)  
Captain M. Calder (IHO)  
Dr. Y. Iwabuchi (IHO)  
Dr. A. Lonardi (IOC)  
Dr. G. Udintsev (IOC) who was represented by Dr. G. Agapova.

The Chairman welcomed Dr. R.L. Fisher as a new member of the Committee, nominated by IAPSO to replace Dr. Heezen. He also welcomed five invited participants - Mr. James B. Chandlee, Dr. Leonard Johnson, Dr. Jacqueline Mammerickx, Dr. Evgeny Popov, and Ms. Marie Tharp. A full list of participants is attached as Annex VI.

2. (a) Adoption of the Agenda

The agenda was slightly modified and then adopted (see Annex I).

(b) Arrangements for the session, documentation, etc.

The Canadian Hydrographic Service representative explained the arrangements for the session and the Secretary introduced the documentation (Annex II).

3. Matters arising from the report of the fourth session of the Guiding Committee

Item 3. Revision of GEBCO Regulations

The representative of the IHO informed the Committee that the GEBCO regulations would consist of the basic regulations governing compilation of plotting sheets to which would be annexed :

- i) Terms of Reference of the Guiding Committee ;
- ii) Classification Criteria ;
- iii) GEBCO Specifications ;
- iv) Catalogue of Bathymetric Plotting Sheets (World Series).

The state of preparation of these various parts was as follows :

Revision of the basic regulations - complete ;  
Terms of Reference - Annex II to doc. IOC-IHO/GEBCO-I/3 ;  
Classification Criteria - will be completed very shortly ;  
GEBCO Specifications - further revised during this session of the  
Committee (see item 6 below) ;  
Catalogue of Bathymetric Plotting Sheets - published separately  
1976.

He asked for guidance from the Committee on the inclusion of criteria for digitized data. It was decided that rather than delay further the publication of the GEBCO regulations, a statement should be included to the effect that "As of 1 May 1978, the Guiding Committee for GEBCO has under active consideration the need to establish a data bank for digitized soundings and contours of published GEBCO sheets".

It was also suggested that the title of the GEBCO Regulations be changed to reflect more accurately their content as regulations for bathymetric data collection and handling.

The representative of IHO stated that copies of the entire regulations would be distributed to the Volunteering Hydrographic Offices and members of the Guiding Committee, for comments before publication.

#### Item 6. Publication of Undersea Feature Terminology

The Secretary reported that he had received word from Ing. Lonardi that he is working on the Spanish translation of this document.

#### Item 8. (iv) Echo-Sounding Correction Tables "Matthews' Tables", Third Edition

The representative of IHO stated that he had been informed by the British Hydrographic Office that work was actively proceeding on the new edition of the tables but a publication date could not yet be announced.

#### 4. Consideration of new sheets

##### i) 5.01 Norwegian and Barents Seas

The representative of CHS tabled copies of sheet 5.01 and informed the Committee that it had now been printed and was ready for issue.

The Committee noted several anomalies in the use of generic names for undersea features where local languages had been used in preference to those approved in the Undersea Feature Terminology. A lengthy debate ensued on the practice to be followed for features falling in waters under the national jurisdiction of coastal states.

The Committee agreed that too much onus had been placed on the CHS to decide on differences of opinion and confirmed the recommendation of the Sub-committee on Geographical Names and Nomenclature of Ocean Bottom Features that short meetings of the sub-committee be held to resolve the question of names appearing on each subsequent sheet (see Specifications for the GEBCO (5th Edition), paragraph 602, as revised by the Guiding Committee at its fourth session - doc. IOC-IHO/GEBCO-IV/3, Annex IV). The Committee expressed its thanks to Dr. J. Ulrich, Scientific Coordinator for sheet 5.01 and to Dr. Werner Bettac for their work on this sheet.

- ii) 5.04 North Atlantic (46°40' - 72°N)
- iii) 5.12 South Atlantic (7°N - 46°40'S)

The representative of CHS tabled proof copies of sheets 5.04 and 5.12 and these were reviewed by small *ad hoc* groups set up for the purpose. All matters concerning content of these sheets were resolved satisfactorily and, with amendments, the two sheets were approved for printing and publication. The Committee placed on record its thanks to Dr. A.S. Laughton, and Mr. D. Monahan, joint Scientific Coordinators, for their work on sheet 5.04 and also to Ms. Marie Tharp, who had succeeded Dr. Bruce Heezen as Scientific Coordinator for sheet 5.12.

In discussions on sheet 5.12, it was stressed that geographical names acquire consistency with use and the Committee has a responsibility to keep alteration of accepted names to an absolute minimum, to avoid confusion in the scientific community.

#### 5. Progress with the production programme

A revised production programme was approved by the Committee (see Annex III).

The Chairman announced a goal which was accepted by the representative of the Canadian Hydrographic Service as feasible, of having the complete series of 18 sheets published in time for the XIIth International Hydrographic Conference in April 1982. The representative of Canadian Hydrographic Service warned however that only three sheets could be handled at any one time and nine months lead time was required for production after all manuscripts had been received by the CHS.

The following notes on each sheet should be read in conjunction with the revised Production Programme (Annex III).

- 5.01 - Printed. Approved for publication
- 5.02 - Complete except for U.S. data. The observer from the U.S. Defense Mapping Agency agreed to investigate provision of these data.
- 5.03 - Substantially complete
- 5.04 - Proof stage (see item 4 above)
- 5.05 - Published
- 5.06 - Draft manuscript sheet distributed to reviewers for comments. These are now being incorporated. It was noted that since

sheet 5.05 was published, additional work had been carried out in the area of overlap of the two sheets, by Fisher and Mammerickx. A copy of their chart will be sent by Dr. Mammerickx to Dr. Iwabuchi with a request that the contours therefrom be used in this area rather than copying those which appear on sheet 5.05.

This raised a matter of principle and it was agreed that when adjacent sheets were published at different times, the most up-to-date information should be incorporated in the later sheet even if this entailed differences in the information displayed on overlap or displacement of contours between abutting sheets, though these should be avoided so far as possible.

- 5.07 - Dr. Mammerickx reported that this sheet covered an area which was being intensively studied by various groups and that charts of part of this area were already published or in preparation. She undertook to take into account the work of these groups in the preparation of the GEBCO sheet which will be completed for submission by the end of 1979.
- 5.08 - The invited participants of the USA (DMA and ONR) offered two contoured sheets prepared by the U.S. Navy for a global plastic three-dimensional chart series now in preparation.

Whilst it was generally agreed that this offer should be accepted, provided the sheets could be updated in the normal way using data obtained from other sources, this led to a lengthy discussion on the ethics of showing only a small proportion of the data control used in the preparation of the sheet.

It was finally decided that the U.S. Navy charts should be used in conjunction with other available data as a guide for the preparation of the final contour chart and that, in addition to the tracks shown, a footnote should state "Additional charts made available by the U.S. Navy were utilized in the delineation of the contours shown on this sheet".

Ms. Tharp confirmed that a revised project document had been submitted to the National Science Foundation applying for assistance with the processing of certain data collected during the GARP Atlantic Tropical Experiment (GATE) in the strip 20°N - 10°S.

Dr. Laughton and Dr. Johnson were invited to assume overall supervision of the compilation of this sheet and to attempt to locate a suitable scientist to act as scientific coordinator.

- 5.09 - It was agreed that if possible this sheet (and 5.10, see below) should be published in time for display at the International Conference on Indian Ocean Studies - "The Indian Ocean in Focus", 15-22 August 1979. This effectively gave a deadline for the scientific co-ordinator of the end of 1978.

In accepting this deadline, Dr. Fisher said the sheet was well in hand with the exception of the south-east portion south of 32°S where his main requirement was for data from Lamont subsequent to Conrad 17 and Vema 29, in plotted form.

- 5.10 - The Chairman said that he had provisionally allocated this sheet to Ms. Marie Tharp but that since then he had received a letter from Captain Calder proposing Dr. C. von der Borch of Flinders University, South Australia, as scientific co-ordinator for the area west of 148°E. After discussion it was agreed to appoint Ms. Marie Tharp and Dr. von der Borch as joint scientific co-ordinators to work together on the sheet, with the same deadline as for 5.09 above. The Chairman noted the availability of a bathymetric chart series prepared by the New Zealand Oceanographic Institute and the name of Dr. Larue from New Caledonia was also mentioned as being interested in participating in the preparation of this sheet. The Secretary agreed to contact Dr. Larue and put him in touch with Ms. Tharp.

Ms. Tharp was asked to give this sheet priority over all other GEBCO work, though it was recognized that work on sheet 5.14 would have to proceed simultaneously.

- 5.11 - Dr. Mammerickx reported that the area east of 130°W was almost complete and work was proceeding on the strip 130° - 160°W. A manuscript will be ready by the end of 1978 and should one of the scheduled charts (5.09, 5.10 or 5.18) due for submission in December 1978 not be ready, sheet 5.11 would take its place.
- 5.12 - In proof stage (see item 4 above)
- 5.13 - The Chairman suggested Dr. D. Hayes (Lamont) and Dr. R. Schlich (Institut du Globe, Paris) as joint co-ordinators ; this was accepted by the Committee. He noted also that data were available from Dr. H. Bergh (SA). Drs. Johnson and Vanney would retain responsibility for the overlap strip 64° - 72°S between this sheet (and 5.14, 5.15, 5.16) and the antarctic polar sheet 5.18 (see below).
- 5.14 - It was noted that a large part of this sheet was covered by Hayes and Connolly (1972) and that Dr. Robin Falconer, Bedford Institute of Oceanography, had worked for his Ph.D. thesis on the eastern part of the area.

The Chairman reported that Dr. Falconer had agreed to become a joint scientific co-ordinator for this sheet with Ms. Marie Tharp (see 5.10 above). Also Johnson/Vanney (see 5.13 above).

- 5.15 - The representative of the IHO reported that he had received a letter from Captain A. Mazzei, Hydrographer of the Chilean Navy, offering to undertake compilation and co-ordination of this sheet. The Committee welcomed this offer but considered that the chief Chilean interest would be in the eastern part of the sheet 62° - 100°W. It was therefore decided to invite Captain Mazzei to become a joint scientific co-ordinator with Dr. Ellen Herron of Lamont and Dr. Jacqueline Mammerickx of Scripps and to suggest that he identify an individual to work with Drs. Herron and Mammerickx on the compilation of this sheet. Also Johnson/Vanney (see 5.13 above).
- 5.16 - The Chairman offered to accept responsibility for this sheet with Dr. John LaBrecque of Lamont and with the assistance of Dr. A. Lonardi. It was noted that work carried out by Dr. Peter Barker (University of Birmingham, U.K.) in the Scotia Sea, and Drs. Hugh Bergh and Ian Norton will need to be incorporated. Also Johnson/Vanney (see 5.13 above).
- 5.17 - Dr. Johnson reported that the sheet was basically complete except for the Canadian input. All material had been delivered to the CHS.
- 5.18 - Dr. Johnson reported that compilation was complete apart from the Weddell Sea sector being worked on by Professor Vanney. Projection transformation (Mercator to Polar Stereographic) was still being investigated by Ing. Roubertou with IGN. Depending on the IGN response, a decision will be made as to which office will undertake the work, if it appears technically possible using available automatic systems.

The Committee considered the implications of the Scientific Review procedure (Specifications for the GEBCO (5th Edition), item 601 - doc. IOC-IHO/GEBCO IV/3, Annex IV) and invited the Chairman, in consultation with the Secretary, to draw up and distribute a list of Scientific Reviewers for each of the remaining sheets of the series.

#### 6. Updating of the Specifications for the GEBCO (5th Edition)

The Committee considered the Specifications for the GEBCO (5th Edition) - doc. IOC-IHO/GEBCO-II/3, Annex III, (as amended by doc. IOC-IHO/GEBCO-IV/3, Annex IV), and approved amendments to paragraphs 201C, 202B, 203A and 204 (see Annex IV), to take into account decisions that have been made with regard to the Basic Specifications for the Polar Sheets.

No other amendments were considered necessary.

The full specifications will be published shortly as an Annex to the GEBCO Regulations (see item 3 above).

7. Report of the Sub-Committee on Geographical Names and Nomenclature of Ocean Bottom Features

The Secretary of the Sub-Committee (Rear Admiral D.C. Kapoor) introduced the report of the third session of the Sub-committee (doc. S3/2641/3 Revised), held in Patricia Bay, Victoria, Canada, 21 April 1978 .

He informed the Committee that Dr. R.L. Fisher had been coopted to the Sub-Committee to replace Dr. B.C. Heezen (see also item 10(a) below). Dr. Richard R. Randall, Convenor UN Working Group on Undersea and Maritime Feature Names and Dr. Jack W. Pierce - Member U.S. Board on Geographical Names, attended by invitation to discuss matters dealt with in item 8 below.

The Guiding Committee welcomed with great appreciation the statement that had been made by the Chairman of the Sub-Committee (Mr. G.N. Ewing) that the Canadian Hydrographic Service would be prepared to continue its support in scribing and printing the remaining sheets of the GEBCO 5th Edition. His further proviso that efforts to establish a permanent geoscience unit should be intensified and possible sources of financial support investigated by the two sponsoring organizations of the GEBCO programme, was noted.

The Sub-Committee had carried out a careful Cartographic Review of sheets 5.01, 5.04, 5.06 and 5.12. The Guiding Committee considered the geographical names and nomenclature of ocean bottom features shown on sheet 5.01 (printed), and 5.04 and 5.12 (in proof), together with the recommendations of the Sub-Committee, under item 4 of the agenda (see above).

Other matters dealt with by the Sub-Committee were considered under items 8 and 10 of the agenda (see below).

8 (a). Consideration of the policies and principles for the naming of new undersea features developed by the United Nations.

The subject was introduced by the Secretary of the Sub-Committee on Geographical Names and Nomenclature of Ocean Bottom Features who explained that at the Second UN Conference on the Standardization of Geographical Names, the Group of Experts on Geographical Names had been asked to work with IHO and other interested organizations to prepare proposals for policies and principles for the naming of new undersea features. The Group of Experts had however worked independently and it was only at the Third Conference, Athens, 17 August - 7 September 1977, that the IHO learned that the Group of Experts had developed a paper on the subject. At the same Conference, the representative of IHO (and IOC) had been invited by the Chairman of the GEBCO Sub-Committee to present the GEBCO Undersea Feature Terminology to the Conference as a contribution.

The Conference instructed the Group of Experts to work with the GEBCO Guiding Committee to develop agreed guidelines and a terminology list



for consideration of the Conference at its next session.

The Convenor of the UN Working Group on Undersea and Maritime Feature Names had attended the third session of the GEBCO Sub-Committee and agreed to draft a paper based on the agreement reached at the Sub-Committee meeting.

The Secretary of the Sub-Committee stated that this paper will be distributed to the members of the Guiding Committee as well as the Member States of IOC and IHO, for comments.

The Guiding Committee expressed some reservations about these procedures but it was pointed out that they were solely guidelines for the use of the national names authorities, intended to improve international standardization of the procedures used for the naming of new undersea features.

(b) Development of a joint list of terms and definitions of undersea features for international use, in collaboration with the UN Group of Experts on Standardization of Geographical Names

The Sub-Committee had held detailed discussions with the UN Convenor on the terms contained in the two lists and a fair amount of agreement was reached. However, it was not possible to reach full agreement on all the terms listed. Consequently further negotiations would be necessary between the Sub-Committee and the UN Group of Experts.

The Guiding Committee stressed that the terms contained in the GEBCO Undersea Features Terminology have been developed after considerable discussion and should not be altered substantially without full discussion in the Committee.

9. International Bathymetric Chart of the Mediterranean (IBMC).

The Secretary introduced document IOC-IHO/GEBCO-V/7 and provided the Committee with general background information on the state of preparation of the International Bathymetric Chart of the Mediterranean.

He explained that the compilation of the basic data on a series of 1/250,000 plotting sheets was virtually complete and that the Group of Experts for the IBCM would meet for its sixth (and probably last) time in June 1978 in Leningrad. During 1979 and 1980 the ten sheets of the series will be printed and published by the Hydrographic Office of the USSR. He noted that a small editorial board might be set up to advise the Hydrographic Office of the USSR during this period and to review the sheets in proof stage as they are produced.

The Secretary explained that the reason for placing this item on the agenda of the Guiding Committee was to ask the Committee to consider the project and to place on record whether it would be willing to accept responsibility for technical supervision of the IBCM (and projects of a similar nature developed in the future), should it be requested to do so by the governing bodies of IOC. Any such decision would of course be subject to the agreement of the IHO.

It became clear in debate that the matter could be divided into two problems :

- i) continued maintenance of the 1/250,000 plotting sheet series ;  
and
- ii) technical supervision of the chart series.

With regard to the continued maintenance of the plotting sheets, it was pointed out that only two of the six regional co-ordinators were from Hydrographic Offices and the remaining four were most unlikely to be prepared to maintain the sheets for which they now hold responsibility, as a permanent task. It was suggested therefore that it might be appropriate for this task to be transferred to the Hydrographic Offices of the Member States of IHO in the region and on the suggestion of the representative of the IHO, it was agreed that the matter should be passed to the newly formed Mediterranean and Black Sea Hydrographic Commission for its consideration.

So far as technical supervision of the chart series was concerned, the Committee was not clear what effort would be needed and felt therefore that no definite undertaking could be given until this was known. Members were insistent that any task of this nature should not be allowed to dilute the effort available for the GEBCO (5th Edition). It was therefore decided to place on record that the Guiding Committee would be willing to assist, provided this was without prejudice to the existing programme.

#### 10. (a) Membership of the Guiding Committee and its Sub-Committees

The Secretary recalled that the rules for membership of the Guiding Committee and its Sub-Committees had never been formally laid down and approved, though there were a number of statements on record and an understanding existed between the IOC Secretariat and the IHB. In view of the questions that had been raised both in sessions of IOC governing bodies and in the International Hydrographic Conference, the co-sponsoring bodies felt that this matter should be formalized. Guidelines submitted by the IOC Secretariat and the IHB (see Annex V) were approved.

Members of the Committee also raised the question of attendance at meetings by other interested individuals and representatives of Members States of IOC and IHO.

It was confirmed that Members States of IOC and IHO had the right to send observers to any sessions of the Committee. So far as individuals were concerned, the Chairman confirmed that GEBCO Sheet Co-ordinators should be invited to attend all sessions of the Committee ; in addition other interested scientists or hydrographers would always be welcome as observers.

Membership of Sub-Committees is decided upon by the Guiding Committee which is responsible for all appointments made. Each Sub-Committee may however invite additional experts needed to assist them in specific tasks, to participate actively in the work of the Sub-Committee.

The Committee confirmed the appointments of Dr. R.L. Fisher and Dr. G. Udintsev to the membership of the Sub-Committee on Geographical Names and Nomenclature of Ocean Bottom Features. A full list of the present membership of the Guiding Committee and its Sub-Committees is attached to Annex V.

#### (b) Chairmanship of the Guiding Committee

Professor E.S.W. Simpson having completed his term of office, the post of Chairman of the Guiding Committee was opened for election. Professor Simpson was reelected with acclamation.

11. (a) Proposal for GEBCO displays at various conferences, etc.

It was decided that displays should if possible be made of the GEBCO (5th Edition) at the following conferences, etc. :

- i) International Conference on Indian Ocean Studies - "The Indian Ocean in Focus", Perth, Australia, 15-22 August 1979 (see item 5 above, sheets 5.09 and 5.10) ;
- ii) 26th International Geological Congress, Paris, 7-17 July 1980 ;
- iii) XIIth International Hydrographic Conference, Monaco, April 1982 ;
- iv) Joint Oceanographic Assembly (1982) - Place and dates not yet confirmed.

The Secretary was instructed to investigate these possibilities and take appropriate action. It was noted that these conferences, etc., would provide suitable opportunities for actual sales of sheets, if permitted by the organizers, thus improving publicity for the series.

(b) Fourteenth Pacific Science Congress, Khabarovsk, USSR

The Secretary drew the attention of the Committee to the above Congress which will be held from 20 August to 5 September 1979. The main theme of the Congress is "Natural Resources of the Pacific Ocean - for the Benefit of Humanity". He reported that a letter had been received by Unesco from the Academy of Sciences of the USSR proposing *inter alia* that a seminar on GEBCO consisting of 5-8 invited papers, be held during the Congress.

Whilst welcoming the opportunity to be present and publicize GEBCO at the Congress, the Committee felt that it did not justify on its own a full seminar during the Congress. It was decided therefore to invite the Dominion Hydrographer, Canada, to send Mr. D. Monahan to the Congress to present a paper on GEBCO and to make a display of the sheets of the GEBCO (5th Edition) published by that date. If possible sales of sheets should also be organized. The Secretary was asked to arrange for an appropriate response to be sent from Unesco to the organizers.

12. Co-operation with the United Nations Secretariat on matters connected with the Third UN Conference on the Law of the Sea (UNCLOS)

The representatives of the IOC and IHO informed the Committee that a joint offer of assistance was made to the United Nations Secretariat for UNCLOS in the preparation of a map illustrating various formulæ for the definition of the Continental Shelf. The map has been prepared by the Lamont-Doherty Geological Observatory, and Drs. Laughton and Fisher were nominated on behalf of the GEBCO Committee to review the material in draft form. The valuable advice and assistance rendered by the two GEBCO experts has been greatly appreciated by the UN Secretariat.

The Guiding Committee expressed its thanks to Drs. Laughton and Fisher.

13. Date and place of next session of the Guiding Committee

It was agreed that the sixth session of the Committee would be held in Canadian Hydrographic Service Headquarters, Ottawa, 21-23 May 1979, immediately after the CHS/FIG International Hydrographic Technical Conference, Ottawa 14-18 May 1979.

14. Approval of the Summary Report

The Summary Report of the session was approved unanimously.

15. Closure of the session

The Chairman closed the session at 1345 on Wednesday, 26 April 197

A N N E X I

AGENDA

1. Opening of the session
  2. (a) Adoption of the Agenda  
(b) Arrangements for the session, documentation, etc.
  3. Matters arising from the report of the fourth session of the Guiding Committee
  4. Consideration of new sheets :
    - 5.01 Norwegian and Barents Seas
    - 5.04 North Atlantic (46°40' - 72°N)
    - 5.12 South Atlantic (7°N - 46°40'S)
  5. Progress with the production programme
  6. Updating of the Specifications for the GEBCO (5th Edition)
  7. Report of the Sub-Committee on Geographical Names and Nomenclature of Ocean Bottom Features
  8. (a) Consideration of the policies and principles for the naming of new undersea features developed by the United Nations.  
(b) Development of a joint list of terms and definitions of undersea features for international use, in collaboration with the UN Group of Experts on Standardization of Geographical Names
  9. International Bathymetric Chart of the Mediterranean (IBCM)
  10. (a) Membership of the Guiding Committee and its Sub-Committees.  
(b) Chairmanship of the Guiding Committee
  11. (a) Proposal for GEBCO displays at various conferences, etc.  
(b) Fourteenth Pacific Science Congress, Khabarovsk, USSR.
  12. Co-operation with the United Nations Secretariat on matters connected with the Third UN Conference on The Law of The Sea (UNCLOS).
  13. Date and place of the next session of the Guiding Committee
  14. Approval of the Summary Report
  15. Closure of the session
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A N N E X    I I

LIST OF DOCUMENTS

<u>Document Code</u>	<u>Title</u>
IOC-IHO/GEBCO-V/1	Provisional Agenda
IOC-IHO/GEBCO-V/2	Annotated Provisional Agenda
IOC-IHO/GEBCO-V/3	Summary Report of the fifth session of the Joint IOC-IHO Guiding Committee for GEBCO (this document)
IOC-IHO/GEBCO-V/4	List of Documents
IOC-IHO/GEBCO-V/5	List of Participants
IOC-IHO/GEBCO-V/6	Draft revised programme for compilation of the GEBCO (5th Edition)
IOC-IHO/GEBCO-V/7	Status report on the International Bathymetric Chart of the Mediterranean (IBCM)
IOC-IHO/GEBCO-V/8	Form of Understanding between the co-sponsoring bodies on membership of the Joint IOC-IHO Guiding Committee for GEBCO

Other documents

IOC-IHO/GEBCO-IV/3	Report of the fourth session of the Joint IOC-IHO Guiding Committee for GEBCO, Paris, 2-3 May 1977
S3/2641/3 REVISED	Report of the third session of the Sub-Committee on Geographical Names and Nomenclature of Ocean Bottom Features, Victoria, B.C., Canada, 21 April 1978
GEBCO Sheets	5.01 Norwegian and Barents Seas 5.04 North Atlantic (46° 40' - 72°N.) - proof 5.12 South Atlantic (7°N. - 46° 40'S.) - proof
IOC Resolution X-6	General Bathymetric Chart of the Oceans (GEBCO)
Resolutions of the Third United Nations Conference of the Standardization of Geographical Names	21 Maritime Feature Names 22 Undersea Feature Names
ICIOS 1979	"The Indian Ocean in Focus" Main Announcement and Call for Papers
IOC-IHO/GEBCO-II/3 Annex III	Specifications for the GEBCO (5th Edition)

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A N N E X    I I I

PROGRAMME FOR THE COMPILATION OF THE GENERAL BATHYMETRIC CHART  
OF THE OCEANS (GEBCO) (5th Edition)  
(Revised April 1978)

Sheet 5.05	Published 1975
Sheet 5.01	Published March 1978
Sheet 5.04	Proof stage - publication May 1978
Sheet 5.12	Proof stage - publication May 1978
Sheet 5.17	Johnson/Gronlie/Sobczak - Scientific Co-ordinators Submitted to CHS March 1978 (Publication end-1978)
Sheet 5.03	Johnson - Scientific Co-ordinator Submitted to CHS March 1978 but Canadian data still to be added Publication end-1978
Sheet 5.06	Iwabuchi - Scientific Co-ordinator (Submission date July 1978) Publication end-1978
Sheet 5.18	Johnson/Vanney - Scientific Co-ordinators (Submission date July 1978)
Sheet 5.09	Fisher - Scientific Co-ordinator (Submission date end-1978)
Sheet 5.10	Tharp/Von der Borch - Scientific Co-ordinators US (Fisher) responsible for area 0° - 17°S., 110° - 140°E (complete) (Submission date end-1978)
Sheet 5.02	Udintsev - Scientific Co-ordinator (Submission date end-1978)
Sheet 5.11	Mammerickx - Scientific Co-ordinator Area east of 130°W almost complete (Submission date end-1978)
Sheet 5.14	Tharp/Falconer - Scientific Co-ordinators Johnson/Vanney responsible for area south of 60°S (Submission date September 1979)
Sheet 5.16	Simpson/LaBrecque - Scientific Co-ordinators Johnson/Vanney responsible for area south of 60°S (Submission date September 1979)
Sheet 5.13	Hayes/Schlich - Scientific Co-ordinators Johnson/Vanney responsible for area south of 60°S (Submission date end-1979)
Sheet 5.07	Mammerickx - Scientific Co-ordinator (Submission date mid-1980)
Sheet 5.08	Laughton/Johnson - Scientific Co-ordinators (tentative) (Submission date March 1981)
Sheet 5.15	Herron/Mammerickx/Mazzei - Scientific Co-ordinators Johnson/Vanney responsible for area south of 60°S (Submission date March 1981)

Note : The submission date shown is the deadline date for receipt of all material by CHS.

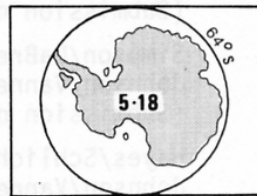
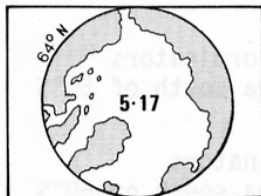
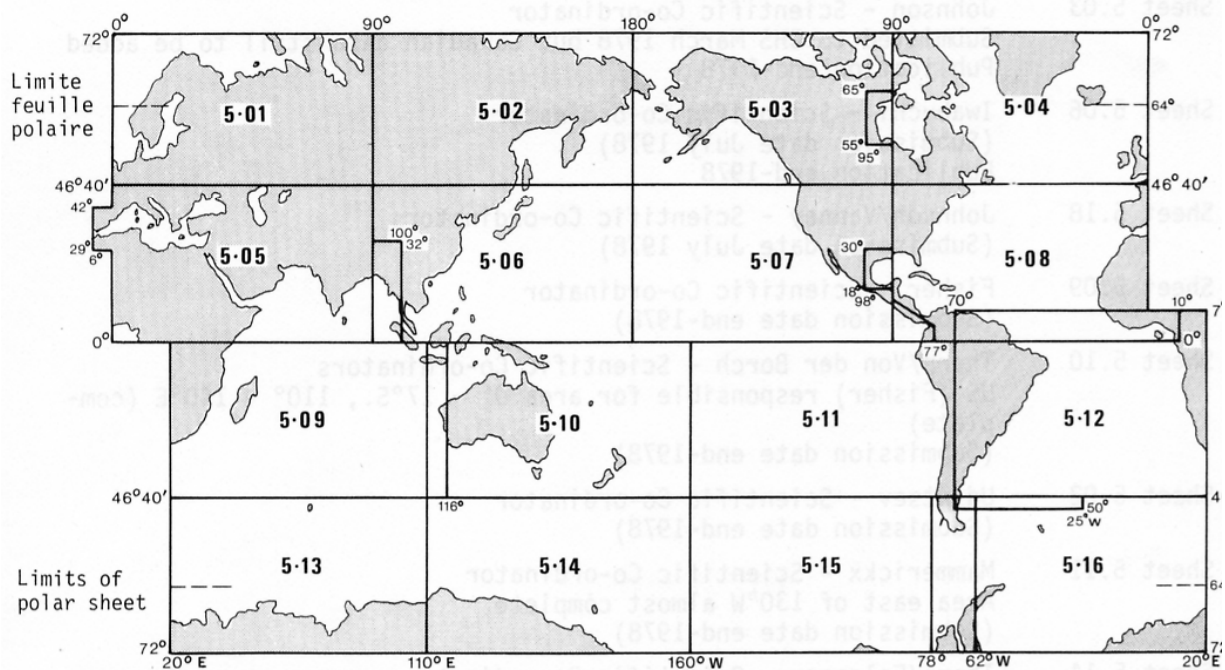
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ANNEX III

PROGRAMME FOR THE COMPIATION OF THE GENERAL BATHYMETRIC CHART  
OF THE OCEANS (GEBCO) (5th Edition)  
(Revised April 1978)

ASSEMBLY DIAGRAM FOR GEBCO  
SHEETS (5th EDITION)

TABEAU D'ASSEMBLAGE DES FEUILLES  
DE LA GEBCO (5ème EDITION)





A N N E X    I V

SPECIFICATIONS FOR THE GEBCO (5th Edition)

REVISION TO SECTION 200 "BASIC SPECIFICATIONS"

Référence ⇨ Summary Report of the second session of the Joint IOC-IHO Guiding Committee for GEBCO (doc. IOC-IHO/GEBCO-II/3, Annex III).

*Delete existing items 201, 202, 203 and 204, and substitute :*

SECTION 200 - BASIC SPECIFICATIONS

201 - Projection

- A. Sheets between latitudes 72°N and 72°S shall be on Mercator projection as used in the IGN "Carte générale du monde".
- B. The polar sheets shall be prepared on polar stereographic projection.
- C. International Ellipsoid (Hayford).

202 - Scale of the sheets

- A. The scale of the sheets of Mercator projection shall be 1/10M at the Equator.
- B. The scale of the polar sheets on polar stereographic projection shall be 1/6M at the pole.
- C. A scaled border shall be shown subdivided into 30-minute increments of latitude and longitude for the Mercator sheets.

203 - Graticule

- A. Meridians and parallels shall be drawn every 10° on sheets on Mercator projection. On the polar sheets, meridians shall be drawn every 10° and parallels every 5°.
- B. Labelling of the graticule shall be as shown on Sheet 5.05.
- C. The tropics of Capricorn and Cancer and the Polar Circles shall be shown.

204 - Size

The neat line size of the 5th Edition sheets shall be the same as that of previous editions (585 mm x 1000 mm) except in the case of extended sheets and the polar sheets.

A N N E X V

FORM OF UNDERSTANDING BETWEEN THE CO-SPONSORING BODIES ON MEMBERSHIP  
OF THE JOINT IOC-IHO GUIDING COMMITTEE FOR GEBCO

At the formation of the Joint IOC-IHO Guiding Committee for GEBCO in November 1973, it was decided that members would be "nominated by the International Hydrographic Organization (IHO) and IOC Secretariats in consultation with SCOR, the International Association for the Physical Sciences of the Ocean (IAPSO) and the Commission for Marine Geology (CMG) ; five being selected by IHO, two by IOC and one each by SCOR, IAPSO and CMG" (ref.: doc. IOC/EC-IV/3, item 4.3.1).

Based on this decision, the following understanding has been reached between the IHB and the IOC Secretariat that membership of the Guiding Committee would be covered by the following guidelines :

1. The Guiding Committee will consist of 10 members, five of whom will be nominated by IHO and five by IOC. Of the IOC members, two will be selected by IOC, one by SCOR, one by IAPSO and one by CMG ;
2. In close consultation, the co-sponsoring bodies will ensure that members of the Guiding Committee will be appointed on a wide geographical basis and that no more than one member will be nominated from any one country ;
3. Members of the Guiding Committee are experts acting in their personal capacity and shall not represent their government. \*

Invitations to sessions of the Guiding Committee will be sent to all GEBCO Sheet Co-ordinators as well as members of the Committee.

Meetings are open to any interested scientists and hydrographers who may wish to attend as observers.

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\* So far as IOC is concerned, the Guiding Committee is classed as a Joint Group of Experts under the IOC guidelines for subsidiary bodies.

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