MINUTES

50th EXECUTIVE COMMITTEE MEETING
FEBRUARY 25 – MARCH 1, 2002
LOWER HUTT, NEW ZEALAND
AGENDA

0. WELCOME ADDRESSES

1. APPROVAL OF AGENDA

2. 48TH EXECUTIVE COMMITTEE MEETING HELD IN HYDERABAD, INDIA, FEBRUARY – MARCH, 2001 AND 49TH EXECUTIVE COMMITTEE MEETING HELD IN YICHANG, CHINA, SEPTEMBER 2001
   a. Approval of Hyderabad Minutes
   b. Actions arising from these Minutes
   c. Approval of Yichang Minutes
   d. Actions arising from these Minutes

3. ANNUAL ADMINISTRATIVE AFFAIRS
   a. President’s Report
   b. Past President’s Report
   c. Vice Presidents’ Reports
   d. Secretary General’s Report
   e. Treasurer’s Report
   f. Permanent Secretariat
   g. Membership
   h. IUGS Member Countries and Regions
      1. Reports and Comments

4. ANNUAL REPORTS OF IUGS BODIES AND FUTURE PLANS
   a. Committees for Research Directions, Publications, and Finances
   b. Commissions
   c. Working Groups, including Working Group on Public Affairs
   d. Affiliated Organizations, including two new applications

5. REPORTS ON CO-OPERATIVE ENTERPRISES
   a. IUGS/UNESCO International Geological Correlation Programme (IGCP)
   b. IUGS/UNESCO Programme on Geol. Application on Remote Sensing (GARS)
   c. IUGS/UNESCO Deposit Modelling Programme (DMP)
   d. Proposed IUGS-UNESCO International Consortium on Landslides
   e. Geoparks Initiative

6. INTERNATIONAL GEOLOGICAL CONGRESS (IGC)
   a. 32nd IGC
   b. 33rd IGC
7. INTERNATIONAL COUNCIL OF SCIENCES UNIONS (ICSU)
   a. Relations with ICSU
   b. Proposed Programs with ICSU
   c. ICSU Committees and IUGS Representatives
   d. Relations with other Unions of the ICSU Family
   e. ICSU Grants

8. IUGS POLICY AND STRATEGY MATTERS
   a. IUGS Statutes
   b. IUGS Nominating Committee
   c. IUGS Strategic Action Plan
      c.1. Task Groups’ Progress
   d. International Year of Planet Earth

9. EXTERNAL RELATIONS
   a. UNESCO
   b. Other Organizations

10. REQUEST FOR FUNDING AND BUDGETS FOR 2002

11. UPDATE
   a. Annual Report
   b. Directory
   c. Brochure

12. IUGS ROAD MAP

13. VENUE AND DATE OF THE 51st EXECUTIVE COMMITTEE MEETING
CONTENTS

0. WELCOME ADDRESSES ................................................................. 1

1. APPROVAL OF AGENDA ............................................................. 2

2. 48TH EXECUTIVE COMMITTEE MEETING HELD IN HYDERABAD, INDIA, FEBRUARY – MARCH 2001 AND 49th EXECUTIVE COMMITTEE MEETING HELD IN YICHANG, CHINA, SEPTEMBER 2001
   2.a. Approval of Hyderabad Minutes ........................................... 2
   2.b. Actions arising from these Minutes ....................................... 2
   2.c. Approval of Yichang Minutes ............................................. 2
   2.d. Actions arising from these Minutes ....................................... 2

3. ANNUAL ADMINISTRATIVE AFFAIRS
   3.a. President’s Report ............................................................. 2
   3.b. Past President’s Report ........................................................ 3
   3.c. Vice Presidents’ Reports .................................................... 3
   3.d. Secretary General’s Report ............................................... 4
   3.e. Treasurer’s Report .......................................................... 4
   3.f. Permanent Secretariat ....................................................... 4
   3.g. IUGS Member Countries’ and Regions’ Reports .................... 5
   3.h. Membership ..................................................................... 5
       1. Member countries and Regions .......................................... 5
       2. Affiliated Organizations ................................................... 5
       3. Associated Members ....................................................... 6

4. ANNUAL REPORTS OF IUGS BODIES AND FUTURE PLANS
   4.a. COMMITTEES
       4.a.1. Committee for Research Directions (CRD) ....................... 6
       4.a.2. Adhoc Review Committee (ARC) .................................... 7
       4.a.3. Committee for Publications (CP) ..................................... 7
       4.a.3. Committee for Finances (CF) .......................................... 8

   4.b. COMMISSIONS
       4.b.1. Commission on Geological Sciences for Environmental Planning
              COGEOENVIRONMENT) .................................................. 9
       4.b.2. Commission on Global Sedimentary Geology (CGSP) ............ 11
       4.b.3. Commission on the History of Geological Sciences (INHIGEO) .... 12
       4.b.4. Commission on Igneous and Metamorphic Petrogenesis (CIMP) or
              Comm. on Petrology and Chemistry of Solid Earth (COPCSE) .... 13
       4.b.5. International Commission on Stratigraphy (ICS) ................... 13
       4.b.6. Commission on Systematics in Petrology (CSP) .................... 18
       4.b.7. Commission on Tectonics (COMTEC) ................................ 19
              Information (COGEOINFO) ........................................... 20
       4.b.9. Commission on Geosciences Education and Training
              (COGEOED) (Dormant) .............................................. 20
### 4.c. WORKING GROUPS

4.c.1. UNESCO-IUGS Working Group on Global Geosites ............................................. 21
4.c.2. IUGS Working Group on Continental Geochemical Baselines .......................... 21
4.c.3. IUGS Working Group on Geochronological Decay Constants ......................... 22
4.c.4. IUGS Working Group on Fossil Fuels ............................................................... 22
4.c.5. IUGS Working Group on Public Affairs ............................................................ 23

### 4.d. AFFILIATED ORGANIZATIONS

4.d.2. Association of Exploration Geochemists (AEG) ............................................... 25
4.d.3. Association of European Geological Societies (AEGS) ................................. 25
4.d.4. Arab Geologists Association (AGA) ................................................................. 26
4.d.5. American Geological Institute (AGI) ............................................................... 26
4.d.6. Ass. of Geoscientists for Intern. Development (AGID) .................................... 27
4.d.7. American Geophysical Union (AGU) ............................................................... 27
4.d.9. Carpathian Balkan Geological Association (CBGA) ........................................ 28
4.d.11. The International centre for Training Exchanges (CIFEG) ............................. 29
4.d.13. European Association of Sciences Editors (EASE) .......................................... 31
4.d.14. European Mineralogical Union (EMU) ......................................................... 32
4.d.15. The Geochemical Society (GS) ..................................................................... 32
4.d.16. Geological Society of Africa (GSA)f ............................................................... 32
4.d.17. Geological Society of America (GSA)m .......................................................... 33
4.d.18. Int’l Ass. of Engineering Geology and the Environment (IAEG) ...................... 33
4.d.19. International Association of Geomorphologists (IAG) .................................... 33
4.d.20. Int. Association of Geochemistry and Cosmochemistry (IAGC) ...................... 34
4.d.21. International Association of the Genesis of Ore deposits (IAGOD) ................... 34
4.d.22. International Association of Hydrogeologists (IAH) ......................................... 34
4.d.23. International Association of Mathematical Geology (IAMG) ......................... 36
4.d.24. International Association of Sedimentologists (IAS) ....................................... 36
4.d.25. Int. Association of Structural/Tectonic Geologists (IASTG) .............................. 35
4.d.27. International Mineralogical Association (IMA) ................................................. 36
4.d.28. International Palaeontological Association (IPA) ............................................. 36
4.d.29. International Permafrost Association (IPA) .................................................... 36
4.d.31. International Society for Rock Mechanics and Geotechnical Engineering (ISSMGE) ................................................................. 37
4.d.32. International Union for Quaternary Research (INQUA) .................................... 37
4.d.33. The Meteoritical Society ................................................................................. 38
4.d.34. Society of Economic Geologists Incorporated (SEG) ...................................... 39
4.d.35. Society for Geology Applied to Mineral Deposits (SGA) ................................. 39
4.d.36. Society of Sedimentary Geology (SEPM) ......................................................... 40

### 5. REPORTS ON CO-OPERATIVE ENTERPRISES

5.a. IUGS/UNESCO International Correlation Programme (IGCP) ......................... 40
5.b. IUGS/UNESCO Programme on Geollogial Application of Remote Sensing (GARS) ................................................................. 41
5.c. IUGS/UNESCO Programme on Mineral and Energy Deposit Modeling (DMP) ................................................................................. 41
5.e. Geoparks Initiative ............................................................................................... 42
6. INTERNATIONAL GEOLOGICAL CONGRESS (IGC)
   6.a. 32nd IGC, Florence (Italy) .................................................................43
   6.a.1 Status of Planning .................................................................43
   6.b. 33rd IGC .................................................................43

7. INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS (ICSU)
   7.a. Relations with ICSU .................................................................43
   7.b. Proposed Programs with ICSU ......................................................44
   7.b.1 Food Security .................................................................43
   7.b.2 Sustainable Development ........................................................44
   7.c. ICSU Committees .................................................................44
   7.c.1 Scientific Committee on the Lithosphere (SCL-ICL) .......................44
   7.c.2 IUGS Representatives on ICSU Committees ................................44
   7.d. Relations with Other Unions of the ICSU Family: .......................45
   7.d.1 International Union of Geodesy and Geophysics (IUGG) ...............45
   7.d.2 International Union of Geography (IGU) .....................................45
   7.e. ICSU Grants
   7.e.1 ICSU grants for 2002 ..............................................................45
   7.e.2 Proposals for ICSU grants for 2003 ..............................................45

8. IUGS POLICY AND STRATEGY MATTERS
   8.a. IUGS Statutes .................................................................46
   8.b. IUGS Nominating Committee ......................................................46
   8.c. IUGS Strategic Plan .................................................................46
   8.c.1 TASK GROUPS .................................................................46
   a. Task Group 1 Committee for Research Directions .......................46
   b. Task Group 2 Proposal Policy ......................................................47
   c. Task Group 3 Joint Programs ......................................................47
   d. Task Group 4 Technology Transfer & Education ............................47
   e. Task Group 5 Visibility ...............................................................48
   f. Task Group 6 Publications ...........................................................48
   g. Task Group 7 Finances ...............................................................48
   h. Task Group 8 Commissions ..........................................................48
   i. Task Group 9 IGC and IUGS .........................................................49
   j. Task Group 10 Affiliated Organizations ........................................49
   k. Task Group 11 National Committees ............................................50
   8.d. International Year of Planet Earth ............................................50

9. EXTERNAL RELATIONS ...............................................................51
10. REQUEST FOR BUDGETS AND FUNDS FOR 2001 ..................................51
11. UPDATE
   11.a. Annual Report ...............................................................51
   11.b. Directory .................................................................51
   11.c. Brochure .................................................................51
   11.d. New IUGS Logo ...............................................................51
   11.e. IUGS Award .................................................................51

12. IUGS ROAD MAP ...............................................................52
13. VENUE AND DATE OF THE 51st EXECUTIVE COMMITTEE MEETING ....52
ATTENDEES

IUGS EXECUTIVE COMMITTEE:

Ed de Mulder  President (The Netherlands)
Attilio Boriani  Outgoing Secretary General (Italy)
Werner R. Janoschek  Incoming Secretary General and Treasurer (Austria)
Robin Brett  Past President (USA)
Peter Bobrowsky  Vice President (Canada)
Tadashi Sato  Vice President (Japan)
Wissam S. Al-Hashimi  Vice President (Iraq)
Gabor Gaál  Vice President (Finland)
Ian G. Speden  Vice President (New Zealand)
Harsh K. Gupta  Councillor (India)

Secretariat:
Hanne Refsdal  IUGS Secretariat (Norway)

OBSERVERS:

John Aaron  IUGS Webmaster
Antony Berger  Chair, COGEOIN and Committee for Publications
Jean-Paul Cadet  IUGS Councillor from August 2002 (France)
Fred Davey  Institute of Geological & Nuclear Sciences (GNS)
Wolfgang Eder  Director, Earth Science Division, UNESCO
Colin Simpson  Chair, COEOENVIRONMENT
Fred Spilhaus  AGU
Tracey Stoks  New Zealand Commission for UNESCO
Zhang Huaisu  EPISODES (China)

National Committee Representatives
0. WELCOME ADDRESSES

Fred Davey, Institute of Geological & Nuclear Sciences (GNS), welcomed the Executive Committee participants to New Zealand and to the GNS in Lower Hutt.

Ed de Mulder, the IUGS President, opened the 50th Executive Committee Meeting and said he was pleased to see the Committee members and observers in Lower Hutt. He regretted that Vice President Isaac Nyambok and Councillor Jane Plant were not able to be present at the meeting.

De Mulder thanked the organizer, IUGS Vice President Ian Speden of the Institute of Geological & Nuclear Sciences (GNS), and his supporters for the hospitality in arranging the meeting and for the unique field excursion prior to the meeting to view magnificent geological localities on the North Island of New Zealand. De Mulder recognized the financial support of the Institute of Geological & Nuclear Sciences and the Royal Society of New Zealand that had made both the meeting and field trip possible. He also referred to a planned seminar to be held half a day in the course of the Committee meeting.

NEW SECRETARY GENERAL

Before turning to the agenda, De Mulder asked Robin Brett, Chair of the Nominating Committee, to present the results concerning appointment of new Secretary General. Brett officially announced that according to an election previously held, the Representatives of the Adhering Bodies had unanimously elected Werner Janoschek, Austria, the present IUGS Treasurer, as the new IUGS Secretary General. Representatives of the Nordic National Committees had served as scrutineers for the election. Janoschek said he hoped his experience as IUGS Treasurer would help him in his new tasks and that he will continue to act as Treasurer till a new one has taken over.

Attilio Boriani, the former Secretary General, will serve as Past Secretary General on the Executive Committee for one year. He will also be in contact with IUGS and the Executive Committee as President of the 2004 IGC.

The Committee EXPRESSED satisfaction at the appointment of Janoschek as the new Secretary General, who would be in business from the beginning of the present meeting.

The Committee THANKED Boriani for his work for IUGS during his ten years on the Executive Committee, including the Secretary General position for the last five years. The Committee was looking forward to further collaboration with him as President of the 2004 IGC.
1. APPROPRIATE OF AGENDA
   
   The Committee APPROVED the Agenda.

2. 48TH EXECUTIVE COMMITTEE MEETING HELD IN HYDERABAD, INDIA, FEBRUARY – MARCH 2001 AND 49th EXECUTIVE COMMITTEE MEETING HELD IN YICHANG, CHINA, SEPT. 2001

2.a. Approval of Hyderabad Minutes
   
   The Committee APPROVED and ADOPTED the minutes of the 48th Executive Committee meeting held in Hyderabad.

2.b. Actions arising from these Minutes
   
   Boriani reviewed the action list resulting from the Hyderabad Executive Committee meeting, noting that the actions were either done or would come up later in the agenda.

2.c. Approval of Yichang Minutes
   
   The Committee APPROVED the minutes of the 49th Executive Committee meeting held in Yichang.

2.d. Actions arising from these Minutes
   
   Boriani went through the Yichang action list. Almost all of the actions were done. The remaining will be discussed later in the meeting.

3. ANNUAL ADMINISTRATIVE AFFAIRS

3.a. President’s Report
   
   De Mulder presented a brief report to the Committee, stating that most of the work done had been concentrated on increasing the IUGS profile. He referred to the IUGS Strategic Plan approved by the Council in 2000 and reported on a busy year. An extraordinary Executive Committee meeting devoted to all the actions to fulfil the goals of the Strategic Plan had been held in China in September. At that time the different Task Groups had completed 70% of the actions. In the course of the present meeting more actions will be approved and regarded as finished. The remaining ones will be the more complicated, which probably may take several years to complete.

   De Mulder also reported on an IUGS “road mad” that he had worked on together with Gupta. This and other issues he had been involved in would be dealt with under other parts of the agenda.

   He commented on several meetings with National Committees, other Unions and groups and mentioned that two associations would like to be IUGS affiliated organizations. The common goal is to increase the output in geoscience.

   The Committee ACCEPTED the President’s report.
3.b. Past President’s Report

Brett gave a brief report, noting that after being involved in IUGS for 12 years he still had correspondence to take care of. He had been in charge of the Nominating Committee, responsible for finding a new Secretary General. He had chaired the IUGS Task Group 10 on Affiliated Organizations, which had completed its task at the Yichang Executive Committee meeting and also been involved in other task groups. Brett continued to represent earth sciences on the Executive Board of International Council for Science (ICSU).

The Committee ACCEPTED the Past President’s report.

3.c. Vice Presidents’ and Councillor’s Reports

Speden, IUGS Vice President, reported that he had attended both Executive Committee meetings in 2001. He had provided reports on IUGS activities to relevant IUGS related organizations in New Zealand, Australia, Papua New Guinea and Fiji.

He had contributed to several of the Task Groups preparing documents for the IUGS Strategic Plan, notably Task Group 1 (research and Development), Task Group 2 (Proposal policy and Guidelines), Task Group 4 (Technology Transfer and Education), Task Group 7 (Finances) and Task Group 8 (Terms of Reference for Commissions and Working Groups).

Speden had confirmed financial and practical support for a meeting of the Executive Committee of IUGS to be held in New Zealand, February 21 to March 1, 2002, as requested by the President. The Institute of Geological & Nuclear Sciences and the Royal Society of NZ had strongly supported holding an EC meeting in New Zealand. Planning for the meeting continued through the year: the arrangement of facilities, transport, accommodation, workshops, a public lecture, and the field trip with its associated guidebook. The field trip, from Auckland to Wellington through the Taupo Volcanic Zone in the centre of the North Island, also included a visit to the Wairakei Research Centre of IUGS and the Pli-Pleistocene coastal section of the Wanganui Basin.

Gaál, IUGS Vice President, stated that he had attended both Executive Committee meetings in 2001. He had chaired the Task Group 8, which later in the agenda would present a document on new rules for IUGS Commissions and Working Groups and he had been involved in the correspondence concerning updated statutes for the stratigraphy commission. Gaál also talked about his participation in a workshop of the Deposit Modelling Programme.

Al-Hashimi, IUGS Vice President, reported on his participation in various discussions on IUGS matters by e-mail. He had been involved in IUGS Task Group 10 on Affiliated Organizations. He had provided a list of regional development organizations in the Arab world and the Middle East to the President. He had written to each of them introducing IUGS, requesting a list of their programmes and projects and proposing partnership with IUGS on issues of mutual interest. As a member of IUGS Nominating Committee, he had participated in the selection procedure for a nominee to the post of IUGS Secretary General.

Al-Hashimi further stated that he had been in contact with Muslim and Arab countries concerning support to IUGS, IGC and EPISODES and that he had called on Arab Geological Institutions and Universities to forward proposals for symposia, workshops and fieldtrips to the IGC Organizing Committee. He and J. Warren at Brunei University will be conveners for one of the IGC sessions.

Sato, IUGS Vice President, reported on his activities last year and his participation in both the Executive Committee meetings. He had chaired Task Group 9 on the International Geological Congress and prepared a draft to be presented to the National Committees. He had also been in contact with the Japanese National Committee for Geology in effort to
encourage their activities related to IUGS. He had also contacted the Japanese National Committee in effort to stimulate their involvement in IUGS activities.

Bobrowsky, IUGS Vice President, regretted that he had not been able to attend the Executive Committee meeting in China, but reported on his participation in the Task Groups on visibility, technology transfer, finances, and affiliated organizations. He had been involved in IUGS work on geoscience education, had participated in the IUGS publication meeting in Washington in 2001, had represented IUGS in Helsinki and at the "Crowding the Rim" meeting in California. Together with the IUGS President, he had been present at a meeting of the Geological Society of America (GSA) and also the Landslide meeting in Kyoto. He had presented drafts for the IUGS Annual Report, a new IUGS poster and flier.

Gupta, IUGS Councillor, informed the Executive Committee of his involvement with developing a "road map" for IUGS together with de Mulder, interactions with IUGG in developing better co-operation between IUGG and IUGS, and interactions with ICSU on focusing on importance of earth sciences in the 21st century. He had also participated in the two Executive Committee meetings in 2001. He further told the Committee that he is enjoying his new job as Secretary of Department of Ocean Development in India. His background in Earth Sciences has proved helpful when dealing with the ocean development issues such as Energy from the Ocean (Gas Hydrates and Ocean Thermal Energy Conversion); Poly-Metallic Modules and Delineations of Legal Continental Shelf.

The Committee ACCEPTED the Vice Presidents’ and the Councillor’s report. De Mulder thanked them for their work, especially for the efforts made in fulfilling the Strategic Action Plan.

3.d. Secretary General’s Report

Boriani stated that his job as Secretary General had come to an end with the last two Bureau meetings in Trondheim in December 2001 and Paris in February 2002. He stated that the meeting of the Ad Hoc Review Committee (ARC) to review COMTEC was on course for April 2002. He had been engaged in mailing to member countries, Commissions and other IUGS bodies and had appointed, together with Wolfgang Eder, the new members of the IGCP Scientific Board. He said that he was currently setting up the Organizing Committee for the International Geological Congress and finding financial support for this event.

The Committee ACCEPTED the Secretary General’s report.

3.e. Treasurer’s Report

Janoschek presented a written financial report and gave a short explanation of income and expenditures in 2001, noting that 60 member countries had paid the membership fee in time in 2001 and some countries had paid with some delay. Altogether ninety percent of the membership fees had been paid. Almost all of the inactive countries are in category one. Sri Lanka had become again active after submitting membership fee for three years. The Brazilian membership fee for 2001 was still missing. In general, the financial situation was sound.

The Committee ACCEPTED the Treasurer’s report and commended him for his achievements.

3.f. Permanent Secretariat’s Report

Refsdal referred to the Secretariat’s written report and highlighted the day-to-day operations of the Secretariat. She drew special attention to the IUGS Secretariat Website where increasingly more internal IUGS documents will be stored and accessed by IUGS Executive via password.
3.g. **IUGS Member Countries' and Regions' Reports**

Janoschek reported that 113 countries and one region are now members. He presented a summary of the 30 annual reports received.

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The Committee THANKED the Adhering Organizations that had submitted an annual report. It decided to publish the highlights of the annual reports in next *Episodes*, and to distribute the 2002 annual reports to all the National Committees to improve the communication between the Committees.

3.h. **Membership**

3.h.1. **Member Countries and Regions**

De Mulder informed the Executive that IUGS had received a request from Peru to rejoin IUGS as a member country. Peru had withdrawn its membership in 1987. The Adhering Organization will be Instituto Geologico Minero y Metalurgico, which is the first agency for geoscienctific information and research for the sustainable development of mineral, water and energy resources of Peru.

The Committee unanimously APPROVED Peru as a new Member in category 1, pending ratification by the IUGS Council in 2004.

3.h.2. **Affiliated Organizations**

De Mulder stated that IUGS has 37 Affiliated Organizations. The last one, approved at the Executive Committee meeting in Yichang, was the International Geological Education Organization (IGEO).

He further informed the Committee that the following two new associations have applied for affiliated status in IUGS:

1. National Groundwater Association (NGWA)

De Mulder reported on the Groundwater Association, mentioning that the membership is 16,500, of these are 2500 members outside the US representing 72 countries. The Association has good reputation for performing educational work. The Committee questioned how geological they are in their approach, and if they have contact with the International Association of Hydrogeology. The Committee also discussed whether there should be some rules on what percentage of international members an affiliated organization should have and how the word “National” fit in the title of an association that would like to be international. It was noted that from its statutes this seemed to be a rather national and non-scientific organization and it was questioned whether it has non-US officers.
The Committee AGREED to ask the National Groundwater Association for further clarification before the new information is presented to them for a decision on affiliation.

2. Association of Women Geoscientists
Borani presented the application of this association and a relatively long discussion followed, the Committee agreeing with the principle of its objectives to encourage participation of women in geoscience. However, it was noted that this is a US group, based in USA and the representatives to the Board are only Americans. The only international members are individual members and these are few.

The Committee REGRETTED that and affiliation to IUGS of Association of Women Geoscientists could not be approved at this moment in time. However, the Committee sympathized with its goals and would encourage the Association to broaden its international coverage.

3.h.3. Associated Members
Refsdal informed the Committee that the Secretariat had received several requests for membership forms from persons interested in becoming individual associated members.

4. ANNUAL REPORTS OF IUGS BODIES AND FUTURE PLANS
A discussion on IUGS Bodies took place under Agenda Item 8.c.1.h. Report of Task Group 8: Commissions, Working Groups, and Task Groups.

4.a. Committees
De Mulder referred to a decision at the Executive Committee meeting in Hyderabad to split the former Advisory Board for Research Development in two groups, the Committee for Research Directions (CRD) and the Ad Hoc Review Committee (ARC).

4.a.1. Committee for Research Directions (CRD)
(Connected to Task Group 1, Committee for Research Directions.)

De Mulder stated that on the recommendation of the IUGS Strategic Planning Committee a Committee (CRD) had been established and was now in operation. Its primary role is to identify new directions and opportunities for geoscience research. It is composed of nine eminent scientists and two ex-officio Executive Committee members. Chairman is Prof. E. Derbyshire, and members are the four leaders of the IGCP Scientific Board: M. Gaetani (WG1), J. Teller (WG2), G. Wörner (WG3) and V. Ramos (WG4). Further members are four representatives of Affiliated Organizations: S. Haldorsen (INQUA), I. Dalziel (GSA), C. Chopin (EMU) and A. Hofmann.

A copy of the minutes of the group’s first meeting on 8 February 2002 in Paris, by the Chairman E. Derbyshire, was presented to the Executive Committee. De Mulder presented the conclusions of the meeting, mentioning that the CRD had suggested that IUGS should invest in holding one or two workshops per year on new research programmes and on identifying sponsors. Some main new directions were identified, such as, geoscience and human history or evolution, deep Earth processes, and global geo-databases. It was also suggested that IUGS should coordinate geo-publishing in general and some topics were mentioned. CRD had expressed great concern that there are several systems in operation dealing with geosciences directly or indirectly. Some databases are missing or under threat and the importance of identifying the holes in the geo-databases were regarded as important. The idea would be to organize workshops in this field, but as a first step only.
A discussion followed on the topics mentioned that seemed to be overlapping with the work of other Unions and organizations. De Mulder said that the idea was to bring organizations together and other groups will be invited to set up activities with IUGS. Eder noted that overlapping is difficult to avoid. UNESCO had been facing the same problem in the IGCP. However, Eder regarded these topics as generic and was in favour of continuing. He also pointed to the geopolitical aspect: the former IGCP chairman, the new chairman and many IGCP members are involved in the Committee for Research Directions. This would suggest a further joining of forces of UNESCO and IUGS, in addition to the IUGS Affiliated Organizations that are involved.

The Committee ACCEPTED the CRD meeting report, commending the Chairman and members for good work, and decided that the Bureau should work further on the report.

4.a.2. Ad Hoc Review Committee (ARC)

De Mulder stated that the primary role of ARC is to review the activities of IUGS scientific bodies. Boriani mentioned that the Executive Committee had decided a long time ago that the Commission on Tectonics (COMTEC) should be reviewed. This will take place on 21 April in Nice, France during the EGS meeting. Participants, mostly structural geologists, are C. Sengor (Turkey), C. Passchier (Germany), J.-P. Cadet (France), G. Gaál (Finland) and E. de Mulder (IUGS President). T. Blenkinsop would represent COMTEC. He had been asked to prepare a document on future activities in the Commission.

The next review will be on the Deposit Modeling Programme (DMP), probably in June this year. It was pointed to the necessity to keep the expenses as low as possible for these meetings. It was also discussed to review the International Stratigraphy Commission, before Speden is leaving as the rapporteur on ICS.

4.a.3. Committee for Publications (CP)

(Connected to the Task Group 6. This Agenda Item was discussed just following the Committee for Publications’ meeting on 27 Feb 2002 in Lower Hutt, New Zealand)

2001 SUMMARY:
The Committee for Publications (CP) was formed during the Executive Committee meeting in Hyderabad and requested to start its work immediately. It met twice in 2001: 28 February in Hyderabad (during the Executive Committee Meeting) and 12–13 July in Washington DC. At the Executive Committee meeting in Yichang, Janoschek accepted to act as interim chairman until the next CP meeting and Antony Berger was asked to be member of the committee.

Berger, who had chaired the previous Committee for Publications meeting, reported on fruitful discussions. A revised version of the terms of reference will be submitted to the Executive Committee. The CP had agreed to meet again on 9 and 10 August in Washington, DC.

11 recommendations by the CP were presented to the Executive Committee for approval. The first recommendation was to include one representative of both Episodes and the IUGS Web Site as ex-officio members who will participate as observers. A discussion followed on the list of recommendations, some of them discussed under the special items that follow. Berger added that the CP would also like to expand the Committee and needed the Executive Committee’s approval.
The Committee AGREED IN PRINCIPLE to the CP recommendations, but would wait for printed copies before the final decision is made. The Committee approved the CP wish to expand its committee.

EPISODES
SUMMARY 2001:
At the Committee for Publications (CP) meeting in Hyderabad Zhang reported about the improving situation of "Episodes" and the intentions to convert it to a review journal for the next three years. This decision had been postponed until the CP Meeting in Washington where it was decided that "Episodes" should become, step by step, a journal with more review articles. The following distribution of content was decided: 50% articles (40-60%), 30-40% IUGS news (reports from working groups, conferences, commissions, etc.; calendar; profiles), 5-10% book reviews and lists (books and maps), 5% letters and the editorial. A new Editorial Board should be installed.

Berger referred to the Episodes report that had been discussed at the CP meeting, and which also had been distributed to the Executive by Zhang Huaisu. He explained that several of the CP recommendations to the Executive Committee dealt with Episodes. Of high priority the CP considered the Memo of Understanding with the Ministry of Land Resources of China, which should be in place to cover the remaining period to the end of 2004. He also stressed the importance that all IUGS supported projects and programs be required to contribute review papers and quality articles to Episodes at least once during a four year term, and that the annual reports to the Executive Committee should clearly indicate what had been contributed.

It was noted that letters of invitation to new members of the Editorial Board had been sent out from the IUGS Secretariat and acceptance responses had been received. Copies of these letters will be forwarded to the Episodes staff and the PC Chair.

NON-SERIAL PUBLICATIONS
SUMMARY 2001:
At the Hyderabad CP meeting it had been suggested that non-serial publications should be published by a commercial publisher. However, it had been decided to postpone further deliberations until the recommendations of the Strategic Action Plan emerged. At the Washington DC CP meeting a couple of potential partners had been identified, but the decision was again postponed until the Executive Committee meeting in New Zealand.

Berger reported that the CP agreed that it needed further discussions on the non-serial publications before finding a publishing house. He remarked that it is not only to find a publisher, because it also includes implications for Internet. He mentioned that he had been some years on the board of the ICSU Press, but that it had been difficult to convince the Union of an advantage for them working through the ICSU Press. The ICSU Press has a series for guidelines for seeking outside publisher. Berger said he would contact Glen Caldwell, the former CP Chairman on this issue.

STRATIGRAPHIC CHART
SUMMARY 2001:
At the Hyderabad CP meeting a crucial question was the Copyright. A sticker should be added to the Chart indicating single Copyright of IUGS. France and China had requested to edit editions in their own language. At the CP meeting in Washington DC it was agreed to bring the Stratigraphic Chart affair to an end. Distribution was started at the Congress of EUG.

De Mulder said he regarded the item as closed. The Chart is available from the IUGS Secretariat.
INTERNET HOME PAGE (http://www.iugs.org)

Aaron reported on the IUGS web site, which is regularly updated. The President has a column on the site. Visitors from 140 countries had visited it, and visitors from developing countries reflect an increasing spread of Internet. Since he last reported to the Committee in 1999, the visitors to the site have increased 350 per cent. The web site will now be given a facelifting, a more contemporary look.

At the Committee for Publications meeting in Washington DC in July 2001 it had been suggested that a forum should be activated, in which relevant persons and organizations can interact. Aaron stated that the attempt to built up interactivity, a “chat group”, on the site did not work. The Executive Committee, however, found it a good idea and suggested that Aaron try once more to generate discussion on three or four topics including controversial geoscientific ideas. The Commissions should interact and keep it going.

The Committee sincerely THANKED Berger, the new CP Chair, for his presentation and chairing the CP meeting, THANKED Zhang Huaisu and the Episodes staff for all the good work being done, and THANKED John Aaron for his excellent work with the IUGS Website.

4.a.4. Committee for Finances
Janoschek noted that there are no activities in this group yet. See agenda item 8.c.1.g. Task Group 7 Finances.

4.b. Commissions
See also item 8.c.1.h. Task Group on Commissions.

In general, Brett noted that according to the Strategic Plan the commissions should not take it for granted that they last forever. All the commissions should be asked to show a plan for the next year that indicates why they should be a Commission of IUGS, and if the plan was good, they would have a chance to be funded. The Executive Committee should give them guidelines on what should be included in the plan (directions, ambitions, specific scientific objectives and time frame). Brett stressed that the work should not extend beyond five years.

The Committee AGREED that more attention should be paid to the Commissions. They are vital to IUGS, but most of them are not in good condition. According to the Strategic Plan IUGS should be more decisive concerning discontinuation or not.

4.b.1. Commission on Geological Sciences for Environmental Planning (COGEOENVIRONMENT)

SUMMARY 2001:
Four new Officers were elected to bring the Executive up to a more effective operating number of 14, representing 12 countries. The Commission’s profile with the international community remains high with over 250 Corresponding Membership representing 85 countries.

The Geoindicators Initiative continued to progress. Its website was updated. An International Workshop on Geoindicators for Ecosystem Monitoring in Parks and Protected areas was held in Newfoundland (this was stimulated in part by the US National Parks Service adopting the geoindicators concept into its management methodologies), and a Geoinicator Short Course and Field Trip was held in Zambia.
The Working Group on Medical Geology has also continued to progress as the new IGCP Project 454 “Medical Geology”. Its website is active and publication of its newsletter has continued. A series of technical papers (not initiated by the Working Group) were published this year on the topic of “medical geology”. A proposal by the Commission to sponsor the development of the first ever “Registry on Medical Geology” has been accepted by the US Armed Forces Institute of Pathology (AFIP) which will compile the registry (website based). The Second East and Southern Africa regional Workshop in Geomedicine was held in Zambia (in conjunction with the Geoindicator course).

Both the Working Group on Medical Geology and the Geoindicators Initiative actively supported the IGU Workshop on health and the environment held in Jamaica. The success of the Geoindicators Initiative and the Working Group on Medical Geology is such that the Commission has supported a proposal for elevation of these to “special status” within IUGS to allow them to progress further than the Commission can provide.

The Working Group on Urban Geology has almost completed its new website. It has negotiated with IAVCEI about collaborative efforts and also with the Netherlands Institute of Applied Geoscience on Sustainable Subsurface Development. The Working group was awarded a special IUGS grant to develop a research proposal entitled "Capacity building in urban geoscience for sustainable development". Proposed working groups on “Geocology” and “Geosciences for Sustainable Non-Urban Land Resources Management” are actively establishing objectives and work plans.

Two new working groups “Geologic Heritage and Tourism”, and “Cross-Border Issues” have been proposed and are being actively documented for further consideration.

COGEOENVIRONMENT Newsletter 17 was printed and distributed in 2001. The Commission website was upgraded during 2001 and in early 2002 it will be transferred to the Geological Survey of Sweden for future management. Websites of the Working Group on Medical Geology, the Geoindicators Initiative, and COGEOENVIRONMENT are all prominently linked to the IUGS site.

Colin Simpson, the COGEOENVIRONMENT Chairman, gave an overview of the Commission’s activities in 2001, referring to the summary submitted above. He mentioned that increasing the number of people on the executive committee had reinforced the Commission. Concerning publications, Newsletter 17 was published and the Working Group on Medical Geology has advanced its preparations for a textbook of 800 pages with 50 authors from around the world, half of them geoscientists and half medical people. Simpson said there was enthusiasm around the world for the Commission’s activity.

Simpson further stated that it was extremely important that at the current meeting IUGS gave directions for a future within the Union for both the Geoindicators Initiative and the Working Group on Medical Geology. This would allow the groups to progress beyond the boundaries of Commission and broaden its avenue for multidisciplinary activities. The two groups have worldwide recognition and should be allowed to stand on their own in order to develop and disseminate their concepts in various new directions. The Commission also wanted the Committee’s consent to raise other initiatives to the same level.

Reported on the Initiative, Antony Berger, Chair of the Geoindicators Initiative (GEOIN), recalled for the Committee that seven years ago COGEOENVIRONMENT established a Working Group to specifically develop and promote a new approach to monitoring and assessing rapid (<100 years) geological change as a contribution to assessing the state of ecosystems and the environment in general. This “geoindicator” concept using geological indicators of environmental change was currently widely promoted in workshops, in
published book form, in refereed journals, and on the Internet. As a result the geindicator approach had been adopted by several organizations in their environmental reporting activities such as the US National Park Service in a new program to monitor landscapes under its control. The ge indictors initiative has attracted significant funding both from ICSU and from the private sector.

De Mulder stated that it was considered essential to IUGS to keep these initiatives, Medical Geology and GEOIN, in the IUGS family; however, positioning these initiatives as IUGS Commissions, Committees or Working Groups was not appropriate. Hence, it was proposed to transfer GEOIN and Medical Geology temporarily and informally under the IUGS umbrella, as IUGS Initiatives. De Mulder remarked that this solution was compatible with the IUGS Statutes.

The Committee ACCEPTED the COGEOENVIRONMENT report, thanking the Chairman Colin Simpson for his supplementary oral report and commending the Commission for its work.

The Committee AGREED in principle to accept GEOIN Initiative as an IUGS Initiative and at the same time disconnecting it from the Commission on Geological Sciences for Environmental Planning (COGEOENVIRONMENT). The Committee ASKED Berger to present a written report on the GEOIN Initiative with concrete actions. (This was done at the meeting.)

The Committee also AGREED to invite the Medical Geology Working Group to proceed as an IUGS Initiative. It should be asked to submit a report following the same report model as the GEOIN.

4. b. 2. Commission on Global Sedimentary Geology (GSGP).

CHIEF ACCOMPLISHMENTS:
Yet, and in spite of an over ambitious agenda and underfunding, GSGP and its two projects have, over the years, become a remarkable umbrella for bringing together researchers from around the world. The solid concepts behind these two projects have acted like unifying forces to bring under the same roof, scientists from third-world and developing countries and researchers from the rich nations. This synergy has taken the form of symposia, workshops and conferences that resulted in high quality publications wherein all aspects of the Commission’s three terms of reference have been explored and fulfilled.

2001:
Meeting of CRER Working Group in Marseille, May 2001. The theme of the meeting was Anatomy of Carbonate bodies.
Participation of the Pangea Programme and GSGP Chairman to the organising Committee of the International Symposium on the Global Stratotype of the Permian-Triassic Boundary and the Paleozoic-Mesozoic Events held in Changxing, Zhejiang Province, China, August 2001.
Meeting of GSGP interested scientists and PDC members during the IAS international Conference held in Davos, September 2001.
Adoption of a new flagship project for GSGP: "Sedimentary environments of East Asia Mesozoic deposits" (SEAMD) under the leadership of Prof. Paul Markevich, Far East Geological Institute, Vladivostok, Russia.
Updating the web site for GSGP.
Speden (commentator) said that the 2001 GSGP report was not as specific as the other he had read. This commission was set up in 1987 and was reviewed in 1999 by the IUGS Advisory Board for Research Development. He referred to the chief accomplishments above, mentioning that the chief problems were the lack of attendance of PDC members at the GSGP meeting in Davos, and the little response to a new flagship project on “Global ancient oceanic environments and events (GAOEE)”. Plans for 2002 included publication of proceedings of meetings, development of SEAMD and of GAOEE, and development of a web site. The challenge for the Commission over the next five years is to build the flagship projects and to reassess and, perhaps, rationalize the numerous working groups, many of which did not deliver on their “highly ambitious research promises”. It proposed to be more focused and less ambitious.

The Committee ACKNOWLEDGED, with thanks, the annual GSGP report, but expressed some concern about the future work of the Commission. According to new rules and guidelines for Commissions, the Committee invited the Commission to ask for continuation and present as soon as possible a specific plan for the future work.

4.b.3. Commission on the History of Geological Sciences (INHIGEO)

SUMMARY OF ACTIVITIES IN 2001
The Commission’s main activity for the year was the holding of a conference in Portugal, organised by the INHIGEO President, Professor Manuel Pinto. Three themes related to the history of the geosciences were considered: building stones in history; dinosaurs and megafauna; and mining history. The papers were presented in several venues: the Lisbon Geographical Society; the Lisbon Academy of Sciences; and the University of Aveiro. Visits were made to important archaeological sites and ancient mining localities, to Lisbon Cathedral and other notable buildings, the Museum of the Instituto Geológico e Mineiro, and to well-known dinosaur sites on the Portuguese coast.

In addition a round-table discussion was held on the question ‘Why Study the History of Geology?’, and it is planned that a transcript will be published in the next INHIGEO Newsletter. The papers presented at the conference are to be published in 2002 a book, funded by the Gulbenkian Foundation. The conference was strongly supported by the Portuguese community, with no less than 25 sponsoring organizations, and was judged most successful.

With the addition of three new Portuguese Members to INHIGEO in 2001, it is believed that the holding of the annual INHIGEO meeting in Portugal gave a valuable boost to work in the history of geosciences in that country.

A ballot for new Members was held in 2001, and 14 new Members were elected (Argentina 2, Hungary 2, Italy 1, Namibia 1, Portugal 3, New Zealand 2, Russia 2, and Yugoslavia 1).

Sato (commentator) reported on the INHIGEO activities, mentioning that although the Commission achieved a lot in 2001, there were not enough members. An effort to rejuvenate the membership had been prepared and its future activities were also planned on solid basis. Regular conferences were already planned up to 2005, and their scientific contents were scheduled to be published in Proceedings or Special Publications of various Geological Societies. He mentioned that the Commission also had tried to maintain a good relation with the International Union of the History and Philosophy of Science (IUHPS), but was unable to attend the IUHPS Congress in Mexico City.

The Committee COMMENDED INHIGEO on the report and invited them to study the impact of International Geological Congresses in the development of Geosciences, and to help IUGS in reconstructing the history of IUGS through the first-hand experience of some of the protagonists. It should be left to the Commission to decide on the person to carry out this, but the IUGS Executive Committee should be informed about the author.

4.b.4. **Commission on Igneous and Metamorphic Petrogenesis (CIMP) or Commission on Petrology and Chemistry of Solid Earth (COPCSE)**

Boriani (commentator) informed the Committee that no report had been received from this group. The Commission had been examined by the former Advisory Board for Research Development in 1998 in Vienna, with the following recommendation:

"The ABRD commends CIMP for good work, organizing perfect meetings resulting in high quality articles and recommends that the Commission continue. However, the Board feels that there is another role that the Commission should play, provided it has the capability to turn its face more outward, which is to turn to subcommissions to promote a more cross disciplinary and multidisciplinary contribution. There are geological problems, which could need the Commission’s help and expertise. The Board also suggests that the Commission members hold a meeting in the near future."

A short discussion followed.

The Committee DECIDED that since there had been no response from the Commission, the Committee would recommend to the IUGS Council in 2004 that the Commission be terminated.

4.b.5. **International Commission on Stratigraphy (ICS)**

**CHIEF ACCOMPLISHMENTS IN 2001:**

- Reorganization and streamlining with more focus on web-based data dissemination.
- ICS has new Statutes consistent with IUGS guidelines and submitted for ratification.
- Merger of Quaternary and Neogene Subcommisions submitted for ratification.
- Dissolution of Gondwana Subcommission, Precambrian Subcommission and Committee on Quantitative Stratigraphy.
- Proposal to establish Subcommission on Stratigraphic Information System.
- US sponsored and ICS steered action for global stratigraphic web network. (CHRONOS’); “Stratigraphy.org” central ICS website established (webmaster Dr. Sorin Filipescu, Romania; academic computer server sponsored by AMNH, New York).
- Five Global Stratotype Sections and Points (GSSPs) in advanced proposal stage.
- Base of Cenomanian (Cretaceous) 100% approved in ICS and submitted for ratification.
- Bases of the upper stage for the Lower Ordovician Series and of the base of the Upper Ordovician Series are currently submitted to ICS for voting. If approved, these will be submitted to IUGS for ratification in Feb, 2002.

- PROBLEMS IN 2001:
- Progress on Global Stratotype Section and Point (GSSP) selection did not proceed in the timely manner indicated by several subcommission projections in 2000.
- Website construction proved to be more time consuming than originally planned, partly due to lack of dedicated specialists who could freely donate their time and other efforts.
- Efforts to consolidate some subcommissions into a more streamlined framework had to be abandoned.
- Focused Precambrian subcommissions or working groups (Archean, Proterozoic) were recommended to be re-established, but enthusiasm (especially to serve as organizers) has not appeared.

SUBCOMMISSION SUMMARIES:

Neogene Subcommission
- Merger with the former Subcommission on Quaternary Stratigraphy (ongoing)
- Miocene GSSP selection
- Working group on bases of Tortonian and Serravallian Stages have identified candidate sections with cyclically bedded enabling astronomical tuning, but these lack a good magnetic signal.

Paleogene Subcommission
- The base of the Carbon Isotope Excursion is established as criterion for the recognition of the Paleocene/Eocene Boundary. The Dababiya Section near Luxor (Egypt) will be proposed for the location of the future GSSP.
- K/T boundary GSSP section destroyed and likely relocated.

Cretaceous Subcommission
- GSSP for the base of the Maastrichtian was ratified. A volume of data on the Maastrichtian GSSP site at Tercis, France, has also been published with partial financial support from ICS.
- GSSP for base of the Cenomanian was approved by ICS and submitted for ratification to IUGS.
- GSSP proposal for both the base of the Turonian and the base of the Middle Turonian is now with SCS Voting Members; their vote is due by 10 January 2002.
- Another 3 GSSP proposals are at a very advanced stage.

Jurassic Subcommission
- Progress within the Stage Working Groups towards proposal of GSSPs has been concentrated on preparation for the Sicily Symposium to be held in Sicily in September, 2002.
- Publication of the report of the Aalenian WG on the GSSP in Episodes.

Triassic Subcommission
- The base of the Triassic is now fixed and ratified at the first appearance of the conodont Hindeodus parvus in the middle of bed 27, within the Yinke Formation at Meishan, Changxing County, Zhejiang Province, South China. Yin Hongfu, the Chair of the working group convened an International Conference on the P-T boundary in
Changxing during August 2001. The GSSP was celebrated with the unveiling of an impressive 9 m tall stele with a model of the index fossil at its apex.

- Much of the year was taken up in re-organizing the STS and laying the foundation for more inclusive and effective decision making, with a view to speeding up the process of GSSP definition.

- Permian Subcommission
- Formal Proposal of the Guadalupian and component Roadian, Wordian and Capitanian Stages as International Standards for the Middle Permian Series was ratified by the IUGS.

Carboniferous Subcommission
- In September 2001, the SCCS sponsored a general meeting at St. Louis, Missouri, USA, with an associated field trip (with extensive guidebook) that visited the type region of the Mississippian Subsystem in the Mississippi River valley north and south of St. Louis.
- A newsletter (79 pages) with 24 articles on various topics including new proposals for series and stage subdivision of the two subsystems of the Carboniferous System; new radiometric dates, and GSSP discussions was published.

Devonian Subcommission
- Agreement on a threefold subdivision for the Frasnian and almost agreement on the stratigraphic levels. Substantial agreement on subdivision of the Devonian stages: Emsian, Givetian and Famennian.

Silurian Subcommission
- It was decided to re-examine the GSSPs of the Base of Silurian and Base of Wenlock in light of the experience that researchers have had in using these GSSPs as well as new information that had become available since they were established.
- Otherwise, the suite of Silurian series and stages are firmly established by previous GSSPs.

Ordovician Subcommission
- Base of the Tetragraptus approximatus graptolite Zone in the Diabasbrottet section in southern Sweden was approved by the Subcommission as the GSSP for the base of the Second Stage, yet to be named, for the Ordovician System (upper stage of Lower Ordovician Series). The proposal is now before the ICS for a vote of approval.
- The base of the Nemagraptus gracilis graptolite Zone in the Fågelsång section in Sweden was approved by the Subcommission as the GSSP for the base of the Upper Ordovician Series. The proposal is now before the ICS for a vote of approval.
- The Subcommission sponsored a successful meeting and field excursion in Morocco, 30 January to 7 February, 2001 with the title "The Gondwanan Platform during Ordovician times: Climatic, eustatic and geodynamic evolution."

Cambrian Subcommission
- Voting indicated that only the Cordylodus proavus, the G. reticulatus, the Pt. Punctuosus, A. atavus, the Pt. Gibbus, and O. indicus levels and horizons should be taken into consideration for closer examination as potential GSSPs for major chronostratigraphic levels in the Cambrian.
- A Working Group on a Glyptagnostus reticulatus level GSSP to define a Late Cambrian stage.

- The internet homepage of the International Subcommission on Cambrian Stratigraphy includes an overview of Cambrian general bio- and chronostratigraphy, paleontology, and regional litho- and biostratigraphy.

**Terminal Proterozoic Period Subcommission**

- There was a very successful meeting and associated field trip to eastern Newfoundland, where participants studied terminal Proterozoic successions that contain both recently dated ash beds and exceptional assemblages of Ediacaran fossils.

- A newsletter is being distributed in December, 2001 that includes final detailed arguments for candidate GSSP sections, as well as a ballot on choice of GSSP. Therefore, the current mandate of the terminal Proterozoic subcommission will soon be completed.

**Geochronology Subcommission**

- No activities in Geochronology s.str. but its chair edited a volume published this year under auspices of the Cretaceous Subcommission on the GSSP for the base Maastrichtian.

**International Stratigraphic Classification Subcommission**

- A research conference on "Sequence Stratigraphic and Allostratigraphic Principles and Concepts", organized by the Working Group on Sequence Stratigraphy, recommended to (1) leave sequence stratigraphy informal, (2) reconsider a modified concept of allostratigraphy, and (3) avoid conflicting definitions in the International Stratigraphic Guide and in the North American Code for Stratigraphical nomenclature.

- An ISSC Website has been prepared and will be made accessible shortly.

Speden (commentator) stated that this was the largest and most active Commission and it received most of the Union’s research money. He commended the Commission for its restructuring activities and for the improvement in the annual report.

The ICS has three major goals; a) development of an internationally agreed scale of chronostratigraphic units defined by GSSP’s, b) promotion of stratigraphic classification and terminology, and c) encouragement of international collaboration in understanding the evolution of the earth. International linkages are very active, numerous and beneficial. Major linkages are with the Ocean Drilling Programme (ODP), IGCP, INQUA for Quaternary activities, the NSF (Washington DC) scientific database initiative, the ODP Stratigraphic Database Centre in Bremen, a wide range of international research groups (9 listed) and other IUGS activities.

Speden further pointed to the chief accomplishments and products that were listed for each Subcommission. These demonstrated a continuing high level of diverse activity related to its goals, notably the definition of GSSP’s and stratigraphic classification, merger of the Quaternary and Neogene SC’s, dissolution of the Gondwana and Precambrian SC’s and the Committee on Quantitative Stratigraphy, establishment of web sites, and numerous meetings and publications. Activity was limited in the Geochronology SC. The Cambrian SC had published a valuable correlation chart, the ISSC an abridged version of the International Stratigraphic Chart, and the ICS the International Stratigraphic Chart, which is noted to be very valuable to the geological community.

Key “Work plans, critical milestones and anticipated results” were listed. These concentrate on completing GSSP’s and related stratigraphic investigations, web site development, several major workshops and symposia (field and planning). New working groups were
proposed by the Neogene, Carboniferous and Cambrian SC’s. The Geochronology SC planned to discuss its future existence, and the ISSC planned to complete a project on unconformity related units and to produce a document on cyclostratigraphy.

All elements of the ICS reported specific, key objectives for the next five years (2002-2006), with an emphasis on GSSPs, correlation, refinement of stratigraphic intervals, website and database development, and workshops and symposia. The ISSC planned to organize a working group on Chemostratigraphy, and the Jurassic SC to produce paleoclimatic maps of the Jurassic world. Also, there was an emphasis on completing projects and consequent redirection into new, strategic needs.

Speden concluded his report by commending the ICS Summary report. It was concise, factual and informative, and matched well the reports of the individual SCs, many of which were very detailed. All but the Geochronology SC were active, and its members were reviewing its future positively. About half were thinking ahead about the key needs after their GSSP research is finished, including new directions and specialized scientific products.

It was noted that Speden will continue to be in charge of the commenting on ICS until August this year when his term as IUGS Vice President was over, after which another Committee member must take over. The Committee thought it was an appropriate time to review ICS. The next opportunity might be in connection with the next IGCP Scientific Board meeting, where there already will be a good group of stratigraphers present to participate in the review.

The Committee ACCEPTED the ICS report, commending the Commission for good work. It referred to the new IUGS rules for Commissions, which also are applicable for ICS. The ICS statutes should therefore be re-drafted before approved by the Committee. The Committee decided that the ICS should be reviewed by the Ad Hoc Review Committee (ARC).

Global Boundary Stratotype Section and Point (GSSP):
Speden informed the Committee that ICS had submitted three GSSPs.

The first one is defining the base of the Cenomanian stage of the Late Cretaceous and is defined at 36 meters below the top of the Marnes Blues Formation on the south side of Mont Risou, east of Rosans, Haute-Alpes, France. This level coincides with the first appearance of the planktonic foraminiferan Rotaliapora globotruncanoides Sigal, 1948, and can be placed in the context of a series of secondary marker levels based on nannofossil, planktonic foraminifera, ammonites and an ornate δ13C curve.

The second GSSP for the base of the “Second Stage” of the Lower Ordovician is defined just above the E bed in the lower Toyen Shale, about 2 m above the top of the Cambrian, in the inactive Diabasbrottet quarry at base of the northeast slope of the Hunneberg Mountain, Province of Västergötland, southern Sweden. This level coincides with the first appearance of the graptolite Tetragnaptus approximatus and associated fauna.

The third GSSP is defining the base of the “Fifth Stage” of the Lower Ordovician. It is defined 1.4 m below a phosphorite marker bed in the E14a outcrop along the south bank of the Sularp Brook at Fågelsäng, 8 km east of the centre of the City of Lund, Scane, southern Sweden. This level coincides with the first appearance of the graptolite Nemagraptus gracilis.

The Committee RATIFIED the three GSSPs submitted by ICS, defining the base of the Cenomanian stage, the base of the “Second Stage” of
the Lower Ordovician, and the base of the Upper Ordovician Series (and base of the "Fifth Stage"). However, the ratification is on condition that the Commission must name the stages as soon as possible. The stage names must be published.

In addition ICS requested from IUGS ratification of the following changes, which was dealt with after the Executive Committee meeting:

a. Deletion of the Subcommission on Precambrium following the request by its members.

b. Deletion of the Subcommission on Quaternary shared with INQUA.
   Comments: This matter still is of great importance and additional information is necessary. A request to merge the Subcommission on Quaternary and the Subcommission on Neogene was postponed as a result of additional information forwarded to the President after the EC Meeting. During the first meeting of the chairpersons of the Subcommissions of ICS in June 2002, it was agreed not to delete the SC on Quaternary, but to establish a new one with new members and a new chairperson under the rules of IUGS and ICS only. The establishment should be effected in mutual understanding between IUGS/ICS and INQUA.

c. Approval of the Subcommission on Stratigraphic Information System following the detailed proposal by Eduardo Koutsoukos, Brasil. The rapid development of global stratigraphic networks (like 'CHRONOS' and others) + the urgent need for better communication of stratigraphy demands that ICS is not left standing in the cold. ICS wants to play a leading role in this new portal on the earth science world, and needs a body to do so.

4.b.6. Commission on Systematics in Petrology (CSP)

SUMMARY 2001:
During 2001, the commission and its three active subcommissions continued their work on systematics, classification and nomenclature of igneous and metamorphic rocks in business and working meetings and with questionnaires, circulars and written discussions. Information and addresses can be obtained via the web page at http://www.uni-freiburg.de/minpet/IUGS-CEP.html with links to available web pages of the subcommissions.


The Subcommission on the Systematics of Metamorphic Rocks (SCMR ) has successfully rearranged its organization. Douglas Fettes, BGS Edinburgh, for many years an active member of the sub-commission has been appointed the new chairman of SCMR. Rolf Schmid will continue to contribute with his long-years experience as a honorary chairman. Jaqueline Desmons will continue to act with her competence as SCMR Secretary. Information on the new structure and the scientific output of SCMR is found on the web page http://www.bgs.ac.uk/SCMR.

The Subcommission on Data Bases in Petrology (SDBP) presented the state of the databases during the Rio meeting. The databases were updated and some major retrieval
projects performed. Connection to other groups dealing with systematic geochemical data archives has been reinforced.

The Subcommission on Systematics in Sedimentary Rocks is still inactive. However, Niichi Nishiwaki has agreed to contact active sedimentologists to form a discussion group in order to re-establish this subcommission.

Information and addresses can be obtained via the webpage at http://www.uni-freiburg.de/minpet/IUGS-CSP.html

Boriani (commentator) commented that this Commission has existed for a long time, but pointed out that CSP was performing a special task, very much like the Commission on Stratigraphy, and that IUGS likes to support standardization in general. CSP had encountered some difficulties in the last year. He mentioned that the new edition of the "blue book" and the Classification of Metamorphic Rocks, might be of importance for IUGS. The Commission has appointed a new Chairman, G. Bellieni, and two of the Subcommission Chairs have changed.

The Committee ACCEPTED the CSP report and approved G. Bellieni as the new Chairman. It suggested to watch this Commission carefully in the near future and would like to see that the Subcommission on Systematics in Sedimentary Rocks is revitalized and that the Subcommission on Data Bases in Petrology is closed.

4.b.7. Commission on Tectonics (COMTEC)
See Agenda Item 4.a.1. ARC. The Commission will be reviewed in April.

SUMMARY 2001:
COMTEC activities strengthened in 2001 as a result of a stronger budget. The Subcommission on Tectonic and Surface Process Interactions (SOPTSPI) was involved in an international conference and an international workshop. The Subcommission on Rheology continued with its collaborative program of research and training with the Argentine Geological Survey. The first edition of a Newsletter - COMTEC News - has been compiled and distributed to members. As part of the new emphasis on educational activities, COMTEC awarded a prize for the best student paper at a Session at the GSA Annual General Meeting. COMTEC is particularly proud of the publication of the Paul Hancock Memorial issue of the Journal of Structural Geology, a fitting tribute to the former Chairman of the Commission.

Subcommission on Tectonic and Surface Process Interactions (SOPTSPI)
During 2001 SOTSPI activities have been directed at international, multi-team projects, based loosely around the following three research areas: International meeting on ‘Neotectonics, Sea-Level Change and Coastal Evolution’, International Workshop on ‘Uplift and Erosion: dynamic relations between crustal and surface processes’, Working Group on Earthquake Archaeology, and the Publication of the Paul Hancock Memorial Issue of Journal of Structural Geology.

Subcommission on the Rheology of Rocks
The Subcommission on Rheology’s collaborative research and training project in Argentina took significant steps forward in the past year. Field mapping, undertaken by the Argentine and Boston University geologists, together with U/Pb age determinations by colleagues at Brown University, showed for the first time that the two major ranges of the eastern Sierras Pampeanas, the Sierras de Cordoba and the Sierras de San Luis, had completely separate deformation and metamorphism histories prior to the middle Ordovician.

Publications:
COMTEC NEWSLETTER (first edition) and more than 32 papers were published or accepted in 2001, one edited volume and more than 8 abstracts were given in projects associated with COMTEC in 2001. The Paul Hancock Memorial Volume is a fitting achievement to honour the past Chairman of COMTEC. COMTEC supported one international workshop and one international conference, as well as awarding a student prize. COMTEC News 2000-2001 was produced as the first issue of the COMTEC Newsletter.

Gupta (commentator) referred to the 2001 accomplishments mentioned in the summary and a short discussion followed on the Commission’s activitites. It was noted that concerns would be dealt with in the review of COMTEC, which would take place on 21 April 2002 in Nice, France.

The Committee ACCEPTED the COMTEC report, awaiting the review by the IUGS Ad Hoc Review Committee.


De Mulder (commentator) noted that no report had been received. The Chair B. Kelk had left COGEOINFO. The Past Chairman, J. Biesecker has been incommunicative for the last years. The Commission is dormant. Some other members have expressed concern about the lack of direction. Although there had been several follow-up activities to the Multilingual Thesaurus, they were beyond COGEOINFO. The original six language Thesaurus had been expanded into ten languages and had been put on Internet. De Mulder remarked that exciting new things were going on in the geo-information field, like the development of a next generation of geo-information databases. He expressed his view that rather than playing a direct role in development of software, IUGS should focus on standards and dissemination.

Cadet informed the Committee that CGMW had proposed to set up an international working group to investigate and implement common CGMW standards for digital geological data structures. The standards have to be recognized worldwide. The group would have its first meeting in May 2002 in Hanover. Cadet suggested that IUGS could use this opportunity to meet with people and discuss the matter.

A discussion followed on the future of COGEOINFO and how to reorganize it. The Committee found it a good idea to join the CGMW meeting in Hanover. Eder said that UNESCO was prepared to join COGEOINFO. This could be done through PANGIS and SANGIS, and through CIFEG for the developing countries. De Mulder said that a revived Commission should have connections to UNESCO, CGMW and CIFEG, but have a broad scope. He suggested that the IUGS Bureau make draft terms of reference for the Commission.

The Committee CONCLUDED that IUGS should have a commission on geo-information systems, but that COGEOINFO in its present form should be terminated. The name might be kept. Sufficient people to take on the leadership should be identified.

4.b.9. Commission on Geosciences Education and Training (COGEOED)

De Mulder described COGEOED as an empty commission. Under the IUGS Strategic Action Plan there is a Task Group 4 on Technology Transfer & Education and the first step would be to complete the tasks in this group. The International Geological Education Organization (IGEO) was accepted as an affiliated organization at the Yichang Executive Committee meeting in 2001. This group is an autonomous body and it was suggested to invite IGEO to contribute to the implementation of the IUGS goals. Eventually, officers of IGEO might be invited to become officers of the IUGS Commission.
The Committee AGREED to come up with a clear focus on procedures how to revitalize COGEOED, and names for officers should be identified. The Commission should be in function in August 2004.

4.c. WORKING GROUPS (NEW TASK GROUPS)

4.c.1. IUGS Working Group on Global Geosites
No report had been received and no financial statement for the funds allocated in 2001 to the working group.

The Committee REGRETTED that no report had been received.

4.c.2. IUGS/IAGC Working Group on Continental Geochemical Baselines

SUMMARY 2001:
On the global scale, the most significant progress has been made in India and by the member countries of the CCOP. Sampling has commenced in Southern India within the last year. Funding had been secured from the Indian Government for 12 cells – about one tenth of the total for the country as a whole.

A presentation on “Environmental Geochemistry at the Global Scale” was given at the Seminar on Regional Geochemical Exploration, Beijing, China, May 20-26 2001. A separate meeting of CCOP delegates, chaired by Mr Chen Shick Pei and Prof Xie Xuejing, was convened during the Seminar to discuss the CCOP member countries’ participation in the Global Geochemical Baselines Project. Dr Dave Smith of the USGS subsequently met with Mr Chen Shick Pei in Washington DC in August to discuss CCOP acting as a coordinating body for a “FOREGS-like” effort in Southeast Asia.

Within Europe, work has been continuing on the FOREGS contribution to the project according to the schedule agreed at the last business meeting held in Athens in November 2000. Sampling has been completed within all countries participating in the FOREGS program. Analysis is due to be completed by the end of the year and data compilation and management processes are already underway. Meetings of the Analytical Working Group and the Data Management Working Group were held in Finland in March and June 2001 respectively. Preliminary maps of geochemical data for Europe have been prepared and preliminary interpretation has begun.

In addition, sampling has recently commenced in Ukraine and has been ongoing in northwestern parts of Russia as part of the BARENTS Ecogeochemistry project since 1999. Data from both will ultimately be included in the FOREGS programme.

Bobrowsky (commentator) referred to the above summary of the Working Group’s activities, noting that this group has a large impact on the society and has been one of IUGS’s flagships. It has been involved with CCOP and significant progress has been made in India.

The Committee THANKED the Working Group for its report, commending it for the work and was pleased with the good group of scientists.
4.c.3.  IUGS Working Group on Geochronological Decay Constants

SUMMARY 2001:
During 2001 the Working Group conducted the first wave of consciousness-raising and inspired the start of new experiments (referred to in the review by Kramers, Science 293, 619, 2001.

Chief products include following publications:
- "Call for an improved set of decay constants for geochronological use" in Geochimica et Cosmochimica Acta 65: 111-121,
- "Reply to Comment on "40Ar/39Ar age of plagioclase from Acapulco meteorite and the problem of systematic errors in cosmochronology" in Earth and Planetary Science Letters 190 (3-4): 255-257, and
- "Statistical methods for jointly estimating decay constant of 40K and age of a dating standard" in Mathematical Geology 34 (4) still in press.

Gupta (commentator) stated that the topic of this working group is important, it fits in everything and to get standards was important. The group has a good journal and good publications. The Committee was impressed by the good group of people involved in the activity.

The Committee THANKED the Working Group for its report.

4.c.4.  IUGS Working Group on Fossil Fuels

SUMMARY 2001:
The work program for the WGFF, in line with its mission statement and goals, was successfully implemented in 2001 and will be expanded over the next three years according to the IUGS strategic plan as well as the policy of individual IUGS member countries.

During 2001, (www.geointelligence.org) a state of the art-concept website on "Geointelligence" to support natural resources evaluation based on knowledge gathering from global Internet and Intranet data stores was developed. This concept will permit IUGS national members to better exploit open data sources in promoting their petroleum potential and could be used in training of staff in remote link techniques via Internet/Intranet.

The development of the geo-intelligence concept and its test of the concept on the Doba oil field development in Chad demonstrated how anybody today could acquire pertinent information using a cost friendly technique. The working group has started preparations for a workshop in Central Africa in order to promote the usefulness of geo-intelligence to potential new IUGS member countries in the area.

Two thematic workshops were organized, one was on use of geo-intelligence in fossil fuels development evaluation (November 2001 Norway), and the other was on GIS and geo-intelligence (May 2001 Greece).

"Geo-intelligence" and modern map integration technology were used to improve regional capacity building using the website or exchange of information. The WGFF was able to establish a Fossil Fuels forum between mature and experienced fossil fuels energy exploiting countries and IUGS member countries that have a potential to develop such a sector, and to initiate regional (north-south and east-west) co-operative studies.
The WGFF’s main product was the publication of “Proceedings and CD-ROM from the Geointelligence Seminar” in Trondheim 2001.

The group has started preparation for conducting a workshop in, Chad, Central Africa, in order to promote the usefulness of geointelligence to prospective new IUGS member countries in this area.

Al-Hashimi (commentator) commented on the Working Group’s activities in 2001, mentioning the website on “Geointelligence” as a major achievement. He reported that the work plan for 2002 includes expanding the web portal on geointelligence to include several other cases in addition to the Chad case and collaboration with Canadian Gas Potential Committee on Petroleum resources on evaluation methodology. Results will be presented in Calgary in April 2002.

The Committee ACCEPTED the Working Group’s annual report, but asked the Group to consider a broader participation in its leadership.

4.c.5. IUGS Working Group on Public Affairs

SUMMARY 2001:
The IUGS Executive Committee officially established this new Working Group at its meeting at Hyderabad, India in March 2001. The goal of the working group is to share information on geoscience-related public policy activities that are taking place around the globe, focusing on the common challenges faced by geoscientists in many different countries.

Plans for the Working Group were discussed with the members of the IUGS Executive Committee during a Washington DC meeting of the IUGS Publications Committee in July 2001. A list of working group representatives was also presented at that time. That same month, the chairman gave a talk at the joint meeting of the Geological Society of America and Geological Society of London in Edinburgh, Scotland, addressing the need for greater international collaboration and the opportunity presented by the working group.

The Working Group was also the subject of an article entitled "Crossing Geopolitical Borders" that appeared in the August 2001 issue of Geotimes magazine. The article, which appeared in a special internationally focused issue noted that policy issues relevant to the geosciences global in applicability if not always in scope... environmental protection, resource development, natural hazard loss mitigation, land-use planning, and need for adequate research funding and geoscience education. The article is available on the web at www.geotimes.org/aug01/scene.html.

At the end of 2001, the Working Group remained a nascent undertaking, but there are several activities planned for 2002 that will start turning a good idea into a useful reality. Two activities that readily present themselves are highlighting success stories that can be adopted in other countries and sharing position statements developed by one organization but applicable to others. An article about the working group and the survey will appear in a forthcoming issue of Episodes. An effort will be made to engage additional organizations and tap into the broader geoscience community’s resources.

Brett reported that the Working Group on Public Affairs was established by the Executive Committee at its meeting in Hyderabad in 2001, but that the previous Executive had Committee launched it. Its purpose was to look at position statements, to collect them and distribute them to national members, if they are useful. Any statements that already have been produced within IUGS should be presented to David Applegate, the Chair.
The Working Group of Public Affairs should be congratulated on its work and be asked to come up with terms of reference.

4.d. AFFILIATED ORGANIZATIONS

8.c.1.j. Report of Task Group 10 Affiliated Organizations

Before the discussion of the Affiliated Organizations, Brett presented the result of the Task Group on Affiliated Organizations. The Task Group was brought together to find out what would make the organizations interested in being an affiliate to IUGS. Some advice was given by the Executive Committee, but also by representatives of several affiliated organizations.

Brett presented a list of main items the Task Group suggested would strengthen the links.
It should be remembered that the organizations have different reasons for being affiliated to IUGS. The Committee regarded the following items as the most important:

- Joint events, because these may generate joint projects;
- Joint projects;
- The connection to Episodes, both the dissemination and the recognition of the affiliates should be worked on. This is also valid for the Web Site and the new IUGS Annual Report;
- An Executive Committee member should be responsible for the contact with all the Affiliates;
- The annual report from the Affiliates is important, but the organizations should be approached in a more friendly way than the annual reporting form is expressing now;
- Position statements.

The Committee THANKED Brett for the report. The Task Group 10 had thus completed its task.

* * * * *

The Committee discussed the annual reports from the Affiliated Organizations, paying attention in the meeting only to those with some concern on the IUGS relationship and/or asking for financial support by IUGS.

4.c.1. American Association of Petroleum Geologists (AAPG)

SUMMARY 2001:
The AAPG Annual Meeting was held in Denver, Colorado (USA) and the International Regional Conference and Exhibition was held in St. Petersburg (Russia). Six new publications were published including “Geological Perspectives of Global Climate Change” and “Risk Analysis and Management of Petroleum Exploration Ventures”.

A new membership service APPEX (AAPG Prospect and Property Exposition) was launched in Houston, Texas (USA), featuring both domestic and international prospects and properties.

Al-Hashimi (commentator) referred to the short report, listing the highlights above. He regretted that the report did not mention any future plans or any plans or intentions to cooperate with IUGS in fields of common interest, i.e. energy and environment.

The Committee ACKNOWLEDGED the AAPG report.
4.d.2. Association of Exploration Geochemists (AEG)

SUMMARY 2001:
In May, AEG sponsored the 20th International Geochemical Exploration Symposium (IGES), “Geochemistry and Exploration: “2001 and Beyond”, in Santiago, Chile. In addition to technical sessions, the Symposium sponsored several two-day workshops on aspects of geochemical exploration ranging from stream sediment drainage geochemistry to quality control. Three pre-meeting field trips were conducted to view ore deposits of Chile and Peru.

The Association sponsors the publication of the journal “Geochemistry: Exploration, Environment, Analysis” in partnership with the Geological Society of London, and publishes a monthly newsletter, EXPLORE, which is distributed throughout the world and contains timely articles on a variety of exploration geochemistry topics as well as environmental geochemistry topics related to the minerals industry. The Association also produces special publications and conducts short courses on topics of concern in the fields of exploration and environmental geochemistry. In 2001, AEG released a special publication titled Drift Exploration in Glaciated Terrain.

AEG supports a web site “http://www.aeg.org/” where the information about the Association and upcoming sponsored events can be found. The AEG sponsors an annual Distinguished Lecturer Series. In 2001, Dr. Clemens Reimann, formerly of the Geological Survey of Norway, served the Association.

The Committee ACKNOWLEDGED the AEG report.

4.d.3. Association of European Geological Societies (AEGS)

SUMMARY 2001:
The Executive Committee of AEGS was strengthened. Representatives of Austria, Denmark, Estonia and Italia entered the Executive Committee board. The biannual meeting (MAEGS-12), held in Cracow (Poland), was a successful meeting with more than 100 participants from 16 countries.

MAEGS-12 (Carpathian Palaeogeography and Geodynamics: A Multidisciplinary Approach), was held in Cracow (Poland). 108 participants had turned up, from 16 countries: Austria, Belarus, Czech Republic, Denmark, Estonia, France, Germany, Italy, Poland, Portugal, Russia, Romania, Serbia, Slovenia, UK, Ukraine. 90 posters and lectures were presented. A 3 days field trip went into the Carpathian Mountains.

The Executive Committee of AEGS was strengthened. The following representatives entered the Executive Committee board:
Prof. G.B. Carulli (Italian Geological Society), Prof. V. Hock (Austrian Geological Society) Dr. R. Raudsep (Estonian Geological Society) and Dr. S. Stouge (Danish Geological Society).

A book of abstracts and a field trip guide were printed in high quality. In consideration of the 25th anniversary of AEGS (1975 – 2000), the Chronicle of AEGS had been published.

Janoschek (commentator) commented that the AEGS Executive Committee was in a similar phase as IUGS; that is, it was adapting its organization to a rapidly changing world and developing strategies to remain up-to-date. Therefore “brainstorm meetings” had been held. The main outcome of which was a new structure of the biennial meetings that more strongly supported a geo-politics.

The Committee ACKNOWLEDGED the AEG report.
4.d.4. Arab Geologists Association (AGA)

SUMMARY 2001:
The AGA continued its efforts in organizing Scientific Meetings and other scientific activities as well as training courses:
1- Scientific meetings include the preparation for the organisation of the 3rd Arab Symposium on Geological Correlation between Arab Countries, and participated in the Symposium on Karst Water Resources in Arab Countries, the 7th Jordanian Conference and the First National Geological Conference organised by the Geol. Dept. of Mosul University in Iraq the Fifth Conference

2- Other Scientific Activities include preparations for the Conference & Exhibition on the International Petroleum and the International Conference on Gypsum Soils.

3- AGA continued its training programmes, and produced two combined issues of its bilingual "Geoscience & Arab Development".

Al-Hashimi (commentator) reported that the Association had spent the last year trying to establish contact with other organizations in Arab countries for the purpose of organizing some scientific activities in 2002 and 2003. Its newsmagazine published an article in English entitled "What is IUGS" and it published an advertisement for Episodes. AGA also announced the IUGS logo contest. It gave support to the 32nd IGC by publishing an announcement on behalf of the Organizing Committee, and responded to an invitation for symposia and workshops and requests for hosting field trips in the Mediterranean countries.

Brett drew attention to an IUGS allocation of USD 2,000 to the Arab Geologist Association (AGA) in the mid-nineties. During the transferring the check was held back by the US Treasury Authorities, because of the UN sanctions on Iraq. The matter needed clarification.

The Committee ACKNOWLEDGED the AEG report.

4.d.5. American Geological Institute (AGI)

SUMMARY 2001:
AGI presents a focused voice on national sciences policy issues, develops curriculum materials that strengthen K-16 Earth science education, and increases public awareness and understanding of the geosciences and the environment, including the bibliographic database Georef and its Document Delivery Service, scholarships, career information, and Geotimes.

During 2001, the chief accomplishment was the implementation of Earth science education standards with near completion of middle school and high school curriculum.

AGI published (1) environmental Awareness series Booklet “Living with Karst, a Fragile Foundation”, (2) Directory of Geoscience Departments 40th Edition and (3) 85 000 new citations in Georef.

Brett (commentator) referred to this organization as an exemplary umbrella organization consisting of 39 US or international societies and representing over 150,000 geologists. It was particularly active in earth science educational standards, its widely used GeoRef database, and in its public affairs program.

The Committee ACKNOWLEDGED the AGI report.
4.d.6. Association of Geoscientists for International Development (AGID)
Commentator: I. Nyambok

Chief accomplishments in 2001:
Networking activities in 2001 included preparation of an edition of the AGID journal, Geoscience and Development, though printing and distribution had been delayed until February 2002 because of a change of production strategy to enable printing in Bangladesh. The 42nd and 43rd editions of the AGID S and W Asia Geoscience Newsletter were printed, distributed and placed on the AGID website.

A seminar/workshop on ‘Challenges of Water Resources Management in Developing Countries’ was held in Visakhapatnam, India, from 6 to 10 May, in collaboration with TWAS, IAH, ICSU and IAGC. A workshop on Geoscience Education, in conjunction with UNESCO, was also held in India.

Considerable effort has been expended on preliminary organisation of an ‘International Conference on The Role of Natural Resources and the Environment in Sustainable Development in South and Southeast Asia’ (NESIDA) to be held in Dhaka, Bangladesh from 20 to 23 November, 2002. The conference is jointly organised by AGID, SEGMIT and the Geological Survey of Bangladesh.

Proposals for several co-sponsored seminars at the next IGC have been submitted by AGID and preparatory work will commence once the proposals are accepted.

The Book and Journal Exchange programme continued to be operated by AGID Canada where it is a registered charity.

Berger, who had been a Secretary/Treasurer when this group was founded, reported on a serious decline in activities, due to the cut in the core funding from Canada. It had been discussed whether or not the Association had fulfilled its missions and should be discontinued. However, the membership from developing countries had increased and the work plan for the next five years included a decentralized AGID organization with autonomous regions largely in charge of fundraising for all regional activities, and a closer cooperation with IUGS and its affiliated organizations. Berger noted that there were dedicated people in charge and after another year the Association would probably be in motion.

The Committee ACKNOWLEDGED the AGID report, and seconded the training schemes for young geoscientists as a very important contribution to the growth of earth sciences in developing countries.

4.d.7. American Geophysical Union (AGU)

SUMMARY 2001:
AGU is composed by the Atmospheric Sciences; Biogeosciences; Geodesy; Geomagnetism and Paleomagnetism; Hydrology; Ocean Sciences; Planetary Sciences; Seismology; Space Physics and Aeronomy; Tectonophysics; and Volcanology, Geochemistry, and Petrology. In addition the Union has focus groups that address such topics as paleoclimate, global change, mineral and rock physics and the Earth’s deep interior.

During 2001, critical milestone cited in this report was for all current issues of journals to be available in HTML XML format by December 31. On that date all papers in AGU journals began to be published when ready on a daily basis and only collected periodically for a print
edition of each of the various journals. Additionally back issues are available in electronic form (approx. 150,000 pages).

There were over 9000 scientists registered at the AGU Fall Meeting in San Francisco in December. This is probably the largest meeting exclusively devoted to Earth science research held in the world. Planning is proceeding apace for the joint assembly of EUG (European Union of Geosciences), EGS (European Geophysical Society), and AGU in Nice in 2003.

AGA’s publication includes the Journal of Geophysical Research, Water Resources Research and eight other scientific journals, a weekly newspaper, Eos, and a variety of books. AGU maintains a website, as a source of scientific information and data.

A.F. Spilhaus, AGU Executive Director, reported that AGU was committed to becoming a truly international society. People in this scientific field are spread all over the world. AGU had currently 41,000 members in the Earth and space sciences. 2000 of these are from Japan. A step had been taken towards establishing a network of societies, and a world wide net of individual scientists, in an effort to collect abstracts of journals, which could be searched. This would bring the societies closer together.

The Committee members remarked that there were areas where IUGG, IUGS and AGU must work together and that it anticipated further interaction. The future of earth sciences depends on all the earth science organizations operating together.

The Committee ACKNOWLEDGED the AGU report, complimented AGU on its work and thanked Spilhaus for his oral report and participation in the Committee meeting.


SUMMARY 2001:

The Committee ACKNOWLEDGED the AIPEA report.

4.d.9. Carpathian Balkan Geological Association (CBGA)

ACTIVITIES IN 2001:
Activities of Slovak National Committee of CBGA focused on organization of XVII Congress, Bratislava, September 1 -4, 2002.
Permanently informed IUGS Secretary and Editorial Board of EPISODES.
1st and 2nd circulars were prepared and distributed to more than 1500 addresses in more than 30 countries including IUGS Secretary and Secretary of next 32nd IGC Florence 2004.
XVIIth Congress of CBGA is supported by Ministry of Environment of Slovak Republic and sponsored from individual companies and institutions.

The work plan for 2002 is focused on the organization of the XVIIth Congress of CBGA, September 2002, in Bratislava.
see http://www.gssr.sk/cbga

The Committee ACKNOWLEDGED the CBGA report.


SUMMARY 2001:
CGMW adopted a new marketing policy, with a particular emphasis placed on some products designed for the general public (high schools, colleges, universities) and advertisement in various geoscience journals. The sales of maps increased significantly in 2001 due mainly to the publication of the 2nd edition of the Geological Map of the World (1:25 M). Sales in 2001 is about 11 times higher than the 1999 "standard" year sales, a year.

A significant effort was made for the advancement of: The Hydrogeological Map of the World in cooperation with UNESCO Water Science Division, the Structural Map of the Indian Ocean, and the Tectonic Map of Africa.
CGMW participated to international and national exhibitions in the geosciences area, either for professionals and general public: XI Meetings of the European Union of Geologists (Strasbourg), Pedagogic Seminar of the French National Association of Biology and Geology Teachers (APBG) (Montpellier), APBG National Meeting (Paris), Latin American Geological Congress (Montevideo).

CGMW published CLIMEX maps (the last two climatic extremes of the World) in Episodes, with a short notice on the Commission and a pedagogic booklet accompanied by a CD was realized and released in July 2001 entitled Le Visage changeant de la Terre. L'éclatement de la Pangée et la mobilité des continents au cours des derniers 250 millions d'années en10 cartes (The changing face of the Earth. The splitting of the Pangea and the continental drift during the last 250 myrs, in 10 maps).

J.-P. Cadet (CGMW President) reported on the organization, noting that the improvement of the visibility and dissemination of the CGMW products has had a high priority. A new marketing policy was in place and sales have increased. Links are strengthened with UNESCO, IUGS and IGC and the organization has tried to improve the relations with its member countries. With specific products, CGMW has extended its audience to school teachers. It was noted that the digital and paper versions of maps can be produced through UNESCO or CGMW.

The Committee ACKNOWLEDGED the CGMW report and believed that the group is doing important work in disseminating a better understanding of the earth sciences to both specialist and non-specialist audiences.

4.d.11. The International Centre for Training Exchanges (CIFEG)

SUMMARY 2001:
CIFEG organized a workshop on "Water resources in East African Rift Valley". Participant countries were Kenya, Ethiopia and the Islamic Republic of Djibouti. The workshop aimed at building a regional research programme about management of the underground water resources to be financed by the French Co-operation.
A training session about the financial and technical analysis of mining feasibility studies, gathering 9 participants from 5 African countries has been organized on April 2-14, 2001, at CIFEG.

PANGIS (Pan African Network for a Geological Information System) upgraded through MS Access 2000 its new application for data management.

SANGIS (Southeast Asian Network for a Geological Information System) prepared a questionnaire to design the SANGIS project, and was sent to the South-east Asian Geological Surveys. The answers have been analysed, and consequently an XML software has been built in order to allow the exchange of bibliographic data through the WEB. Then a workshop has been co-organised with CCOP in Bangkok (June 25-29, 2001). Six countries participated (Cambodia, Indonesia, Japan, Malaysia, the Philippines and Thailand) in order to set up the XML application in their own institution.

Chief products include PANGEA No. 33/34 was published in November 2001. Starting with this issue, the bulletin is bilingual (French / English). CIFEG published also a special issue (No. 2001/37) in its series "Occasional Publication" about informal mining activity: "Séminaire sur l'exploitation minière artisanale en Afrique – Ouagadougou (Burkina Faso) – 01-03 décembre 2000", following a seminar about smallscale mining held in Ouagadougou (Burkina Faso).

Boriani (commentator) was concerned that the CIFEG role was becoming unclear. However, he stated that this was an important organization for IUGS because of what it was doing for developing countries, provided it preformed the service to the third world through SANGIS and PANGIS.

The Committee ACKNOWLEDGED the CIFEG report.


SUMMARY 2001:
In 2001, the Circum-Pacific Council continued its mission to encourage international collaboration in the investigation, assessment, and sustainable utilization of earth resources in the Pacific region.

In partnership with Stanford University, the American Red Cross, and the U. S. Geological Survey (USGS), the Council initiated a new program called "Crowding the Rim" to emphasize and help mitigate the potential for regional catastrophes from natural disasters around the Pacific Rim.

In 2001, the Circum-Pacific Map Project was completed to the extent that no additional maps will be compiled. The last of 52 regional maps in the Circum-Pacific Map Project was transmitted for publication in cooperation with the USGS, and the Geospatial Data Project to demonstrate the use of digital data for stratigraphic correlation was completed in cooperation with the Coordinating Committee for Coastal and Offshore Geoscience programs in East Asia. A total of 62 major maps have been completed, two of which are still in the printing process. Some of these have been raster-scanned, and it is expected that most of them will ultimately be available on CD-ROM.

Also in 2001, the Geospatial Data Project was completed in cooperation with CCOP, having demonstrated the procedures and practical applications of using digital data for geologic studies in the East Asia countries.
Speden commented briefly on this independent group. From the report it was clearly continuing its activity, especially its new programme called “Crowding the Rim”. Its council noted that it has financial difficulties. However, Bobrowsky had attended the Crowding the Rim meeting and stated that it was a fantastic meeting – a summit.

The Committee ACKNOWLEDGED the CPCEMR report.

4.d.13. European Association of Sciences Editors (EASE)

SUMMARY 2001:
URL http://www.ease.org.uk/.

The European Association of Science Editors is a Company Limited by Guarantee, registered in England and Wales, Number 4049507. This change of status does not alter the aims of EASE in promoting improved communication in science. The Association remains a not-for-profit organization, registration merely protects members in the event of financial loss.

Co-operation with other international projects
EASE is an international non-governmental organization in category C (mutual information) relationship with UNESCO and category A liaison with Technical Committee 46 (Information and documentation/Subcommittee 9 (Presentation, identification and description of documents) of the International Organization for Standardization. EASE is affiliated to the International Union of Biological Sciences as well as to IUGS. EASE also co-operates actively with editors’ associations in North America, as well as in Europe and elsewhere, and is represented at meetings of ISO and BSI Subcommittees DOT/6/9 (Printing style manuals) and IDT/2/1 (Bibliographic references and descriptions).

Accomplishments in 2001
Membership at the end of the year was about 900, with the number countries represented remaining at 53; the breakdown of membership remains virtually unchanged at about 14% of members from countries outside Europe. Half the membership is in Europe outside the UK, and the rest, 35%, are working in the UK. The three-yearly conference is in advanced planning; the title will be “Editing and Scientific “Truth””. The courses in scientific writing in Eastern European countries continued, under the care of Professor Elisabeth Heseltine, who ran a further successful four-day course in Warsaw, Poland, two in St Petersburg, Russia and a fourth at Brno, Czech Republic. EASE hopes to continue to provide funds for courses, in Eastern European countries and elsewhere. EASE continues to provide sponsorship from funds received from WERK (The Netherlands) and those members who are prepared to pay a special subscription rate on behalf of over 60 members from countries with currency exchange problems. For the first time four, rather than three, issues of EASE’s bulletin, European Science Editing, Volume 26, were distributed to members and subscribers.

Janoschek (commentator) referred to the new status of EASE as a Company Limited by Guarantee, effective August 2000. Consequently IUGS had asked EASE to consider becoming an Associate member. However, EASE had explained that becoming a Company did not change or modify its original orientation as a non-profit scientific organization, and reiterated the wish to continue as an IUGS Affiliated Organization. IUGS accepted them back as Affiliated Organization.

The Committee ACKNOWLEDGED the EASE report and AGREED that EASE should remain as an Affiliated Organization.
4.d.14. European Mineralogical Union (EMU)

SUMMARY 2001:
EMU organized its annual Council meeting during the EUG XI (Strasbourg), and the election of a chief-editor of EJM on behalf of EMU.

During 2001, EMU gave scientific sponsorship to the Eleventh Meeting of the European Union of Geosciences, EUG (Strasbourg), organized its third school on Mixing in Silicate and Oxide Systems (Lübeck, Germany), and started to prepare its fifth school on Ultra-high pressure metamorphism that will take place in Turin, Italy.

EMU donated its annual “Research Excellence” medal during the EUG XI (Strasbourg) to Prof. Dr. St. Poli (Bergamo, Italy), and helped 20 institutional libraries facing serious financial difficulties (mainly in Eastern Europe and Latin America) by donating them free subscription of European Journal of Mineralogy.

Vol. 3 of the EMU Notes in Mineralogy was published in connection with a School held in: Solid solution in silicate and oxide systems of geological importance.

EMU has its own homepage (http://www.univie.ac.at/Mineralogie/EMU).

The Committee ACKNOWLEDGED the EMU report.

4.d.15. The Geochemical Society

The Committee REGRETTED that no report had been received from the Geochemical Society.

4.d.16. Geological Society of Africa (GSA)

SUMMARY 2001:
The Society held its triennial International Conference and General Assembly in Yaounde, Cameroon. Field excursions were successfully held, pre- and post-conference.

In conjunction with the recently re-established Geological Society of Uganda (GSU), the Society co-organised a Regional Conference on East African Geology in Kampala, Uganda in September. The Society provided financial support to the 2nd East and Southern Africa Regional Workshops and courses (followed by field trips) on Geomedicine and a Geoindicators held in Lusaka (Zambia).

The Society provided modest assistance to the Mozambique Geological-Mining Association and maintained its efforts to establish closer cooperative links and exchanges with other societies, within Africa and beyond. The Geological Society of London kindly assisted GSA by publishing in Geoscientist a promotional article on GSA entitled ‘Out of Africa’, and in posting notices of GSA activities on its website. Dialogue remained open with the Geological Society of South Africa (GSSA) and the Geological Society of America (GSA).

GSA and UNESCO continued to promote the exchange of geoscientists between African institutions. During the year GSA also established a valuable working relationship with the German scientific exchange programme, DAAD.

The meetings and other promotional activities permitted the recruitment of some one hundred new and renewing members, from within Africa and elsewhere. This number included five new Life members and corporate members, drawn from industry and western geological surveys (Billiton International Development, Delta Gold, Rio Tinto Mining and
Exploration Ltd, British Geological Survey (BGS International), Geological Survey of Denmark and Greenland (GEUS) and the Norwegian Geological Survey (NGU)).

The Society's newsletter Africa Geonews was published and a second issue was in press at the time this report was prepared. Work continued on the update of the Geology of Africa by publications on a regional basis. Close links were maintained with JAES (Elsevier) that hosts the Society’s homepage (www.elsevier.nl/locate/gsa)

The Committee ACKNOWLEDGED the GSA report.

4.d.17. Geological Society of America (GSA)

De Mulder regretted that no report had been received from this society. However, he referred to useful discussions during the GSA Fall meeting in Boston in November 2001, where he and Bobrowsky had participated. Discussions had been held with the GSA Division for International Geology regarding implementation of activities for involvement with IUGS. Issues relevant to IUGS were primarily dealing with Geodicators, potential participation in the Year of the Planet Earth, but also the status of IUGS-GSA relationship. De Mulder noted that the GSA representative I. Dalziel was the current chair of the IGCP Scientific Board and a member of the IUGS Committee for Research Directions.

The Committee REGRETTED that no GSA report had been received, but was looking forward to strengthened relationship.

4.d.18. International Association of Engineering Geology (IAEG)

SUMMARY 2001:
In 2000, the main activities of the IAEG were: publications and meetings.
Publications:
IAEG published five issues the Bulletin of Engineering Geology and the Environment, a quarterly bulletin and the official Journal of the IAEG, 37 papers in Volume 60 (4 of them in French, others in English), and two issues Volume 28, No.2 and Volume 29 of the IAEG Newsletter.
Meeting:
IAEG organized the Council and Executive Committee meetings in Helsinki (Finland) in August 2001. IAEG-sponsored the International Symposium on Engineering Geological Problems of Urban Areas (EngGeolCity 2001) in Ekaterinburg (Russia), Aggregate 2001-Environment and Economy in Helsinki (Finland), the First International Conference on Sustainable Development in Karst Regions in Beijing (China), the 3rd Asian Symposium on Engineering Geology and the Environment - Natural Resources Management for Regional Development in Tropical Area in Yogyakarta (Indonesia), and the 14th Southeast Asian Geotechnical Conference in Hong Kong (China).

The Committee ACKNOWLEDGED the IAEG report.

4.d.19. International Association of Geomorphologists (IAG)

SUMMARY 2001:
During 2001, IAG organized the Fifth International Conference on Geomorphology in Tokyo. During the Conference 16 sessions and 20 symposia were conducted, with 419 paper and 205 poster presentations. 3 pre-conference and 4 post-conference field trips were organised, in addition to the selection of 6 one-day trips during the Conference.
Four new Working Groups were created to be active in 2001-2005 period. In recognition of valuable results achieved, the activity of three existing Working Groups was extended over the 2001-2005 period, although without direct financial support from the IAG.

The circulation of the IAG Newsletter was extended through its publication in languages other than English, in national journals in France, Italy and Mexico. The IAG website (www.geomorph.org) has been made fully operational.

The Committee ACKNOWLEDGED the IAG report.

4.d.20. International Association of Geochemistry and Cosmochemistry (IAGC)

The Committee REGRETTED that no IAGC report had been received.

4.d.21. International Association of the Genesis of Ore Deposits (IAGOD)

SUMMARY 2001:
IAGOD promotes international cooperation in the study of the genesis of ore deposits and participates closely with other international bodies in the field of ore deposits in a wide range of international programmes, including 4 IGCP projects.
Scientific activities of IAGOD are carried out within 6 Commissions and the Working Groups. Several working groups convened sessions at the Joint 6th Biennial SGA-SEG Annual Meeting 'Mineral Deposits at the Beginning of the 21st Century' in Krakow, Poland. IAGOD also co-sponsored the XVI ECROFI conference held in Porto, in Portugal.
Several national groups (NG) and working groups (WG) were involved in organization of scientific conferences and field workshops during 2001. WGGT participated and co-sponsored the IGCP-373 field conference "Paleozoic geodynamics and intrusion-related Au deposits in the Altaids (Kyrgyzstan)" in Bishkek and the Tien Shan. The Russian Far East Group was involved with the International Scientific Conference 'Problems of Development of Georesources of the Russian Far East and Countries of APR' in Vladivostok.

The Committee ACKNOWLEDGED the IAGOD report.

4.d.22. International Association of Hydrogeologists (IAH)

SUMMARY 2001:
IAH 2001 Congress was held in Munich in September on the theme of "New methods to characterize groundwater flow". The 2001 IAH President’s Award was presented to Lenny Konikow of the United States Geological Survey.

A key activity during the year was to increase our influence on world water development issues. IAH contributed to the planning of the International Hydrological Programme 6th phase, was represented at the kick-off meeting for 3rd World Water Forum kick off meeting in June and took a lead role in the conference on the management of transboundary water held in Koblenz, Germany. The 2001 Congress of IAH was held in Munich on "New Methods of Characterising Groundwater Flow".

During the year membership has been steady at around 3500 members. IAH has various initiatives underway to increase membership, which include adoption of a new structure for corporate membership of the Association.

Hydrogeology Journal has completed its 9th year of publication and has a well established reputation. During 2001 IAH published the fourth annual issue of hydrogeology journal in
Spanish, produced by ITGE, Spain in conjunction with IAH and UNESCO. In July 2001, the first electronic newsletter (Groundwater eNews) was produced. Use of the IAH web page, at http://www.iah.org continues to grow and a significant proportion of new membership is recruited over the Internet. IAH currently distributes a member newsletter “News and Information” three times a year and this will continue.

The 2001 IAH President’s Award, presented every year to an outstanding groundwater scientist, went to Lenny Konikow of the United States Geological Survey.

The Committee ACKNOWLEDGED the IAH report.

4.d.23. International Association of Mathematical Geology (IAMG)

SUMMARY 2001:
The organization held its annual conference 6-12 September, 2001, in Cancun Mexico. A total of 264 people from 35 countries participated. A variety of papers were presented and workshops were given. IAMG sponsored a session for the 53rd Session of the International Statistical Institute (ISI) held 22-29 August, 2001 in Seoul, South Korea. The topic of this session was ”Extreme Value Distributions in Geology.”

Sato reported on the Association’s good results with many publications and an online journal. However, its membership is declining. He suggested that IAMG should have a link to COGEOINFO.

The Committee ACKNOWLEDGED the IAMG report.

4.d.24. International Association of Sedimentologists (IAS)

SUMMARY 2001:
The IAS held the 21st Meeting of Sedimentology in Davos, Switzerland, and sponsored conferences and workshops in Indonesia, Argentina, Slovakia, and the USA. Membership is stable with 2120 members in the year 2001

The IAS published 6 issues of its journal Sedimentology. Two Special Publications (Volcaniclastic sedimentation, Sediment transport) and a Field Guide (Almeria region, Spain) have been produced. A Newsletter accompanies Sedimentology, and the IAS homepage (http://www.blacksci.co.uk/uk/society/ias) is regularly updated.

The IAS friendship grants scheme for scientists and libraries in developing countries benefited 163 individuals and 36 libraries in 2001. In addition to 20 grants (of 1000 US$ each) to young researchers from developing countries and a field workshop that gave 13 young scientists the opportunity to study modern carbonate sediments in Florida and on the Bahamas.

The Committee ACKNOWLEDGED the IAS report.

4.d.25. International Association of Structural/Tectonic Geologists (IASTG)

The Committee REGRETTED that the activities of the IASTG had come to an end, and THANKED Susan Treagus, the IASTG Coordinator, for her cooperation and hard work during the last years.

SUMMARY 2001:
The IFPS bi-annual Newsletter PALYNOS vols. 24/1 and 24/2 were published in June and December respectively and distributed by the Secretariat to the Individual national palynological society and IFPS Councillors to distribute to their members.

A decision aimed to distribute PALYNOS via the IFPS website and the publication of the proceedings of the IPC 10 was reached.

Two proposals for the venue for IPC 11 in 2004 were received at the 10 IPC in China: Berlin and Granada. The proposal to hold the 11 IPC in Granada, Spain was voted for in the Council meeting held during 10 IPC, 2000. Plans are well advanced for the Conference. Dr Ana Teresa Romero Garcia (Univ. Granada) heads the Organising Committee for IPC11.

The Committee ACKNOWLEDGED the CPCEMR report.

4.d.27. International Mineralogical Association (IMA)

SUMMARY 2001:
The members of IMA are 38 national scientific societies representing mineral scientists of individual countries. Only one Member Society from any one country may join.

The main scientific activity of IMA is its four-yearly General Meeting, Edinburgh 2002 being the 18th. IMA gives regular scientific sponsorship to IUGS by organizing symposia at its own General Meeting which occurs every 4 years, and at other international meetings, such as the International Geological Congress.

The IMA Council organized its annual meeting in Strasbourg during the EUG Congress (8-12 April 2001). IMA will be holding its 18th GENERAL MEETING from 1st-6th September 2002 in Edinburgh, UK.

The Committee ACKNOWLEDGED the IMA report.

4.d.28. International Palaeontological Association (IPA)

De Mulder reported on his meeting with the IPA Secretary General, David Bruton, in December 2001 in Norway, where they had discussed the IPA affiliation with IUGS. IPA plans to have its own congress, which it found more useful, and the relationship with IUGS was questioned. Bruton thought, however, that a link with IUGS was valuable and explored with de Mulder the possibility of cooperation and joint activities. He said that since IPA was organizing its own congress in Australia, it could not give its sponsorship to the IGC in Florence.

The Committee REGRETTED that no report had been received from IPA. It appreciated the work of the Association and supported the IPA Congress in Australia and did not see that this should weaken the links between IPA and IUGS.

4.d.29. International Permafrost Association (IPA)

SUMMARY 2001:
Committees, working groups and task forces organized and participated in workshops, symposia, conferences and field trips including meetings in Denmark, Italy, Japan, Mongolia, and Russia. Several international cooperative projects, monitoring programs and climate assessment activities continued. The First European Conference on Permafrost was
convened in Rome in March with over 120 attendees. Major emphasis was on initial results of the Permafrost and Climate Change in Europe (PACE) program and mountain permafrost.

IPA co-organized the First European Permafrost Conference, Rome, Italy, the Third International Conference on Cryopedology, Copenhagen, Denmark conferences, the Fifth International Conference on Geomorphology, Tokyo, Japan and the International Symposium on Mountain and Arid Land Permafrost (with field trips), Ulaanbaatar, Mongolia.

In conjunction with Rome conference, the PACE program and the task forces on permafrost creep and mapping and modelling organised several sessions resulting in special issues of Permafrost and Periglacial Processes and the Norwegian Journal of Geography. The Symposium in Mongolia resulted in a resolution to develop a regional permafrost of Central Asia.

Cooperation with other International Organizations involved the International Commission on Snow and Ice (ICSI) and Climate and Cryosphere (CliC) of the World Climate Research Program (WCRP), the International Arctic Science Committee (IASC), the Scientific Committee on Antarctic Research (SCAR), the WMO project Global Terrestrial Network-Permafrost, the International Union of Soil Science (IUSS) and the Third Assessment Report (TAR) of the Intergovernmental Panel on Climate Change (IPCC).

The Committee ACKNOWLEDGED the IPA report.


Summary 2001:
ISRM activities include the Annual Board, Council and Commissions meetings in Beijing CHINA. ISRM published 3 issues of the "News Journal" and reports resulting from the Commissions activity. ISRM stimulated international meetings for discussing problems of interest for the Rock Mechanics community and made contacts with other International Bodies such as IAEG, ISSMGE, IBSM, ICOLD, ITA, IUGS and SPE for discussing problems of common interest.

The Committee ACKNOWLEDGED the IPA report.

4.d.31. International Society of Soil Mechanics and Geotechnical Engineerin (ISSMGE)

The Committee REGRETTED that no report had been submitted.

4.d.32. International Union for Quaternary Research (INQUA)

SUMMARY 2001:
INQUA has twelve scientific Commissions and one inter-congress Committee. The main INQUA activities are connected to these thirteen scientific bodies. At the XIV International INQUA Congress in Berlin in August 1995 it was decided that the activities of these bodies should be project oriented. This procedure was evaluated in Durban in August 1999, and it was decided to keep the same format in the inter-congress period 1999-2003. In 2001 10 new scientific projects were started with funding from INQUA. The scientific commissions and committees arranged around 15 meetings in 2001. Some of the meetings have been held in co-operation with other organizations.

The XVI INQUA congress will be arranged in Reno, USA in August 2003, and a programme committee and a local organising committee have been appointed. The tentative theme of
the 16th Congress is "Frontiers in Quaternary Research". Information about the congress is found on the web: http://www.dri.edu/Projects/INQUA/index.html

The INQUA Internet Home Page: http://inqua.nlh.no/ is updated monthly and is visited by 1300 people per month and contains a directory of the whole Union’s activities, meetings, projects and publications.

There are still problems to bring forward an application for a full membership of ICSU, and IUGS does not seem to be willing to support an application from INQUA. We have had a dialogue with IUGS about the role of the IUGS associate (should be affiliated) members, which has been encouraging.

During 2001, INQUA published two issues of Quaternary Perspectives, and 10 issues of Quaternary International have been distributed.

Speden (commentator) reported on INQUA, which he said was still aimed to become a full member of ICSU, but also wanted a closer contact with IUGS. De Mulder had spoken recently to Sylvi Haldorsen, the INQUA Secretary General, who expressed more satisfaction with the IUGS-INQUA interaction. Haldorsen was also a member of the IGCP Scientific Board and the IUGS Committee for Research Directions.

The Committee ACKNOWLEDGED the INQUA report. It was pleased with the INQUA activities and hoped to have joint cooperation in the future. It was mentioned that the ICS might have a closer cooperation with INQUA.

4.d.33. The Meteoritical Society

SUMMARY 2001:
The Society held its Annual Meeting in Rome. Travel awards were given to 26 students from 10 countries and 9 other scientists. There were more attendees, 560, and more posters, 200, than at any previous society meeting.

The Society’s own journal was published monthly for the first time. The December issue included papers from the successful NEAR-Shoemaker mission to the asteroid Eros that ended with a successful landing on February 12, 2001. Ten subscriptions of MAPS are given yearly by members and the Society to libraries in countries where meteorite researchers are active but unable to afford the journal. Electronic access to MAPS papers before and after hard-copy publication is now available to all journal subscribers.

In 2001 the Meteoritical Bulletin published descriptions of 1376 meteorites: 658 from Antarctica, 409 from Africa, 265 from Asia, 31 from North America and 13 from Europe, Australia and South America. Noteworthy specimens included 6 from the Moon and 5 from Mars. The Bulletin is now edited jointly by two editors in the UK, one in Germany and one in the USA.

A new award was initiated with the Geological Society of America for the best student paper in planetary sciences in 2000.

Chief products (eg. publications, maps) in 2001 include: The Society's own journal, Meteoritics and Planetary Science, was published monthly plus a 337 page supplement of meeting abstracts and new meteorite data in the Meteoritical Bulletin. The Society also cosponsors Geochimica et Cosmochimica Acta with Geochemical Society, which is published twice monthly.
The Committee ACKNOWLEDGED the Society’s report.

4.d.34. Society of Economic Geologists Inc. (SEG)

SUMMARY 2001:
SEG was successfully re-incorporated in the State of Colorado, as a prelude to the planned merger with the Economic Geology Publishing Company (PUBCO).

In 2001, the Society participated in a number of national and international conferences and organized and sponsored one short course, two field courses, and three field trips.

SEG’s activities include the SEG exhibit booth at the BCYCM Cordillera Roundup in Vancouver, Canada, the SME annual meeting held in Denver, a short course entitled “Structural Controls on Ore Genesis” in Toronto, SEG sponsored the NUNA conference on funding for mineral deposits research held in Kingston, Ontario, Canada and “A Hydrothermal Odyssey” meeting in Townsville, Australia.

Regular Society publications include the Reviews in Economic Geology series, the field trip Guidebook series, the Special Publication series, and the quarterly SEG Newsletter. The journal, Economic Geology (established 1905), and the Economic Geology Monograph series were previously published by SEG’s sister organization, the Economic Geology Publishing Company, Inc., but now form part of the Society’s publications since the merging of the two organizations.


With major support from the SEG Foundation, the Society continues to focus its educational efforts at university students throughout the world. During 2001, over $70,000 was awarded to support 49 graduate students pursuing field-oriented research topics in economic geology.

Educational events in economic geology (symposia, short courses, workshops, field courses, field trips) were widely promoted on the SEG website, while traditional listings and announcements continued to be prominently displayed in both the SEG Newsletter and Economic Geology. Advertising of the significant educational opportunities associated with the “2002 Global Exploration” meeting in Denver (April 14-16) was extended to the general media (e.g. Mining Journal and The Northern Miner).

The Committee ACKNOWLEDGED the SEG report.

4.d.35. Society for Geology Applied to Mineral Deposits (SGA)

SUMMARY 2001:
Society home page: http//www.min.tu-clausthal.de/sga.html
Two Ordinary Council Meetings and one SGA General Assembly and the 6th Biennial SGA Meeting were held.
Five scientific meetings were co-sponsored: Prospectors & Development Association of Canada, A special GEODE/SGA symposium „The timing and location of major ore deposits
in an evolving orogen" at the EUG XI, XVI ECROFI Meeting, 2001 A Hydrothermal Odyssey, and the 4th International Archaean Symposium.

SGA co-sponsored a joint SEG-SGA Global Exploration 2002 Meeting "Integrated Methods for Discovery" Conference and the 7th SGA Biennial Meeting "Mineral Exploration and Sustainable Development".

SGA published Mineralium Deposita, issues nos. 10 and 11 of the SGA News and a paper "The giant chromite deposits at Kempiirsai, Urals: constraints from trace element (PGE, REE) and isotope data" by F. Melcher, W. Grum, T. V. Thalhammer and O. Thalhammer.

The Committee ACKNOWLEDGED the SGA report.

4.d.36. Society of Sedimentary Geology (SEPM)

The Committee REGRETTED that no SEPM report had been submitted.

4.d.37. The International Geological Education Organization (IGEO)

(See agenda item 4.b.9. COGEOED and agenda item 8.c.1.d Task Group 4 on Technology Transfer and Education.

5. REPORTS ON CO-OPERATIVE ENTERPRISES

5.a. IUGS/UNESCO International Geoscience Programme (IGCP) de Mulder

Eder reported on IGCP, the flagship of UNESCO and IUGS, and on the latest events in UNESCO. UNESCO had been restructured and has put more emphasis on the environment; thus, IGCP has been asked to move towards topics such as health, water resources, ecosystems Eder expressed his satisfaction in learning of the activities in COGEOENVIRONMENT. He said that the role of IGCP within UNESCO has increased during the last three years as its influence on UNESCO policies.

Eder further mentioned that, according to UNESCO rules, there would be an external evaluation of the overall programme in the next years (paid by UNESCO). The evaluation should be finished in 2003, and nominations for a review committee should start the summer 2002. Candidates should be nominated by the national committees or the UNESCO commissions. Six or seven people could be the core group of the evaluation committee, but should not include present IGCP Scientific Board members.

Eder informed the Committee that the funding of the IGCP had been secured to almost the same level as the year before. Janoschek explained that IUGS would pay all the projects immediately so they can operate without delay.

New Scientific Board members elected 2002 were C. Zazo-Cardenas (Spain), S. Haldorsen (Norway), M. Wilson (UK), P. Pande (India) and R. Okhravi (Iran).

The Committee THANKED Eder for his oral report on IGCP.
5.b. IUGS/UNESCO Program on Geol. Application of Remote Sensing (GARS)

SUMMARY 2001:
The GARS-Program developed into a network, affiliating institutes all over the world. In Asia, Europe and South-America the new members joined, as well as in Canada, USA and the Near and Middle East. Australia and Africa are still not presented, although in Africa several institutes benefited from the GARS follow-up program GARS-DBM (Data Base Management) and PANGIS.

The GARS-Steering Committee met on June 16, 2001 at UNESCO HQ in Paris to discuss together with the Division of Water Sciences a joint effort in the Middle East for a regional Transboundary Aquifer Study including the investigation of remote sensing data. During the 12 International Symposium of Remote Sensing General Organization for Remote Sensing of Syria, Damascus (Syria) reserved one session dedicated to the GARS-Program on hydrogeological studies and remote sensing. A transboundary aquifer study for the region was elaborated following a round-table discussion with representatives from Syria, Lebanon, Egypt, Tunisia and ACSAD.

As a result, following studies were agreed between Lebanon and Syria, between Tunisia and Libya, between Algeria, Tunisia and Libya, between Egypt and Libya, and volcanic Jb. Arab between Syria and Jordania. A GIS should be established for all studies, which has to allow for compatability.

GARS- Program activities were presented during the 2001 Yemen Science Conference in Sana’a, (Yemen), GORS-12th International Symposium: The International and Arab Cooperation in Remote Sensing and Space Sciences in Damascus (Syria), the Scientific and Technical Sub-Committee Meeting of the UN-Committee on the Peaceful Use of Outer Space (COPUOS) in Vienna (Austria), the UN Working Group on Geographic Information Systems, Rome, (Italy), the NOAA-ICSU-UNESCO International Consultation Meeting on Potential Geological- Geophysical Hazards Theme for IGOS, Paris (France), the CEOS Ad Hoc Working Group on Disaster Management Support, Brussels (Belgium), and the CEOS-IGOS-Partners Meeting, Paris (France).

Eder reported that the overall programme gained a lot of momentum through the chairmanship of D. Bannert, but suffered a bit during his absence in Yemen. It was anticipated that GARS would recover in due course and the overall strategy and objectives are good. The programme was moving towards monitoring and preventing natural hazards and has put emphasis on groundwater detection in arid and semi-arid areas. A review is foreseen in the next biennium, but Eder informed the meeting that this was not in the UNESCO budget.

The Committee ACKNOWLEDGED the GARS report and was pleased with the GARS activities. It noted that the Chairman will continue for a short time and that a new leader should be identified.

5.c. IUGS/UNESCO Program on Mineral and Energy Deposit Modeling (DMP)

SUMMARY 2001:
The DMP sponsored a workshop “Sediment-hosted lead-zinc sulfide deposits in the North-western Indian shield,” in Delhi and Udaipur, India, December 10th – 17th, 2001. The workshop consisted of two days of lectures, followed by field visits to three active mines, and finishing with a day and a half of wrap-up lectures.
DMP continues to participate in an international effort spearheaded by US Forest Service to establish criteria and indicators for global mineral resource sustainability.

DMP’s chief product was the production and distribution of Workshop materials.

Gaál reported on a successful workshop in India in December 2001. Goals under consideration included broadening DMP’s brief so that environmental aspects of mineral deposit models and sustainability issues would be a routine part of all workshops. This was emphasized by de Mulder during the opening of the DMP Steering Committee meeting in Paris, February 2002. In addition, de Mulder had urged for expanding the number of countries involved and to dramatically improve the communication level. These issues were voiced by Eder as well.

The Committee was worried about lack of international representation on the leadership and that the reports were very late. The Program should present a plan for the future. It was noted that the DMP steering committee was well informed about the UNESCO and IUGS concern. There was a plan to review the Program in mid June 2002, and Boriani said that he had written to IAGOD and SEG to provide candidates for a review committee. IUGS may be represented by Zdenek Johan.

The Committee ACCEPTED the DMP report, commending the Program for the workshops, but expressed concern about the lack of emphasis on sustainable mining, on international representation and on communication. Improvement on these three issues is a boundary condition for further IUGS support to DMP.

5.d. Proposed IUGS-UNESCO International Consortium on Landslides

Bobrowsky called to mind the discussion at the Committee meeting in Hyderabad, that the Committee was, in principle, positive to the new joint IUGS-UNESCO programme, which had originated from the IGCP Project 425. However, several questions about the organization of the proposed International Consortium on Landslides (ICL) had to be solved. Bobrowsky had attended an ICL meeting in January 2002 to discuss what had been resolved: It was clear that this was no longer a joint IUGS-UNESCO initiative; it was an international programme on landslides. The programme succeeded to establish the International Consortium on Landslides (ICL). Terms of reference had been drafted, statutes had been approved, and the first annual general assembly will be held fall 2002. K. Sassa will be the first president. 40-50 organizations want to be an affiliate. As other organizations, to have a vote on the Board, IUGS would have to pay a fee of USD5,000 per year. The consortium would have a secretariat, initially in Japan, but eventually replaced by an international research centre set up by UNESCO to avoid a secretariat governed by a single national group.

A discussion followed on how IUGS should respond: and should IUGS be represented on the board and pay a voting fee? It was mentioned that IUGS could refrain from participating directly in ICL and rather work towards cooperating with ICL in other ways.

The Committee AGREED that IUGS at this time will not become a member of the Consortium. The Committee will follow the movements of the ICL with great interest.

5.e. Geoparks Initiative

Eder summarized the background of the Initiative, mentioning the joint history of IUGS and UNESCO in this, starting with the involvement of IUGS and IGCP in setting up GILGES, a network of global geological sites. Many meetings to promote geological heritage had been
held during the geological congresses in Beijing and Rio. Three years ago the UNESCO Executive Board had concluded that the Geoparks included no science, so it was decided not to provide a home for this activity within UNESCO. Since then other potential homes within UNESCO had been searched. Being refused as a programme, the Geoparks activity established itself as an Initiative, a UNESCO network of national Geoparks, based on national requests. There are numerous examples of Geoparks in the world, and UNESCO was prepared to promote national initiatives. Some members of the IGCP Scientific Board have expressed their interest to serve on a review group for the Initiative. Eder concluded by stating that the Geoparks Initiative is a fantastic tool for popularization of sciences and for education.

A discussion followed on the role of IUGS in the activity, and on whether or not IUGS should be more deeply involved. For the time being the involvement was indirect, through the individual members of the IGCP Scientific Board who have made commitments to serve on the review group. Eder informed the Committee that the Initiative expected expertise, which could be provided by the IUGS National Committees. Indirectly or directly expertise could be provided. The COGEOENVIRONMENT’s Working Group on Geologic Heritage and Tourism might provide a link also. Tracey Stoks, representing the New Zealand Commission for UNESCO, put forward the idea that sites with a strong and unique geological concept could be recognized also by a geological group, like IUGS.

The Committee THANKED Eder for his oral report. It agreed to work on a more visible role of IUGS in the Geoparks Initiative and try to explore how IUGS can be involved at a later stage.

6. INTERNATIONAL GEOLOGICAL CONGRESS (IGC)

Aaron informed the Committee that the 31st IGC web site was abandoned a few weeks ago. The next geological congresses should be informed not to abandon the site right after the congress.

6.a. 32nd IGC, Florence (Italy)

6.a.1. Status of Planning

Boriani reported on the preparation of the 32nd IGC in Florence. The organization committee consists of: A. Boriani, President; E. Abbate, Secretary General; G. Zuffa, Scientific Program Committee; P. Soddu, Deputy Secretary General and also responsible for the exhibit. The first circular would be distributed in April and the second circular would be put on the web in March 2003. Deadline for registration will be March 1, 2004. It was noted that there will not be requested any fee for business meetings. The pre-registration fee will be USD327 including lunch. An IGC Steering Committee meeting will be held in October 2002, in Florence.

6.b. 33rd IGC

It was noted that the Norwegian National Committee for IUGS had set up an organizing committee to present the bid in 2004 to arrange the IGC in Oslo, Norway in 2008, with excursions to the other Nordic countries. The Committee has been chaired by I. Ramberg. A web site will soon be in place. Concerning the interest shown by the IUGS National Committee in Cairo, Egypt no report on any activities had been received so far.
7. INTERNATIONAL COUNCIL FOR SCIENCE (ICSU)

7.a. Relations with ICSU
Brett is on the ICSU Executive Board and he reported that the relations are good. Concerning the Executive Directors, ICSU has had four Directors in five years. The new incoming President of ICSU was J. Lubchenco (USA). IUGS had been invited to make nominations for new officers of the ICSU Executive Board; the term for these positions was three years.

The Committee AGREED to propose to ICSU that Brett continues his membership of the Executive Board and to nominate Gupta for Treasurer.

7.b. Proposed Programs with ICSU

7.b.1. Food Security
De Mulder reported that an IUGS representative (Davies) attended a meeting on Food Security and that IUGS is waiting for the report.

7.b.2. Sustainable Development
De Mulder mentioned that UN has invited ICSU to prepare a document on the role of international science for sustainable development. IUGS participated in the discussions held in Paris, February 2002. A brief report to the participants of the World Summit on Sustainable Development in Johannesburg, will be completed by ICSU soon. The participants of the meeting showed interest in Geoindicators, which could be used as an example for other unions to follow up.

7.c. ICSU Committees

7.c.1. Scientific Committee on the Lithosphere (SCL-ICL)
Boriani reported that the contact with SCL was not as close as in the past years when Alan Green was the President, and hoped that the links could be strengthened. De Mulder explained that he had met the new President in Japan and they had agreed to strengthen these relationships, also in conjunction with IUGG.

Boriani reported that the Executive Committee had decided to nominate Harsh Gupta as a new member of the SCL Bureau. However, the message from the Lithosphere Committee was that Gupta is already connected to the Bureau, and they needed a representative from South America. Three names had been proposed and should be supported by IUGS: Gonzalo Janes and Batai from Chile and Hamasa from Brazil.

7.c.2. IUGS Representatives on ICSU Committees
A list of representatives on ICSU committees was distributed. The Executive Committee questioned how active these representatives were. When they were appointed it should be assured that they were able to travel. Gupta said he was deeply involved in COSTED. However, some of the representatives cannot afford to go to the ICSU meetings. If they request IUGS support, this could be given, but only partial. Brett stressed the importance of introducing geology in the ICSU Committees. Concerning representation, Petit-Maire was recently replaced by Derbyshire as the IUGS representative in IGBP and Cendrero was no longer the representative in SCOPE.

IUGS Representatives on ICSU and ICSU Committees:
International Council of Scientific Unions (ICSU)          Ed de Mulder
7.d. Relations with Other Unions of the ICSU Family

7.d.1. International Union of Geodesy and Geophysics (IUGG)
Gupta informed the Committee that the links between IUGG-IUGS was continually improving and the two Unions have been working together on several issues. Discussed was a list of proposals for programmes where the Unions could interact and it was suggested that “Inter-Union Programmes”, be set up. De Mulder reported that he had met Masura Kono, the IUGG President, twice and that he hoped to be present at its next Executive Committee in Namibia.

7.d.2. International Union of Geography (IGU)
De Mulder said he had been invited to the IGU Bureau meeting in UK. The two Unions could work on a broader cooperation.

7.e. ICSU Grants

7.e.1. ICSU grants for 2002
It was noted that only one proposal had been accepted by ICSU in 2002, i.e. Medical Geology, which had been awarded USD45,000.

7.e.2. Proposals for ICSU grants for 2003
Janoschek reported that the ICSU forms for applying for grants had been distributed in October and two proposals had been received: one on geomorphology (via IAG) and one on stratigraphy (via ICS). He mentioned that the ICSU forms were complicated and ICSU had been informed about this.

The Committee DECIDED that the Secretary General should submit the project proposal on geomorphology to ICSU. IGU is supporting it.

IUGS should work hard on submitting project proposals in 2003 for ICSU Grants for 2004 with emphasis on groundwater. The Committee AGREED to inform the IUGS bodies in July 2002 about the ICSU Grants and the forms will be sent out in October.
8. IUGS POLICY AND STRATEGY MATTERS

8.a. IUGS Statutes
De Mulder informed the Committee that a Statutes Committee had been set up with P. McArdle as Chairman, and J.-P. Cadet, J. Reinemund and M. Schmidt-Thomé as members. Three matters should be raised and discussed on short notice: Electronic voting; the domicile of the Union is now Reston, but Trondheim should be considered as the new domicile; and the Nominating Committee may nominate more than one candidate.

The responses from the Statutes Committee to the proposed new reading in article 24 of the Statutes and in article 5 of the Bye-laws, which allows electronic voting, are positive. The General Director of the Geological Survey of Norway was dealing with the domicile question. Concerning the third issue dealing with the Nominating Committee and the possibility to nominate more than one candidate, Brett drafted a change of the wording in the Statutes. This should be presented to the Statutes Committee.

The Committee THANKED the Statutes Committee for the work done on the Statutes changes.

8.b. IUGS Nominating Committee
De Mulder listed the names of the Nominating Committee members:
R. Brett (Chairman) (USA), W.G.E. Caldwell (Canada), W.S. Al-Hashimi (Iraq), M. Mantovani (Brazil), I. Niang-Diop (Senegal), M. Schmidt-Thomé (Germany), and Zhang Hongren (China).

Brett remarked that since Janoschek, was elected as the new IUGS Secretary General, a call for nominations for a new Treasurer must be made. Following formal procedures, it would take almost a year before a new Treasurer could be in place. Janoschek said he was prepared to formally do the Treasurer's job until the end of 2002.

The Committee DECIDED to ask the IUGS Adhering Organizations for nominations for new Treasurer by the formal procedure.

8.c. IUGS Strategic Plan -- remaining actions
De Mulder gave a brief overview of the situation. After the Yichang Executive Committee meeting 75% of the actions required had been done. Task Groups one, two, six and eight had completed their work. After presentation of the work of the Task Groups at the present meeting in Lower Hutt, 93% of the work had been completed.

The Committee DECIDED that the President should make a progress report on the IUGS Strategic Plan and inform the National Committees about the situation in the coming months.

8.c.1. Task Groups
8.c.1.a. TASK GROUP 1 COMMITTEE FOR RESEARCH DEVELOPMENT
Consisting of de Mulder (chair), Plant and Al-Hashimi.
The Task Group had completed its work.

It was agreed that the Committee for Research Development should change its name to Committee for Research Directions (CRD). See also Agenda Item 4.a.1. and 4.a.2. A report by Edward Derbyshire on the first CRD meeting had been distributed.
The Committee AGREED on the following change to the CRD terms of reference: The term for the ex-officio members of the IUGS Executive Committee corresponds with their position on the Executive Committee. The term of the chairpersons of the IGCP Working Groups corresponds with their appointment as chairpersons of the IGCP Working Groups. The term of the members selected from the IUGS affiliated organizations is to be agreed with these organizations, but must not exceed four years.

The Committee AGREED that the IUGS President and Secretary General should be ex-officio members of the CRD.

The Committee THANKED the CRD for its report.

8.c.1.b TASK GROUP 2 PROPOSAL POLICY
Consisting of Brett (chair), Gaál, Sato and Speden.
The Task Group had completed its work.

Brett reported that he had prepared a statement to be distributed. He stated that to review the proposals, the CRD was more scientifically qualified than the Executive Committee. CRD was a full IUGS initiative and these proposals should be examined by people with IUGS background. The statement was approved with minor modifications. The Task Group has finished its work.

The Committee AGREED to invite CRD to review the proposals and inform them that Cadet will be included in the procedure, as an observer.

8.c.1.c. TASK GROUP 3 JOINT PROGRAMS
Consisting of de Mulder (chair), Cadet and Nyambok.

A task group for IUGS representatives was already set up at this meeting, see Agenda Item 7.c.2.

The Committee APPROVED the report of the Task Group 3 and considered its task completed. The Committee approved Cadet to be the IUGS officer in charge of implementing the recommendations.

8.c.1.d. TASK GROUP 4 TECHNOLOGY TRANSFER & EDUCATION
Consisting of Bobrowsky, de Mulder, Plant and Speden. Nyambok has been the leader. (See also agenda item 4.b.9. COGEOED.)

De Mulder presented a document prepared by Nyambok with a lot of questions on how to operate in this area. It was unclear what results this would have for IUGS. In the discussion that ensued, it was suggested to identify the work on geoscience education that has been accomplished by other groups, like IGU, AGU, AGID and CIEFEG, and contact should be made with IGEO who would have a congress next year.

The Committee ASKED the Task Group to concentrate on building a Commission and within three months to come up with a concrete plan of actions for implementation. A clear focus on how to proceed should be achieved in 2003 and the renewal of the Commission on Education be completed in 2004 in due time before the IUGS Council meeting.
8.c.1.e TASK GROUP 5 VISIBILITY
Consisting of Bobrowsky (chair), Cadet, Gaál and Plant and external experts.

Bobrowsky referred to his first report of the task group report and asked the Committee to evaluate the 22 points in the recommendations. The points were examined one by one.

A draft IUGS poster was presented, that was designed to sit in a portable frame, several of which could be distributed to Executive Committee member. He stressed the importance of physical presence and stated that the IUGS exhibition at the Florence IGC must be better than the previous one, placed in a corner booth. The problem is that IUGS would need professional help, for which IUGS was not currently willing to pay.

Berger commended the recommendations and mentioned that he would like to bring the suggestions to the Committee for Publications. He thought that the poster together with a flyer would have a big impact.

The Committee ACCEPTED the report and commended the Task Group 5 for its work and decided that IUGS should prepare a first package for a booth, including fliers, poster, etc. The Task Group has completed its work.

8.c.1.f TASK GROUP 6 PUBLICATIONS
Consisting of Caldwell (chair), Bobrowsky, Janoschek, Brett, Zhang Hongren, Spilhaus, and Aaron.

The task group had been taken over by the Committee for Publications, chaired by Berger, who asked the Committee to accept 11 recommendations that resulted from the recent meeting of the Committee for Publications meeting.

The Executive Committee APPROVED the report by the Committee for Publications and invited its members to implement these recommendations. By being incorporated in the Committee for Publications, the Task Group has completed its activities.

8.c.1.g TASK GROUP 7 FINANCES
Consisting of Bobrowsky, Janoschek and Speden and external experts.

Janoschek informed the Committee that he had tried to establish a Task Group, but it had been difficult to find experienced persons willing to cooperate in this group. The objective of the group was to give advice on revival of the Committee for Finances. IUGS needed a group that thinks financially, not scientifically. It had been decided that the IUGS Treasurer should never be the chair of the Committee for Finances.

The Committee AGREED that Janoschek to try to find some key people in the finance area and organize a meeting. This will be regarded as the last chance to come up with some advice. After this meeting, the Task Group 7 has ended its work.

8.c.1.h TASK GROUP 8 COMMISSIONS
Consisting of Gaál, Boriani, Nyambok and Speden. (See also comments under agenda item 4.b. COMMISSIONS.)

Gaál presented the task group’s report. The purpose of this task group was to come up with rules and guidelines for Commissions and other IUGS groups for operational affairs, in
addition to Statutes and Bye-laws. These rules and guidelines should not be included in the Statutes, but be presented in a separate document and referred to in the Bye-laws. The guidelines should be given to the chairpersons of the Commissions. During the discussion, the Committee members suggested some adjustments. The main changes were the following:

The Committee DECIDED that a project should NOT BE approved by the Executive Committee and approved that this line in the document be deleted.

The Committee APPROVED that Working Groups should be positioned under Commissions and that the present Working Groups operating directly under the Executive Committee should be named Task Groups.

The Committee APPROVED the rules and guidelines with the above changes.

The Committee ASKED the Secretary General to see to that the minor changes in the Statutes because of the new Commission guidelines will be carried out.

The Committee ACKNOWLEDGED with thanks the work done by the Task Group 8 and considered its work to be completed.

8.c.1.i TASK GROUP 9 IGC AND IUGS
Consisting of Sato (chair), Boriani, de Mulder, Cordani and Zhang Hongren.

Sato presented a document, which had been submitted to the task group members several times before the last version of the draft proposal had been distributed to the Committee members before this meeting. Sato showed a timetable for the implementation of the steps suggested. A decision of a merger had to be taken by the IGC General Assembly and the IUGS Council.

The Committee members stated that all were in favour of a merger, but pointed out that the structure of the merged body was not clear and needed clarification. It was expected that there would only be one council and the general assembly of the IGC would be ceremonial. Discussion followed on the role and position of the IGC Steering Committee, which might be preserved as an advisory board.

Concerning the merger, IUGS has to negotiate with the IGC Steering Committee. Both organizations need approval for the merge by both councils, which generally consist of the same voting members. It was noted that changes in the IGC statutes have to be presented to the IGC Council nine months in advance of its meeting.

The Committee INVITED all Committee members to forward suggestions for the proposed final organizational structure of the merged body and to advise on the Task Group document to Sato.

8.c.1.j TASK GROUP 10 AFFILIATED ORGANIZATIONS
Consisting of Brett (chair) and Bobrowsky.

Brett had presented the report of this task group at the Yichang Executive Committee meeting in 2001. It had been decided that one Executive Committee member should be charged especially to take care of the Affiliated Organizations. The connection with the
Affiliated Organizations was important and the member chosen would be fully responsible for the link with IUGS.

The Committee APPROVED the report by the Task Group and regarded the work of the Task Group as completed.

The Committee unanimously AGREED on Bobrowsky as its member to deal with the Affiliated Organizations.

8.c.1.k TASK GROUP 11 NATIONAL COMMITTEES
Consisting of de Mulder, Boyd, Sato, Boriani, and external people.

De Mulder reported on activities of the group. Input came from A. Bjorlykke (Norway), S. Muhongo (Tanzania) and N.P. Laverov (Russia). Muhongo had made many suggestions how National Committees in developing countries could get more involved in IUGS affairs. Among other issues he raised the point of the practical impossibility that no representatives of developing countries could get sufficient financial support from their mother organizations to be eligible for a position in the Bureau.

During the discussion it was suggested that some IUGS money (USD5,000 a year in 12 years) could be set aside to make possible the election of a Bureau officer from a country that is not able to pay the travel money and the support of an office and a secretary.

The Committee APPROVED the report by the Task Group 11, which was regarded as having completed its task.

The Committee DECIDED that the IUGS Bureau should consult the National Committees on the problem how to get a stronger influence on IUGS of developing countries.

8.d. International Year of Planet Earth
De Mulder gave a presentation, explaining aims and objectives and the state of the art. Three phases were presented, the feasibility, the preparatory and the implementation phase.

IUGG and ICSU were positive in principle. UNESCO was very positive. The Year should be proposed by a member country of the UN. The year will be 2004 or 2007 or the period in between. The total estimated budget for the second Phase is USD50,000. This budget should be made available by the two main partners: IUGS and UNESCO. On behalf of UNESCO Eder informed the meeting that he will identify USD10,000 to 15,000 from the UNESCO budget for this phase. IUGS has USD25,000 in the budget for 2002. Eder invited the Executive Committee to trigger the IUGS National Committees to support the UNESCO national committees on the initiative, and UNESCO will be entitled to provide the money. The third (implementation) phase should be covered almost entirely by external sources.

The Committee ACCEPTED the report and gave green light for the preparatory phase (Phase II), provided that the funding will not seriously hamper the economy of the programmes.

De Mulder explained that during Phase II, sponsors and scientific issues will be identified. In addition, a brochure will be developed and a logo. The Project Team for the Preparatory Phase will consist of 4 to 6 people and the Phase II is regarded to last at least 14 months. H. Schalke will be the leader and, apart from de Mulder, Gupta and Bobrowsky will participate. The IGC Organization Committee in Florence might also be of help. An Action Plan will be developed on short notice.
9. EXTERNAL RELATIONS
De Mulder informed the Committee that a Memorandum of Understanding had been signed with CCOP. The idea is that this relationship might eventually result in an associated membership.

10. REQUEST FOR BUDGETS AND FUNDS FOR 2002
Janoschek presented the 2002 IUGS budget. It was noted that IUGS bodies and especially Commissions should be aware of the USD 50,000 set aside for projects under the item Proposal Policy. The funding for the Commissions was increased, and IUGS contributed to the IGCP in the same way as in the previous year.

   After some minor changes, the Committee unanimously APPROVED the 2002 IUGS budget as shown in Appendix 1.

11. UPDATE

11.a. Annual Report
De Mulder returned to the decision at the Yichang Executive Committee meeting that the first annual report should cover the years 2000 and 2001. The annual report was aimed to have a wider distribution than the minutes and should be attractive and look good. This will be the priority work for the Secretary General and his assistant for the moment.

11.b. Directory
Concerning updates of database addresses, the Secretariat was asked to put the date on the updating.

11.c. Brochure
The brochure/flier will be updated. Should be two pages/one sheet. The text of the poster could be used, but this should also be updated.

11.d. New IUGS Logo
De Mulder noted that IUGS was seeking a new logo to represent the Union and its goals for the 21st century. All IUGS bodies were therefore invited to submit ideas for a new logo design before this Executive Committee meeting. More than 100 ideas had been received by the IUGS Secretariat, submitted by about 25 different entities. It had also been discussed if IUGS needed a tag line in connection with the logo.

   The Committee DECIDED on six draft logos that should be presented to professional designers at Geological Surveys for comments, before any further decision is made. Based on their advice the Bureau will submit a final list of proposed logos to the Executive Committee to decide. To keep the old logo will be one of the options.

11.e. IUGS Award
De Mulder reported that at its meeting in Washington D.C. in July 2001, the Bureau had approved the proposal for an IUGS Award. It was suggested that the award should go to people who have served the IUGS in a particular way, and that travel costs involved in receiving it may be included. This had been accepted by the Yichang Executive Committee meeting.
12. IUGS ROAD MAP

De Mulder referred to the previous Executive Committee meeting, where the Committee had agreed on the importance of developing an IUGS road map which illustrated how the Union would perform in 10 years time. This was based on the mission, goals and research directions formulated by the IUGS Strategic Planning Committee. Gupta presented a first draft of a five pages position paper, compiled by de Mulder and himself. This was well received by the Executive Committee whose additional comments will be included in the document and then prepared for publishing, i.e. Episodes. It was recommended to prepare a condensed version. This could also be printed in the second circular of the 2004 IGC.

The Committee THANKED Gupta and de Mulder for preparing the “Road Map” document and asked the members to provide Gupta, within two weeks, with their comments in writing to this document.

13. VENUE AND DATE OF THE 51st EXECUTIVE COMMITTEE MEETING

De Mulder reported that the Committee had been invited by the Geological Survey of Namibia to hold its next annual meeting in Windhoek, Namibia in the last half of February 2003, probably starting on 24 February. A field trip will be arranged before the meeting.

The Committee THANKED and ACCEPTED with pleasure the invitation to hold its next meeting in Namibia. Neighbouring member countries of Namibia should be invited to the meeting, and be asked to present themselves and be interactive.

CLOSING CEREMONY

At the closing ceremony the four outgoing Vice Presidents, G. Gaál (Finland), W. Al-Hashimi (Iraq), I. Speden (New Zealand), and I. Nyambok (Kenya) (not present) were especially thanked for their serving on the Executive Committee for six years. As a token of appreciation a plaque was given to them by the President.

Ian Speden and the Institute of Geological & Nuclear Sciences were thanked for hosting the meeting and for the excellent geological excursion prior to the meeting. They were presented a reprint of the first geological map of New Zealand.

June 2002
Secretariat
International Union of Geological Sciences
Trondheim
Norway

(These Minutes are subject to approval and adoption by the Executive Committee.)
## 2001 IUGS ALLOCATIONS
### BUDGET

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## 2001 IUGS ALLOCATIONS
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<tr>
<td><strong>TOTAL EXPENSES</strong></td>
<td>580 750</td>
</tr>
<tr>
<td>Transfer to/from reserve</td>
<td>-77 650</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>503 650</td>
</tr>
</tbody>
</table>