Intergovernmental Oceanographic Commission
Reports of Meetings of Experts and Equivalent Bodies

IOC Editorial Board for the International Bathymetric Chart of the Mediterranean and its Geological/Geophysical Series

Sixth Session

Jerusalem, 1-6 November 1993

UNESCO

In this Series, entitled

Reports of Meetings of Experts and Equivalent Bodies, which was initiated in 1984 and which is published in English only, unless otherwise specified, the reports of the following meetings have already been issued

1. Third Meeting of the Central Editorial Board for the Geological/Geophysical Atlases of the Atlantic and Pacific Oceans
2. Fourth Meeting of the Central Editorial Board for the Geological/Geophysical Atlases of the Atlantic and Pacific Oceans
3. Fourth Session of the Joint IOC-WMO CPPS Working Group on the Investigations of 'El Niño' *(Also printed in Spanish)*
4. First Session of the IOC-FAO Guiding Group of Experts on the Programme of Ocean Science in Relation to Living Resources
5. First Session of the IOC-UN(OETB) Guiding Group of Experts on the Programme of Ocean Science in Relation to Non-Living Resources
6. First Session of the Editorial Board for the International Bathymetric Chart of the Mediterranean and Overlay Sheets
7. First Session of the Joint CCOP(SOPAC)-IOC Working Group on South Pacific Tectonics and Resources
8. First Session of the IODE Group of Experts on Marine Information Management
9. Tenth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies in East Asian Tectonics and Resources
10. Sixth Session of the IOC-UNEP Group of Experts on Methods, Standards and Intercalibration
11. First Session of the IOC Consultative Group on Ocean Mapping *(Also printed in French and Spanish)*
12. Joint IOC-WMO Meeting for Implementation of IGOSS XBT Ships-of-Opportunity Programmes
13. Second Session of the Joint CCOP/SOPAC-IOC Working Group on South Pacific Tectonics and Resources
14. Third Session of the Group of Experts on Format Development
15. Eleventh Session of the Joint CCOP-IOC Working Group on Post IDOE Studies of South-East Asian Tectonics and Resources
16. Second Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean and Overlay Sheets
17. Seventh Session of the IOC-UNEP Group of Experts on Methods, Standards and Intercalibration
18. Second Session of the IOC Group of Experts on Effects of Pollutants
19. Primera Reunión del Comité Editorial de la COI para la Carta Batimétrica Internacional del Mar Caribe y Parte del Océano Pacífico frente a Centroamérica *(Spanish only)*
20. Third Session of the Joint CCOP/SOPAC-IOC Working Group on South Pacific Tectonics and Resources
21. Twelfth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of South-East Asian Tectonics and Resources
22. Second Session of the IODE Group of Experts on Marine Information Management
23. First Session of the IOC Group of Experts on Marine Geology and Geophysics in the Western Pacific
24. Second Session of the IOC-UN(OETB) Guiding Group of Experts on the Programme of Ocean Science in Relation to Non-Living Resources *(Also printed in French and Spanish)*
25. Third Session of the IOC Group of Experts on Effects of Pollutants
26. Eighth Session of the IOC-UNEP Group of Experts on Methods, Standards and Intercalibration
27. Eleventh Session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans *(Also printed in French)*
28. Second Session of the IOC-FAO Guiding Group of Experts on the Programme of Ocean Science in Relation to Living Resources
29. First Session of the IOC-IAEA-UNEP Group of Experts on Standards and Reference Materials
30. First Session of the IOCARIBE Group of Experts on Recruitment in Tropical Coastal Demersal Communities *(Also printed in Spanish)*
31. Second IOC-WMO Meeting for Implementation of IGOSS XBT Ship-of Opportunity Programmes
32. Thirteenth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of East Asia Tectonics and Resources
33. Second Session of the IOC Task Team on the Global Sea-Level Observing System
34. Third Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean and Overlay Sheets
35. Fourth Session of the IOC-UNEP-IMO Group of Experts on Effects of Pollutants
36. First Consultative Meeting on RNODCs and Climate Data Services
37. Second Joint IOC-WMO Meeting of Experts on IGOSS-IODE Data Flow
38. Fourth Session of the Joint CCOP/SOPAC-IOC Working Group on South Pacific Tectonics and Resources
39. Fourth Session of the IODE Group of Experts on Technical Aspects of Data Exchange
40. Fourteenth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of East Asian Tectonics and Resources
41. Third Session of the IOC Consultative Group on Ocean Mapping
42. Sixth Session of the Joint IOC-WMO CCPS Working Group on the Investigations of 'El Niño' *(Also printed in Spanish)*
43. First Session of the IOC Editorial Board for the International Bathymetric Chart of the Western Indian Ocean
44. Third Session of the IOC-UN(OALOS) Guiding Group of Experts on the Programme of Ocean Science in Relation to Non-Living Resources
45. Ninth Session of the IOC-UNEP Group of Experts on Methods, Standards and Intercalibration
46. Second Session of the IOC Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico
47. First Session of the IOC Editorial Board for the International Bathymetric Chart of the Western Indian Ocean
48. Twelfth Session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans
49. Fifteenth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of East Asian Tectonics and Resources
50. Third Joint IOC-WMO Meeting for Implementation of IGOSS XBT Ship-of-Opportunity Programmes
51. First Session of the IOC Group of Experts on the Global Sea-Level Observing System
52. Fourth Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean
53. First Session of the IOC Editorial Board for the International Chart of the Central Eastern Atlantic *(Also printed in French)*
54. Third Session of the IOC Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico *(Also printed in Spanish)*
55. Fifth Session of the IOC-UNEP-IMO Group of Experts on Effects of Pollutants
56. Second Session of the IOC Editorial Board for the International Bathymetric Chart of the Western Indian Ocean
57. First Meeting of the IOC *ad hoc* Group of Experts on Ocean Mapping in the WESTPAC Area
58. Fourth Session of the IOC Consultative Group on Ocean Mapping
59. Second Session of the IOC-WMO/IGOSS Group of Experts on Operations and Technical Applications
60. Second Session of the IOC Group of Experts on the Global Sea-Level Observing System
61. UNEP-IOC-WMO Meeting of Experts on Long-Term Global Monitoring System of Coastal and Near-Shore Phenomena Related to Climate Change
62. Third Session of the IOC-FAO Group of Experts on the Programme of Ocean Science in Relation to Living Resources
63. Second Session of the IOC-IAEA-UNEP Group of Experts on Standards and Reference Materials
64. Joint Meeting of the Group of Experts on Pollutants and the Group of Experts on Methods, Standards and Intercalibration
65. First Meeting of the Working Group on Oceanographic Co-operation in the ROPME Sea Area
66. Fifth Session of the Editorial Board for the International Bathymetric and its Geological/Geophysical Series
67. Thirteenth Session of the IOC-IHO Joint Guiding Committee for the General Bathymetric Chart of the Oceans *(Also printed in French)*
68. International Meeting of Scientific and Technical Experts on Climate Change and Oceans
69. UNEP-IOC-WMO-IUCN Meeting of Experts on a Long-Term Global Monitoring System
70. Fourth Joint IOC-WMO Meeting for Implementation of IGOSS XBT Ship-of-Opportunity Programmes
71. ROPME-IOC Meeting of the Steering Committee on Oceanographic Co-operation in the ROPME Sea Area
72. Seventh Session of the Joint IOC-WMO-CPPS Working Group on the Investigations of 'El Niño' *(Spanish only)*
73. Fourth Session of the IOC Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico *(Also printed in Spanish)*
74. UNEP-IOC-ASPEI Global Task Team on the Implications of Climate Change on Coral Reefs
75. Third Session of the IODE Group of Experts on Marine Information Management
76. Fifth Session of the IODE Group of Experts on Technical Aspects of Data Exchange
77. ROPME-IOC Meeting of the Steering Committee for the Integrated Project Plan for the Coastal and Marine Environment of the ROPME Sea Area
78. Third Session of the IOC Group of Experts on the Global Sea-level Observing System
79. Third Session of the IOC-IAEA-UNEP Group of Experts on Standards and Reference Materials
80. Fourteenth Session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans
81. Fifth Joint IOC-WMO Meeting for Implementation of IGOSS XBT Ship-of-Opportunity Programmes
82. Second Meeting of the UNEP-IOC-ASPEI Global Task Team on the Implications of Climate Change on Coral Reefs
83. Seventh Session of the JSC Ocean Observing System Development Panel
84. Fourth Session of the IODE Group of Experts on Marine Information Management
85. Sixth Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean and its Geological/Geophysical Series

IOC/EB-IBCM-VI/3
Paris, 4 January 1994
English only

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I AGENDA

II REPORT OF CIRCUM-ATLANTIC PROJECT ACTIVITIES - 28 OCTOBER 1993

III SEABEAM SOUNDING SURVEY MADE BY IFREMER

IV LIST OF PARTICIPANTS

1. OPENING OF THE SESSION

1 The Chairman, Professor Carlo Morelli, opened the Sixth Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean and its Geological/ Geophysical Series at 09:00 on Monday 1 November 1993. The session was held at the residence of Dr. John K. Hall, 25 HaMitnahalim Bahar, Ramat Motza, Jerusalem, Israel.

2 At a later stage the group was welcomed in the name of the Geological Survey of Israel by Dr. Ron Bogoch, head of the Marine Geology, Mapping & Tectonics Division, who wished the members and observers all success in their important endeavours.

3 The list of participants is given in Annex IV

2. ADOPTION OF THE AGENDA

4 The agenda - Annex I - was adopted.

3. CONDUCT OF THE MEETING - DOCUMENTATION

5 Dr. John Hall welcomed the participants and explained the arrangements for the session. The Chairman introduced the documentation available.

4. STATE OF PREPARATION AND PUBLICATION OF THE IBCM GEOLOGICAL/GEOPHYSICAL SERIES

4.1 BOUGUER GRAVITY ANOMALY SERIES

6 Dr. Jannis Makris reported that he was continuing to collect data from countries in the region with a view to the possible issue of a 2nd Edition of this series in due course.

7 The existing edition (published April 1989) does not cover the Balkan countries or the eastern Black Sea due to the difficulties that had been experienced at the time in obtaining data from these countries. Subsequently, he had contacted the appropriate authorities in Albania and Bulgaria and was confident that he would obtain their data.

8 Data for the new countries of former Yugoslavia would be more difficult to obtain but he would make an attempt.

9 Dr. Pavel Kuprin and Dr. Emelyan Emelyanov were requested to obtain copies of all Russian data from the Black Sea.

10 Iberian data and French data from North Africa had been updated and upgraded. A new gravity map of Greece had been obtained; a new data set from Israel and more data from Algeria were expected.

11 Dr. Makris reported that the text of the Gravity chapter (brochure) was now complete and this would be handed over to Dr. Hall for publication. The Editorial Board approved publication of this text as Chapter 2 of the Supporting Volume and invited John Hall to arrange for 3,000 copies to be printed.

4.2. SEISMICITY SERIES

12 The Editorial Board had before it Professor Bonnin's final text in English of the Seismicity Chapter (brochure).

13 The Chairman suggested that it was too long (over 100 pages) but Dr. Hall, as Editor and Publisher, accepted the length as he could reduce its size by printing in a reduced typeface. It was camera ready but will require an additional cycle of editing. He would print 3000 copies within seven months.

4.3. PLIO-QUATERNARY/MESSINIAN SEDIMENTS SERIES

14 The Chief Editor presented copies of the 1:5 million sheet which had now been published. These were received with enthusiasm by the Editorial Board and Dr. Popov was congratulated on the final product.

15 He also presented a final colour proof copy of Sheet 2 of the 1:1 million series.

16 As all sheets of the series had now been approved by Prof. Maurice Gennesseaux, printing had already started and would be completed by the end of 1993 (or early 1994). Mr. Desmond Scott reminded him that a full set of the 1:1 million series was needed for display at the General Assembly of the Commission for the Geological Map of the World (CGMW) which will be held in Unesco House, Paris, 7-11 February 1994.

17 Prof. Maurice Gennesseaux reported that he had already submitted the Plio-Quaternary Chapter (brochure) in French. This text is now undergoing editing and translation into English by his co-author Dr. Pierre Burollet. When this has been completed copies of both the English and French texts should be sent to Desmond Scott for stylistic editing, and finally to John Hall (with a copy back to Maurice Gennesseaux) for printing of 3000 copies.

4.4. UNCONSOLIDATED BOTTOM SURFACE SEDIMENTS

18 The title of this series was altered to the above.

19 Dr. Emelyan Emelyanov reported that all maps of this series were now complete, and the Chief Editor tabled a colour proof of sheet 9. The Editorial Board made a number of comments on the presentation, in particular that the blue symbology shown was too heavy. Andrey Popov said that printing of this series would be undertaken during 1994/95. Desmond Scott and Maurice Gennesseaux worked on the title and legend but concluded that some further work will be needed.

20 Emelyan Emelyanov reported that a large amount of data had been promised but had not been received: he had received no data from Germany (Frank Fabricius); or the U.S.A.; the only French data he had received was from the Sicilian-Tunisian Platform; Pierre Burollet had promised some data, so had Graham Evans (U.K.), but neither had supplied any. He was still requesting these data but they were needed urgently if they were to be incorporated into the map series.

21 It was noted that the brochure might run to 100 pages which was considerably in excess of the 12 pages originally planned. John Hall did not reject this but requested that no further additions should be made; he would in fact reduce the physical size requirements by using smaller typefaces.

22 In conclusion Emelyan Emelyanov made a plea for funding support for his projects. Initially it was pointed out that it was unlikely that funding of any kind could be expected from UNESCO or IOC. However, a number of other possibilities were suggested by members of the Editorial Board.

23 Dr. Mekris indicated his willingness to approach appropriate German scientists willing to work with Russians and apply for support from German-Russian co-operation funding sources.

24 Attention was drawn to the European Community Scientific and Technological Options Assessment (STOA) Mediterranean Sea Project which consists of the formation of a digital GIS system. The project has been presented to the European Commission by Professor Frédéric Briand, Director General of ICSEM. It was suggested that as IBCM is being compiled in collaboration with ICSEM (see the title of this series), it could be incorporated into that initiative as a base series. Again it was noted that for this to be acceptable the various series would have to be submitted as part of a digital database.

25 Another possibility is a project of Directorate General XII of the European Community, under the Lomé agreement: Creation of an Environmental Data Bank.

4.5. MAGNETIC ANOMALIES SERIES

26 Dr. Makris presented a colour printout of part of his magnetic compilation of the eastern Mediterranean. He reported that, though he still had a problem in obtaining data from the Balkan countries, he was ready to merge his compilation with that of the western Mediterranean being compiled by Dr. Armand Galdeano. Prof. Gennesseaux was requested to contact Dr. Galdeano and urge him to submit his compilation (on magnetic tape) to the Editorial Board (*i.e.* to Maurice Gennesseaux) at an early date.

27 Prof. Gennesseaux was also requested to ask Dr. Galdeano to send copies of his brochure text in English, when ready, to Mr. Scott and Dr. Hall for editing and subsequent publication.

28 Dr. Emelyanov said that both Dr. Galdeano himself and Dr. Alexander Zhivago from the Shirshov Institute of Oceanology have additional data which still could be incorporated.

29 Dr. Makris agreed to submit the complete compilation to the Chief Editor by the end of 1994 at the latest, provided he had received Dr. Galdeano's material.

5. PROBLEMS RELEVANT TO THE BATHYMETRY OF THE MEDITERRANEAN

5.1. PREPARATION OF A SECOND EDITION OF THE IBCM (BATHYMETRY)

30 The Editorial Board confirmed its past decisions that this would consist of:

i) the traditional printed contour chart, or a chart in shaded hypsometric format (as envisaged in Section 5.2 of the report of the IBCM Informal Meeting, Trieste, 12-13 October 1992 - doc.IOC/INF-911).

ii) digital contours (with shiptracks, etc.). These will, in addition, form an input into the GEBCO Digital Atlas.

iii) a gridded data-set (on a 0.25' grid), as required for the production of digital terrain models (DTMs or DEMs) - Ref: doc.IOC-EB-IBCM-IV/3 para. 26).

31 The project is in a transitional stage at the present time, with certain countries still maintaining hand-drawn plotting sheets (1:250,000 and 1:1 million) and others archiving their data in digital form. This transition has been recognized by the IHO in two particular respects: the formation of the IHO Data Centre for Digital Bathymetry (DCDB) - Ref: IHB Circular Letter 23/1990 and Decision No. 62 of the XIVth International Hydrographic

Conference), and in the report of the IHO Working Group on Oceanic Plotting Sheets, adopted at IHC-XIV - Ref: Decision No. 61 of the XIVth Conference, in which it is noted that 'all analogue OPS will be phased out by 1996'.

32 It was recalled that one of the reasons why the DCDB was established was because the IHO, as the World Data Centre for Bathymetry, could not handle digital data, and as most (in fact, virtually all) data collected by oceanographic research ships was in digital form, they were not being submitted to the World Data Centre for Bathymetry. As a direct result of the establishment of the DCDB a vast amount of new high-quality data have been made available to the hydrographic as well as to the scientific community.

33 Rear Admiral Giuseppe Angrisano tabled a letter from the Italian Hydrographer (Prot. No CRT/12347 dated 11 October 1993) stating that his office wished to submit bathymetric contours for its area of responsibility on the base of the MEDINTCHART scheme instead of on the 1:250,000 plotting sheets. This proposal has since been supported by the Spanish Hydrographer. In response to a subsequent enquiry (Telecom: 29 October 1993), the Italian Hydrographer confirmed that this material, which is in the form of contours, could be supplied in both hardcopy and in digital form.

34 The Editorial Board raised no objection to this proposal as it was clearly uneconomic in time and manpower to produce duplicate products. However, it wished to make clear that this would only meet the immediate need to produce a traditional contour chart (i above) and the digitital contours (ii above). The production of a chart in shaded hypsometric format and the gridded data-set rely on digital soundings, as archived by the IHO DCDB, and as envisaged for the future replacement for the bathymetric plotting sheets which are due to be phased out over the next few years.

35 For these reasons there is no question but that the long-term (post IBCM Second Edition) products are certain to be based on digital bathymetric data. Gridded data sets are essential for computer modelling and other scientific research applications and it would be unfortunate if there were to be reluctance on the part of the hydrographic community to release their data to DCDB now that the scientific data, i.e. data collected by oceanographic research ships, can be obtained by Hydrographic Offices from the Centre.

36 The Chief Editor was invited to examine the Italian proposal and report back to the Editorial Board on its technical feasibility. The IHB was requested to inform the Editorial Board of any further responses received from IHO Member States to the Italian proposal.

37 All 1:250,000 plotting sheets with new data received by IHB have recently been sent to HDNO for the Chief Editor (IHB File No. S3/2704, dated 21 July 1993). These consist of 72 sheets provided by France, Turkey, Greece, and the United Kingdom. No sheets were available from Italy or Spain for the reasons given in paragraph 32 above.

38 Prof. Gennesseaux tabled a reduced copy of a SeaBeam survey of the area 41°-44° 30'N and 3°-10'W, carried out by IFREMER (see Annex III). This clearly supersedes the French plotting sheets covering this area. Maurice Gennesseaux was invited to ask IFREMER if they would permit reproduction of their chart in the IBCM at half its published scale.

5.2. HDNO WORKSTATION AND DATA FOR UNDER-REPRESENTED AREAS

39 Dr. Hall described the follow-up to the agreement reached at the last Trieste meeting to supply equipment to the HDNO for digitizing and processing data from under-represented areas so as to improve the quality of the IBCM Second Edition. In late January Dr. Popov had telexed that the HDNO ship LEONID DIOMEN would be making a port call from 1 to 4 March in St. John's, Newfoundland, and that this would present an opportunity to send a

computer to HDNO. Hall promptly arranged to take vacation, ordered by telephone from Israel an Insight 486 DX-33 system with 210 Mb hard-disk, 1024x1280 Super VGA graphics, twin diskette drives, and 30" x 36" GTCO digitizer with 16 button cursor and pen stylus for delivery within a few days in the USA, flew to the USA, set up and tested the system, and then flew with it to St. Johns.

40 Despite a diversion to St John, New Brunswick, through a geographical misunderstanding on the part of the travel agent, the system was delivered safely, together with over 400 diskettes, assorted software, and $2,000. Following a very pleasant four day visit aboard the DIOMEN, a 10,000 ton survey vessel, during which professional connections were forged between the Russian hydrographers and the local staff of the Canadian Hydrographic Service, Hall returned to Israel. The computer and peripherals arrived in St. Petersburg at the end of April. The cost of the equipment, hard currency, and air transport was about $10,000.

41 Dr. Popov brought to this meeting two diskettes containing all HDNO's digitized soundings for the areas of the eastern Levant, and from Tunisia to Cyrenaica. It is important to note that despite a letter from Admiral Zheglov approving the transfer of this data, he was given many problems by the Russian customs authorities.

42 The Board sincerely welcomes this new line of co-operation with the HDNO, and hopes that this first small step will quickly lead to much more meaningful collaborations.

5.3. DTM PREPARATION

43 Dr. Hall described the pitfalls encountered since the decision in 1989 by Dr. Makris and himself to produce a 0.25' DTM of the Mediterranean. The initial hurdle had been the discovery that the digitized contours prepared by the HDNO did not include land bathymetry, and that it was unlikely that those contours would be available in the immediate future. Dr. Hall then used the same graphical methods he had used to produce a 125 million point DTM on a 25m grid for Israel and vicinity to carry out the preliminary work of scanning and editing the area on Sheet 10, but was forced to stop because of time restrictions.

44 He had hoped to produce this DTM in time for the meeting, but the passage of several years now showed the wisdom of using all spot sounding data and not just digitized contours for making the mathematical interpolations, so this new effort was quickly curtailed. The present intention is to again upgrade computers, but this time to a far more sophisticated Silicon Graphics system with UNIX and X-windows for using the great selection of share-ware workstation programs available for DTMing, visualization, and presentation. This step is intended for his upcoming sabbatical at the Ocean Mapping Development Center at the University of Rhode Island in the USA.

6. PUBLICITY AND DISTRIBUTION

45 The Chairman recalled that publicity had always been unsatisfactory and he believed that considerable improvements could be made. At a recent conference of the Istituto Nazionale di Geofisica in Rome, the IBCM-S on 1:1 million was mounted as a full wall display and a number of copies of the 1:5 million were placed on sale. These were sold out on the first day of the conference. Leaflets were made available, publicizing availability of both the 1:1 million and 1:5 million sheets and giving an address (the IOC Secretariat, Paris) for further orders. This had proved very satisfactory and should be repeated wherever possible, but it needed close liaison with the organizers and also someone to attend who would be responsible for the initial mounting of the exhibit.

46 The Chairman was asked to write to Professor A. Rovelli of the Institute to thank him for permitting the display and offering it to him to retain.

47 The next display to be mounted would be at the General Assembly of the Commission for the Geological Map of the World (CGMW) in Unesco House, Paris, 7-11 February 1994.

48 LCdr. Maureen Kenny was asked to investigate whether it would be possible for IBCM (and GEBCO?) publicity leaflets to be sent out in NGDC despatches (15,000 to 20,000 circulation). Desmond Scott would send her a copy of a leaflet similar to that distributed in Rome.

49 Rear Admiral Angrisano offered to advertise the IBCM in:

(i) The International Hydrographic Review, page size 17 x 27cms

(ii) The International Hydrographic Organization Yearbook, 17 x 15 cms

(iii) The International Hydrographic Organization Catalogue, Size A4. The 1995 Catalogue will be printed in June 1994.

50 Dr. Hall was requested to investigate whether a similar mailing could be made to the approximately 1,000 individuals and institutions receiving publications of the Geological Survey of Israel.

7. ANY OTHER BUSINESS

7.1. DIGITAL VARIANTS OF THE VARIOUS COMPILATIONS

51 The Chairman was requested to contact Dr. Jean Bonnin to ask if the seismicity tape can be given the necessary identification and headers and released for sale.

52 The Plio-Quaternary Series would not be digitized, but consideration will be given at a later stage to digitizing the Unconsolidated Bottom Surface Sediments Series.

7.2. LIAISON WITH THE CIRCUM-ATLANTIC PROJECT (CAP)

53 Mr. Norman Cherkis introduced this item and made a short statement on the latest developments. This is given in Annex II.

7.3. FADING OF RED PRINTING INK ON THE HDNO SHEETS

54 Mr. Scott displayed copies of the Gravity and Seismicity 1:5 million sheets which had been mounted on a wall in normal indirect sunlight for periods of up to two years. It was clear that on the Gravity Sheet, the red printing ink had faded to a much paler shade, and on the Seismicity Sheet it had almost completely disappeared. The Chief Editor was asked to investigate the matter further.

7.4. DISPOSITION OF RESPONSIBILITY FOR PLOTTING SHEETS IN THE EASTERN AEGEAN

55 Commodore Maratos, Hydrographer Hellenic Navy, informed the Editorial Board about problems that have arisen from the decision taken by the IHB in 1990 to omit the dividing line between Greek and Turkish responsibilities for 1:250,000 plotting sheets, which had existed since 1976. Greece had assumed responsibility for the plotting sheets to the west of this line without any problems. The plan showing this division of responsibility appears in Annex V to the report of the Fourth Session of EB-IBCM (Paris, December 1989). The omission of the dividing line by IHB because of an objection by Turkey had been taken arbitrarily.

56 IHB had recently sent a letter to the Hellenic Navy Hydrographic Service which had created more problems. HNHS had replied to this letter and awaited a response from the IHB.

57 The Chairman said that Commodore Maratos' complaint would be noted in the report, but that responsibility for co-ordinating this matter lay with the IHB.

8. DATE AND PLACE OF THE NEXT MEETING

58 It was agreed that the next meeting will be an informal session to take place during the next ICSEM Congress scheduled to be held in Malta in March 1995.

9. ADOPTION OF THE SUMMARY REPORT

59 The Summary Report was adopted at the end of the session.

10. CLOSURE OF THE SESSION

60 The Chairman closed the session at 16:30 on Tuesday 2 November 1993 and in so doing thanked Dr. Hall for his considerable hospitality.

ANNEX I

AGENDA

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ANNEX II

REPORT OF CIRCUM-ATLANTIC PROJECT ACTIVITIES - 28 OCTOBER 1993

For the past year, Circum-Atlantic Project (CAP) has been in an almost "standby" mode. Members of the Executive Committee have been queried regarding participation, and almost no feedback has been received. However, the following significant advances have been made:

1. Dr. Ron McNab of the Atlantic Geoscience Centre, Geological Survey of Canada, has agreed to make available all of the digital magnetic data he holds. The data are to be released first as a stand-alone digital product of the Geological Survey of Canada, on CD-ROM media, following which, CAP is free to incorporate it into their digital database for dissemination under the CAP logo.

2. The Geological Map of North America has been digitized, and pertinent parts are available to CAP to include in the digital database.

3. The GEBCO digital bathymetry has been incorporated into the CAP digital database.

4. The Bathymetry of the Barents and Kara Seas charts has been scanned, and is expected to be spliced into the GEBCO digital bathymetry database.

5. Dr. Walter Smith of NOAA (US) is in process of taking the declassified GEOSAT altimetry data and, in concert with Dr. David Sandwell of Scripps Institute of Oceanography, will create "pseudo-bathymetric maps" for that area. They are also using the Exact Repeat Mission GEOSAT data to create a more crude version of "pseudo-bathymetry" north of 30°S. The data north of this latitude have been released only in a widely-spaced grid, and do not lend themselves to great detail. Although no firm data has been given, it is expected that the remainder of the GEOSAT altimetry will be declassified in the next few years, upon which Smith and Sandwell expect to produce a detailed "pseudo-bathymetry" map of the world. The term "pseudo-bathymetry" is used because it is impossible to use altimetry to give measurable depths to the ocean basins--only the existence of topographic expression relative to its own base.

6. The US Geological Survey representative to IUGS will present a proposal to have the entire existing digital database of IUGS-sponsored efforts placed on CD-ROM media, and distributed by the Geological Society of America, at no cost to IUGS. However, in order to keep the programme running, nominal funds of less than $10,000 USD will be requested from IUGS. These will be used mainly to pay for administrative costs. The CD-ROM will be mastered at US Geological Survey, at no cost outside of the agency, and will be given to GSA *gratis*. GSA will then distribute the materials, charging only reproduction, shipping, handling and storage costs.

7. Dr. Michael Max, who is presently at SACLANT Undersea Research Centre in La Spezia, Italy, is attempting to compile a database, and will be supplying digital data for the central and western Mediterranean to be incorporated into the CAP digital database. He would like to include sedimentary characteristic for the entire Mediterranean, with the incorporation of IBCM data as well, and create a CD-ROM or CD-ROM set under the "umbrella" of IUGS, NATO, ONR and CAP. It is expected that neither IBCM or generally, IUGS will have to commit funds for this project.

8. As a corrollary project, USGS is tentatively exploring the possibility of a Circum-Atlantic Project, with data distributed on a CD-ROM product.

9. USGS has an agreement with one of the small universities (Mary Washington) not far from Washington DC, to scan and edit all analog data it received. The project can be expanded to include IBCM products, provided they are incorporated into the CAP database. Point of contact for this effort is Dr. Terry Offield, (703) 648-6135.

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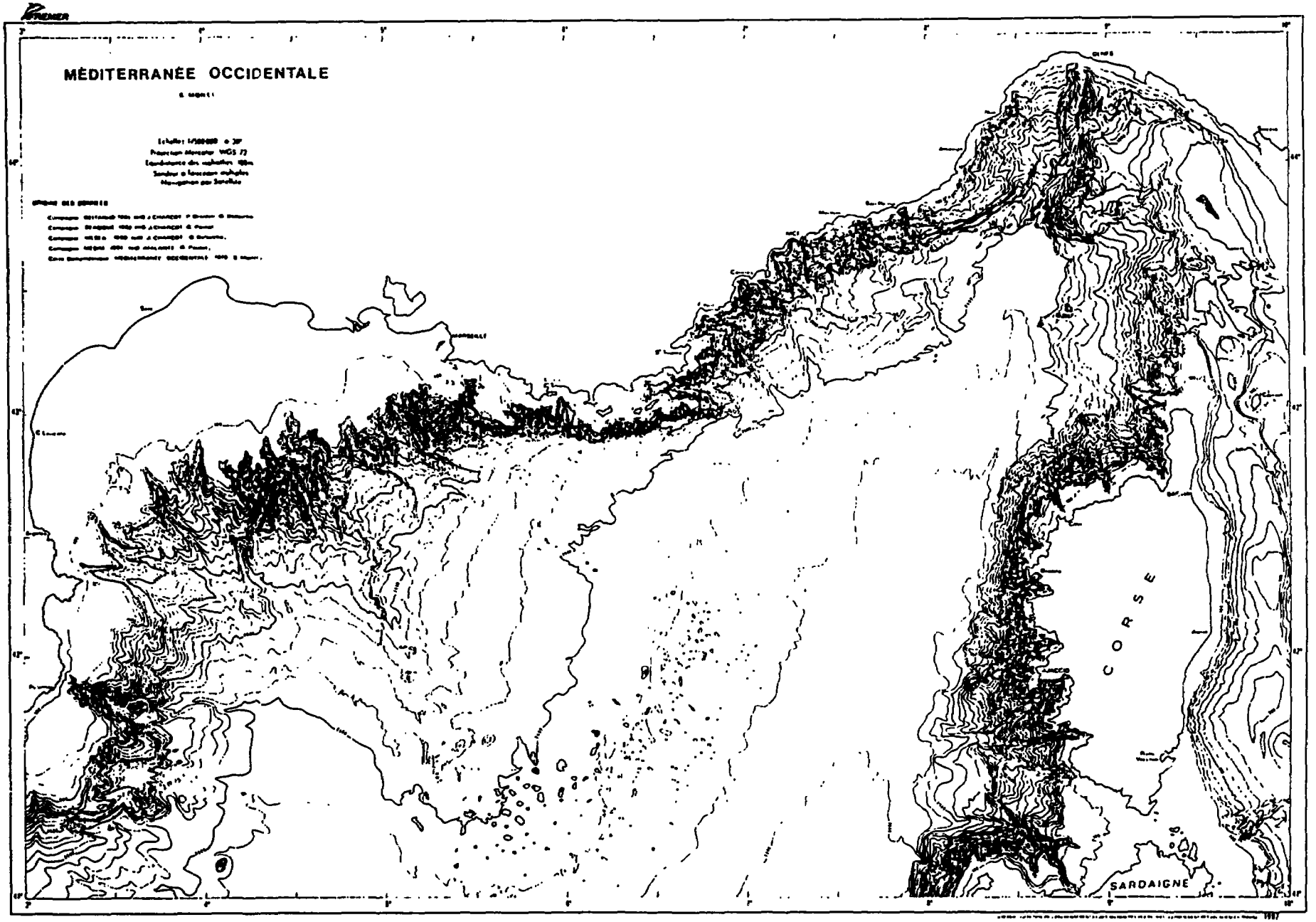

ANNEX IV

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During the meeting and subsequent four-day excursion, the Group had the pleasure to meet and be edified by the following Israeli scientists, whose affiliations are given in case members wish to follow up on their brief encounters:

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