



**INTERNATIONAL SOCIETY FOR SOIL MECHANICS AND FOUNDATION  
ENGINEERING — MINUTES OF THE COUNCIL MEETING HELD IN FLORENCE, ITALY**  
**SOCIETE INTERNATIONALE DE MECHANIQUE DES SOLS ET DE TRAVAUX DE  
FONDATIONS — PROCES-VERBAL DE LA REUNION DU CONSEIL TENUE A  
FLORENCE, ITALIE**

May 26, 1991 8.30 am to 1.00 pm  
2.00 pm to 6.30 pm

**PRESENT:**

Prof. N. R. Morgenstern	President ISSMFE
Prof. B. B. Broms	Past President ISSMFE
Mr. G. Donaldson	Vice-President Africa
Prof. K. Ishihara	Vice-President Asia
Prof. H. G. Poulos	Vice-President Australasia
Prof. U. Smolczyk	Vice-President Europe
Prof. J. K. Mitchell	Vice-President North America
Prof. L. Décourt	Vice-President South America
Prof. V. A. Ilyichev	Board Member
Prof. M. Jamiolkowski	Board Member
Dr. R. H. G. Parry	Secretary General ISSMFE
Prof. V. F. B. de Mello	Past President ISSMFE
Prof. R. Oliveira	President IAEG
Prof. Mineiro	for President ISRM
Prof. E. E. de Beer	Secretary PCS
Prof. A. McGown	Chairman Technical Committee on Geotextiles and Geosynthetics (TC9)
Dr. D. M. Cruden	Chairman Technical Committee on Landslides (TC11)
Prof. H. Poorooshasb	Co-chairman Technical Committee on Mechanics of Granular Materials (TC13)
Mr. Harry Kolk	Secretary Technical Committee on Penetration Testing (TC16)
Prof. Koichi Akai	Chairman Technical Committee on Indurated Soils and Soft Rocks (TC22)
Dr. N. Krebs Ovesen	Chairman Technical Committee Limit State Design in Geotechnical Engineering (TC23)
Prof. G. E. Blight	Chairman Technical Committee on Tropical and Residual Soils (TC25)
D. Michel Gambin	Chairman Technical Committee on Pressuremeter and Dilatometer Testing (TC27)
Professor I. Manoliu and Professor M. Popescu	attended the meeting as observers on behalf of Romania.

**APOLOGIES:**

Dr. Za-chieh Moh

Board Member

Dr. W. Pircher  
Mr. C. Berenguier

ICOLD Representative  
ITA Secretary General

Member Society	Voting Member	Non-voting Member
Argentina	Dr. L. Décourt*	
Australia	Mr. Max Ervin	
Austria	Dr. H. Brandl	
Bangladesh	Prof. K. Ishihara*	
Belgium	Prof. J. Nuyens	
Bolivia	—	
Brazil	Mr. F. Bogossian*	
Bulgaria	Prof. U. Smolczyk*	
Canada	Dr. G. Lefebvre	
Chile	—	
China	—	
Colombia	—	
Costa Rica	—	
Czechoslovakia	Dr. J. Feda	
Denmark	Prof. J. S. Steinfeld	Mr. Hans Denver
Ecuador	—	
Egypt	—	
Finland	Mr. Hans Rathmayer	Mr. A. Valkeisenmäki
France	Mr. F. Schlosser	Mr. M. Londez
Germany	Dr. W. Wittke	Mr. Krauter
Ghana	—	
Greece	Dr. G. D. Coumoulos	Dr. A. Anagnostopoulos
Hungary	Dr. G. Petrasovits	
Iceland	Mr. I. Ingimarsson	Mr. H. Sigursteinsson
India	Prof. S. Gulhati	Prof. A. Sridharan
Indonesia	—	
Iran	Dr. H. Sanii	
Ireland	Dr. Martin F. Grace	
Israel	Prof. A. Komornik	Dr. E. Zolkov
Italy	Ing S. Martinetti	Ing R. Jappelli
Japan	Dr. Akio Nakase	Dr. Fumio Tatsuoka
Kenya	—	
Korea R	Prof. Sang-Kyu Kim	Prof. Hyung-Sik Chung
Mexico	—	
Morocco	Mr. Ejjaaouani	Mr. Sikkal
Netherlands	Prof. A. Verruijt	Dr. E. H. de Leeuw
New Zealand	Mr. Max Ervin*	
Nigeria	—	
Norway	Mr. Arne Simonsen	
Pakistan	—	
Paraguay	Prof. L. Décourt*	
Peru	—	
Poland	Mr. M. Wolski	Mr. Z. Grabowski
Portugal	Prof. M. M. Fernandes	Prof. A. G. Correira
South Africa	Mr. G. Donaldson*	
S E Asia	Dr. Chin-der Ou	
Spain	Dr. V. Escario	
Sudan	—	
Sweden	Mr. E. Sellgren	Mrs. M. Nord
Switzerland	Dr. Markus Caprez	Dr. Peter Brenner
Syria	—	
Tunisia	—	
Turkey	Dr. Ergun Togrol	
UK	Dr. C. R. I. Clayton	Dr. J. A. Lord
USA	Mr. Clyde N. Baker Jr.	Mr. Harvey E. Wahls
USSR	Dr. V. P. Petrukhin	
Venezuela	Mr. Max Ervin*	
Vietnam	Mr. Max Ervin*	
Yugoslavia	Prof. P. Anagnosti	
Zimbabwe	Mr. Ron Mackechnie	

\* denotes a proxy vote

## INTRODUCTION

1. The President opened the meeting and introduced to the delegates the Secretary General, and Secretary, Mrs Cobb, the Board Members and Technical Committee Chairmen who were present. He welcomed to the meeting Professor Oliveira, President of IAEG and Professor Mineiro, representing ISRM.

## QUORUM

2. A roll call showed delegates from 34 Member Societies to be present at the start of the meeting. As 50 Member Societies were entitled to vote the requirement under statute 12F, for general business, of 17 delegates for a quorate meeting was met.

## OVERVIEW

3. In his overview of the activities of ISSMFE the President reminded the meeting that new statutes and by-laws had been introduced at the 1989 Council Meeting in Rio de Janeiro, opening the way for more substantive actions by the Society. With this fully in mind he had formed a number of task forces within the Board to consider and report possible new initiatives that the Society might undertake, and he looked to discussion at this meeting to give a positive indication if these initiatives should be pursued further. He felt that the activities of the Society could usefully be divided into three categories. Routine, Emergent and Potential.
4. Routine activities included the International and Regional Conferences, the work of 27 Technical Committees, Council and Board Meetings and ISSMFE News. The Secretariat administered the affairs of the Society and, at its present level, could be maintained from income to the Society from traditional sources.
5. Emergent activities include Young Geotechnical Engineers Conferences which had already been held in Europe, South America, Asia and Africa, the Model Library for which there was a specific budget, the Mercer Lecture, the Visiting Lecturer Scheme, Videos of leading geotechnical engineers, improved liaison with the Sister Societies ISRM and IAEG, and the establishment of suitable international affiliations. These activities make only modest financial demands at most and can be pursued within the Society's present level of income.
6. Several task forces had been formed within the Board to investigate Potential areas into which ISSMFE activity might be extended, but some of these would require additional resources. However it was not unrealistic to visualise doubling the income of the Society without imposing a significant change in fees. One possible source of income was Corporate Membership and this had been reviewed by one of the task forces. Other possible activity areas investigated included Communications, both within ISSMFE and with other related societies; Technology Transfer and the potential for tapping into the aid industry; and Publishing, keeping in mind that most successful learned societies have their own publishing capability.
7. The President expressed the need for a community spirit and reassurance from the meeting that ISSMFE was moving in the right directions. It was essential that the meeting should express its views, as Council Meetings were held only once every two years. New ideas from delegates would be most welcome, and it was essential too that Member Societies should work actively to ensure that ISSMFE achieved its goals.

## MEMBERSHIP

8. The Secretary General presented his report on ISSMFE Membership (Appendix 1). On 31 December 1990 ISSMFE comprised 60 Member Societies representing 18065 individual members, compared with 60 Member Societies and 18,438 individual members on 31 December 1988. Since the 1989 Council Meeting Bangladesh had been admitted into membership and the suspension on the Ecuador Society, SEMSIR, had been lifted. The GDR Member Society had been dissolved and its members invited to join the FRG Member Society to form one German Society.
9. Papers submitted by the new Romanian Society for Soil Mechanics and Foundation Engineering for membership of ISSMFE were found to be in order by the Vice-President for Europe, Professor Smolczyk and the Secretary General. Under the powers invested in him by Statue 4F the Secretary General was admitting Romania into membership. It had been agreed that Romania should be granted a two-year moratorium on payment of fees and their membership would be effective from the end of this Council Meeting.
10. Noting the substantial changes in membership numbers of some Member Societies, Professor Togrol asked if individual changes in names and addresses were known. He was advised that they were not, but that an updated List of Members would be published in 1993 before the XIII ICSMFE.

## SECRETARIAT

11. The Secretary General advised the meeting that although the workload on the Secretariat had increased progressively over the past few years, this could still be coped with under present arrangements. He had himself recently taken early retirement from the University of Cambridge, partly to devote more time to the Secretariat. Mrs Cobb worked four days a week and he expressed his great appreciation for her help. The Secretariat would continue to operate from office space provided by the University for the foreseeable future, but eventually would be asked to pay rental, although at well below commercial rates. Provision had been made for this in the budget. Office equipment now includes a Fax and a Macintosh word processor. ISSMFE News continues to be produced four times a year. Close contact is maintained with the British Geotechnical Society, the Secretary General having been kindly invited to attend BGS Committee Meetings.
12. The Secretary General had been asked by the President to continue in post to the end of his Presidential period and had expressed himself pleased to agree to this.
13. The President expressed his appreciation of the work of the Secretariat.

## REGIONAL REPORTS BY VICE-PRESIDENTS

14. Brief presentations of their reports (Appendices 2a to 2f) were made by the six Vice-Presidents. Professor Poulos noted particularly the increase in membership in Australia. He felt that the comparatively high memberships of Australia and New Zealand could be attributed in part at least to the excellent News journals produced by both Societies. Professor Ishahara advised that, in addition to this report, Israel had organised three seminars attracting about 150 participants each, and a cooperative seminar of USSR and Israeli geotechnical engineers had been held in Moscow, with about 20 representatives, from Israel and 100 from USSR. The 10th Southeast Asian Conference had been held in Taipei in April in 1990 with about 500 participants from 24 countries. This conference had also hosted the 1990 ISSMFE Board Meeting. Mr Donaldson distributed copies of Bulletin No. 3 for the 10th African Regional Conference to the meeting. He hoped to be able to tap international aid for YGECs in Africa as well as encourag-

ing other conferences in North Africa. Professor Mitchell pointed out that North America now had one-third of the membership of ISSMFE. He attributed the substantial rise in the USA membership to inclusion of ISSMFE Membership on the ASCE dues form, which had to be struck out by ASCE members not wishing to belong to ISSMFE. There was a high level of geotechnical activity in Canada and the USA and North America hosted six ISSMFE Technical Committees. Professor Décourt drew particular attention to the 9th Panam Conference to be held in Viña del Mar, August 26–30, 1991. Professor Smolczyk highlighted the success of the European YGECs and advised that after Lisbon in 1992 the following YGEC would be in Germany about eighteen months later. European Regional Technical Committees had been very active, with ETC1 on Stabilisation of Landslides producing a third volume of case records and ETC8 on Geotechnics of Landfill Design and Remedial Works producing a bound volume of Technical Recommendations. Other Regional Technical Committees – ETC4 on Pressuremeter Testing, ETC6 on Reinforced Soils and ETC7 on Numerical Methods – had all been associated with recently held symposia.

15. The President thanked the Vice-Presidents and congratulated them on the level of activity in their Regions.
16. In his Regional Report Professor Smolczyk drew attention to the various problems which had arisen as a result of political changes in Eastern European Countries, but agreed with delegates from Czechoslovakia, Hungary, Poland, USSR and Yugoslavia that some modifications would be made to his final report.
17. In a reference to applications by Estonia and Lithuania for independent membership of ISSMFE Dr. Ilychev informed the meeting that he had met in Moscow with representatives from all Republics in the USSR and there had been a general understanding that a solution of the problems with respect to membership of ISSMFE by engineers in the USSR should wait until political problems had been solved. Not all delegates to the meeting agreed with this. He recognised that the USSR membership did not reflect the number of geotechnical engineers in the USSR wishing to be members, but the present method of paying ISSMFE membership fees through a government body limited the number of members and did not allow differentiation between republics. The matter was under continuing study and he would advise ISSMFE in future what actions he felt should be taken.
18. Professor Wolski told the meeting that payments for the Polish Member Society to ISSMFE had been made in the past by the National Technical Society and this had limited the ISSMFE membership to 120. This was going to change, however, and in future anyone wishing to be a member could make their own contribution, but the main payment would still come from the National Committee. Professor Wolski took the opportunity to express his thanks to the Italian Organising Committee for offering him a reduced registration fee making possible his attendance at the X ECSMFE.

#### VENUE FOR XIV ICSMFE, 1997

19. Presentations offering to host the XIV ICSMFE in 1997 were made by Mr Ervin on behalf of Australian Geomechanics society and Professor Wittke on behalf of the Deutsche Gesellschaft für Erd-und Grundbau. The respective venues proposed were Melbourne and Hamburg. Slides and videos were used by both speakers in making their presentations.
20. Mr. Rathmayer asked for confirmation from both Mr. Ervin and Professor Wittke that a surcharge of 5% payable to ISSMFE be added to the registration fee and that there would be simultaneous translation at all sessions. Both confirmed that the surcharge would be added. The Secretary General advised that Statute 3D required only that simultaneous translation should be provided at plenary sessions, but at the discretion of the Conference Advisory Committee and the Conference Organising Committee may be provided at other selected sessions. Both presenters agreed to this.

21. A secret ballot to decide the venue resulted in a tied vote with 21 votes each. Acting in accordance with Statute 12H, which gives the Chairman a casting vote in the event of equality of votes, the President consulted with Mr Ervin and Professor Wittke and it was agreed that the decision should be made by the toss of a coin. The toss resulted in the decision going to Germany.

#### TECHNICAL COMMITTEE ACTIVITY

22. The President explained briefly the process of setting up the Technical Committees, which was his responsibility. He had taken advice from the previous and present Boards, from Member Societies and from outgoing TC Chairpersons in deciding which TCs working under the Previous President, Professor Broms, should continue their work, which new TCs should be formed, and the appropriate Member Society to host each TC. Member Societies agreeing to take on this responsibility were then asked to provide the names of the TC Chairperson and Secretary. Shortlists of TC members were then requested from each Chairperson and these lists circulated to all Member Societies, asking if they wished to add any names to the lists.
23. Brief administrative reports had been requested from TC Chairpersons and these have been summarised in Appendix 3.
24. The President confirmed that with only a very small number of exceptions all the TCs were actively working towards a product falling basically within three possible categories.
  - (a) Organisation of a symposium. A number of more mature TCs were working towards this product as shown in Appendix 3.
  - (b) Participation in a parallel session at the XIII ICSMFE in New Delhi, January 1994.
  - (c) Presentation of a paper to be included in the Proceedings of the XIII ICSMFE under the President's allocation of pages.
25. Dr. Cruden asked about the procedure by which TCs would be consulted about participation in the XIII ICSMFE. His TC had not yet received such an invitation. In reply the President confirmed that the programme for the XIII ICSMFE had only just been firmed up at the CAC meeting three days earlier and invitations to appropriate TCs to participate would be sent to them in the next six months.
26. Professor Lefebvre praised the work of the TCs and the products they were producing. He said these should be better publicised as part of the benefits received by ISSMFE Members. The President agreed and advised Professor Lefebvre that he had asked the Task force on Corporate Membership, which had now completed that task, to prepare a document on membership of ISSMFE and possible benefits.

#### XIII ICSMFE, JANUARY 5–10, 1994, NEW DELHI

27. Professor Gulhati reported on the planning progress for the XIII ICSMFE. The Conference Advisory Committee had met three times and approved the general framework and venue. A technical programme consisting of six plenary sessions and twelve parallel sessions had been agreed and appropriate session leaders identified. These persons would now be contacted to confirm their acceptance. Bulletin 1 had been sent to Member Societies in April 1991 and Bulletin 2 with the technical programme and call for papers would be out in January 1992. The final bulletin would be distributed in January 1993. Some pre-registration forms had already been received. The Conference Secretariat now had a Fax as well as telephone

and postbag to facilitate communication.

28. Professor Zolkov asked for confirmation that anyone wishing to attend would be able to obtain a visa. Professor Gulhati replied that although at the moment visas were not issued to official delegates from Israel and South Africa, individuals from those countries could get visas, but he stressed that application should be made well in advance.

#### **PERMANENT COORDINATING SECRETARIAT**

29. The Secretary of the PCS, Professor de Beer, made an outline presentation of his report (Appendix 4). He stressed the problems of sister Society cooperation in Technical Committee or Commission activities arising from the different Presidential periods.
30. Professor Oliveira, President of IAEG, complimented Professor de Beer on the work of the PCS and assured the meeting that IAEG would be seeking to further strengthen its relationship with ISSMFE and ISRM. He thought more joint committees could be established and noted that seven of the ISSMFE TCs were working in areas of interest to IAEG. The President thanked him for these comments.
31. The President advised the meeting that Professor de Beer would be relinquishing his position as Secretary of the PCS after the next meeting on June 14, 1991. He thanked him for the endless devotion he had given to this task. The Belgian Government would be continuing its support, and he had accepted the offer by the Belgian Member Society that Professor Lousberg should take up the position of Secretary of PCS.

#### **BOARD TASK FORCES – REPORTS BY PRESIDENT**

##### **(a) Communications**

32. The TF on Communications had evaluated ISSMFE News and declared itself happy with the content and style at present. Editorial correspondents had been identified in each of the Regions to assist Dr Parry and this, together with increased activity in ISSMFE, was likely to lead in the near future to a larger ISSMFE News or more frequent publication.
33. The main concern of the TF had been the consideration of an effective information retrieval system. Two ISRM nominees, Mrs. L. R. Austriaco of AIT and Dr. Spencer of Imperial College London had joined them in this task. It was expected that IAEG nominees would also join the group shortly. The main conclusion of the report by this TF was that ISSMFE, ISRM, and IAEG should combine to produce and maintain an updated database of databases, which would allow prospective users to select the specific database(s) which met their requirements at any specific time. This would be discussed at the PCS meeting on June 14 next.
34. Mr. Donaldson confirmed the President's report and said that the TF hoped to complete the task within the next year.
35. The President expressed his appreciation of the valuable input from the two ISRM nominees.

##### **(b) Corporate Membership**

36. The TF on Corporate Membership had been asked to prepare a recommendation on whether or not ISSMFE should introduce Corporate Members, which the Statutes already permitted. In a report to the 1990 Board Meeting in Taipei the TF recommended in favour of Corporate

##### **Membership.**

37. Implementation of the scheme would now go ahead; but having regard to the interests of Member Societies, many of whom had their own corporate members, ISSMFE Corporate Membership would be limited to organisations such as Consultants, Contractors, and Suppliers who operated internationally. Member Societies will be asked to assist by suggesting names of possible corporate members in their own countries, with the names of contact persons within these organisations. Lists of these organisations would then be prepared, and a number of strategically placed point members asked to mail to these organisations, within their area, a document explaining corporate membership, its benefits and a simple form on which the contact persons could make their response.
38. In the document to potential corporate members the benefits of such membership would be presented, including participation in ISSMFE activities, and a card entry in the ISSMFE membership directory. It would also be made clear that the revenue would be used to fund new or special initiatives and projects, and not for routine administration of ISSMFE. Examples of such initiatives were the Model Library and YGECs in developing countries.
39. In answer to various points raised by the delegates the President agreed that there would be some problems in drawing up the list of potential corporate members. In some countries it would be easy, such as the UK which published a geotechnical directory, but in other countries such as the USA it would be more difficult. He confirmed that at the moment there was no provision in the statutes for representation of corporate members on the Council but, if appropriate, a by-law could be introduced in due course. He concluded that there was a strong support by the meeting for Corporate Membership as proposed and that he would therefore be going ahead with execution of the scheme.

##### **(c) Technology Transfer and Aid**

40. The President estimated the international aid industry to amount to about 40 to 50 billion dollars a year, mostly on a bilateral basis. Funding is usually on a request led basis. The TF has collected information on donor countries and organisations and also on possible recipients. This work is continuing. The next phase will be to encourage two or three Member Societies to enter into the process, so that ISSMFE can learn from this the most effective procedures by which to tap into this aid.
41. Professor Smolczyk confirmed that he would be sending out further letters seeking information on possible donors. Attempts would also be made to elicit information on experiences, positive or negative, in attempting to implement projects. Eventually it should be possible for ISSMFE to produce a manual or guide, with examples of actual projects, giving details of how to use the system effectively.
42. Professor Ishihara explained that he had sent questionnaires to 20 possible recipient countries and had received seven responses, all of whom indicated a willingness to receive aid. He will be sending out further questionnaires asking possible recipients more specifically what sort of projects they would like funded.
43. The President said that he expected the Board would be tabling a final report in about 2 years time, but anyone wishing to have a copy of the present interim report should contact the ISSMFE Secretariat. He reminded the meeting that the report would only be as good as the input from the Member Societies made it.
44. Professor Mackechnie told the meeting that the University of Zimbabwe had derived considerable benefits from aid in areas such as supplementing local salaries for university staffing, obtaining equipment, mid-career training and in the establishment of specific departments. He welcomed the

ISSMFE initiative as he would like to see greater benefits going into geotechnical areas.

45. Professor Anagnosti made specific mention of the need to offer assistance to companies in developing countries in the training of their engineering staff. Environmental geotechnology was an area pin-pointed by Professor Wolski in which many countries would welcome support and advice. Professor Gulhati also expressed support for the scheme, particularly as many National Societies have only marginal experience in this activity.
46. The President concluded that the meeting supported the initiatives being taken in this area by ISSMFE and clearly wished the TF to continue its work.

#### (d) Publishing

47. Unlike most leading scholarly organisations ISSMFE gets no financial return from its publications to help support its learned activities. ISSMFE members write the material, prepare it for publication, buy it and read it, but derive no financial benefit for it. A Task Force had been formed to investigate the possibility of ISSMFE being more proactive in the publication of material which it generates.
48. Requests for proposals had been sent out to five international publishing houses asking them for proposals based on two possible broad arrangements:

- (i) a revenue sharing agreement in which costs and revenues are split between the publisher and ISSMFE
- (ii) a royalty agreement in which ISSMFE receives a percentage on book sales.

The publishers were asked to base their proposals on a four year cycle embracing the proceedings of one International Conference, five Regional conferences and five Specialty Conferences.

49. It was proposed to bring a positive proposal to the next Council Meeting in New Delhi, January 1994, which would be in the form of a binding contract with a specific publisher. In the meantime a document setting up the proposal would be produced and forwarded to Member Societies in good time before the Council Meeting. Where a Member Society or some other body such as a Sister Society was involved in the conference or symposium producing the publication, then an equitable revenue sharing arrangement would have to be agreed. ISSMFE could expect to derive revenue of about US\$50,000 per annum from this source.
50. Professor Mitchell confirmed that publishers had submitted positive and encouraging responses to the ISSMFE request for proposals from them. It was clear from these that a cost sharing basis could produce more revenue, but with increased risk. It would be possible to introduce a royalty arrangement by activating and extending the resolution of the 1983 ISSMFE Executive Committee Meeting in Paris that "a small portion of revenues from sales of the Proceedings of the International Conferences of ISSMFE and from final, or state-of-the-art, reports of ISSMFE Technical Committees should accrue to ISSMFE". Judging from responses received Professor Mitchell felt that royalties of 10% might well be possible.
51. In discussion Dr. Cruden raised the point that an arrangement with a single publisher as envisaged would give ISSMFE publications a positive identity which they do not have when different publications are produced by different publishing houses. It would also be easier to ensure publications of a consistently high quality. Professor Zolkov was concerned that after administration costs not very much would remain from \$50,000 dollars per annum income and thought there may be other ways of raising funds, such as a percentage for approving and monitoring sponsored conferences. Dr.

Rathmayer suggested that ISSMFE publications could be publicised by including refereed reports on them in ISSMFE News. Dr Wahls saw an advantage in increased availability and knowing where to go to get publications, which was one of the present difficulties. Professor Smoltczyk raised the possibility of republishing famous books now out of print. From his experience with the IX ECSMFE in Dublin 1987 Mr Grace advised that ISSMFE could get considerable revenue by providing seed money for conferences and in consequence taking a portion of the profits.

52. The President confirmed that the Board will be considering this matter further, particularly in the light of the helpful comments from the Council delegates. It would be necessary to have a binding agreement with a specific publisher and this meant Member Societies relinquishing some of their present freedom in making publishing arrangements. They should reflect on this. A draft proposal would be prepared by the end of the next Board Meeting in August 1992 and circulated to Member Societies together with the relevant motion to be put to the next Council Meeting in January 1994.

#### (e) Education

53. Professor Poulos listed the four areas of activity that the ISSMFE Board at its meeting in 1990 in Taipei had proposed that ISSMFE should pursue in taking a more active role in geotechnical education. These were

- (i) the establishment of model curricula for undergraduate courses in geotechnics
- (ii) the development and dissemination of information on suitable experiments and demonstrations for these courses
- (iii) the collection and dissemination of suitable audio-visual material for these courses
- (iv) the development of annotated lists of suitable texts.

Preliminary information had already been gathered through solicitations by Vice-Presidents to institutions in their Regions. Information had been received from North America, South America and Australia. This process was continuing and it was hoped this would lead to not a single curriculum, but a number of model curricula which should be particularly useful for developing countries, but recognised that different curricula may be suited to different countries. It was intended, too, to prepare a catalogue of experiments and demonstrations illustrating geotechnical principles. A number of Technical Committees had been asked to prepare sets of annotated slides and had responded positively. The fourth objective of developing annotated lists of suitable texts was the most difficult, but it should be a straightforward matter to provide lists of texts suitable for specific circumstances. One session at the XIII ICSMFE would be devoted to this topic in which the findings of the Task Force will be debated.

54. In reply to a suggestion from Professor Anagnosti that this may be working towards an expert system Dr. Poulos said that the present process of gathering and synthesising information was at a much more elementary level than this.
55. Professor Fernandes recommended that videos should be collected as well as slides and Dr. Poulos agreed with this.
56. Dr. Rathmayer stressed the lack of educational programmes for geotechnical laboratory and field technicians. Dr. Poulos concurred strongly with this and hoped that this problem would be addressed in the future as part of ISSMFE's on going efforts on Education.
57. Professor Komornik complimented the TF on its work and looked forward to its being extended into other areas in the future. Sensing strong support

in the meeting for this activity the President advised that he looked towards a resolution of this first part of the work in two years' time.

## INTERNATIONAL AFFILIATIONS

58. The President confirmed that the Board had been keeping under review the possibility of ISSMFE joining or affiliating with suitable international umbrella organisations. An application had been made for affiliation to the International Union of Geological Societies (IUGS) to which IAEG already belonged and to which he understood ISRM would also be seeking affiliation. However, affiliation to IUGS would not meet the ISSMFE need for international identification on the engineering and technological side of its activities, which might be met by joining the Union of International Technical Associations (UITA) or the World Federation of Engineering Organisations (WFEO).
59. Presenting his report (Appendix 5) the Secretary General said he hoped ISSMFE affiliation to IUGS would be confirmed at the IUGS Council Meeting in 1992. There is no membership fee for affiliated membership of IUGS. With encouragement from UNESCO, UITA and WFEO had set up a Joint Executive Committee (JEC) to undertake Tasks of mutual interest. Close contact was being maintained with both UITA and WFEO, which would probably lead to our joining one of these organisations at a suitable time.
60. In discussion Professor Feda mentioned that the International Union of Applied and Scientific Mechanics might also be a suitable body for ISSMFE to consider joining. Professor Verruijt asked about the possibility of ISSMFE having direct membership of ISCU rather than through IUGS, but the President advised him that this was not possible. He also said that although a Union of Geotechnical Societies was not workable at the moment, it may be in the future.

## MODEL LIBRARY

61. The President reminded the meeting that the Model Library Scheme had been initiated by the previous Board under the Presidency of Professor Broms. The present Board, at its last meeting in Taipei, had delegated part of its budget to implement the project.
62. The Secretary General presented his report (Appendix 6) and confirmed that a start had been made with implementing the project, within a present budget of US\$10,000. The UK list of books had already been sent to 21 recipients who had responded to a questionnaire sent out by Professor Holtz and it was anticipated that these recipients would also be receiving the US books in the near future.
63. Dr. Brenner asked if a number of copies of proceedings of ISSMFE could not be made available free of charge to the Model Library Scheme. The President explained that at the moment the scheme was confined to undergraduate texts, but in the future it may be extended to include more advanced material. Having our own publication arrangement could be beneficial in this.
64. Professor Nuyens' suggestion that French speaking texts should be included drew a request from the President that the French speaking Member Societies consider initiating such a scheme. Professor Nuyens confirmed that he would speak to the Belgian Committee on this.
65. Professor Décourt stressed that, as he had previously suggested, donations of subscriptions to modern geotechnical journals would be most helpful to many of the Member Societies in his Region.
66. Dr. Escario offered to send copies of proceedings of Spanish conferences

ad symposia to Spanish speaking developing countries free of charge. He also recommended that a well known soil mechanics text in Spanish by Salas et al should be distributed, although copies of this could not be obtained free of cost, but probably at a reduced price. Although the present phase of the Model Library Scheme was limited to distributing basic texts, as mentioned previously by the President, other delegates, including Professor Décourt and Professor de Mello, supported the idea of distributing the Spanish proceedings. (Subsequent to the Council Meeting the Secretary General spoke with Dr. Escario and agreed that the present phase of the Model Library Scheme should be extended to distribute free copies of Spanish proceedings to suitable recipients and that this would be done through the ISSMFE Secretariat. It was also agreed that Dr. Escario would explore the possibility of obtaining the Salas text at a reduced price which would allow it to be purchased and distributed within the ISSMFE Model Library budget).

## MERCER LECTURE

67. After a brief review by the President of the events leading to the establishment of the Mercer Lecture (a name associated with "mercerised" cotton and the man who invented "tensar") the Secretary General presented his report (Appendix 7) and confirmed that the first Mercer Lecture would be given by Professor Koerner at three venues – Washington, London and Kyushu – at dates between February and June 1992.
68. Professor Togrol pointed out that this was in some measure a promotional exercise for the Neilon company and that there should therefore have been some bargaining with them. Both the President and Professor McGown, Chairman of the Mercer Lecture Selection Committee, assured him that there had been some strong bargaining firstly in persuading the company to co-sponsor it, getting a ten year commitment from them, and with respect to representation on the Selection Committee. Professor McGown also told the meeting that the next Mercer Lecture would be held at different locations in different countries to the first lecture.

## INTERNATIONAL DECADE FOR NATURAL DISASTER REDUCTION

69. The President reviewed the initiatives which had led to the United Nations approving the IDNDR. Implementation had been slower than anticipated owing in part to other distracting international events. A small secretariat had now been established at the offices of UNDR in Geneva. Activity would be mainly at National and Binational level, and to a lesser extent at International level. Names and addresses of National Committees for IDNDR which Member Societies could contact were included with the papers issued to delegates. At the moment there were no funds for complex Multi-national projects. The Technical Committees on Landslides and Earthquakes had been asked to maintain a brief on proposed projects and some recognition of the Decade will be incorporated into the programme for the XIII ICSMFE in New Delhi. ISSMFE was positioning itself through the Secretary General to ensure participation in projects to which the Society could usefully contribute.
70. The Secretary General presented his report on IDNDR (Appendix 8). This lists three projects approved by the Scientific and Technical Committee of the IDNDR Secretariat, to be undertaken by the UITA/WFEO Joint Executive Committee. A Task Committee had been set up by the JEC to form working groups to tackle these tasks and, where relevant, to liaise with ICSU on other projects. Megacities was an example of such a joint project with ICSU. One of the three working groups set up by the UITA/WFEO Task Committee for IDNDR is concerned with the design, construction and modification of buildings and structures to withstand earthquakes and/or extreme winds. ISSMFE had already been asked to

designate a correspondent to work with this group.

71. Dr. Cruden expressed disappointment at the absence of Landslides in the list of proposed projects. Other speakers maintained omissions and mistakes in the UN list of IDNDR National Committees, the nominated Turkish Committee, for example, had been abolished five years ago. Dr. Ilyichev advised that the USSR were pursuing several IDNDR programmes at National level.

72. The President reiterated the need for Member Societies to get involved in their National programmes.

## ACCOUNTS

73. A review of the ISSMFE accounts for 1989, 1990 was given by the Secretary General (Appendix 9). There was no discussion. A proposal by Mr. Donaldson to accept the accounts was seconded by Professor Mackechnie and carried unanimously.

## BUDGET

74. In presenting the budget (Appendix 10) for 1991–4, Professor Jamiolkowski described it essentially as a revision and extension of the budget approved at the 1989 Council Meeting. He advised some caution in looking at the 1990 audited accounts as relatively low expenditure on travelling was not likely to be repeated and the receipts included a large sum from the XII ICSMFE. The proposed budget contained an inflationary element of about 5% to 10% per annum on expenditures. It was assumed that the new fee structure would be in operation. All years showed deficits with the exception of 1994, when there should be a substantial amount received from the XIII ICSMFE in New Delhi.

75. Acceptance of the budget was proposed by Professor Togrol and seconded by Mr. Martinetti.

76. Concerns regarding budgeted increases in administrative expenses were expressed by Professor Nuyens and Professor Petrasovits, both of whom asked that no increases in Secretarial expenses should be allowed for in the budget. The President responded that the changes in secretarial costs had already been approved in the 1989 budget, from which the present budget evolved. He also reminded the meeting that much of the travel by Board Members and the Secretariat had been financed from other sources and this was, in effect, a subsidy enjoyed by ISSMFE.

77. Professor Togrol said that ISSMFE must consider the funds it needed for its future work. He told the meeting that of the five international societies in which he was involved ISSMFE was the most economically run.

78. Some concerns were also raised during this item with respect to the difficulties some countries had with the payment of fees. Professor Feda drew attention to the large differences in fees/capita, pointing out that the figure of 28 SFr/capita for Czechoslovakia was high. The President agreed that there were some problems, particularly with respect to the difference between real and apparent Gross National Products. He said that the Secretary General had been granted a degree of flexibility by himself and the Board to help deal with this problem.

79. A vote to accept the budget was carried by 34 votes in favour to 2 against.

## REVISION OF ISSMFE MEMBERSHIP FEES

80. The President proposed two motions from the chair concerning future

ISSMFE Membership fees:

### Motion 1

The Group Number (GN) for determining ISSMFE Member Society fees for 1992 and until further notice will be determined on the basis of Gross National Product (GNP) as given in Table 1, but adjusted according to GNP/capita as given in Table 2. In determining GNP and GNP/capita the most recently available figures in the World Bank Atlas will be used.

### Motion 2

ISSMFE Member Society fees for 1992 and until further notice will be determined by the formula:

Member Society fee = 195GN + 6M Swiss Francs

where GN is the Group Number and M is the number of individual members in the Member Society belonging to ISSMFE.

The calculated fee will be subject to the following qualifying factors:

(a) The annual fee for any Member Society should not be less than 300 Swiss Francs

(b) The annual fee for any Member Society, divided by the Number of Members, should not exceed 35 Swiss Francs.

81. In speaking to these motions the Secretary General presented his report (Appendix 11) and stressed that the purpose of Motion 1 was to place more emphasis on GNP/capita and the purpose of Motion 2 was to increase fees overall by about 15%.

82. Points made by delegates in discussion of Motion 1 included the need for more up-to-date and realistic data of GNP/capita and real salaries, taking proper account of exchange rates. Some questions were raised with regard to the lower limit of SFr 300 in Motion 2 as this could mean relatively high individual membership fees for small countries. It was pointed out, however, that taking Paraguay as an example the new formula meant a reduction in their membership fee.

83. A vote to accept Motion 1 was carried by 34 votes in favour to 2 against.

84. A vote to accept Motion 2 was carried by 35 votes in favour to 1 against.

## VISITING LECTURE SCHEME

85. The President reminded the meeting that a Visiting Lecture Scheme had been introduced, operated through the Secretariat, and that guidelines describing the scheme had been sent to all Member Societies.

## XI ECSMFE, COPENHAGEN 1995

86. Professor Oliveria noted that the theme of the XI ECSMFE to be held in Copenhagen in 1995 was the Interplay between Geotechnical Engineering and Engineering Geology. He offered the cooperation and sponsorship of IAEG for this conference. The President asked Professor Smolczyk, Vice-President for Europe, to contact the Danish Organising Committee on this.

## VOTE OF THANKS

87. Professor Togrol proposed a vote of thanks to the Italian Member Society for hosting the Council Meeting and the conference to follow. This was carried with acclamation.

## NEXT MEETING

88. The next ISSMFE Council Meeting will be held in New Delhi on 4 January, 1994.

## NEW MEMBER SOCIETY

89. The Secretary General formally welcomed Romania into membership of ISSMFE.

## VIDEOS

90. On closing the meeting the President explained that ISSMFE has entered into an agreement with publisher BiTech to produce videos of leading geotechnical engineers on a cost and revenue sharing basis. These would come under the general title of "Leaders of Geotechnical Engineering". Two videos had already been made featuring Dr. Peck who had donated his time free of charge. The first, entitled "Engineering Judgement" was available and would be shown after the end of the meeting for those wishing to stay and see it. It would retail at about \$250. The second, "Learning from the Ground", would be available by the end of June and would retail at about \$400 to \$450.
91. A number of Council Members commented favourably on this initiative and the President said that he sensed their support for it. The first Peck video was then shown.

## Appendix 1

### MEMBERSHIP OF ISSMFE

#### Report by Secretary General

### EXISTING AND NEW MEMBERS

On 31 December 1990 ISSMFE comprised 60 Member Societies representing 18065 individual members. This compares with 60 Member Societies and 18438 individual members reported to the 1989 Council Meeting. Member Societies which have shown substantial changes in membership since 1989 are:

Member Society	Membership 31 Dec 1990	Change since 1989 Report
Australia	500	+122
Canada	1088	-180
Italy	660	-878
Japan	1013	+179
S E Asia	330	-124
UK	650	-350
USA	4730	+795

Immediately after the 1989 Council Meeting the Bangladesh Society for Geotechnical Engineering submitted the necessary papers for ISSMFE membership. These were in order and their membership is now confirmed. Bangladesh has 55 individual members.

The suspension on SEMSIR, the Ecuador Society of ISSMFE, was lifted at the 1989 Council Meeting and a letter, dated 4 September 1989, was sent to SEMSIR advising them of this.

The GDR Committee for Soil Mechanics and Foundation Engineering was dissolved in 1990 and its members invited to join the Deutsche Gesellschaft fur Erd-und Grundbau, to constitute a single German ISSMFE Member Society.

### MEMBERSHIP ENQUIRIES

Enquiries regarding membership have been received from Albania, Algeria, Jordan and Romania. Letters have been sent to each of these advising the procedures to be followed in applying for membership. As the former Romanian Society, whose membership of ISSMFE was annulled in 1987, is now defunct, the newly formed Romanian Society for Soil Mechanics and Foundation Engineering will be considered as a new Member Society in applying for membership, and thus not responsible for the debts of the previous Member Society. The new Romanian Member Society has also been advised that it would be possible for ISSMFE to allow it a two year moratorium on fees after being admitted as a Member Society.

## MEMBER SOCIETIES BADLY IN ARREARS

Membership subscription to ISSMFE has not been paid by Bolivia since 1985 and by Morocco since 1986.

### ISSMFE MEMBERSHIP 31 DECEMBER 1990.

Societies	Members	Africa	Asia	Australasia	Europe	N. America	S. S. America
Argentina	82						82
Australia	500			500			
Austria	73				73		
Bangladesh	55		55				
Belgium	62				62		
Bolivia	13						13
Brazil	272						272
Bulgaria	92				92		
Canada	1088					1088	
Chile	35						35
China	106		106				
Colombia	41						41
Costa Rica	58						58
Czechoslovakia	60				60		
Denmark	278				278		
Ecuador	57						57
Egypt	20	20					
Finland	370				370		
France	746				746		
Germany	1345				1345		
Ghana	33	33					
Greece	122				122		
Hungary	25				25		
Iceland	28				28		
India	460		460				
Indonesia	70	70					
Iran	37		37				
Ireland	73				73		
Israel	61		61				
Italy	660				660		
Japan	1013		1013				
Kenya	21	21					
Korean R	24		24				
Mexico	463					463	
Morocco	12	12					
Netherlands	325				325		
New Zealand	250			250			
Nigeria	58	58					
Norway	367				367		
Pakistan	80		80				
Paraguay	11						11
Peru	59						59
Poland	120				120		
Portugal	103				103		
South Africa	623	623					
S. E. Asia	330		330				
Spain	278				278		
Sudan	25	25					
Sweden	517				517		
Switzerland	264				264		
Syria	12		12				
Tunisia	30	30					
Turkey	57				57		
U.K.	650				650		
U.S.A.	4730					4730	
U.S.S.R.	356				356		
Venezuela	37						37
Vietnam	18		18				
Yugoslavia	72				72		
Zimbabwe	238	238					
<b>Total</b>	<b>18065</b>	<b>1060</b>	<b>2266</b>	<b>750</b>	<b>7043</b>	<b>6281</b>	<b>665</b>

## Appendix 2a

### REPORT ON ACTIVITIES IN THE AUSTRALASIAN REGION 1990-1 H. G. Poulos.

#### 1. MEMBERSHIP

There has been a steady expansion of membership in the region. In Australia, as at October 1990, there were 742 members of the Australian Geomechanics Society (AGS) of whom 494 were members of the ISSMFE. This latter figure represents an increase of about 5% over the corresponding figure for 1989.

In New Zealand the current total membership figure of the New Zealand Geomechanics Society is 375, of whom about 270 are members of ISSMFE.

#### 2. CONFERENCES

Preparations are proceeding for the Sixth Australia-New Zealand Conference on Geomechanics to be held in Christchurch New Zealand, from 3rd to 7th February 1992. The Conference theme is "Geotechnical Risk – Identification, Evaluation and Solutions". In response to the call for papers, about 110 abstracts were submitted.

The Sixth International Symposium on Landslides is being held in Christchurch in the week immediately following the Geomechanics Conference (10th to 14th February). The call for papers and the associated Bulletin have been distributed, and it is understood that the response has been very good, with approximately 360 abstracts being received.

The Australian Geomechanics Society (AGS) is co-sponsoring the 7th International Conference on Numerical Methods in Geomechanics, in Cairns Australia, from 6th to 10th May 1991. A very large number of abstracts were received, and about 300 papers have been submitted for presentation.

The AGS is continuing its efforts to secure the 14th International Conference on Soil Mechanics and Foundation Engineering for Melbourne in 1997. The bid will be made to the ISSMFE Council in May 1991 and has the support of the Australian Federal Government, the State Government of Victoria and the City of Melbourne.

#### 3. TECHNICAL WORKING GROUPS

Within the Australian Society there are a number of technical working groups addressing problems of particular interest to the Society. The groups currently active are:

- i) footings and foundations
- ii) site selection and penetration testing
- iii) earthworks codes
- iv) litigation

The Australian Society is also sponsoring Technical Committee TC26 on Calcareous Sediments.

#### 4. HONOURS AND AWARDS

The 1990 D. H. Trollope Medal for the best PhD thesis in geomechanics was awarded to Dr. L. J. Wardle.

The 1991 E. H. Davis Memorial Lecture will be presented in November by Associate Professor Ian W. Johnston, of Monash University in Melbourne.

In New Zealand, the Geomechanics Lecture will be presented at the forthcoming 6th Australia New Zealand Conference on Geomechanics in Christchurch. The lecturer will be announced in the near future.

#### 5. COMMUNICATIONS

Both the New Zealand and Australian Societies continue to produce news journals twice yearly for their members. "Australian Geomechanics" and "New Zealand Geomechanics News" are produced by volunteers and contain technical papers, new items and geodiary information.

## Appendix 2b

### REPORT ON ACTIVITIES IN ASIAN REGION 1990-1 K. Ishihara

With the participation of Korea, Bangladesh and Vietnam as new member societies, the number of national societies in the Asian Region has become 12 embodying a total of 2138 members.

Since the Rio Conference in August 1989, various activities have been implemented in the national societies in Asian Region.

One of the highlights of the undertakings was holding the first Young Geotechnical Engineering Conferences in Bangkok on January 7 to 11, 1991, under the sponsorship of Japanese National Society. The representatives from Asian countries, including 50 young geotechnical engineers, participated in the work of the conference. The theme of the Conference was "Construction in Soft Clay" for which Professor Balasubramaniam, AIT, Professor H. Ohta, Kanazawa University, Japan and Dr. Surachat, Thailand presented key-note lectures. The conference met with a great success and voices were heard enthusiastically among participants for soon holding the next one. In these days when it is becoming more difficult to participate in the large-scale and costly international conference, it is truly worthwhile having occasionally such a small-scale gathering encouraging participation of young promising engineers from developing countries.

#### CHINA

Chinese National Society has been actively engaged in sponsoring the symposia and seminars at different parts of the country. Among them, the workshop on Soil Improvement in September, 1990 and 3rd national symposium on Soil Dynamics in May 1990 were the main events.

#### INDIA

Planning of the 13th International Conference to be held in New Delhi early in 1994 is the major concern for the Indian colleagues. On January 9-11th, 1991, the second meeting of the Conference Advisory Committee was held in New Delhi to make up the framework for the Conference. At one night during the Committee meeting period, a special panel discussion entitled "Geotechniques in the 1990s, Impact on Environment" was held to make the importance of the forthcoming Conference prevail among key persons in the Indian Community.

## IRAN

The first International Seminar on Soil Mechanics and Foundation Engineering in Iran was held at Tehran University on November 19–21, 1990, under the sponsorship of Iranian Government and Iranian Geotechnical Society. Five speakers invited from abroad made useful and interesting presentations. The Conference was well attended by more than 300 engineers and scientists from all over the provinces in Iran. It was instructive to learn that such a seminar was organized by the Government's initiative and implemented successfully with the overall cooperation of the Iranian Geotechnical Society.

The Iranian geotechnical engineers began to recognize the importance of earthquake effects on the earth structures and foundation of structures, since this country suffered the severe damage by the Manjil Earthquake of June 21, 1990.

## JAPAN

A joint symposium between Japan and Korea was held in Seoul in October 1990 on the theme "Tunnelling and Excavation in Soft Ground". With the participation of 4 Japanese lectures, the symposium was finished with a great success.

Japanese society sponsored the First Young Geotechnical Engineering Conference in Asia which was held in January 7–11, 1991 at AIT in Thailand.

## KOREA

The Korean national society played an essential role in bringing the Joint seminar with Japan to a great success.

## SOUTHEAST ASIA

The Southeast Asian society has been hard at work for organizing the 9th Asian Regional Conference on Soil Mechanics and Foundation Engineering which will be held in Bangkok in December, 1991.

## PAKISTAN

Pakistan National Society has been actively engaged in any undertakings aimed at advancement and proliferation of the geotechnical engineering expertise in this country. This includes a series of lectures and conferences and proposals for establishment of National Center for Civil Engineering Investigation.

## **Appendix 2c**

### **REPORT ON ACTIVITIES IN THE AFRICAN REGION 1990–1** **G. Donaldson**

The African Region of ISSMFE consists of nine member societies ranging from Tunisia in the north to South Africa in the south and from Morocco in the west to Kenya in the east. Most of these developing countries have to concentrate their engineering input into providing the basic infrastructure for the needs of their people. As a result the geotechnical engineering communities are small and without large financial resources. On average the membership of a society is about thirty with the exception of Zimbabwe and South Africa which are much larger. With the widespread distribution of societies and the high cost of

travel, regional activities are difficult to arrange and must inevitably be dominated by the large number of attendees from the host society. Furthermore it is almost impossible for the small societies to undertake the organisation of any large meeting with the limited manpower and financial resources that are available to them. These limitations do severely restrict activities within the region.

The major event is the regional conference and preparations are well-advanced for the 10th African Regional Conference which will be held in Lesotho in September 1991. Fifty papers have been received from various countries and indications of attendance have been received from ten African countries.

In May 1990 a young geotechnical engineers meeting near Johannesburg was attended by 50 engineers under the age of thirty-five, including delegates from Zimbabwe and Malawi. It is intended to hold a similar meeting in 1992, when it is hoped that more young engineers from all over southern Africa will be able to attend. Because of the costs of travel, it is hoped that meetings of young engineers can also be arranged in central and north Africa. Possibly young engineers in north Africa could be assisted to attend the meetings in Europe.

## **Appendix 2d**

### **REPORT ON ACTIVITIES IN THE NORTH AMERICAN REGION** **1990–1**

**J. K. Mitchell**

One need only read the quarterly issues of **Geotechnical News**, published by ISSMFE member John Gadsby (BiTech Publishers, Vancouver, BC, Canada) to be impressed by the very large amount of recent and current soil mechanics and geotechnical activity in North America. The meetings, conferences, committee meetings, and special projects, which are far too numerous to list here, cover virtually every area of interest to members of ISSMFE. However, note is taken of the special Memorial Symposium, with an attendance of over 500, held in Berkeley on May 10 and 11, 1990 in honour of the late Professor Harry Bolton Seed and the many monumental contributions that he made to our profession. Certainly his work as Chairman in organizing the highly successful XI ICSMFE held in San Francisco in 1985 ranks high among them.

North American member societies have proposed potential speakers, panelists, chairmen and moderators for the XIII ICSMFE to be held in New Delhi in 1994. Several U.S. and Canadian Universities have provided materials to help Board Member Harry Poulos develop a model curriculum for teaching undergraduate soil mechanics.

Work is now underway by the several ISSMFE Technical Committees that are sponsored by North American member societies. These include TC2, Centrifuge Testing, USA, Hon-Yim Ko, Chairman; TC5, Environmental Control, USA, John Nelson, Chairman; TC6, Expansive Soils, Canada, Del Fredland, Chairman; TC10, Geophysical Site Characterization, USA, Richard Woods, Chairman; TC11, Landslides, Canada, D. Cruden, Chairman; TC14, Offshore Geotechnical Engineering, USA, Don Murff, Chairman; and TC17, Ground Improvement, Reinforcement and Grouting, USA, Ian Juran and Joe Welsh, Co-Chairmen. In addition, a regional Technical Committee on Foundation Performance During Earthquakes and its Influence on Building Codes under the chairmanship of M.P. Romo, Mexico, has been organized.

The IX Pan American Conference on Soil Mechanics and Foundation Engineering is to be held in Viña Del Mar, Chile during August 26–30, 1991. This conference is a regular event held at four year intervals that brings together colleagues from both the North American and South American Regions of ISSMFE. An excellent technical program has been organized that includes sessions on Special Problems in Foundations, Mass Movement Phenomena, Underground Excavations in Urban Areas, The Soils of America, Geotechnical Aspects of Tailings Dams, and Earth and Rockfill Dams. In addition, the Casagrande Lecture will be presented by Oscar Vardé of Argentina. Attendance by interested persons from all over the world will be welcomed.

## Appendix 2e

### REPORT ON ACTIVITIES IN THE SOUTH AMERICAN REGION 1990-1

L. Décourt

The main activities in South America from the time of the last meeting are:

The "Sociedad Argentina de Mecanica de Suelos" promoted in September of 1990 in the city of Mendoza the XI Argentinian Conference on Soil Mechanics.

In August of 1991 the first Argentinian Symposium on the utilization of Geotextiles is going to be held.

In September, the XII Conference on Soil Mechanics.

In October a course on Rock Mechanics.

In December a course on Geology for Engineers.

#### BRAZIL

In April, 1990 the "Associacao Brasileira de Mecanica dos Solos" (ABMS) promoted in Rio de Janeiro the SINGEO 90, Symposium of Field Geotechnical Instrumentation.

In November of 1990 in Sao Paulo, a Technical Meeting on Structure of Soils Reinforced with Geosynthetics.

In November, 1990, in Salvador, the IX Brazilian Conference on Soil Mechanics and Foundation Engineering.

Scheduled for November 1991 are the II Symposium on Tailing DAMS in Rio de Janeiro and the II Engineering Seminar on Special Foundations, in Sao Paulo.

#### CHILE

The most important activity in the region is the Panamerican Conference on Soil Mechanics and Foundation Engineering, that is going to be held in Vina Del Mar, in August, under the sponsor of the "Sociedad Chilena de Geotecnia".

#### PARAGUAY

In October 1990 it was issued the first number of the technical magazine Estructura y Geotecnia.

It is scheduled for September a Lecture by the ISSMFE Vice-President for South America.

#### VENEZUELA

In October of 1990 the Sociedad Venezolana de Mecanica del Suelos e Ingenieria de Fundaciones promoted a local Symposium on Soil Mechanics and the III South America Conference on Rock Mechanics.

## Appendix 2f

### REPORT ON ACTIVITIES IN EUROPEAN REGION 1990-1

U. Smolctzyk

The period of 1989 to 1991 which is object of this report was earmarked by the

known political changes in Europe. With regard to ISSMFE, this meant fresh activities in many of the Eastern European countries but also considerable outcomes due to the economical difficulties raised by the switch-over to an open market approach in many of those countries.

In terms of the ISSMFE structure, the following changes occurred:

1. The German Democratic Republic committee ceased to be an independent member of ISSMFE. Most of its members joined the FRG member society. Abbreviations used so far are unnecessary now; there is one German Member Society only since autumn 1990.

2. The Romanian member society was re-established and could already attend the Danube-European Congress in Budapest in autumn 1990. It is now again a member society to the ISSMFE.

3. Following an invitation by the Albanian Ministry of Building, I visited Tirana in August 1990 and found a group of soil engineers and engineering geologists and surveyors strongly interested in founding an Albanian SSMFE. The current political instability in this country, however, obviously delayed a formal application.

4. The soil engineers in the Baltic republics have founded separate member societies. In Lithuania, a society was founded in 1990, in Estonia in 1991. The affiliation to ISSMFE is postponed until the status of the republics towards the USSR will be clarified.

A review of the organisational structure is under discussion in several East-European countries where the representation at present is realized by national committees associated to national academies of science. At a delegates' meeting held on the 25th May in Florence, the delegates of these countries reported on the states of affairs. Obviously, the situation is different in Poland, Czechoslovakia, Hungary, Romania and the Soviet Republics and it was emphasized that it is too early now to come to final conclusions.

In Northern Europe, there is a well established cooperation of Finland, Sweden, Norway, Denmark and Iceland. Regional conventions with unspecified topics and open discussions are held in a four years' cycle. The next will be the 10th meeting (X NGM 92) to be held in Aalborg, Denmark in May, 1992. Official visits were undertaken to the Danish Geotechnical Society and to the Finnish Member Society on occasion of its 40th anniversary.

Several occasions in Western Europe gave opportunities to have official contact visits to member societies in the Netherlands (40th anniversary; 4th Int. Conference on Geotextiles and Geomembranes; 4th Young Geot. Engineers Conference), in Belgium, France (5th Young GEC) and Switzerland. In the Mediterranean, the Greek and Italian Member Societies organized valuable official meetings at which it was possible to collect ideas about the future of ISSMFE in Europe.

The 9th Danube-European CSMFE on October 2-5 in Budapest demonstrated convincingly its special role to be an international platform not only for countries bordering the Danube but for the East-West dialogue in geotechnics in general. It was decided to continue this conference cycle and Romania was given the chance to prepare the 10th DECSMFE.

Since perpetuity of regional conferences should be questioned in terms of their necessity, it was decided to stop the sequence of Baltic conferences on SMFE. Thus the conference proposed to be held in Rostock (and formerly to be organized by the GDR committee) was cancelled. Instead, regional workshops with selected topics and less spectacular outfit seem to be preferable.

A conference type to be continued at any rate is the already mentioned Young Geotechnical Engineers' Conference. It is a hopeful sign that there is no lack of hosts. In 1992, the 6th YGEC is planned to be in Lisbon. The overnext of these conferences will be held in September 1993 in Stuttgart under the sponsorship of the German member society.

A notable international cooperation is going on in Europe via eight "European Technical Committees" on matters of

- ETC1 – Stabilization of Landslides (chairman: Togrol);  
2 – Earthquake Engineering Problems in Europe (Viggiani);  
3 – Piles (Franke);  
4 – Pressuremeter Testing (Gambin), now changed into an International TC;  
5 – Laboratory Testing (De Quelerij);  
6 – Reinforced Soil (MacGown);  
7 – Numerical Methods in Geotechnical Engineering (Sagaseta);  
8 – Geotechnics of Landfill Design and Remedial Works (Jessberger).

Reports were given by the chairmen to the delegates of the European member societies at their meeting in Florence:

The ETC 1 presented a third volume on the state of its work and asked for two more years to collect the still incoming contributions for the final report. This was agreed upon.

ETC 2 presented a finalizing report to the 10th ECSMFE and asked for being disbanded.

ETC3 and 5 are closely connected to CEN actions (CEN TC 250/SC7) and are at an early stage of their intended programmes.

ETC 4 held an international symposium in April 1990 in Oxford and presented its final report. The topic will be followed up further by the activity of the existing international TC.

ETC 6 had an international conference in Glasgow in September 1990, the proceedings of which could be presented to the 10th ECSMFE. Since the chairman Prof. McGown had asked for a change in the chairmanship of the committee, Prof. Schlosser (France) will take over to continue the work of this committee for another two years.

ETC 7 also held an international symposium in Santander in September 1990. The proceedings of this were available at the congress in Florence. Since it is intended to achieve a documentation (manuals or recommendations or standard drafts) which may be taken over into intercontinental committees later on, the period of this committee was also extended until the end of 1993.

ETC 8 has recently started its activities by translating German recommendations into English and publishing these.

The Vice President expressed the thanks of the ISSMFE to the chairman for the excellent results delivered to the profession, with a special appreciation to Prof. Viggiani, Prof. McGown and M. Gambin whose chairmanship end.

The unification of Europe into one multicultural society needs to use the funds of the European Community for joint endeavours in geotechnical research and education. Schemes like TEMPUS or ERASMUS should be used to improve the situation of geotechnical institutions and university institutes in Europe wherever necessary. Existing funds until now have not found adequate attention by our profession.

At the meeting of the delegates of the European member societies (28 attendants) two offers to host the 11th ECSMFE by the Dutch and the Danish society were gratefully considered. Following their presentations, a voting yielded a 10:7 priority for Copenhagen to be the place of this event in 1995. The considerable efforts of either society in preparing the proposals were very much appreciated by the delegates.

## Appendix 3

### STATUS OF TECHNICAL COMMITTEES

- TC1 Instrumentation, Telemetry and Data Processing Questionnaire being prepared to plan work.  
TC2 Centrifuge Testing. Symposium June 13–15, 1991, Boulder USA.  
TC3 Arid Soils. Questionnaire sent out to plan work.  
TC4 Earthquake Geotechnical Engineering. Workshop and manual on Geotechnical Seismic Zonation planned for 1993.  
TC5 Environmental Control.  
TC6 Expansive Soils. 7th Int. Conf. on Expansive Soils, August 3–5, 1992, Dallas USA. Collected slide set.  
TC7 Tailings Dams. Meeting in Chile, August 1991.  
TC8 Frost. Int. Symp. on Frost in Geotechnical Engineering June 28–July 2, 1993, Alaska. Preparing draft on Reference Test Procedures.  
TC9 Geotextiles and Geosynthetics. Collecting case records. Mercer Lecture.  
TC10 Geophysical Site Characterization.  
TC11 Landslides. 6th Int. Symp. on Landslides, Feb. 10–14, 1992, New Zealand. Compiling UNESCO Landslides Inventory. Collecting Slides.  
TC12 Validation of Computer Simulations.  
TC13 Mechanics of Granular Materials. Symp. sometime in 1992–4.  
TC14 Offshore Geotechnical Engineering. Collaborating with TC18 on 4th Int. Conf. on application of Stress-wave Theory to Piles, September 21–24, 1992.  
TC15 Peat.  
TC16 Penetration Testing. Liaisons established with ISO, CEN-TC250 and SPRINT RA 216.  
TC17 Ground Improvement, Reinforcement and Grouting.  
TC18 Pile Driving. See TC14.  
TC19 Preservation of Historic Sites. Special publication being prepared by AGI on Italian Historic Sites.  
TC20 Professional Practice.  
TC22 Indurated Soils and Soft Rocks. Collaboration with ISRM and Hellenic Society on Int. Symp. on Hard Soils-Soft Rocks, September 20–24, 1993.  
TC23 Limit State Design in Geotechnical Engineering. Specialist Symp. on Limit State Design in Geotechnical Engineering. May/June 1993, Copenhagen.  
TC24 Soil Sampling.  
TC25 Tropical and Residual Soils. Symp. at 10th African Regional Conference, September 1991, Lesotho.  
TC26 Calcareous Sediments.  
TC27 Pressuremeter and Dilatometer Testing.  
TC28 Underground Construction in Soft Ground. One day Symp. planned for January 1994.

## Appendix 4

### REPORT ON THE ACTIVITIES OF THE P.C.S.

E. E. de Beer, Secretary P.C.S.

Since the last meeting of the Council in Rio de Janeiro in August 1989, the Council of the P.C.S. has met in June 1990.

The Secretary General of the I.S.R.M., Mr. J. Charrua-Graça, deceased a few months after the P.C.S. meeting of June 1990. Mr. J. Charrua-Graça was always very active in promoting the possibilities of cooperation between the 3 International Societies. His premature death is deeply regretted. The President of the I.S.R.M. appointed Mr. J. Delgado Rodrigues to replace Mr. J. Charrua-Graça.

Before the meeting of the Secretaries General in June, the Presidents of the

three basic Geotechnical Societies had an important meeting in Ontario-Canada on 29 May 1990.

They formulated the following conclusions:

“1 – The Secretaries General are asked to prepare a list of all Technical Committees, Commissions, Task Forces, etc. in their respective organizations. Such lists should include the name, address, telephone and fax numbers of relevant chairmen, the names of the members of the committees, etc. and the mandate or terms of reference of the various groups. The P.C.S. should present the information from all three organizations in one document and should ensure that these lists and details therein should be updated at least once per year. Proposals for new committees or commissions should be brought to the attention of the other organizations as soon as possible.

2 – The Secretaries General are asked to prepare a common calendar of events associated with each organization and to advise the Presidents of actions taken to ensure that no clashes occur between major events of each organization such as:

- a) International Meetings,
- b) Regional Meetings of the I.S.S.M.F.E.
- c) Council Meetings.

3 – The Secretaries General are asked to ensure that each Society’s Newsletter be sent to the Executive Committee members of the other two sister organizations. This action is requested to develop in members of all three executive committees a greater knowledge and awareness of the activities of the other organizations and will require that each Secretary General provides an updated list of names and addresses of Executive Committee members to the other two sister organizations.

4 – The Permanent Co-ordinating Secretariat is asked to arrange a meeting of the three Presidents every two years in association with a major meeting of one of the three sister organizations.”

1 – To fulfill the item 1, the P.C.S. established a file as given in addendum 1, asking the Secretaries General to establish a list for each Technical Committee, Commission or Task Force, and to send a copy to the two other Secretaries General and to the P.C.S. The lists should be updated at least once a year and in each case after the election of a new President. The lists for I.S.S.F.M.E. and I.S.R.M. have been received but not on the proposed canvas. For the I.A.E.G. the updated list after the General Assembly in Amsterdam – August 1990 – has until yet not been received.

2 – Concerning the item 2, it must be mentioned that in their annual meeting the Secretaries General not only consider the events already decided, but also those not yet fully fixed. In that way, they are able to prevent some clashes. Of course initiatives taken by organizations outside the member societies are much more difficult for preventing clashes with meetings organized with the sponsorship of the International Societies.

3 – For the item 3 the Secretaries General have been asked to send to their colleagues and the P.C.S. the list with names and addresses of the Board or Executive Committee’s members in order that they receive the Newsletters of the Sister Societies. The informations for I.S.S.M.F.E. and I.S.R.M. have been received. For the I.A.E.G. the updated list after the General Assembly in Amsterdam – August 1990 – has until yet not been received.

4 – Concerning the item 4, as the Presidents had a meeting in Ontario in 1990, the Secretaries General propose that the next President’s meeting should take place on 10–14 February 1991 in New Zealand, at the occasion of the 6th International Symposium on Landslides, topic which is of interest for the three Geotechnical Societies.

At the meeting of June 1990 the Secretaries General ascertained that, also because of the objections of I.A.E.G., the creation of an International Geotechnical Union, as once suggested by Prof. Morgenstern, is no longer supported. Another possibility for a better representation of the International

Geotechnical Societies in the upper spheres of the International Scientific Organizations is the affiliation of the I.S.S.M.F.E. and I.S.R.M. to the International Union of the Geological Sciences (I.U.G.S.). Some exchange of letters has been initiated between the President Prof. Morgenstern and I.U.G.S. It seems that a conclusion concerning the affiliation of the I.S.S.M.F.E. to IUGS cannot occur before the Council Meeting to be held during its International Congress in Kyoto in 1992. During the meeting of June 1990, Secretary General Charrua-Graça informed that the I.S.R.M. was not interested in an affiliation with I.U.G.S. However the Minutes of the Council Meeting of I.S.R.M. held on September 9 in Zwaziland mention that I.S.R.M. decided to ask for affiliation to I.U.G.S. and to the International Union of Technical Associations (I.U.T.A.) jointly with I.S.S.M.F.E. with a view to sharing the cost of admission.

At the meeting of the Council in Rio de Janeiro guidelines concerning the role of liaison members in the Technical Committee or Commissions of the Sister Geotechnical Societies have been approved. They have now been published in the respective Newsletters. The appointment of a liaison member of the I.A.E.G. in the Technical Committee of the I.S.S.M.F.E. on the study of Tropical Soils will be taken into consideration after the possible creation of a Commission of Tropical Soils in I.A.E.G.

It was worthwhile to draw the attention of the Organizing committee of a conference or symposium of sending an invitation for a delegate to the Academies of Science of the countries where a Member society of the I.S.S.M.F.E. exists. A complete list of these Academies with addresses has been established by the P.C.S. and a copy sent to the Secretaries General, which can afford a duplication to the organizing committees of sponsored events.

At the meeting of May 1990, the Presidents decided also that:

“Both I.S.R.M. and I.A.E.G. will appoint two members each to join the Task Force on Communication of I.S.S.M.F.E. in order to:

- i) Review the quality and financial health of existing geotechnical abstract services,
- ii) In the light of i) above advise the Societies, jointly or separately, whether any action should be taken,
- iii) Outline directions in which to proceed to achieve a satisfactory information retrieval service.”

The President Prof. Morgenstern has drawn the attention of the Member Societies to actively participate on the National Committees of their country organized for the Decade 90 for Natural Disaster Reduction by the U.N.O. the I.C.S.U. is involved in the scientific Aspect of the Decade. It has chosen 7 topics. One of these topics concerns the problem related to the megacities. The I.A.E.G. is especially mentioned for this topics, but also the interest of the participation of the two other geotechnical Societies is mentioned in the document established by the I.C.S.U.

The Joint Working Party (J.W.P.) on the World Landslides Inventory under the Chairmanship of Dr Cruden is doing a very good job and is an example of the cooperation between the 3 Geotechnical Societies. An article “A suggested method for reporting a landslide” written by the International Geotechnical Societies – Unesco Working Party on Landslides Inventory has been published in the Bulletin of the I.A.E.G.

In the same Bulletin a vocabulary in English and French used in the description on Landslides has been published. Looking at the working of the J.W.P. on landslides it appeared that it could be worthwhile to define more precisely the role and the structure of a J.W.P.

The Young Geotechnical Conferences continue to be organized with much success. After the third Conference at Minsk (Bellorussia), the fourth has taken place at Delft (Netherlands), the next Y.G.E.C. of I.S.S.M.F.E. will take place at Grenoble (France). It will be proposed that members of I.A.E.G. take also

part.

The Secretaries General considered the problem of improving the cooperation of the basic Geotechnical Societies with User Societies also largely involved in geotechnical problems (Large Dams, Roads, Waste Disposals, Hydrogeology, Harbours, Geotextiles, etc). A better cooperation can be obtained by mutual invitation to council meetings, organization of joint events etc. It seems however not desirable, also due to the limitation of funds, that they become members of the P.C.S.

General conclusion:

The President of the three Geotechnical Societies clearly show their concern for a better coordination of the activities of the three basic Geotechnical Societies. They prop up the effort made since several years by the P.C.S. to realize this goal.

## Appendix 5

### INTERNATIONAL AFFILIATIONS

Report by Secretary General

#### UNION OF INTERNATIONAL TECHNICAL ASSOCIATIONS (UITA)

UITA is a grouping of international non-governmental technical associations created in 1951 at the initiative of UNESCO. It has been granted Category A consultative status by UNESCO. Its purpose is

- 1) to identify, promote and coordinate their actions in fields of common interest,
- 2) to facilitate their relations with the organizations connected to the UNO system such as ECOSOC, UNESCO, UNIDO, FAO or with its operational bodies such as UNITAR, UNEP, UNDP and also with any international organization.

Member Associations may take full advantage of UITA's special standing with these bodies and consequently be granted the same status for their consultative and associative relations.

UITA takes part in the drawing up to the annual and pluriannual programmes of the Bodies of the United Nations System; its members may be the recipients of specific contracts and take full advantage of all the aid systems available for their actions in favour of developing countries.

Financial support is also available, notably for the publication, purchase and distribution of technical works and for the organization of and participation in colloquia.

ISSMFE was a Founder Member of UITA, but withdrew in 1972 as it was no longer felt that ISSMFE derived any benefit from its membership. However, if ISSMFE is to participate fully in international initiatives such as the International Decade for Natural Disaster Reduction (IDNDR) it needs to have access to UN bodies such as UNESCO, UNIDO, and UITA is set up to provide such access.

The case for ISSMFE rejoining UITA has been strengthened by the agreement in 1989 between UITA and the World Federation of Engineering Organisations (WFEO) to create a Joint Executive Committee (JEC), empowered to act for both organisations and to manage activities utilising resources and capabilities of both organisations. This link was forged under the strong encouragement of UNESCO. Action was initiated under the JEC by the organisation of a work-

shop in Paris, 15–18 October, 1990 to discuss "Engineering Contribution to IDNDR" attended by about 30 international experts. An outcome of this workshop has been the setting up of a Joint Task Committee for IDNDR, under the Chairmanship of A. Villeveille.

The Joint Task Committee will serve a similar purpose to that set up by ICSU under the chairmanship of Sir James Lighthill.

The current annual fee for Membership of UITA is FF10,500.

### INTERNATIONAL UNION OF GEOLOGICAL SCIENCES (IUGS)

In response to a recommendation by the ISSMFE Board Meeting held in Rio de Janeiro in 1989 a letter was sent from the Secretariat to IUGS on 17 October 1989 enquiring about possible affiliation of ISSMFE with IUGS. A reply dated 3 November 1989 was received from IUGS Secretary General Dr Robin Brett inviting ISSMFE to apply to become an affiliated organisation of IUGS. He listed the following benefits to ISSMFE

- a) formal affiliation with most of the world's international geological organisations
- b) formal affiliation with the International Council of Scientific Unions (ICSU) through IUGS
- c) the opportunity to co-sponsor symposia at the quadrennial International Geological Congress
- d) the opportunity to initiate joint programmes with other IUGS Affiliates and Commissions.

Although some organisations receive limited funding from IUGS, Dr Brett thought it would be unlikely in the case of ISSMFE. There is no membership fee for affiliation to IUGS.

At its meeting in Taipei, 18 April, 1990 the Board recommended that ISSMFE should apply to become an Affiliated Member of IUGS and this was put into effect in a letter from the Secretariat to IUGS dated 11 May, 1990. In his reply of 16 May Dr Robin Brett, Secretary General of IUGS welcomed the application and advised that the IUGS Executive Committee would meet in February 1991 and vote on the ISSMFE application. A favourable vote then had to be ratified by the whole IUGS Council in Kyoto in 1992.

The ISSMFE application was discussed briefly at the IUGS Executive Committee Meeting in January 1991, but no vote was taken as some members of the Committee expressed the view that IUGS Organisations and Affiliates with similar interests to ISSMFE should be consulted on the matter. Dr Brett indicated in a letter to the ISSMFE Secretariat that this was perhaps a somewhat conservative reaction by the Committee and that there was still a very good chance that a positive recommendation for ISSMFE to become an Affiliated Member of IUGS would come before the IUGS Council Meeting in 1992.

## Appendix 6

### ISSMFE MODEL LIBRARY

Report by Secretary General

At the request of the ISSMFE President, Professor B. Broms, the Technical Committee for Research Cooperation TC21, chaired by Mr. C. B. Crawford, in the period 1985–9 investigated the possibility of setting up a model library for distribution to research or educational institutions in developing countries at a low cost or free of charge. A number of leading geotechnical engineers with a wide geographical spread were then asked their opinion of the material which should be included. It was then decided, in the first place at least, to limit

the model library to text books and manuals only.

On 15 April 1988 a letter was sent by Mr. Crawford to all Vice-Presidents and Member Societies in Asia, Africa and South America asking them to propose suitable recipients for the model library. Thirty-three recipients were proposed, distributed by Region and country as given in Attachment A with the subsequent addition of Romania increasing the total to thirty-four.

The project divides itself conveniently into two parts: books to be collected in the USA and distributed from there and books to be collected in the UK and distributed from there. Mr Crawford worked closely with Professor Holtz of the USA on the project and Professor Holtz agreed to handle the US side of the project, on the understanding that all costs would be reimbursed by ISSMFE. Attachment B shows the list of UK and USA books.

Professor Holtz and Mr. Crawford agreed to send out to each proposed recipient a copy of "Taylor – Fundamentals of Soil Mechanics" with a questionnaire to be completed to test the distribution system and confirm where the library will be housed and who will take responsibility for it. This distribution was made in 1990 and with the result that 21 questionnaires have been returned. In 1991 a copy of Taylor was sent to Romania but as yet no reply has been received.

The full set of UK books has been sent to the 21 recipients who have returned the questionnaires, as shown in Attachment A. All books were supplied by the publishers at considerably reduced prices and in the case of the two CIRIA publications and the Canadian Foundation Engineering Manual copies were obtained free.

No distributions have been made as yet from the USA other than the Taylor volume, in part because of a misunderstanding regarding the possibility of payments to US publishers. It is expected that distributions of USA books will be made shortly..

It was agreed at the 1990 ISSMFE Board Meeting in Taipei that the Model Library project should proceed with an immediate budget of USD10,000 for distribution of up to 30 sets, part of this money to come from interest accruing from the Seed Fund and the funds received from the XII ICSMFE in Rio de Janeiro. A contribution of GBP100 has been made to the project by the British Midlands Soil Mechanics Society. Expenditures to the 31 December 1990 was USD1046.38 for distribution of the Taylor volume and GBP1784 for purchase and distribution of the UK books.

#### Attachment A

#### ISSMFE MODEL LIBRARY

Region	Country	No of proposed recipients	No of UK sets sent
Africa	Ivory Coast	1	1
	Egypt	1	
	Ghana	2	2
	Kenya	1	1
	Morocco	1	
	Nigeria	6	6
	Sudan	1	1
	Tunisia	1	
	Zimbabwe	1	1
Asia	Indonesia	1	1
	Pakistan	2	1
	Philippines	1	1
	Syria	1	1
Europe	Romania	1	

North America	Mexico	4	4
South America	Bolivia	1	
	Colombia	2	
	Costa Rica	1	1
	Dominican Republic	1	
	Ecuador	1	
	Paraguay	1	
	Peru	1	

#### Attachment B

#### ISSMFE MODEL LIBRARY

Lists of textbooks and manuals forming the Model Library: books under UK collected and distributed from the UK by ISSMFE Secretariat and those under USA collected and distributed from the USA by Professor Holtz. ELBS refers to English Language Book Society cheap editions prepared specifically for distribution to developing countries (not South America).

#### UK

Padfield & Sharrock (1983) *Settlement of Structures on Clay Soils* CIRIA  
 Scott (1980) *An Introduction to Soil Mechanics and Foundations* Applied Sciences Publishers  
 Simons and Menzies (1975) *A Short Course in Foundation* Newnes-Butterworths or IPC Science and Technology Press Ltd  
 Tomlinson (1986) *Foundation Design and Construction* Longman Scientific and Technical ELBS  
 Weltman and Head (1983) *Site Investigation Manual* CIRIA  
 Canadian Foundation Engineering Manual (1985) BiTech Donated by the Canadian Geotechnical Society  
 Geotechnical Manual for Slopes (1984) 2nd Edition Geotechnical Control Office Engg. Development Dept., Hong Kong  
 Guide to Site Investigation (1987) Geotechnical Control Office Engg. Development Dept., Hong Kong

#### USA

Holtz and Kovacs (1981) *An Introduction to Geotechnical Engineering* Prentice-Hall  
 Lambe and Whitman (1969) *Soil Mechanics* Wiley (SI version preferred but out of print)  
 Peck, Hanson and Thornburn (1974) *Foundation Engineering* Wiley  
 Perloff and Baron (1976) *Soil Mechanics: Principles and Applications* Ronald (Wiley)  
 Taylor (1948) *Fundamentals of Soil Mechanics* Wiley  
 Terzaghi and Peck (1967) *Soil Mechanics in Engineering Practice* Wiley  
 US Navy (1982) *Soil Mechanics (DM-7.1); Foundations and Earth Structures (DM-7.2); Soil Dynamics. Deep Stabilization and Special Geotechnical Construction (DM-7.3).*  
 Contributions to Soil Mechanics (1940) Boston Society of Civil Engineers 2 Vols

## Appendix 7

### THE MERCER LECTURE

#### Report by Secretary General

Following correspondence between Netlon Limited, Professor McGown, Professor Giroud and the ISSMFE President, Professor Morgenstern a decision has been made to establish the "Mercer Lecture" under the joint sponsorship of ISSMFE, The International Geotextile Society (IGS) and Netlon Limited. ISSMFE sponsorship would be through Technical Committee TC9 on Geotextiles and Geosynthetics of which Professor McGown is Chairman. This decision was enthusiastically endorsed by the ISSMFE Board at its 1990 Meeting in Taipei.

It has been agreed that the Award Selection Committee should consist of two members each from ISSMFE and IGS and one from Netlon. The British Geotechnical Society has agreed to give administrative support to the scheme.

Details of the scheme are as follows:

1. Netlon Limited will fund the project at a level of GBP8,000 each second year for a minimum of 10 years.
2. The lecture will be held every second year at three selected venues in America, Asia and Europe.
3. The broad subject matter of each lecture will be "Geosynthetics in Geotechnical Engineering".
4. The paper will be published in the journal "Geotextiles and Geomembranes".

The Award Selection Committee has been set up, and consists of the following:

IGS	V. Milligan M. Fukuoka	(Canada) (Japan)
Netlon	I. Paul	(UK)
ISSMFE	A. McGown P. Jarrett	(UK, Chairman) (Canada)

The first Mercer Lecture will be given by Professor R. M. Koerner of the USA and will be presented in Washington, USA, London, UK and either Kyushu or Shaikoku, Japan. The presentations will be given between February and May 1992. Local arrangements will be made by ASCE in Washington, BGS in the UK and Professor Fukuoka in Japan.

## Appendix 8

### UITA/WFEO JOINT PARTICIPATION IN IDNDR

1. The UITA/WFEO Joint Organising Committee (JEC) consists of ten senior members from the two organisations, under the chairmanship of WFEO Vice-President Michael Leonard.
2. In July 1990 JEC set up a working party, later expanded to a UITA/WFEO Task Committee (TC) for IDNDR composed of Mr. A. Villeveille (Ch), Mr. M. Leonard (Dep. Ch), Mr. R. Chung (Sec) together with Messrs. Carroll, Davenport, Packer, Garnier, Bennet and SGs ex officio.
3. The TC organised a workshop 16/17 October, 1990 in Paris attended by 35 individuals to discuss the decade. Dr. R. Hamilton attended from the IDNDR Secretariat and gave an update on the IDNDR programme. After

the workshop the TC met on 18/19 October and agreed on eight topics for inclusion in the forward programme for participation in IDNDR, viz:

- a) Design and construction of buildings and structures to withstand natural disasters.
- b) Landslides.
- c) Storms and Floods.
- d) Education and training for – hazards and disasters  
– improving public awareness.
- e) Human reliance on Safety Integral Systems.
- f) Cost of implications of prevention versus post disaster recovery.
- g) Megacities.
- h) Special case histories e.g. Limnic eruption of volcanoes – Lake Nyos.

A special concept prepared by Mr. Villeveille, known as a "Roving Seminar", to provide an effective means of communication regionally as part of the education topic was strongly recommended for support by the Task Committee.

4. The International Council for Scientific Unions (ICSU) has also set up a Special Committee concerned with IDNDR projects, under the Chairmanship of Sir James Lighthill. Mr. Leonard attended a meeting of this committee in October 1990 and it was agreed that there should be collaboration between the UITA/WFEO Task Committee and the ICSU Special Committee where appropriate, with the project on Megacities cited as a good example. A further meeting of the ICSU committee held in February 1991 was attended by Mr. Villeveille and Mr. Leonard.
5. The UN IDNDR Secretariat is based in Geneva with Mr. N. Merani as Director and Dr. R. Hamilton (seconded from the US Geological Survey) as Chief of the Scientific and Technical Committee (STC).
6. An inaugural meeting of the STC was held in Bonn in March 1991 attended by representatives of various UN organisations, as well as Sir James Lighthill for ICSU and Mr. Villeveille and Mr. Leonard for UITA/WFEO. This meeting endorsed a total list of 13 IDNDR "demonstration projects", three of them recognised as UITA/WFEO projects, viz:

No. 8 – Design, construction and modification of buildings and structures to withstand earthquakes and/or extreme winds and \*casualties versus structural damages.

No. 9 – Roving Seminar

No. 10 – \*Pilot project for disaster mitigation in hospital facilities in Latin America.

The World Health Organisation (WHO) wishes to collaborate in part of No. 8 and No. 10 marked \*.

ICSU had three of its proposals accepted, namely:

- No. 1 Tropical cyclones
- No. 2 Volcano hazards
- No. 3 Earthquake hazards

In addition to the above projects ICSU and UITA/WFEO were given encouragement to prepare a joint proposal for a Megacities project.

7. The UITA/WFEO Task Committee will set up a Working Group to develop programmes for the approved projects and will be seeking funds to finance these endeavours.
8. Mr. Pecoux (Secretary General of UITA) wrote to ISSMFE Secretariat on 26 March 1991 advising that one of the "demonstration projects" (Project 8) was concerned with "Anti-hazard Constructions and Structures" with the general content as below:

A general survey, including the critical analysis of mechanical resistance of various structures to brutal seismic and extreme winds stresses; building codes; and cost-to-reduction of casualties versus structural damages, at international and national levels. (eg Latin America, South East Asia).

Mr. Pecoux advised that Dr. Davenport of Canada was Chairman of this Working Group and invited ISSMFE to designate a correspondent to this Group.

9. The ISSMFE Secretary General, Dr. R. H. G. Parry attended the General Assembly of UITA held in Paris on 25 April, 1991.

## Appendix 9

### ISSMFE AUDITED ACCOUNTS

#### Report by Secretary General

#### 1 JANUARY 1989-31 DECEMBER 1989

The ISSMFE audited accounts for 1989 show an increase in cash balance of GBP39,208 and a decrease of SFR55,420. Taking GBP 1 = SFr 2.4875 gives a net increase of GBP16,928 compared with a decrease of GBP200 in the 1989 updated budget. The difference was due largely to receiving a donation of USD 15,000 from the USA (GBP9,660) which was not included in the budget and income from investments (i.e. interest) was GBP 10,870 compared to GBP 6,000 in the budget.

Specific items where there are notable differences between budget and actual RECEIPTS are:

Item	Budget GBP	Actual GBP	Actual-Budget GBP
Interest	6,000	10,870	4,870
US Donation		9,661	9,661

Specific items where there are notable differences between budget and actual EXPENDITURES are:

Item	Budget GBP	Actual GBP	Actual-Budget GBP
Travel and Entertainment	22,000	15,896	-6,104
Photocopying	500	1,553	+1,053
Telephone and Telex	1,300	961	-339
Postage	1,000	1,791	+791
Newsletter	5,000	7,246	+2,246
List of Members	5,000	2,800	-2,200

The difference between budget and actual expenditure for the Newsletter occurred because five newsletters were paid for in 1989 (Issue 1988 No. 4 was paid for in 1989). The cost of GBP2,800 for the List of Members is for printing only. Postage costs appear in the 1990 accounts.

#### 1 JANUARY 1990 TO DECEMBER 1990

The ISSMFE audited accounts for 1990 show an increase in cash balance of GBP32,132 plus SFR43,307. Taking 1 GBP = SFr2.46 gives an overall increase of GBP49,736, compared with a budgeted deficit of GBP5,530. The difference was due mainly to the receipt of GBP26,947 from the registration fees for the

XII ICSMFE in Rio de Janeiro, 1989 (ISSMFE by-law 14D.4) which was not included in the budget, travel expenses substantially less than expected and no requests for financial assistance for Young Geotechnical Engineers Conferences.

Specific items where there are notable differences between budget and actual RECEIPTS are:

Item	Budget GBP	Actual GBP	Actual-Budget GBP
Subscriptions	56,000	61,985	+5,985
Interest	6,000	18,535	+12,535
12th ICSMFE		26,947	+26,947

Specific items where there are notable differences between budget and actual EXPENDITURES are:

Item	Budget GBP	Actual GBP	Actual-Budget GBP
Travel and Entertainment	24,000	12,799	-11,401
Model Library		1,784	+1,784
Office Equipment		3,160	+3,160
YGEC	4,000		-4,000

### SPECIAL FUNDS

The following funds are incorporated within the accounts:

Fund	Receipts GBP	Expenditure GBP	Balance GBP
Kevin Nash Gold Medal Fund	4,794*	1,547	3,247
US Donation "H B Seed" Fund	9,660		9,660

\*Assumes GBP1=SFr3.05 on average during 1983-5 when money received.

INTERNATIONAL SOCIETY FOR SOIL MECHANICS AND  
FOUNDATION ENGINEERING

RECEIPTS AND PAYMENTS ACCOUNT  
FOR THE YEAR ENDED 31 DECEMBER 1989

	Credit Suisse	Barclays Bank	Investment Accounts	University of
Cambridge	SFr	£	£	£
CASH BALANCE AT 1 JANUARY 1989	141,493	10,637	81,787	(2,859)
ADD: RECEIPTS				
Subscriptions	119,808	9,953		
Lexicon sales and other Publications		383		
Travel refund		1,982		
Interest received	23	2,010	8,849	
Postage refund		79		
Donation from US society		9,661		
	<u>261,324</u>	<u>34,705</u>	<u>90,636</u>	<u>(2,859)</u>
LESS: PAYMENTS				
Emoluments and staff costs		14,700		7,932
Travel and entertainment		17,851		27
Photocopying		85		1,468
Telephone and telex		873		78
Postage		153		1,718
Stationery		372		310
Newsletter		7,246		
List of members		2,800		
Audit fees		610		
Bank charges	250	9		
Corporation tax		1,718		
Kevin Nash Gold Medal				687
	<u>250</u>	<u>46,417</u>	<u>-</u>	<u>12,220</u>
ADD: TRANSFERS FROM OTHER ACCOUNTS	-	65,498		6,000
LESS: TRANSFERS TO OTHER ACCOUNTS	175,000	6,000	570	-
CASH BALANCE AT 31 DECEMBER 1989	SFr86,074	£47,786	£90,066	£(9,079)
INCREASE/(DECREASE) IN CASH BALANCE	SFr(55,419)	£37,149	£8,279	£(6,220)

Information: At 31 December 1989 – £1=SFr2.4875

Audited by Coopers and Lybrand Deloitte.

INTERNATIONAL SOCIETY FOR SOIL MECHANICS AND FOUNDATION ENGINEERING

RECEIPTS AND PAYMENTS ACCOUNT  
FOR THE YEAR ENDED 31 DECEMBER 1990

Cambridge	Credit Suisse SFr	Barclays Bank £	Investment Accounts £	University of £
CASH BALANCE AT 1 JANUARY 1990	86,074	47,786	90,066	(9,080)
ADD: RECEIPTS				
Subscriptions	143,493	3,655		
Lexicon sales and other publications		160		
Travel refund		871		
Interest received		7,279	11,256	
Contribution from 12th ICSMFE		26,947		
	<u>229,567</u>	<u>86,698</u>	<u>101,322</u>	<u>(9,080)</u>
LESS: PAYMENTS				
Emoluments and staff costs		17,644		8,464
Travel and entertainment		12,799		-
Photocopying		-		803
Telephone, telex and fax		1,015		209
Postage		-		1,504
Stationery		301		322
Newsletter		5,818		
List of members		1,294		
Audit fees		725		
Bank charges	186	72		
Corporation tax		2,715		
Model library		1,784		
Office equipment		-		3,160
	<u>186</u>	<u>44,167</u>	-	<u>14,462</u>
ADD: TRANSFERS FROM OTHER ACCOUNTS	-	40,593	-	19,000
LESS: TRANSFERS TO OTHER ACCOUNTS	100,000	19,000	-	-
CASH BALANCE AT 31 DECEMBER 1990	SFr129,381	£64,124	£101,322	£(4,542)
INCREASE/(DECREASE) IN CASH BALANCE	SFr43,307	£16,338	£11,256	£4,538

Information: At 31 December 1990 – £1=SFr2.4600

Audited by Coopers and Lybrand Deloitte.

**Appendix 10**

**ISSMFE BUDGET YEARS 1990 THROUGH 1994**

	YEAR					
	1989	1990	1991	1992	1993	1994
<u>INCOME</u>	<u>AUDITED</u>	<u>AUDITED</u>				
SUBSCRIPTIONS (1) (2)	57880	61985	58000	68000	68000	68000
OTHER INCOMES e.g. SALES, INTERESTS, etc.	14120	46513	11000	13000	15000	16000
<u>EXPENDITURES</u>						
TRAVEL AND ENTERTAINMENT (3)	17880	12799	25000	25000	25000	27500
PHOTOCOPYING (3) (4)	1550	803	1500	1500	1600	1600
PHONE, TELEX, FAX (4)	950	1224	1320	1450	1600	1750
STATIONERY (3a) (4)	680	623	700	700	740	740
POSTAGE (3a) (4)	1870	1504	2000	2000	2200	2400
AUDITORS FEE (3) (4)						
BANK CHARGES	610	1552	800	900	1000	1100
LIST OF MEMBERS incl. POSTAGE (3)	2800	1294	0	0	7400	6400
NEWSLETTER (3)	7250	5818	6500	6800	7300	8000
CORPORATION TAX (3a) (4)	1720	2715	2500	2500	2500	2500
KEVIN NASH MEDAL (3)	0	0	1500	0	0	0
YGEC	0	0	6000	6000	6000	6000
MODEL LIBRARY	1700	1784	1000	1000	1000	1000
OFFICE EQUIPMENT (5)	0	3160	1500	800	800	1000
VIDEO LECTURES	0	0	4500	5000	5000	0
EMOLUMENTS STAFF. OFFICE COSTS (3)	22630	26108	37000	39000	40500	44500
INCOME	72000	108498	69000	81000	83000	109000
EXPENDITURES	59640	58585	91820	92650	102640	104490
SURPLUS OR (DEFICIT)	12360	62231	(22820)	(11650)	(19640)	(4510)
ACCUMULATED SURPLUS (at end of year)	161480	213498	190678	179028	159388	163898

## Appendix 11

### ISSMFE MEMBERSHIP FEES

#### Explanation of Present and Proposed Fee Structure

Following recommendations by the Finance and Budget Committee it is proposed that the formula for determining Member Society fees should be modified to:

- (a) place more emphasis on the Gross National Product/Capita in determining the fees for each Member Society
- (b) give an average increase in fees of about 15%

#### PRESENT FEE

The Annual Membership fee for each Member Society is based on the formula

$$\text{Member Society Fee} = 195\text{GN} + 5.2\text{M Swiss Francs}$$

where: GN is the Group Number based, as its main criterion, on the Gross National Product (GNP) of a country, with a subsidiary adjustment ( $\pm$  one point maximum) according to GNP per capita.

M = number of individual members in the Member Society belonging to ISSMFE.

The basis for calculating GN is set out in the attached tables taken from Volume 4, Proc. 10th ICSMFE Stockholm 1981.

#### PROPOSED REVISED GROUP NUMBER

It is proposed that the "main" criterion based on GNP should be unchanged (Table A), but adjustments to the GN for GNP/capita should be as given below.

GNP/cap US Dollars	Adjustment to GN obtained from Table A
0- 3000	-1
3000- 6000	0
6000- 9000	+1
9000-12000	+2
12000-15000	+3
15000-18000	+4
18000-21000	+5
21000-24000	+6
24000-27000	+7
27000-30000	+8

The present 1991 Group Numbers, together with the proposed revised numbers based on the most recent information on GNP and GNP/Capita in the World Bank Atlas, are given in Table C.

#### PROPOSED REVISED FORMULA

In addition to modifying the GN it is proposed that the following revised formula should be used:

$$\text{Member Society Fee} = 195 \text{ GN} + 6\text{M Swiss Francs}$$

with the modifying factors:

- (a) The annual fee for any Member Society should not be less than 300 Swiss Francs.
- (b) The annual Member Society fee, divided by the number of members, should not exceed 35 Swiss Francs.

Extract from Proc. 10th ICSMFE, Stockholm 1981

Vol. 4 P 153

#### TABLE A

MAIN CRITERION (A) – GROSS NATIONAL PRODUCT, U.S. DOLLARS, 10<sup>6</sup>

*GNP (\$10 <sup>6</sup> )	Group No.
<5,000	1
5,000 to 10,000	2
10,000 to 20,000	3
20,000 to 40,000	4
40,000 to 80,000	5
80,000 to 160,000	6
160,000 to 320,000	7
320,000 to 640,000	8
640,000 to 1,280,000	9
1,280,000 to 2,560,000	10
>2,560,000	11

#### TABLE B

SUBSIDIARY CRITERION (B) – GROSS NATIONAL PRODUCT PER CAPITA, US. DOLLARS

*GNP/per Cap.(\$)	Group No.
<500	1
500 to 1,000	2
1,000 to 1,500	3
1,500 to 2,000	4
2,000 to 2,500	5
2,500 to 3,000	6
3,000 to 3,500	7
3,500 to 4,000	8
4,000 to 4,500	9
4,500 to 5,000	10
5,000 to 5,500	11
5,500 to 6,000	12
6,000 to 6,500	13
6,500 to 7,000	14
7,000 to 7,500	15
7,500 to 8,000	16
8,000 to 8,500	17
8,500 to 9,000	18
9,000 to 9,500	19
9,500 to 10,000	20
10,000 to 10,500	21
10,500 to 11,000	22
11,000 to 11,500	23
11,500 to 12,000	24
12,000 to 12,500	25
12,500 to 13,000	26

\*Based on World Bank figures for 1978 from World Bank Atlas

#Where the Group Number based on Criterion B is greater than or less than the Number based on Criterion A, then the Group Number based on Criterion A is increased or decreased accordingly by one unit to arrive at the final Group Number.

**TABLE C**

Member Societies	Present Group Numbers	New Group Numbers	Member Societies	Present Group Numbers	New Group Numbers
Argentina	6	5	Japan	12	17
Australia	8	10	kenya	1	1
Austria	7	10	Korea R.	6	6
Bangladesh	2	2	Mexico	5	5
Belgium	7	9	Morocco	2	2
Bolivia	2	0	Netherlands	8	10
Brazil	7	7	New Zealand	5	6
Bulgaria	5	5	Nigeria	3	3
Canada	9	12	Norway	7	11
Chile	4	2	Pakistan	3	3
China	7	7	Paraguay	2	0
Colombia	3	3	Peru	3	3
Costa Rica	2	0	Poland	4	4
Czechoslovakia	7	7	Portugal	5	4
Denmark	7	11	S. Africa	5	4
Ecuador	3	2	S. E. Asia	6	5
Egypt	3	3	Spain	8	8
Finland	7	11	Sudan	1	1
France	10	13	Sweden	8	11
Germany	11	15	Switzerland	8	15
Ghana	1	1	Syria	4	2
Greece	6	5	Tunisia	3	1
Hungary	5	5	Turkey	4	4
Iceland	3	7	U.K.	10	12
India	6	6	U.S.A.	12	16
Indonesia	4	4	U.S.S.R.	10	10
Iran	5	5	Venezuela	6	5
Ireland	5	5	Vietnam	3	3
Israel	5	5	Yugoslavia	6	4
Italy	10	12	Zimbabwe	2	1

**ISSMFE COUNCIL MEETING, FLORENCE MAY 26, 1991**

Proposed Revision of Membership Fees

**MOTIONS**

**Motion 1**

The Group Number (GN) for determining ISSMFE Member Society fees for 1992 and until further notice will be determined on the basis of Gross National Product (GNP) as given in Table 1, but adjusted according to GNP/Capita as given in Table 2. In determining GNP and GNP/Capita the most recently available figures in the World Bank Atlas will be used.

**Motion 2**

ISSMFE Member Society fees for 1992 and until further notice will be determined by the formula:

$$\text{Member Society fee} = 195\text{GN} + 6\text{M Swiss Francs}$$

where GN is the Group Number and M is the number of individual members in the Member Society belonging to ISSMFE.

The calculated fee will be subject to the following qualifying factors:

- (a) The annual fee for any Member Society should not be less than 300 Swiss Francs
- (b) The annual fee for any Member Society, divided by the Number of Members, should not exceed 35 Swiss Francs.

**TABLE 1**

**MAIN CRITERION (A) – GROSS NATIONAL PRODUCT, U.S. DOLLARS, 10<sup>6</sup>**

*GNP (\$10 <sup>6</sup> )	Group No.
<5,000	1
5,000 to 10,000	2
10,000 to 20,000	3
20,000 to 40,000	4
40,000 to 80,000	5
80,000 to 160,000	6
160,000 to 320,000	7
320,000 to 640,000	8
640,000 to 1,280,000	9
1,280,000 to 2,560,000	10
>2,560	11

**TABLE 2**

GNP/cap US Dollars	Adjustment to GN obtained from Table 1
0–3000	-1
3000–6000	0
6000–9000	+1
9000–12000	+2
12000–15000	+3
15000–18000	+4
18000–21000	+5
21000–24000	+6
24000–27000	+7
27000–30000	+8



**INTERNATIONAL SOCIETY FOR SOIL MECHANICS AND FOUNDATION  
ENGINEERING — MINUTES OF THE COUNCIL MEETING HELD IN ASHOK HOTEL,  
NEW DELHI, INDIA**

**SOCIETE INTERNATIONALE DE MECANIQUE DES SOLS ET DE TRAVAUX DE  
FONDATEMENTS — PROCES-VERBAL DE LA REUNION DU CONSEIL TENUE A  
L'HOTEL ASHOK, NEW DELHI, INDE**

January 4, 1994 0830–1230 hrs  
1400–1800 hrs

**PRESENT:**

Prof N R Morgenstern  
Mr G Donaldson  
Prof K Ishihara  
Prof H G Poulos  
Prof U Smolczyk  
Prof J K Mitchell  
Prof L Décourt  
Prof V A Ilyichev  
Prof M Jamiolkowski  
Dr R H G Parry

President ISSMFE  
Vice-President Africa  
Vice-President Asia  
Vice-President Australasia  
Vice-President Europe  
Vice-President North America  
Vice-President South America  
Board Member  
Board Member  
Secretary General ISSMFE

Prof M K El-Ghamrawy  
Mr M C Ervin  
Mr V Milligan  
Prof L Valenzuela  
Prof V F B de Mello  
Dr E Maranas das Neves  
Dr J Troncoso  
Mr R D Woods  
Dr R K Bhandari  
Prof Masao Satake  
Prof Ilan Juran  
Dr G E Blight  
Mr M Gambin

ISSMFE Vice-President Elect Africa  
ISSMFE Vice-President Elect Australasia  
ISSMFE Vice-President Elect North America  
ISSMFE Vice-President Elect South America  
Past President ISSMFE  
Representative ISRM  
Chairman TC7 Tailings Dams  
Chairman TC10 – Geophysical Site Characterization  
Representative TC11 – Landslides  
Chairman TC13 – Mechanics of Granular Materials  
Chairman TC17 – Ground Improvement  
Chairman TC25 – Tropical and Residual Soils  
Chairman TC27 – Pressuremeter and  
Dilatometer Testing

**APOLOGIES:**

Prof B B Broms  
 Prof J Kerisel  
 Prof M Fukuoka  
 Dr Za-Chieh Moh  
 Prof W F van Impe  
 Prof A S Balasubramaniam  
 Prof E Lousberg  
 Mr R Oliveira  
 Mr Z Eisenstein  
 Dr M Cruden  
 Dr H Meissner  
 Prof R Jappelli  
 Prof K Fujita

ISSMFE Immediate Past President  
 ISSMFE Past President  
 ISSMFE Past President  
 ISSMFE Board Member  
 ISSMFE VP Elect Europe  
 ISSMFE VP Elect Asia  
 Secretary PCS  
 Secretary General IAEG  
 Representative ITA  
 Chairman TC11 – Landslides  
 Chairman TC12 – Validation Computer Simulations  
 Chairman TC19 – Preservation of Historic Sites  
 Chairman TC28 – Underground  
 Construction in Soft Ground

Member Society	Voting Member	Non-Voting Member
Argentina	—	
Australia	Mr Max Ervin	Prof Mark Randolph
Austria	Mr L Maertens*	
Bangladesh	—	
Belgium	Mr L Maertens	Mr J de Jaeger
Bolivia	—	
Brazil	Dr Susumu Niyama	Mr Francis Bogossian
Bulgaria	Dr Dimiter Alexiew	
Canada	Mr John L Seychuk	Mr Murty S Devata
Chile	Mr Eugenio Retamal	Mr Issa Kort
China	Prof Can Wen Yang	Prof Xue-Yuan Hou
Colombia	Mr Eugenio Retamal*	M Adolfo Alarcon
Costa Rica	—	
Croatia	Prof U Smolczyk*	
Czech & Slovak Rs	Prof I Vanicek	Dr J Feda
Denmark	Prof Jørgen Steenfelt	Mr Hans Denver
Ecuador	—	
Egypt	Prof M K El-Ghamrawy	Prof M M Hamza
Estonia	Mr H Rathmayer*	
Finland	Mr H Rathmayer	
France	Mr F Schlosser	Mr M Londez
Germany	—	
China	—	
Greece	Dr Andrew Lord*	
Hungary	Mr Jozsef Mecsi	
Iceland	—	
India	Shri H C Verma	Prof Gopal Ranjan
Indonesia	—	
Iran	Dr Gatmiri	Mr Rezvan
Ireland	Apologies	
Israel	Prof Gdalyah Wiseman	
Italy	Eng S Martinetti	Eng G Baldi
Japan	Prof Koichi Akai	Prof Fumio Tatsuoka
Kenya	—	
Korea R	Prof Hyung-Shik Chung	Dr Sun-Wan Hong
Latvia	—	
Lithuania	Prof U Smolczyk*	
Mexico	Ing Guillermo Springall	Dr Eulalio J Badillo
Morocco	Mr Ejjaouani	
Netherlands	Ir G W Beetstra	Prof F B J Barends
New Zealand	Mr L D Wesley	
Nigeria	—	
Norway	Mr Tore Valstad	
Pakistan	—	
Paraguay	—	
Peru	—	
Poland	Prof E Dembicki	Prof W Wolski
Portugal	Mr R Correia	

Romania  
Slovenia  
South Africa  
S E Asia  
Spain  
Sudan  
Sweden  
Switzerland  
Syria  
Tunisia  
Turkey  
UK  
USA  
Russia  
Venezuela  
Vietnam  
Yugoslavia  
Zimbabwe

Prof Iacint Manoliu  
Prof Ivan Sovinc  
Dr G Blight  
Dr Ooi Teik Aun  
Dr V Escario  
—  
Dr Eskil Sellgren  
Dr K E Suter  
—  
—  
Dr Ergün Togrol  
Dr J A Lord  
Dr Charles C Ladd  
Prof V A Ilyichev\*  
—  
—  
—

Prof M Popescu  
Mr P Day  
Dr Chin-Der Ou

Dr Markus Caprez

Dr R J Mair  
Mr Harvey E Wahls

\*denotes Proxy Vote

## INTRODUCTION

1. The President opened the meeting at 8.45 am and welcomed Member Society delegates and invited participants. He reminded the delegates that they had the authority for everything that ISSMFE did and thus they carried the responsibility for the future directions and actions of the society. The Society had moved from a somewhat passive role, concerned mostly with quadrennial International and Regional Conferences, to a much more active and creative, and consequently exciting, role, reflecting the wide diversity of interests embraced by its members. The future Board, which had a guiding role in the Society's affairs, would pay close attention to the discussions at today's meeting.

## QUORUM

2. A roll call at 10.30 am showed 34 voting delegates to be present plus 6 proxy votes. As 60 Member Societies were entitled to vote the requirement under Statute 12F that one-third, that is 20 voting delegates, should be present for general business was met. Statute 12F requires that at least two-thirds of Member Societies entitled to vote should have delegates present for voting on changes of statutes. As proxy votes do not count towards this number, the meeting was not quorate for voting on changes of statutes. Although the number of voting delegates changed slightly during the meeting, the meeting did not become quorate for changing statutes, and Item 9 on the agenda, concerned with an amendment to Statute 12J and the addition of a related by-law 14B3, could not be considered by the meeting.

## MEMBERSHIP

3. The Secretary General presented his report (Appendix 1) confirming that on 30th September 1993 ISSMFE comprised 65 Member Societies representing 16, 743 individual members, an increase of five Member Societies, but a decrease of 1322 individual members since the last reported figures to Council on 31st December 1990. In addition to the Member Societies mentioned in his report which had shown an encouraging increase in membership he cited Hungary, which showed an increase from 25 to 84. The Member Societies badly in arrears were Bolivia, Ecuador, Ghana, Kenya, Nigeria.
4. Expressing some concern at the drop in individual membership the President voiced the need to market ISSMFE, and the publicity leaflet to be discussed later was one effort towards this end.
5. Professor Sovinc introduced the new Slovenian Geotechnical Society which had recently become a Member Society of ISSMFE.
6. In reply to a query by Dr Rathmayer whether or not all countries permitted to vote at the meeting had paid their ISSMFE membership for 1993, the Secretary General replied that a small number had not paid, but because of their special circumstances and excellent past records the Board had recommended that they should be allowed to vote. Dr Rathmayer advised that Finland was opposed to this.

## TECHNICAL COMMITTEE ACTIVITY

7. Expressing his satisfaction at the level of activity of ISSMFE Technical Committees during his term of office, the President said that the TC structure was still evolving and the Society was still learning to make full use

of it. On taking office he had sought advice from the Past President, Member Societies, the Board and Council, which had led to the 27 International TCs now working. He had set out terms of reference for each TC, and asked each host Member Society to select a chair and a core of people for each TC, and had then sought names from all Member Societies to make up the membership of the TC. This TC structure had led to 3 or 4 focused meetings each year. Other deliverables included active participation in sessions of the XIII ICSMFE and the publication of several independent reports. These activities and products were summarised in the tabulation included with the Council papers (Appendix 2). The various TCs had reached different stages of maturity and some were exploring new activities, notably TC 17 which was promoting a new journal on Ground Improvement and was setting up an International Technology Transfer Centre in this subject area. It had already obtained substantial UN funding. Over 400 ISSMFE members were involved in TC activities. There were already a number of offers from Member Societies for both existing and new TCs.

8. In addition to the international TCs there were also some 10 Regional Technical Committees in Europe, Asia and North America.
9. In reply to a question by Dr Lord the Secretary General advised that the Secretariat did not have full details of European TCs.
10. The President agreed with Dr Togrol that the membership of TCs should be regenerated from time to time, and that this in fact already occurred with each incoming President.
11. Dr Steenfelt pointed out that only a relatively small number of people in any country could participate in ISSMFE activity and thus duplication in membership of International and Regional TCs should be avoided.
12. Referring to the tabulation, Dr Barends advised that administration reports for TC 16 and TC 18 would be submitted soon. Professor Woods confirmed that TC 10 had prepared an administrative report and, in addition, had produced a publication, which was now available, entitled Geophysical Site Characterisation, consisting of 12 tutorials. Professor Krebs Ovesen reported that the 700 page Proceedings of the Limit State Symposium held in 1993 was available. Professor Troncoso recommended that TC 7 on Tailings Dams should continue with Chile as the host Member Society. Professor Juran suggested that the International Technology Transfer Centre set up by TC 17 might provide an example for ISSMFE to follow in seeking United Nations or other international funding.

## TASK FORCES

13. In introducing this item the President explained that at the outset of his period of office a number of non-technical issues important to ISSMFE had been identified by the Board and himself. He had formed Five Task Forces, made up only of Board members, to look into these issues, namely Communications, Corporate Membership, Publishing, Technology Transfer and Education. He asked one member from each Task Force to describe its work.

## COMMUNICATIONS TF G DONALDSON, H G POULOS

14. Mr Donaldson described the interactions which had taken place with the Asian Geotechnical Engineering Information Center (AGE) which had resulted in proposals to set up:

- (a) a database of databases
- (b) a comprehensive information retrieval system.

It was envisaged that ISRM and IAEG as well as ISSMFE might contribute

to the initiatives.

15. The Board had viewed favourably the setting up of a database of databases, the cost of which would be modest, and this was likely to go ahead.
16. It was, however, felt by the Board that the proposal on Information Retrieval submitted to it at its meeting in Athens on 19th September 1993 could not be recommended to Council, because it needed 2000 subscriber members to be self supporting. A revised proposal requiring only 600 members had now been received and, with some minor clarification and changes, could be submitted to Council by the next Board. Dr Poulos would be visiting Bangkok shortly to discuss with AGE minor clarifications of the document. Some starting finance would be needed from ISSMFE (and possibly ISRM and IAEG), but contributions could also be sought from international funding agencies. All that was required from the present Council meeting was support to proceed with finalising the proposal for submission to the next Council meeting.
17. Explaining that the membership of 600 was envisaged to build over 5 years, Dr Poulos also confirmed that the service would be available to ISSMFE and other Society members. Membership would probably cost about \$50 to \$60 per year which would give beneficial access to the database, as well as other benefits such as a journal 4 times per year. He had tested the present AGE system himself to obtain information on base grouted piles. Within 24 hours of sending his fax he had received 50 references and 25 abstracts at modest cost.
18. The President anticipated that the next Board would be likely to finalise the proposal for the next Council meeting with a budget and implementation plan. He saw that the Council meeting was giving its encouragement to continue with this initiative. He also said the Board felt that ISSMFE News was a suitable means of communicating with members, but it was a frustrating task trying to obtain suitable material for it.

#### **CORPORATE MEMBERSHIP TF M B JAMIOLKOWSKI, N R MORGENSTERN, ZA-CHIEH MOH**

19. Having received encouragement from the 1991 Council meeting held in Florence to proceed with attracting Corporate Membership, the President advised that he had, with the help of Board members, compiled a list of possible Corporate Member Organisations with international profiles. He had sent invitations to between 100 and 200 of these very recently and there had already been some positive responses. The names would be acknowledged in ISSMFE News. Corporate Member funds would be used in non-administrative activities of the Society. Further invitations would be sent out by the new Board.
20. In reply to a question by Dr Lord, the President agreed that members had the right to ask the Secretariat for names of companies which had been approached. Replying to a question by Professor Ladd, he said that the Corporate Member fee was \$400 for one year or \$1600 for 5 years. Professor Togrol felt the fee should be fixed by Council. Some delegates expressed concern at the effect of Corporate Membership on Member Society Corporate and Individual membership. There were also queries with respect to the rights of individuals employed by Corporate Members.
21. In concluding this item the President admitted that this was a sensitive matter, but it was also evolutionary, and he was confident that the International Society, and consequently all its members, would benefit from Corporate membership.

#### **PUBLISHING. TF J K MITCHELL, L DECOURT**

22. Following a brief summary of the Task Force report on publishing

(Appendix 3) by Professor Mitchell, the Chairman put the following motion to the meeting:

“Agreements between ISSMFE Sponsored Conference Organizing Committees and the Publisher of Conference Proceedings shall include a provision that the Publisher will pay a royalty to ISSMFE of 10 per cent of net receipts in excess of the amount required to pay the direct production and handling costs of copies provided to registered Conference delegates. When organizations in addition to ISSMFE are acting as co-sponsors, a mutually acceptable agreement should be negotiated concerning the division of royalties among the participating organizations.”

Professor Mitchell also explained that no further action was being called for at this stage on the “Bitech” cost sharing proposal, but that the incoming Board should consider this further. It was being applied in a somewhat different form at the 1st ICEG (where the risk sharing by ISSMFE in fact extended to all aspects of the conference).

23. After some brief discussion, mainly concerned with elucidation of points in the motion, it was carried as follows:

For	24 votes
Against	4 votes
Abstentions	14 votes

#### **TECHNOLOGY TRANSFER TF K ISHIHARA, U SMOLTCZYK**

24. Referring to his report (Appendix 4) Professor Smolczyk said that this represented a start to build up a framework of information on International Donor Agencies, procedures for accessing such funds and examples of funded projects. ISSMFE was instituting a series of information circulars and this information would be presented as Circular No. 1.
25. In discussion Professor Juran said that TC 17 would like to participate in the Technology Transfer programme through its International Technology Transfer Center. Professor Manoliu cited Tempus as a successful programme, through which his own University in Romania had established links with eight Western European Universities.

#### **EDUCATION TF H G POULOS, ASSISTED BY ALL VICE-PRESIDENTS**

26. Professor Poulos advised that a substantial amount of information had been accumulated in three of the four originally targeted areas listed in his report (Appendix 5). These three areas covered model undergraduate curricula, experiments and demonstrations and audio-visual material. As yet no attempt had been made to establish annotated lists of suitable texts, but ISRM had a Commission which had made considerable progress in this area, which included soil mechanics texts. A paper by Professor Poulos in the Proceedings of the XIII ICSMFE summarised the work to date.
27. Anticipating that the new Board would wish to continue with this initiative, Professor Poulos said particular attention might be paid to establishing annotated lists of texts in English and other languages, curricula for post-graduate courses, and computer software. He also suggested that an educational resource centre should be set up as a repository for the material collected.
28. In reply to a question by Professor Steinfeld, Professor Poulos confirmed that the Vice Presidents had approached selected Universities in their regions to obtain material.

## REGIONAL REPORTS BY VICE-PRESIDENTS

29. The six Regional reports (Appendix 6a–6f) were summarised briefly by the Vice-Presidents.
30. Some points in the reports were particularly highlighted. Mr Donaldson welcomed the rejuvenation of the Egyptian Member Society, and their hosting of the next African Regional Conference. Professor Poulos assured the meeting that despite the reduction in membership numbers there was no reduction in enthusiasm or activities in the Australian Geomechanics Society. Professor Smoltczyk advised that Romania had postponed the next Danube European Conference by one year to September 1995. He cited the Czech and Slovak Geotechnical Society as a good example of a Group Member Society and informed the meeting that there was no lack of hosts for future European Young Geotechnical Engineers Conferences. Professor Mitchell advised the meeting that the next Panam Conference would be held in Guadalajara on the revised dates of October 29–November 3, 1995 and the draft of Bulletin No. 1 would be discussed at a meeting of Panam delegates to be held on the next day.
31. In reply to a question by Dr Escario how he obtained the information for his report, Professor Smoltczyk replied by visits and correspondence. Spain had not responded to correspondence and had not sent participants to the Young Geotechnical Engineers Conference. Dr Escario said he had not received a letter from Professor Smoltczyk asking about the activities of the Spanish Society. Assuring the meeting that in fact the Spanish Member Society was very active, Dr Escario cited their holding of a major symposium with 300 participants every 4 years, colloquia with invited lecturers, and two meetings with contractors each year. He said that Spain were doubtful about the usefulness of YGECS.

## PERMANENT COORDINATING SECRETARIAT

32. In the absence of the PCS Secretary from the meeting, the Secretary General presented his own report (Appendix 7) on the PCS meeting in Lisbon on 21st June 1993, which had been prepared for presentation to the Board. After concluding their meeting, the Secretaries General met with the three Presidents, primarily to discuss the possibility of establishing a combined database for the three sister Societies, to include details of individual members, statutes, details of technical committees/commissions, publications etc which could be accessed as desired by each of the three International Societies and their Member Societies. The combined meeting agreed that this possibility should be pursued.

## AMENDMENT TO STATUTE 12J AND ADDITION OF BY-LAW 14B.3

33. The President explained that this item had been included in the Agenda for the meeting because voting at the 1991 Council Meeting in Florence on the venue of the 1997 XIV ICSMFE had resulted in a tie. He had resolved this by tossing a coin. The Board felt the geographical location of the 1991 Council Meeting might have influenced which Member Societies were able to have delegates present in the meeting and participating in the vote and that a postal vote would be preferable. Consequently, two motions to effect this by amending Statute 12J and adding a By-law 14.B.3 had been formulated by the Board and put on the agenda for this Council Meeting. In the event however, despite deferring this item until later in the meeting, a quorum of two-thirds of Member Societies entitled to vote was not met and this item was abandoned. (Note: Proxy votes do not count in establishing quorum).

## REGIONAL VICE-PRESIDENTS 1994–7

34. Elected ISSMFE Vice-Presidents for the period 1994–7 were announced by the President:

Africa	N. K El Ghamrawy
Asia	A S Balasubramaniam
Australasia	M C Ervin
Europe	W van Impe
North America	V Milligan
South America	L A P Valenzuela

The announcement received acclamation from the meeting.

## REPORT ON XIV ICSMFE, HAMBURG 1997

35. A report prepared by the German Conference Organising Committee (Appendix 8) was presented to the meeting by Professor U. Smoltczyk, confirming that planning for the XIV ICSMFE to be held in Hamburg 6–12 September 1997 was well in hand.

## ELECTION OF ISSMFE PRESIDENT 1994–7

36. A secret ballot to elect the ISSMFE President for the period 1994–7, taken immediately after lunch, gave the following result.

K Ishihara	7 votes
M B Jamiolkowski	34 votes
S Prakash	1 vote

As Professor Jamiolkowski had a majority on this first vote he was declared elected. This was greeted with acclamation by the meeting.

## VENUE FOR 1995 ISSMFE BOARD AND COUNCIL MEETING

37. Invitations were received from the Organising Committees of all four ISSMFE Regional Conferences to be held in 1995, to host the 1995 Board and Council Meetings. It was announced that voting would be by secret ballot. If on the first ballot there was no overall majority for any venue the venue with the lowest number of votes would be deleted and a second ballot taken. This would be repeated until one venue had an overall majority. The result of the ballots was as follows:

Venue	Ballot		
	1	2	3
Cairo – XI African Regional Conference 11–15 December	15	17	21
Copenhagen – 11th European Regional Conference 28 May–1 June	15	19	21
Guadalajara – 10th Panam Conference 30 October–4 November	7	6	
Beijing 10th Asian Regional Conference 29 August–2 September	6		

As this resulted in a tied vote, the Chairman consulted with the representatives from the Organising Committees for the Cairo and Copenhagen conferences, Professor Steinfeld and Professor El Ghamrawy respectively,

which resulted in an offer by Professor Steenfelt to withdraw the invitation to hold the meetings in Copenhagen in favour of Cairo. Announcing this to the meeting, the Chairman thanked the Danish Organising Committee for their generosity and announced Cairo as the venue for the 1995 Board and Council Meetings, to be held immediately before the XI African Regional Conference. This announcement was received with acclamation.

#### REPORT ON XIII ICSMFE, NEW DELHI 1994

38. The Secretary General of the Indian Organising Committee, Dr S Gulhati, reported that everything was in place for the holding of the XIII ICSMFE. Up to a few days before 700 delegates had registered and more registrations were still being received.

#### XV ICSMFE 2001

39. Brief statements of intent offering to host the XV ICSMFE to be held in 2001 were made on behalf of Osaka (Japan), Perth (Australia) and Turkey. Observing that it was encouraging that three Member Societies were already offering to host the XV ICSMFE, the President confirmed that other Member Societies could still offer to host the conference if they wished. The venue would be decided by a vote taken at the next Council meeting to be held in Cairo in 1995.

#### 1ST INTERNATIONAL CONGRESS ON ENVIRONMENTAL GEOTECHNICS (1ST ICEG) EDMONTON 11-15 JULY 1994

40. The President emphasised the special nature of the 1st ICEG, both in respect to the importance of the subject matter and the equal sharing of responsibility by the Canadian Geotechnical Society and ISSMFE, through TC5 on Environmental Control and TC7 on Tailings Dams. It was also necessarily a fast track operation. The second progress report recently submitted to the Steering Committee showed planning to be well on track. Most speakers had been selected, including an address on policy matters by the Vice Director of Environment for the World Bank. About 100 to 125 of the submitted papers would be selected, in addition to invited papers. Expressions of interest in attending had been received from 1300 potential delegates from 50 countries. Bulletin No. 2, containing the registration forms, would be distributed before 30 January. The registration fee would be CDN \$700 for early registrants. Bitech would publish the Proceedings and would market post-conference sales in a joint arrangement with Thomas Telford Limited.
41. In reply to a comment by Professor Jamiolkowski that a Second Congress should be held at an early date to consolidate the series, the President said he thought the new Board should combine TC5 and TC7 into one Technical Committee with a suitable host Member Society and Chairman charged with the task of organising the 2nd ICEG, possibly in two years time. There was also some discussion on the relationship between this Congress and sessions on environmental topics at International and Regional Conferences. The latter were seen by Professor Jamiolkowski as being more specific in topic. Finally the President emphasised that the broad concern of ISSMFE should be with the geotechnics of waste management.

#### INTERNATIONAL AFFILIATIONS

42. In stressing that one of his main objectives on becoming President of ISSMFE was to regularise the position of ISSMFE with respect to the international community of science and technical organisations, Dr

Morgenstern said that this had been achieved by ISSMFE being granted Affiliated Membership of the International Union of Geological Sciences (IUGS) and by ISSMFE rejoining the International Union of Technical Associations (UATI). IUGS was a member of the International Council of Scientific Unions which was recognised by the United Nations. UATI was also recognised by the UN. It was up to ISSMFE now to make use of these linkages.

43. Summarising his report on this item (Appendix 9) the Secretary General emphasised in particular the proposal that ISSMFE had put to UATI to initiate a Civil Engineering Library Distribution Scheme to developing countries. It was proposed that ISSMFE could take a lead role in this in view of its experience with the Model Library scheme. This proposal had been received favourably in principle by the UATI and discussions were proceeding on how the scheme could be implemented.

#### INTERNATIONAL DECADE FOR NATURAL DISASTER REDUCTION (IDNDR)

44. The Secretary General said there appeared to be very little geotechnical activity which had been generated by the International Decade. An IDNDR World Conference to be held in Yokohama 23-27 May 1994 appeared to have little geotechnical content. ISSMFE TC4 had produced a manual on Seismic Zoning Methodologies which would be useful in implementing IDNDR earthquake-hazard mitigation programmes. TC11 participated in a UNESCO Working Party which had produced a Multilingual Landslide Glossary, although this was not specifically an IDNDR initiative. In addition, a proposal for landslide hazard mitigation had been forwarded to the ICSU Technical Committee for IDNDR, through IUGS. A letter from the Secretary General to all Member Societies, dated 28 May 1993, requested information on IDNDR sponsored geotechnical activities in their countries indicated many activities related to the aims of IDNDR, but not generated by IDNDR. The joint WFEU/UATI Task Committee for IDNDR had delegated responsibility for one of its five allocated projects, that on "Megacities", to the Institution of Civil Engineers in London. Geotechnical aspects will be included in this study. Some geotechnical contributions had been made to an IDNDR Conference on Natural Disasters - Protecting Vulnerable Communities held in London in October 1993 and sponsored by the Institution of Civil Engineers, The Royal Society and The Royal Academy of Engineering.

#### 1993 ISSMFE LIST OF MEMBERS

45. The Secretary General confirmed that 4500 copies of the 1993 ISSMFE list of members had been printed by Balkema and distributed in bulk to Member Societies, each receiving a number equal to about 20% of their membership.
46. A number of criticisms of the List were made by Mr Rathmayer, who observed that individual Member Societies had interpreted the rules differently and some essential information had not been included. He thought all entries should be in the English language only.

#### MODEL LIBRARY

47. Reminding the meeting that the Model Library scheme had been initiated by his predecessor Dr Broms, the President asked the Secretary General to review the present position. In response the Secretary General confirmed that 24 sets of UK collected books had now been distributed, and all recipients had also received, through Professor Holtz of the University of Washington, a copy of Taylor, Fundamentals of Soil Mechanics; Holtz and Kovacs, An Introduction to Geotechnical Engineering; and the Boston

Society of Civil Engineers Contributions to Soil Mechanics 1925–40, 1941–53, 1954–62. Sets of Spanish books, offered by the Spanish Member Society through Dr Escario, had been sent to each of the South American Member Societies. Dr I. J. Nuyens, Chairman of the Belgian Member Society had submitted a suggested list of French language books for the Model Library scheme. This list had been circulated to French speaking Member Societies asking if they wished to take any action on this.

48. Mr Gambin advised that the Comité Français de la Mécanique des Sols had prepared a proposed list of books (Appendix 10) and circulated this to the Member Societies of Belgium, Canada and Switzerland to obtain their agreement. The agreed list, together with a budget for distribution to recipients in countries such as Morocco, Tunisia, Egypt, Romania, Algeria and Iran, would shortly be submitted to ISSMFE for its approval to proceed with this enterprise. Mr Gambin also said that a newsletter in French was planned for distribution to French speaking Member Societies – he would keep the President and Secretary General informed of progress on this. Finally Mr Gambin asked for a list of the Spanish books which had been sent to the South American Societies.
49. The President confirmed that the list of Spanish books would be included with the minutes of the meeting (Appendix 11). He also said that the Board had recommended that there should be a pause with respect to further implementation or extension of the Model Library Scheme.

#### ISSMFE NEWS

50. After an introduction by the President, emphasising the importance of ISSMFE News in maintaining communication with members, the Secretary General summarised his report (Appendix 12), drawing particular attention to the need for full cooperation from Member Societies to provide items for inclusion in the News. He had written twice to all Member Societies asking them to each appoint a correspondent to send items to the Secretariat for inclusion in ISSMFE News. The response to date had been rather poor, but he intended to persist with this. He highlighted the article on the Tower of Pisa, in the May 1993 issue, as an excellent example of the type of article which could be obtained by direct request.

#### SLIDES AND VIDEOS

51. The Secretary General reported that 42 sets of Expansive Soils Slides (40 slides per set collected by TC6) had been sold by the Secretariat at GBP 30 + GBP 3 for post and packing, and 9 sets of Offshore Geotechnical Engineering Slides (35 slides per set) collected by TC14, at GBP 27 + GBP 3. The Japanese Society for Soil Mechanics and Foundation Engineering had generously donated to ISSMFE 40 sets of slides (30 slides per set) on Soil Improvement, with particular reference to the construction of Kansai Airport. These were being sold by the Secretariat at GBP 27 + GBP 4. A set of 28 slides of cartoons prepared by TC11, illustrating the Multilingual Landslide Glossary, had just been received by the Secretariat and further slides showing examples of the various types of landslides were being collected. Professor Jamiolkowski had also advised him that he had collected a set of 28 slides on the Pisa Tower, together with full descriptions, which he would be forwarding to the Secretariat shortly.
52. Revenue from the Ralph Peck videos sold up to 31 December 1992 had totalled CND 15,088, of which CND 3923 had accrued to ISSMFE. This compared with an outlay of US\$ 8000 by ISSMFE. No further copies of these videos had been sold in 1993, and a proposal by Bitech to reduce the price of each video to CND\$ 195 was supported by the Board. Despite the small number of Peck videos sold, Bitech was proposing to go ahead with making a video with Dr Evert Hoek on "Acceptable and Practical Design in Rock Engineering". The present Board had recommended that partici-

pation by ISSMFE in producing this video should be considered by the incoming Board. It was anticipated that the cost of this video would be considerably less than the Peck videos, as Dr Hoek was resident in Vancouver. The required investment from ISSMFE would be US\$ 4000.

53. Mr Gambin advised that TC27 had nearly finalised a collection of 36 slides on Pressuremeter Testing, with descriptions in English and French, which would shortly be sent to the Secretariat.

#### MERCER LECTURE

54. It was confirmed by the Secretary General that the 1994 Mercer Lecturer, chosen by ISSMFE, IGS and Netlon, was Professor J. P. Gourc of the University of Grenoble, France. His first delivery of the lecture, entitled "Geosynthetics and the Environment" would be on Sunday 9th January as part of the programme of the XIII ICSMFE in New Delhi. Other venues for the lecture were likely to be at a Geosynthetics Conference at Drexel University, Philadelphia in December and at a Polytechnic Exhibition in Lyon in France in November.

#### PUBLICITY LEAFLET

55. Drawing the attention of the meeting to the publicity leaflet prepared by the Secretariat under the guidance of the Board, the President said its purpose was to demonstrate to geotechnical engineers worldwide why they should be members of ISSMFE. The Secretary General confirmed that the leaflet would be updated by including the name of the new President and then distributed to Member Societies, each receiving a number equal to about 1.5 times their ISSMFE membership, unless otherwise requested.

#### ISSMFE ACCOUNTS FOR 1991, 1992

56. Reviewing his report on the ISSMFE accounts for 1991, 1992 (Appendix 13) the Secretary General said that substantial surpluses in each of the two years had been achieved mainly because of higher interest rates than expected on investments, and lower than budgeted expenditure on emoluments, travel and office costs, and no expenditure on YGECs or videos. The audited accounts for 1993 would not be available for three of four months; these accounts would show a surplus, but smaller than in 1991 and 1992.
57. In reply to a question by Professor Togrol, the Secretary General said that the big difference in actual and budgeted corporation tax arose because interest rates in 1991 and 1992 had been much higher than expected. ISSMFE paid corporation tax at the rate of 25% on interest earned.
58. Acceptance of the accounts was proposed by Mr Seychuk, seconded by Professor Martinetti and carried unanimously.

#### ISSMFE BUDGET

59. The ISSMFE Budget for 1993–7 (Appendix 14), prepared by the Finance and Budget Committee consisting of Professor Jamiolkowski, Dr Smolczyk and the Secretary General, was presented by Professor Jamiolkowski, who explained that it had been divided into an Ordinary Budget and Extraordinary Budget, the former embodying receipts and expenditures concerned with the administration of the Society and the latter embodying receipts and expenditures associated with all other activities. Receipts in the Ordinary Budget came from Member Society subscriptions and interest on investments, and expenditures covered staff

emoluments, travel and office expenses. Receipts in the Extraordinary Budget included conference income, corporate member subscriptions and sales, while expenditures covered items such as conference support, model library, ISSMFEE News, UATI subscription, production and distribution of sale items and the Kevin Nash gold Medal. He described it as an essentially conservative budget and despite some overall fall in accumulated surplus up to 1997, he foresaw no need to increase Member Society subscriptions. In fact some slight increase in Member Society income was anticipated arising from increased membership. It was assumed that interest rates would stabilise at about 5%.

60. In drawing up the budget a conservative approach had been adopted, assuming receipts towards the lower limit of possible amounts and expenditures towards the upper limit. This had resulted in a budgeted surplus in 1993 on the Ordinary Budget of GBP 2560, declining to a deficit in 1997 of GBP 10,300. On the other hand, in the Extraordinary Budget, while a deficit of GBP 20,500 was anticipated in 1993, thereafter a surplus was anticipated each year, rising to GBP 10,600 in 1997. Overall, the accumulated consolidated surplus declined from GBP 253160 at the end of 1992 to GBP 209820. Emphasising again the conservative nature of this budget., Professor Jamiolkowski expressed the view that this decline should not cause any concern as the accumulated surplus in 1997 still amounted to 2.5 times the annual income from Member Society subscriptions, which was high for a learned society.

61. The President confirmed that he thought it was, quite rightly, a conservative budget. The present accumulated surplus, more than 3 times the annual income from Member Society subscriptions, was high. However he saw the need to seek additional sources of revenue to fund expanding activities.

62. Dr Rathmayer said he was pleased to see conference surcharges in the Extraordinary Budget and asked if revenue from Regional Conferences was included. Professor Jamiolkowski replied that only revenue from the XIII ICSMFE, 1st ICEG and XIV ICSMFE was included in this budget. Dr Rathmayer asked if this conformed with the resolution of the 1983 Council Meeting and the Secretary General assured him that the 1985 resolution specifically excluded any revenue from Regional Conferences accruing to ISSMFEE.

63. In reply to Dr Lord, who asked if the additional activities would increase the work of the Secretariat, the President said he envisaged no expansion of the Secretariat in the next four years, but sometime after that some expansion may be necessary.

64. There was unanimous acceptance of the budget by the meeting.

#### CLOSING REMARKS

65. Professor Steenfelt proposed a vote of thanks to the President for his conduct of the 1991 and 1994 Council Meetings, to which the meeting responded enthusiastically. He also urged the President-elect and Secretary General to encourage the use of overheads to summarise presentations to Council, as a service to the many delegates for whom English was not their mother tongue.

66. The President thanked the Secretary General and Mrs Cobb for making the arrangements for the Council Meeting and he also expressed his appreciation to the Indian Geotechnical Society for the arrangements they had made to ensure a successful meeting. Thanking the delegates for their attendance he then closed the meeting.

#### Appendix 1

#### MEMBERSHIP OF ISSMFEE

#### Report by Secretary General

#### MEMBERSHIP NUMBERS

Membership numbers on September 30, 1993 are given below, together with corresponding figures on December 31, 1990, reported to the Council Meeting in Florence on May 26, 1991.

	Member Societies	Individual Members
December 31, 1990	60	18065
September 30, 1993	65	16743

Thus, there has been a drop in individual membership of 1322 since December 1990, mainly as a result of a drop from 4730 to 3400 in USA membership. Other countries to show significant drops are Australia (500/420), Canada (1088/969) and Italy (660/488). Member Societies showing a significant increase in membership include Japan (1013/1142), Korea R (24/84) and UK (650/963). The increase in the number of Member Societies reflects the acceptance into membership of the new Societies of Estonia, Lithuania, Romania, Croatia and Slovenia. The old USSR Society is now replaced by the Russian Member Society.

#### MEMBER SOCIETIES BADLY IN ARREARS

Member Societies which on September 30, 1993, had not paid their ISSMFEE membership subscriptions for 3 years or more are listed below:

Member Societies	Last Payment
Bolivia	1985
Costa Rica	1989
Ecuador	No payment since reinstatement in 1990
Ghana	1990
Israel	1990
Kenya	1988
Nigeria	1989

#### VOTING RIGHTS AT JAN 4, 1994, COUNCIL MEETING

Statute 4.1 states:

“A Member Society which has failed to pay its annual subscription and other dues within the prescribed period shall automatically cease to receive the benefits of membership of the International Society and its membership shall be deemed to be suspended.”

Bye-law 4H.1 states:

“Subscriptions are due annually in advance on 1st January each year and must be paid within nine months of that date.”

Thus, voting rights at the Council Meeting on January 4, 1994 will be accorded only to those Member Societies which are fully paid up to and including 1993, unless otherwise granted voting rights by the meeting. The President may request such rights for a small number of countries which have recently experienced great upheavals, both politically and economically.

**ISSMFE MEMBERSHIP 30 SEPTEMBER 1993**

Societies	Members	Africa	Asia	Australasia	Europe	N. America	S. S. America
Argentina	93						93
Australia	420			420			
Austria	74				74		
Bangladesh	55		55				
Belgium	62				62		
Bolivia	13						13
Brazil	272						272
Bulgaria	92				92		
Canada	969					969	
Chile	35						35
China	106		106				
Colombia	30						30
Costa Rica	58						58
Croatia	43				43		
Czech Republic	43				43		
Denmark	275				275		
Ecuador	57						57
Egypt	20	20					
Estonia	30				30		
Finland	350				350		
France	746				746		
Germany	1345				1345		
Ghana	33	33					
Greece	139				139		
Hungary	25				25		
Iceland	28				28		
India	430		430				
Indonesia	70		70				
Iran	37		37				
Ireland	73				73		
Israel	74		74				
Italy	488				488		
Japan	1142		1142				
Kenya	21	21					
Korean R	84		84				
Lithuania	40				40		
Mexico	463					463	
Morocco	12	12					
Netherlands	325				325		
New Zealand	240			240			
Nigeria	58	58					
Norway	335				335		
Pakistan	80		80				
Paraguay	12						12
Peru	25						25
Poland	128				128		
Portugal	133				133		
Romania	27				27		
Slovenia	31				31		
South Africa	660	660					
S. E. Asia	330		330				
Spain	230				230		
Sudan	25	25					
Sweden	517				517		
Switzerland	264				264		
Syria	12		12				
Tunisia	30	30					
Turkey	57				57		
UK	963				963		
USA	3400					3400	
Russia	356				356		
Venezuela	37						37
Vietnam	18		18				
Yugoslavia							
Zimbabwe	103	103					
<b>Total</b>	<b>16743</b>	<b>962</b>	<b>2438</b>	<b>660</b>	<b>7219</b>	<b>4832</b>	<b>632</b>

## Appendix 2

### Summary of Technical Committee Activity 1989–93

- TC1 Instrumentation, Telemetry and Data Processing. *Host Member Society: Norway / Chairman: E Di Biagio*. No Activity reported.
- TC2 Centrifuge Testing. USA / Hon-Yim Ko. Centrifuge '91 Conference, Boulder USA, June 1991. Published Proceedings. Planning Centrifuge '94 Singapore, September 1994.
- TC3 Arid Soils. Russia / V Petrukhin. 1st International Symposium on Engineering Characteristics of Arid Soils, London, July 1993. Publ. Proc.
- TC4 Earthquake Geotechnical Engineering. Japan / K Ishihara. Workshop on Seismic Zoning, Lisbon, July 1992. Publ. Proc. Collected volume of papers: "Performance of Ground and Soil Structures during Earthquakes".
- TC5 Environmental Control. USA / J Nelson. Planning 1st ICEG.
- TC6 Expansive Soils. Canada / D Fredlund. 7th Int. Conf. of Expansive Soils, Dallas, August 1992. Publ. Proc. Slide set collected.
- TC7 Tailings Dams. Chile / J Troncoso. Planning 1st ICEG. One-day Seminar at IX Panam Conference, Viña del Mar 1991. Publ. Proc. 1992.
- TC8 Frost. Finland / E. Slunga. 2nd International Symposium on Frost, Anchorage, June/July 1993. Publ. Proc.
- TC9 Geotextiles and Geosynthetics. UK / A McGown. Mercer Lecture. Publ. Vol. of Case Histories.
- TC10 Geophysical Site Characterisation. USA / R Woods. Publ. Vol. of Selected Papers.
- TC11 Landslides. Canada / D Cruden. 6th Int. Symp. on Landslides, Christchurch NZ, Feb 1992. 7th Int. Symp. planned Trondheim, June 1996. UNESCO Working Party – World Landslide Inventory. Publ. Multilingual Landslide Glossary. Collected slide set.
- TC12 Validation of Computer Simulations. Germany / H. Meissner. No activity reported.
- TC13 Mechanics of Granular Materials. Japan / M. Satake. Tech. Rpt. for XIII ICSMFE.
- TC14 Offshore Geotechnical Engineering. USA / D. Murff. Collaboration on 4th Int. Stress Wave Conf., The Hague, September 1992. Slide set collected. Tech. Rpt. for XII ICSMFE.
- TC15 Peat. Russia / P. Konavalov. Workshop, Delft, June 1993. Publ. "Advances in Understanding and Modelling the Mechanical Behaviour of Peat".
- TC16 Penetration Testing. Netherlands / W. Heijnen. Liaison with CEN and ISO established. Workshop in Piezocone planned, late 1994.
- TC17 Ground Improvement, Reinforcement and Grouting. USA / I. Juran and J. Walsh. Setting up International Centre for Technology Transfer – Ground Improvement Geo-Systems. Developing International Knowledge Database. Promoting new Journal on Ground Improvement (Publ. by Thomas Telford). Planning Symposium, Japan 1996.
- TC18 File Driving. Netherlands / A van Weele. Collaboration on 4th Int. Stress Wave Conf., The Hague, September 1992.
- TC19 Preservation of Historic Sites. Italy / R Jappelli. Spec. Publ. on Italian Historic Sites 1991. Int. Rpt. with bibliography for XIII ICSMFE.
- TC20 Professional Practice. UK / P Green. Publ. Vol. of Country Reports.
- TC22 Indurated Soils and Soft Rocks. Japan / K Akai. Collaboration on Int. Symp. on Hard Soils–Soft Rocks, Athens, September 1993. Preparing Rpt. on Testing Methods.
- TC23 Limit State Design in Geotechnical Engineering. Denmark / K Mortensen and N Krebs Ovesen. Spec. Symp. on Limit State Design, Copenhagen, May 1993. Publ. Proc. Liaison with Eurocode 7.
- TC24 Soil Sampling. Italy / M B Jamiolkowski. Three National Reports presented at XIII ICSMFE.
- TC25 Tropical and Residual Soils. South Africa / G Blight. 3rd ICOTRS at 10th African Regional Conference, Lesotho, September 1991. Publ. Proc. Design Guidelines in preparation.
- TC26 Calcareous Sediments. Australia / R Jewell. No activity reported.
- TC27 Pressuremeter and Dilatometer. France / M Gambin. Seminar at LNEC, Lisbon, May 1992. State-of-the-Art Rpt. prepared. Set of slides collected.
- TC28 Underground Construction in Soft Ground. Japan / K Fujita. One-day Int. Symp., New Delhi, January 1994. Publ. Proc.

## Appendix 3

### REPORT TO COUNCIL OF THE TASK FORCE ON PUBLISHING (J K Mitchell and L Décourt)

October 15, 1993

### INTRODUCTION AND BACKGROUND

The Task Force on Publishing was appointed by President Morgenstern in August 1989 to study possibilities for the ISSMFE to undertake its own publishing activities in cooperation with a suitable publishing company that would be responsible for publication, management, production, and marketing. The motivation was primarily financial, so that increased revenues would be available for support of ISSMFE activities, especially those in our less developed member countries. Other advantages that might accrue include improved coordination and quality control of the diverse publications of the Society, expanded publications output, improved marketing, and better technology transfer among members. Undertaking such an activity would require a very substantial commitment of time, skills, and resources by some members of ISSMFE. With these pros and cons in mind, and at the request of the President and the Board at its meeting in Taipei in April 1990, proposals were solicited from five publishing companies: ASCE, New York; Balkema, Rotterdam; BiTech Publishers, Vancouver; Ernst & Sohn, Berlin; and Thomas Telford, London. The proposers were asked to consider both royalty and co-publishing arrangements. The results of these solicitations were summarized and presented to the Council at its meeting on 26 May 1991 in Florence.

Council was reminded also that in 1983 the ISSMFE Executive Committee had approved a resolution that a portion of revenues from sales of ICSMFE

Conference Proceedings and Technical Committee reports should accrue to ISSMFE.

Considerable discussion ensued at the Council meeting, but no clear consensus emerged on whether to establish a formal publishing agreement with one of the proposers. The President indicated that the Board would consider the matter further with the view to preparing a suitable proposal for consideration by the Council at its meeting in January 1994. It was also agreed in Florence that three (Balkema, BiTech, and Telford) of the five publishers who had submitted proposals be requested to submit a second round proposal to undertake ISSMFE publishing on a royalty basis.

Rather detailed responses were received from BiTech and Telford in which somewhat different bases for pricing publications were set forth. Telford proposed to supply copies of proceedings for conference registrants at a low cost and pay ISSMFE royalties based on post-conference sales. This pricing scheme is similar to that used by Balkema for recent ICSMFE proceedings. BiTech's proposal was based on the concept that conference delegates should be charged a "fair market value" for their proceedings and that the post-conference cost should be higher only by the ISSMFE royalty and marketing costs. In this proposal the delegate price would include the cost of producing both the conference and post-conference sales volumes.

#### THE NEW BITECH PROPOSAL

A somewhat different publishing arrangement has also been suggested by BiTech Publishers. In this arrangement, which need not necessarily be with BiTech, ISSMFE would put up "seed money" to cover the cost of producing all the proceedings volumes. This seed money would then be recovered from conference registration fees. The publisher would then take a percentage of the post-conference sales income, with the remainder shared between ISSMFE and the Conference Organizing Committee. Initially, this scheme could be tried for some Regional Conferences and Specialist Conferences generated by Technical Committees. If successful, then the concept might be applied to International Conferences as well. It was considered that the income could enhance the financial resources of Technical Committees and/or host Member Societies. The scheme could also ensure quality control of published material.

Both Balkema and Telford were requested to provide their views on this type of arrangement. Balkema has no interest beyond a standard royalty agreement. Owing to a change in editors at Telford, no definitive response has been received.

#### RECOMMENDATIONS

After consideration of the many issues and discussion by the Board at its meeting in Athens on September 19, 1993, the Publishing Task Force submits the following recommendations for endorsement by the Board and adoption by the Council at their meetings in New Delhi on January 3 and 4, 1994. Although more elaborate arrangements might provide greater financial returns to ISSMFE than those recommended here, their implementation would require much greater effort and resources than presently available through the Secretariat, and the overall risk to ISSMFE would be greater as well.

**Royalty Clause:** Based on the principle that Conference registration fees should be kept as low as possible, but that each delegate should be assessed an amount sufficient to cover the production and distribution of his/her set of proceedings, the following policy is adopted.

*Agreements between ISSMFE Sponsored Conference Organizing Committees and the Publisher of Conference Proceedings shall include a provision that the Publisher will pay a royalty to ISSMFE of 10 percent of net receipts in excess of the amount required to pay the direct production and handling costs of copies provided to registered*

*Conference delegates. When organizations in addition to ISSMFE are acting as co-sponsors, a mutually acceptable agreement should be negotiated concerning the division of royalties among the participating organizations.*

*Royalty payments will be made by the Publisher to the ISSMFE Secretariat annually. The royalty income will then be divided equally, or according to other mutually acceptable proportion, among the Conference Organizing Committee's Member Society and the ISSMFE Secretariat.*

**The BiTech Type Arrangement:** Although no immediate further action is required, it is recommended that the incoming Board consider the BiTech proposal in more detail.

*The new ISSMFE Board should give further consideration to a cooperative publishing arrangement similar to that proposed by BiTech, with a view towards encouraging a carefully selected Conference Organizing Committee to adopt it on a trial basis.*

#### Appendix 4

Report by Task Force on Technology Transfer (U Smolczyk, K Ishihara, V Ilyichev), Technology Transfer Schemes which may be applied to support geotechnical projects

#### INTRODUCTION

Out of a large amount of aid programmes which are underway throughout the world, tens of billions of dollars per year appear going from developed to developing countries to assist in reinforcing infrastructures and enhancing technology transfer. World organisations such as UNESCO and UNDP are implementing many projects as well, aimed at upgrading technical levels in developing countries. A substantial portion of these projects is associated with the technology transfer in the expertise of geotechnical engineering.

In order to encourage members of ISSMFE to take advantage of such project schemes, ISSMFE has commenced to build up a framework of information about agencies and organisations which can be addressed

- 1. to get a donation of specified professional literature of equipment;
- 2. to invite a geotechnical lecturer without travel expense;
- 3. to get a scholarship for a post-graduate to be sent to a university;
- 4. to get financial help for attending a scientific conference;
- 5. to get financial help to start a trainee programme or a post-graduate geotechnical course.

The listing of donors with brief remarks is given in **Part 1** of this report.

In **Part 2**, typical demands are collected.

In **Part 3**, examples about current projects are reported.

The information collected here should be considered as a first guide to improve the communication between those who want to start such projects and possible sponsoring agencies. The lists were accomplished until 1993 and are certainly incomplete. Users are kindly asked to report about their own experiences and to send in additional informations.

## 1.1 INTERNATIONAL SCHEMES

### UNITED NATIONS

The United Nations established a special agency on technology transfer. For details, address to:

Professor Ilan Juran, Polytechnic University, Dept. of Civil and Environmental Engineering  
6 Metrotech Center, Brooklyn NY 11201, USA. Fax: 718 260 3433.

### EUROPEAN COMMUNITY

The Commission of the EC has started various international scientific and technological cooperation schemes based on agreements with the governments of countries in Eastern Europe, Asia, South America and the Mediterranean. Scientists from those countries who want to cooperate with scientists in EC countries can apply for either – Post-Doctoral Fellowships,

- Joint Scientific Ventures,
- European Doctorates.

Project proposals shall be defined by the eligible country. For example, topical workshops can be sponsored with about 60000 ECU for groups of maximum 24 scientists, half of them coming from the applying country. Fellowship schemes are supported by a grant of 2000 ECU/month. Detailed advice can be obtained by contacting Commission of the European Communities, GD XII/G-3, Rue de la Loi, 200, B-10449 Brussels.

The programmes are:

TEMPUS (Trans-European Mobility Scheme for University Studies\_ which was started in 1990. It forms part of the overall programme of Community aid for the economic restructuring of the countries of Central/Eastern Europe. Its main goals are:

- to promote the quality and support the development of the higher education systems in the eligible countries;
- to encourage their growing interaction with partners in the EC, through joint activities and relevant mobility. This scheme exists alongside programmes as

COMETT, ERASMUS etc, but having distinct identity of its own, with specific aims, grant conditions and priorities;

- mobility programmes enabling a significant number of students, teachers or staff from eligible countries to undertake a period of study, a placement in industry, or a teaching or training assignment in the EC, or vice versa;
- curriculum development activities including review, overhaul and restructuring of curricula, large scale development of teaching material, development of multimedia education/training packages;
- continuing education and retraining schemes for higher education teachers and other trainers;
- short intensive courses on specialised topics in priority subject areas and language courses, bringing together students and teachers from the Community and from the eligible countries;
- support with regard to the creation of new or restructuring of existing higher education centres or institutions, where appropriate, to cater for particular education/training needs in the eligible countries;
- upgrading of facilities such as university libraries, teaching laboratories etc;
- development of universities' capacities to cooperate with industry e.g. through technology transfer.

The financial assistance awarded may be up to a maximum of ECU 200.000/year, with additional funding for mobility grants, and for a period up to three years.

Coordination is ensured with actions in the same field as TEMPUS which are developed by countries which are not members of the EC as well as with national programmes initiated by the EC Member States. These 24 countries,

apart from the EC Member States, comprise the 6 EFTA countries and Turkey, USA, Canada, Japan, Australia and New Zealand.

Detailed information may be obtained from the relevant national TEMPUS Offices or by addressing EC TEMPUS Office Brussels, 45, rue de Treves, B-1040 Brussels, Fax: 32-2-238-77-33.

### CORDIS

Community Research and Development Information Service (DG XIII). Aim: Structuring of Data Bases.

### COST

European Cooperation in Science and Technology (DG XII). Aim: Research in the fundamentals of technology in Europe.

### EARN

European Academic and Research Network. Aim: Computer-aided research networks.

### ECLAIR

European Collaborative Linkage of Agriculture and Industry through Research (DG XII). Aim: Biotechnological and agrotechnological research programmes.

### EPOCH

European Programme on Climatology and Natural Hazards (DG XII).

### MAST

Marine Science and Technology. Aim: Support both to innovative technologies and environmental protection of marine surroundings.

### SPRINT II

Strategic Programme for Innovation and Technology Transfer (DG XIII).

### STEP

Science and Technology for the Environmental Protection (DG XI).

## 1.2 NATIONAL SCHEMES

### AUSTRALIA

The main sources of funding are:

1. AIDAB, The Director General, att.: Business Co-operation Section, POB 778, Canberra ACT 2601.  
They fund a very broad range of projects, but generally larger projects (in excess of A\$2 million). They prefer to generate opportunities themselves.
2. ACIAR (Australian Committee for International Agricultural Research), Canberra, ACT, 2600.  
They are specifically set up to fund agricultural technology and research with possibly some linkage with soil mechanics and soil physics.

### BELGIUM

All assistance to developing countries is centralised by A.G.C.D., Place du Champ de Mars, 5, B-1050 Brussels.

### CANADA

1. Donation of specified professional literature:

The requester should write to:

The Canadian Geotechnical Society (170 Attwell Drive, Suite 602, Rexdale, Ontario, M9W 5Z5).

Assistance may also be asked from the following agencies:

- Canadian International Development Agency (CIDA)  
200 Promenade du Portage, Hull, Quebec, Canada, K1A 0G4
- International Development Research Centre (IDRC)  
250 Albert Street, POB 8500, Ottawa, Ontario, Canada, K1G 3H9
- National Research Council of Canada (NRCC), Bureau of International Relations  
Bldg. M-58, Ottawa, Ontario, Canada, K1A 0R6.

Librarians in developing countries may also directly address university libraries for books and publications superfluous to their needs.

#### 2. Invitation of geotechnical lecturer by a developing country:

The requester should write to the chosen lecturer directly and invite him/her but should emphasize that travelling expenses could not be paid. The lecturer can seek financial support in Canada, based on the written invitation from the requester. The invitation should emphasize the need for and benefits to be derived from the lectures and courses.

It should be noted that many Canadian geotechnical experts often visit such countries as consultants. This provides excellent opportunities for organizing courses and lectures at no or minimal expense.

#### 3. Scholarship for a post-graduate:

The candidate should write to the chosen university and request information on registration for post graduate studies and the availability of scholarships. Addresses of the universities can be obtained from the Canadian Embassies or Consulates.

There are also a number of on-going collaborative projects in geotechnical engineering since 1983. Projects have been supported by the International Development Research Centre (IDRC) in nearly 20 countries. Current funding allows three to five projects to be initiated each year.

Approximately 20 scholarships leading to a master's degree are awarded annually by the International Centre for Ocean Development (ICOD), 5670 Spring Garden Road, 9th floor, Halifax, Nova Scotia, Canada B3J 1H6, to students of high academic calibre who demonstrate a commitment to contribute to the development of ocean resources in their region. Applicants must be nominated by a government agency or regional intergovernmental organisation.

Commonwealth scholarships are offered by the Association of Universities and Colleges in Canada through the governments of the various commonwealth countries. Applications are to be made to the education ministry in the country of the candidate's origin. See also the "Scholarship Guide for Commonwealth Post Graduate Students", John Foster House, 36 Gordon Square, London WC1H 0PF.

#### Francophonic addresses:

- Conseil de recherches en sciences naturelles et en genie du Canada (CRSNG),  
Personne Ressource: Nicole Michaud, chemin Montreal, Edifice M-50, Ottawa, Ontario K1A 0R6.
- Agence Canadienne de Developpement International (ACDI)  
Personne Ressource: Jean Bienvenue, Place du Centre, 200 Prom. du Portage, Hull, Quebec K1G 0G4.
- L'association des universites partiellement ou entierement de langue francaise (AUPELF),  
Fons international de cooperation universitaire, (FICU), Personne Ressource:  
Jean Goyer, B.P. 6128, 3032 rue Edouard-Montpetit, Montreal, Quebec.
- Ministere de l'Enseignement Superieur et de la science du Quebec,  
Direction generale de l'Enseignement et de la recherche universitaires,  
39, rue Saint-Louis, 3e etage, Quebec, Canada, G1R 3Z2.

#### 4. Financial help for attending a scientific conference in Canada:

For conferences organized by the CGS, this society should be contacted directly. In certain instances CGS will apply for financial assistance on behalf of the individual. If the individual wishes to proceed on his/her own the agencies to contact are:

- Canadian International Development Agency (CIDA),
- International Development Research Centre (IDRC) (for addresses, see above).

#### 5. Funds to start a post-graduate geotechnical course in an eligible country:

The applicant should write to the agencies CIDA, IDRC or, for applicants from commonwealth countries, the Association of Commonwealth Universities (ACU), John Foster House, 36 Gordon Square, London. It is suggested that, before writing, the applicant contact the Canadian Embassy and request information, guidance and assistance.

### FINLAND

No specific agency or institution but requests are managed by FINNIDA, Mannerheimintie 15C, SF-00260 Helsinki. The countries which are getting support are Nicaragua, Peru, Egypt, Sudan, Kenya, Zambia, Namibia, Mozambique, Tanzania, Somalia, Ethiopia, Bangladesh, Burma, Sri Lanka, Nepal and Vietnam.

### GREAT BRITAIN

There are various sources of technical assistance to developing countries. These are focussed mainly on governmental agencies which should be approached directly by the requesting body. These are:

- (a) Overseas Development Administration  
94 Victoria Street, London SW1E 5JL, tel.: +(44)-71-917-7000.
- (b) The British Council  
10 Spring Gardens, London SW1A 2BN, tel.: +(44)-71-903-8466.

Assistance may be available under each of the five headings listed in the introduction of this report.

Post-graduate MSc Courses in geotechnics, and studentships for suitably qualified candidates from developing countries are provided by:

- Birmingham University (Foundation Engineering)
- Bolton Institute (Geotechnical Engineering)
- Camborne School of Mines (Mining Engineering – Geotechnics)
- Durham University (Engineering Geology)
- Hatfield Polytechnic and Middlesex Polytechnic (Geotechnics)
- Heriot-Watt University (Soil Mechanics)
- Imperial College, London University (Soil Mechanics, Engineering Geology, Soil Mechanics and Engineering Seismology, Soil Mechanics and Environmental Geotechnics)
- Leeds University (Engineering Geology)
- Newcastle upon Tyne University (Engineering Geology, Soil Mechanics and Foundation Engineering)
- Surrey University (Geotechnical Engineering)
- University of Wales, College of Cardiff (Geotechnical Engineering).

### ISRAEL

Various foundations exist which have funds for financing visiting scientists and academics. Applications for these funds are made through the universities. Geotechnical applicants should address to the Technion – Israel Institute of Technology, Department of Civil Engineering, Technion City, Haifa 32000. Fax: 972-4-220133.

### ITALY

Consiglio Nazionale delle Ricerche can offer assistance to professors of Italian

universities who want to invite foreign professors or postgraduate students to deliver a lecture or a seminar in an Italian university. For the purposes indicated in this manual there is no private or public organisation that can provide financial support to either postgraduate students or researchers.

## JAPAN

### 1. Donation of specified geotechnical literature:

From the Japanese Society SMFE, the following publications may be donated, depending on each condition:

- Soils and Foundations (Quarterly of Japanese Society SMFE),
- Reports of ISSMFE Technical Committees sponsored by the Japanese Society,
- Proceedings of international conferences organized by the Japanese Society,
- geotechnical publications in Japanese.

### 2. Invitation of geotechnical lecturers:

The Japanese Society SMFE has a programme for the international cooperation in the field of geotechnical engineering, including seminars in SE Asia, China and Korea.

### 3. Scholarships for post-graduates:

Many universities have their own programmes and should, therefore, be contacted directly. The Japanese Embassies should be asked for their addresses. Applications may also be sent to the following agencies:

- Japan International Cooperation Agency (JAICA),  
One of the major undertakings being conducted by JAICA is the technology transfer covering a wide variety of fields including civil engineering, agriculture, medicine, etc. The projects are implemented through JAICA in the form of bilateral grants, loans or by contributions or subscriptions to multi-lateral organizations. For materializing a project, JAICA makes it a basic rule to carry out its cooperation in response to specific requests from recipient governments. To obtain an assistance, a request for a technology transfer should first be submitted to the recipient government. It is then transferred, with a list of priority, to the JAICA office in Japan, and after being reviewed and discussed, final decision is made. Address:  
Shinjuku Mitsui Bldg. 1-1, 2 chome, Nishi-Shinjuku, Shinjuku-ku, Tokyo, 163,  
Fax: 03-346-5018.
- Japan Society for the Promotion of Science,  
5-3-1, Kojimachi, Chiyoda-k, Tokyo, 102, Fax: 03-222-1986.
- Japanese Society of Civil Engineers,  
1 chome, Mubanchi, Yotsuya, Shinjuku-ku, Tokyo, 140, Fax: 03-355-3446.
- Japan Cultural Association,  
Minamizyuka Bldg. 2-17-3 shibuya, Shibuya-ku, Tokyo, 150, Fax: 03-407-4588.
- Kajima Foundation, 6-5-30, Akasaka, Minato-ku, Tokyo.

## NETHERLANDS

The central agency for general assistance to developing countries is The Directorate General for International Co-operation, POB 20061, NL 2500 Ed The Hague, attn: Bureau Opleidingen in Nederland.

Specific requests for assistance to promote, support and improve the co-operation between the Dutch and foreign institutions for education can be addressed to:

The Netherlands Organization for International Co-operation (NUFFIC),

POB 90734, NL 2509 LS The Hague

Requests and invitations for geotechnical lecturers can be addressed to the Netherlands Society for Soil Mechanics and Foundation Engineering, POB 69, NL 2600 Ab Delft, or directly to the chosen lecturer.

Information on post-graduate scholarships can be asked for directly at the Embassy of the Netherlands, or by addressing to the International Institute for Hydraulic and Environmental Engineering (IHE), POB 3015, NL 2601 DA Delft.

## NORWAY

Requests are managed by Norwegian Agency for International Development, POB 8142 Oslo Dep., N-0033 Oslo 1.

## SOUTH AFRICA

The South African Institution of Civil Engineers has a programme entitled "Ex Africa pro Africa" which was established to facilitate the flow of technical information between S.A. and countries to the north. Requests for assistance should be addressed to:

South African Institution of Civil Engineers  
Ex Africa pro Africa Programme, POB 93495, Yeoville 2143, South Africa.

## SWITZERLAND

There is no central agency to deal with the indicated activity. Therefore, requests of this kind would have to be addressed directly to Swiss universities.

## GERMANY

There are various institutions and foundations engaged in aid programmes for students (S), graduates (G), post-graduates (PG), scientists and professors (P):

Alexander von Humboldt Foundation:  
480 research grants for highly qualified scientists, age less than 40, from foreign countries into FRG and from FRG to foreign countries. Applications via German embassies.

Carl Duisberg Gesellschaft e.V., POB 190325 D-5000 Cologne 1  
Medium level study programmes for engineers from developing countries.

Deutscher Akademischer Austauschdienst, Kennedyallee 50, D-5300 Bonn 2  
University exchange programmes of any kind (S,G,PG,P) for short research stays (3 months, P only), short grants (6 months for S, summer campus courses for S, G, PG), annual grants (PG), subsidies for individual and group study trips (P).  
Promotion of training programmes in developing countries.

Friedrich Ebert Stiftung (Foundation), Godesberger Allee 149, D-5300 Bonn 2  
6 months' and annual grants for study stays (S, G) at German universities.

Friedrich-Naumann-Stiftung (Foundation), POB 4027, D-5330 Königswinter 41  
Annual grants (S,G,PG) for post-graduate studies at German universities, age less than 35.

Heinrich-Hertz-Stiftung (Foundation), POB 1103, D-4000 Düsseldorf  
Same conditions as with Friedrich Ebert Stiftung.

Hanns-Seidel-Stiftung (Foundation), POB 190846, D-8000 München 19.  
Biennial grants for practice-aimed postgraduate studies at universities and other scientific institutions in the FRG.

International Association for the Exchange of Students for Technical Experience (IAESTE),  
Deutsches Komitee der IAESTE, Kennedyallee 50, D-5300 Bonn 2  
Practice stays for S in Germany. Application via the national committee of IAESTE in the home country.

Katholischer Akademischer Ausländer-Dienst, Reuterstr. 39, D-5300 Bonn 1  
Annual grants for junior scientist from Asia, Latin America and Africa in professions, which are of special importance to the sending country.

Otto Benecke Stiftung (Foundation), POB 170160, D-5300 Bonn 17  
Annual grants (S,G,PG) for university and highschool level students from developing countries.  
Promotion of sur-place-studies at universities or highschools in those countries.

Ökumenisches Studienwerk e.V., Gironde 80, D-4630 Bochum  
Annual study grants for PG of developing countries at a German or home university.

#### UNITED STATES OF AMERICA

Apart from the large global agencies as the Agency for International Development or the World Bank in Washington, DC, requests may be addressed to universities, or

- Federal Laboratory Consortium:  
National Institute for Standards and Technology (NIST), Washington DC  
The chairman: Dr. Loren C. Schmid, Pacific NW Laboratory, POB 999 MSKI-34, Richland, WA 99352, or (representation in Washington, DC): Ms. Beverly Bergen, 1550 M St. NW, Washington, DC 20005.
- US Bureau of Reclamation, Denver, Colorado.
- US Army Corps of Engineers, Washington, DC
- People to People International: an educational and cultural exchange organization dedicated to enhanced international understanding through the exchange of ideas and experiences directly among peoples of different countries and cultures. May be addressed for purposes like exchange of leading specialists.

## **PART 2. DEMANDS**

### **2.1 Outcome of questionnaires**

A list of questionnaires was distributed among national societies in developing countries, asking several questions as to what kinds of technology transfer and aid are needed in the respective national societies. The answers to these questionnaires are summarized as follows.

#### CHINA

The Chinese member society expressed a desire to hold a seminar on landslides and mud-stone-flow inviting specialists from abroad. The society also wants to host the International Symposium on Landslides in 1996. For these

two gatherings, the Chinese society wants to apply for financial aid.

#### ECUADOR

The Ecuadorian member society is keen to implement a programme for producing a National Inventory of Landslides. It also wants to organize a seminar on dynamic behaviour of soil masses during landslides.

#### BRAZIL

Keen interest is expressed by the Brazilian Society in implementing several programmes such as holding seminars and symposia, technical cooperation and equipment supply. The topics of interest are landslides, waste disposal, seismic effects of soils, and rock mechanics.

#### BANGLADESH

Upon entry into the membership of ISSMFE, the Bangladesh member society is very keen to maintain linkage with advanced geotechnical groups in the world. Basically, their wishes are education and upgrading of geotechnology in general in Bangladesh. To this end, they want to materialize a series of undertakings such as news bulletin publication, monthly lectures, seminars, workshops, training programmes etc. The topic of their special interest is the geotechnology associated with mitigation of natural disasters such as earthquake and flooding.

#### BULGARIA

Bulgaria has several kinds of geotechnical problems associated with the construction of deep foundations, landslides and slope stability in the seismically active region. To conduct an integrated programme of investigations, they are requesting some financial support from UNESCO and UNDRD.

#### IRAN

The Iranian member society has successfully carried out the 1st International Symposium on SMFE held in Teheran in November, 1990. They may no longer need financial assistance to implement this kind of activities. Instead, they are very much interested to obtain up-to-date information on the recent developments of geotechnical engineering particularly in the areas of earthquake engineering and landslides.

#### PHILIPPINES

Central Philippine University, Iloilo City, has been undertaking a series of workshops about soil mechanics laboratories for training more than 150 engineers from all over the Philippines. However, the items of the laboratory tests are restricted to conventional types of physical and mechanical soil testing.

The organizer of the workshop, Professor Waldem S Rio, now wants to expand the programme so as to include somewhat advanced soil testing such as direct shear and triaxial shear test techniques, for which he wants to obtain support from ISSMFE.

## 2.2 Recommendations

Although the number of responses to the questionnaire is limited there appear to be strong demands among developing countries for any financial assistance in order to approach the goal of upgrading and proliferation of geotechnology in those countries through technology transfer and aid motivated by ISSMFE.

On the other hand, most of the funding agencies in developed countries have two principles upon which they base their support activities:

(1) The funding is operated on request-led basis. Thus, there should always be some groups in recipient countries to draft a proposal and to take over the responsibility for fulfilling the intended goal.

(2) The funding is made available for those projects which are operated on a bilateral basis. Therefore, it is generally difficult to cover the financial burden of participants from third countries for attending meetings or courses in those countries.

Considering the constraints indicated above, the following recommendations may be made at present to make the maximum use of available financial sources for the benefit of ISSMFE-constituent countries:

(1) ISSMFE Board should nominate two or three member societies having a strong willingness to organize technology transfer seminars or symposia in their country, and back up the implementation of their programmes. For this purpose, the President ISSMFE should write a letter of request to the government of the nominated member society as well as to the office of a funding agency stating the importance and appropriateness of such undertakings for the benefit of the nation as a whole.

(2) ISSMFE should allocate some amount of money from its annual budget to foster the participation of someone from the third country. Participation of even one lecturer, for example, from that country will add to an international flavour and emphasize the multi-lateral nature of the programme. The partial financial support given by ISSMFE should be clearly referred to in the President's letter suggested above.

(3) For the financial aid provided by the international organization, the cooperation with other international societies such as ISRM and IAEG will be necessary to implement any type of programme.

(4) Joint efforts should be made in future to link the ISSMFE technology transfer initiative to those other ISSMFE actions which are dedicated to assist developing countries: the model library action, the educational scheme action.

## PART 3: PROJECT EXAMPLES

### 3.1 Japan

Every year the Japanese Agency for International Cooperation (JAICA) holds a training course in Tokyo in the area of geotechnical engineering, inviting about 15 engineers from developing countries. They stay in Japan for about three months attending courses on soil mechanics and foundation engineering and visiting several research institutes and construction sites. The Japanese Society of Soil Mechanics and Foundation Engineering has been acting as an advisory body providing curriculum of the course and recommending names of tutors. Those wishing to take part are encouraged to address a local agency of JAICA.

### 3.2 Guatemala

The Center of Coordination for the Prevention of Natural Disaster in Central America (CEPREDENAC) was initiated in 1988 under the sponsorship of the Swedish Government. This project aims at mitigating disaster by natural hazards such as earthquakes, volcano eruption, flood and landslides. The first phase of this project was finished in 1991 but continuation of its activities is partly underway through financial aid from other agencies such as the Danish International Development Assistance (DANIDA). The Executive Secretariat is: CEPREDENAC, 7 Avenida 14-57 Zona 13 01013, Guatemala.

### 3.3 Chile

After the 1985 earthquake in Chile, JAICA started a three-year programme upon request from the Catholic University of Chile in which test equipments on structural dynamics, soil dynamics and seismic survey were provided, together with the know-how to use these machines for the assessment of seismic hazards and risks. As part of this project, two seminars were held in Santiago for training local engineers. Professor H Kishida of the Tokyo Institute of Technology and Professor Y Yamada of Tsukuba University participated in this project as geotechnical experts from Japan and cooperated with Professor J Troncoso of Catholic University of Chile in organizing the seminars.

### 3.4 Peru

The Peru-Japan Center for Earthquake Engineering Research and Disaster Mitigation (CISMID) was established in 1987 in the National University of Engineering, Lima, with funds of JAICA. In addition to its routine works, seminars have been organized several times with the aim to inform about technology and know-how related to earthquake hazards and their effects of local societies. In one of the seminars dealing with microzonation and safety of public lifeline, Professor Ishihara was invited to act as lecturer in August 1990. About 50 people not only from Peru but also from neighbouring countries attended the seminar.

### 3.5 South Africa

Ground engineering training courses are annually organized by the national member society of ISSMFE in different locations. Until now there were courses in Johannesburg and Cape Town which were offered to engineers from other African countries. See also Part 1 – South Africa.

## Appendix 5

### REPORT BY TASK FORCE ON EDUCATION IN GEOTECHNICS (H G POULOS ASSISTED BY VICE-PRESIDENTS)

#### 1. INTRODUCTION

Four broad areas of activity were targeted by the ISSMFE Task Force on Education in Geotechnics:

1. the establishment of model curricula for basic undergraduate courses in geotechnics
2. the development and dissemination of information on suitable experiments and demonstrations for these courses

3. the collection and dissemination of suitable audio-visual material for these courses
4. the development of annotated lists of suitable texts.

Attention to date has been concentrated on the first three of these objectives.

## 2. REPORT

A paper has been prepared which summarizes the work carried out to date. This will appear in the Proceedings of the 1993 New Delhi Conference. This paper summarizes suggested undergraduate curricula, and focuses on courses in civil, mining and environmental engineering in which students are taking geotechnical engineering as a major component.

Unfortunately, there is still relatively little information to hand concerning experiments and demonstrations.

Four sets of slides are now available:

1. expansive soils
2. landslides
3. offshore geotechnics
4. soil improvement

The Japanese Member Society has generously donated a number of sets of the last-named slides for sale by ISSMFE.

## 3. LIAISON WITH ISRM

The ISRM Commission on Education is very active, and is in the process of preparing detailed syllabus lists for various courses, including courses on soil mechanics and geotechnical engineering. The ISSMFE Task Force convenor has been involved in the development of the syllabus for appropriate courses. ISRM are also developing a series of annotated text book lists, which should be of assistance to ISSMFE in its future work.

## 4. RECOMMENDATIONS FOR THE FUTURE

It is recommended that the ISSMFE continue its activities related to geotechnical education. Positive responses from several countries in Asia, Africa and Eastern Europe suggest that there is scope for guidance by the Society in the development of both traditional and newer courses in our discipline.

Specifically, it is recommended that the following issues should be addressed:

1. continuing the efforts to collect details of suitable demonstrations and experiments which illustrate the fundamentals of soil and foundation behaviour
2. the development of annotated lists of text books (possibly in conjunction with ISRM)
3. the development of typical curricula and syllabus lists for *post-graduate* courses
4. the collection of appropriate computer software related to the teaching of soil mechanics and foundation engineering
5. the continued collation of instructive slide sets with accompanying descriptive text.
6. the development of a central repository of educational resource material (notes, tutorial questions, examination papers, etc) which may be assessed by educational institutions. Ideally this should reside with the Secretariat, but if this is not feasible, an alternative venue will be required. The Geotechnical Centre at the University of Sydney is willing to provide a service for such a repository, if required, provided that the Society provides the relevant expenses of reproduction, postage, etc.

## **Appendix 6a**

### **REPORT ON THE AFRICAN REGION FOR THE PERIOD MAY 1991 TO DECEMBER 1993 G W DONALDSON**

(For Presentation to the ISSMFE Council Meeting in New Delhi: 4/1/1994)

The problems of Africa: poor communications, long distances with high costs, small number of technological personnel and shortage of funds continue to hamper the activities of ISSMFE in the region. At least the political problems of the past twenty years are being removed rapidly.

The membership in the Region has been given a fillip by the rejuvenation of the Egyptian Member Society during the past year, culminating in the election of Prof El Ghamrawy as the next Vice-President for Africa, and the Egyptian Member Society also undertaking to host the XI African Regional Conference in Cairo late in 1995. The other side of the coin is that several countries in the Region have fallen into arrears with their payments to ISSMFE and therefore cannot participate fully in the benefits of the Society.

The Regional Conference is the major event in the Region and the Xth African Regional Conference which was held in Maseru, Lesotho in September 1991 could be regarded as a success in the number of attendees present, the papers submitted and the financial viability as well as good keynote addresses and lively debate. Yet it is most disappointing to report that no official representatives were present and it was therefore not possible to hold a meeting of regional representatives. However, there were visitors from Europe, Canada, Australia and New Zealand.

The 2nd Southern African Young Geotechnical Engineers Conference was held at Stellenbosch University in April 1993. Among the seventy participants, under 35 years of age, were one each from Ethiopia, Zimbabwe, Pakistan and Bulgaria. The conference was organised entirely by the young engineers and 32 of the delegates delivered papers, many for the first time. Sponsorships from consulting firms, geotechnical contractors, suppliers and the Geotechnical Division of the S.A. Institution of Civil Engineers kept the costs within the reach of young engineers, who further received enthusiastic support from their employers in meeting transport, accommodation and other costs related to their participation. The topics under discussion covered the whole range of geotechnical projects, with perhaps too strong an emphasis on numerical methods – not unnatural in young engineers.

## **Appendix 6b**

### **ACTIVITIES IN ASIAN REGION 1991–1993 (K Ishihara)**

Since the last meeting of the Council in Florence in May in 1991, the activities in the Asian region have been extensive as outlined below.

The highlight of the activities in Asian region was holding of the 9th Asian Regional Conference on Soil Mechanics and Foundation Engineering in Bangkok, Thailand on December 9–13, 1991. The Conference was particularly memorable and exhilarating because of its long-awaited return to Bangkok after a kaleidoscopic period of 20 years. More than 400 people attended the Conference and participated enthusiastically in the technical sessions and other events which were beautifully organized by members of the Southeast Asian Committee headed by Professor Balasburmanian.

It was for the first time that representatives from as many as 10 national societies got together in the special meeting where issues of regional concern were discussed. In this meeting, three national societies expressed the willingness to host the 10th Asian Regional Conference. As a result of voting, China was

selected to be the host of the next Conference which will be held in Beijing in 1995.

Indian National Society has been hard at work preparing for the 13 ICSMFE which is expected for sure to be the most successful event in the calendar of ISSMFE.

The Chinese National Society has been active recently. One of its major undertakings is to have sponsored the International Symposium on Soil Improvement and Pile Foundation which was held in Nanjing, China on March 25–27, 1992. The conference sessions offered a unique opportunity for local geotechnical engineers for exchange of views and opinions in the issues of mutual interest relevant to the development of infrastructures in that region.

Eleventh Southeast Asian Geotechnical Conference was held in Singapore on 4–8 May 1993, attracting about 500 people in attendance. The highlight of the Conference was the Chin Fung Kee memorial lecture delivered by Professor S L Lee. The vitality of geotechnical engineering in the Southeast region was witnessed through the brisk atmosphere in the technical as well as discussion session.

Japanese National Society hosted International Symposium in Earth Reinforcement Practice (IS Kyushu '92) which was held on 11–13 November 1992 in Fukuoka. About 400 persons participated in the Conference. The highlight of the Conference was a special lecture delivered by Professor T Yamanouchi. Five technical sessions were conducted with a great success, preceded by keynote lectures by international experts in respective area.

The fourth National Conference on Ground Improvement was held on January 18–19, 1993 in Lahore under the sponsorship of Pakistan National Society for Soil Mechanics and Foundation Engineering (PNSSMFE). The president, Amjad Agha and Secretary, Dr Izhar Ul Haq were the organizers of the Conference. Particular feature of this conference was the co-sponsorship of JSSMFE which cooperated by sending four prominent specialists. They were Professor H Aboshi, Dr T Tsuchida, Professor F Tatsuoka and Dr A Onoue.

Bangladesh Society for Geotechnical Engineering (BSGE) was also active in organizing the first Bangladesh-Japan Joint Geotechnical Seminar on Ground Improvement on January 23–24, 1993. JSSMFE helped organize the Seminar by sending four prominent experts in the expertise of the ground improvement. It was very fitting and timely to have had such a seminar in Bangladesh where the national society had been newly formed just 4 years ago.

Vietnamese National Society was active as well by organizing International Geotechnical Conference – new Technology for Foundation Engineering, which was held in Hanoi on October 1–3, 1992. This was the first international gathering held in Hanoi since the birth of Vietnamese National Society. The Conference was organized by the efforts of Dr Nguyen Truong Tien under the assistance of the Swedish Agency of Research Cooperation and Swedish Geotechnical Institute. About 200 engineers participated in the Seminar and listened enthusiastically to the lectures by prominent experts. It was a valuable and rewarding undertaking in view of the condition in Vietnam being still in its infancy in the development of geotechnical engineering.

Korean National Society organized the International Symposium on the Construction Technology for Underground Space in Seoul on October 8th, 1993 in cooperation with the Scandinavian countries. The symposium was well attended and ended up with a great success.

Iranian National Society hosted the Second International Seminar “Soil Mechanics and Foundation Engineering of Iran” under the sponsorship of the Iranian Government in October 25–27 in Tehran. The Conference was fruitful and rewarding for local engineers.

Israel National Society launched a project of holding bilateral joint symposia in cooperation with Russian National Society. Following the first one held in 1991, the second Israel-Russia Conference on Soil Engineering was held in 1992 in Haifa with 60 Israeli and 19 Russian delegates in attendance. The two

conferences met with great success in establishing close links amongst engineers and scientists in the two countries.

Although no gathering was undertaken on international scale, several symposia and national meetings were held in Syrian and Indonesian national societies to exchange views and discuss issues of geotechnical importance in respective countries.

## Appendix 6c

### ACTIVITIES IN AUSTRALASIAN REGION 1991–2 (H G Poulos)

#### 1. MEMBERSHIP

Membership has continued to increase in the Australasian region over the past year. In Australia, as at April 1992, there were 903 members of the Australian Geomechanics Society (AGS) of whom 469 were members of ISSMFE. There were also 31 supporting members (ie companies or organisations).

In New Zealand, the current total membership of the New Zealand Geomechanics Society (NZGS) is 368 of whom about 224 are members of ISSMFE.

#### 2. CONFERENCES

The Sixth Australia-New Zealand Conference in Geomechanics was held in Christchurch New Zealand, from 3rd to 7th February 1992. The Conference theme was “Geotechnical Risk – Identification, Evaluation and Solutions”. A considerable number of the papers published at the Conference addressed this theme. A total of 171 people attended the Conference, and enjoyed a well-organised, well-run and technically stimulating Conference. Features of the Conference were the Keynote Address by Professor J K Mitchell on “Mitigation of Ground Failure Risk – Some Lessons from the Loma Prieta Earthquake”, the John Jaeger Memorial Lecture by Dr Brian Richards on “Modelling Interactive Load Deformation and Flow Processes in Soils”, and the New Zealand Geomechanics Lecture by Professor G R Martin, entitled “Geomechanics – the Art and the Science”.

During the following week, the 6th International Symposium on Landslides was held in Christchurch. Many of the 264 registrants also attended a Field Symposium in Queenstown on the weekend between the two conferences. Theme addresses were delivered on:

Investigation; Seismicity; Landslides in Australasia; Analysis; Open Pits; Tropical Areas; Remedial Measures; Reservoirs. Again, the Conference was well run and proved to be successful from both the technical and social point of view.

The next (7th) Australia-New Zealand Conference on Geomechanics is to be held in Adelaide in July 1996.

A Conference will be held in Sydney in March 1993 on Geotechnical Management of Waste and Contamination, and is being organised by the Sydney Group of the AGS.

#### 3. TECHNICAL WORKING GROUPS

The Groups currently active within the Australian Society are:

- i) litigation
- ii) footings and foundations
- iii) bored pier inspection
- iv) slope stability assessment.

#### 4. HONOURS AND AWARDS

The 1991 E H Davis Memorial Lecturer was Associate Professor Ian W Johnston of Monash University, whose lecture was entitled "Geomechanics and the Emergence of Soft Rock Technology".

As reported above, the 1992 Jaeger Memorial Medal of the AGS was awarded to Dr Brian G Richards, while the New Zealand Geomechanics Lecture was delivered by Professor Geoffrey W Martin.

A new award, the "Joint Societies Award" is being developed jointly by AGS and NZGA, and will be awarded to the author(s) of the paper presented to each Australia-New Zealand Geomechanics Conference which makes the most significant contribution to the advancement of geomechanics.

#### 5. YOUNG GEOTECHNICAL ENGINEERS CONFERENCE (YGEC)

Both AGS and NZGS have agreed in principle to the establishment of a YGEC for the Australasian Region. Arrangements are being formulated at present and it is hoped to hold the first such Conference in 1994.

#### 6. FIVE YEAR PLAN

The AGS had developed a Five-Year Plan for the development of the Society. This is providing direction for the activities of the Society, and is reviewed at each National Committee Meeting.

#### 7. MEMBERSHIP BOOKLET

The Secretariat of the AGS has produced a valuable 58-page Membership booklet which contains information on the objectives of the Society, details of the State Groups, and names and addresses of all members. It also contains the Society's Five Year Plan.

#### 8. COMMUNICATIONS

Both the NZGS and AGS continue to produce news journals twice yearly for their members. "New Zealand Geomechanics News" and "Australian Geomechanics" are produced by volunteer members, and contain technical papers, news items, and geodiary information.

#### **ACTIVITIES IN THE AUSTRALASIAN REGION JUNE 1992–OCTOBER 1993 (H G Poulos)**

##### 1. MEMBERSHIP

Current membership of ISSMFE in Australia is 440, out of a total paid membership of the Australian Geomechanics Society of 685. There are also 28 supporting members (i.e. companies or organizations). In New Zealand, the total

membership of the New Zealand Geomechanics Society is about 370.

#### 2. CONFERENCES

The major activity was a Conference on "Geotechnical Management of Waste and Contamination" which was held in Sydney in March. This attracted about 120 registrants and was very successful technically. The proceedings have been published by Balkema.

Planning of the 7th ANZ Geomechanics Conference in Adelaide is proceeding. It will be held in the Adelaide Convention Centre from 1–7 July 1996.

The Perth group of the Australian Society has foreshadowed that it will put forward a bid for the 2001 International Conference.

The New Zealand Geomechanics Society is planning to develop a series of biannual conferences, commencing in May 1994. This conference will be held in Wellington and will be on the subject of Geotechnical Aspects of Waste Management.

#### 3. TECHNICAL WORKING GROUPS

Within the Australian Geomechanics Society, the following groups are active:

- i) litigation
- ii) footings and foundation
- iii) bored pier inspection
- iv) slope stability assessment
- v) limit state design

The New Zealand Society is setting up a study group on urban development, and also has a group studying limit state design.

#### 4. HONOURS AND AWARDS

The Australian Geomechanics Society has selected Mr Philip Pells to be the 1993 E H Davis Memorial Lecturer.

The next New Zealand Geomechanics Lecture will be presented in 1994 by Dr J Berrill.

#### 5. YOUNG GEOTECHNICAL ENGINEERS CONFERENCE (YGEC)

The first Australian YGEC will be held in Sydney in February 1994. Participants will be invited from both Australia and New Zealand. Response to the call for participation has been excellent. The New Zealand Earthquake Commission and the New Zealand Geomechanics Society are sponsoring 5 participants from New Zealand.

#### 6. STRATEGIC PLANNING

Both the Australian and New Zealand Societies have developed strategic plans for their future development. The AGS has a five-year rolling plan which is reviewed at each meeting of the National Committee (twice yearly). The NZGS has also prepared a strategic plan which is being implemented.

## 7. COMMUNICATIONS

Both the NZGS and the AGS continue to produce news journals twice yearly for their members. "New Zealand Geomechanics News" and "Australian Geomechanics" are produced by volunteer effort, and contain technical papers, news items, and geodiary information.

The last issue of "Australian Geomechanics" featured Piling and Deep Foundations as its technical theme, and the next issue will feature Retaining Systems and Geosynthetics.

## 8. RESEARCH PRIORITIES

A working group of the AGS has prepared a report on Research Priorities in Geomechanics Australia. Three broad areas have been defined.

1. problematic soils of the Australasia – Pacific region.
2. mining geomechanics.
3. environmental geotechnics.

## 9. INCOMING VICE-PRESIDENT

Mr M C Ervin of Australia has been elected to be the next Australasian Vice-President.

## **Appendix 6d**

### **REPORT ON ACTIVITIES IN THE EUROPEAN REGION 1989–94 (U Smolczyk)**

The period which is subject of this report, was earmarked by the great political changes in Europe. With regard to ISSMFE this meant fresh activities in many of the Eastern European countries, but also considerable outcomes due to the economical difficulties raised by the change to an open market economy in many of those countries.

In terms of the ISSMFE structure, the following changes occurred:

1. The German Democratic Republic committee ceased to be an independent member of ISSMFE. Since autumn 1990 most of its members joined the FRG member society and there is now one German Geotechnical Society with a membership of about 1,700.
2. The Romanian member society was re-established and could already attend the Danube-European Congress in Budapest in autumn 1990. It is now again a member society to the ISSMFE. They took on the responsibility of hosting the 10th Danube-European CSMFE to be held in September 1994.
3. Following an invitation by the Albanian Ministry of Building, I visited Tirana in August 1990 and found a group of soil engineers, engineering geologists and surveyors strongly interested in founding an Albanian SSMFE. The political upheavals in this country, however, prohibited further attempts to proceed with this.
4. The soil engineers in the Baltic republics have founded separate member societies. In Lithuania, a society was founded in 1990, in Estonia in 1991, getting very valuable support from the Finnish Society of SMFE. Latvia is about to apply for ISSMFE membership. There is a good cooperation between these three societies and discussions are aimed at later joining their external status towards ISSMFE.

5. The civil war in Yugoslavia resulted in independent geotechnical societies in Slovenia and Croatia (both founded in July 1992). The remaining part of the Yugoslav Society is about to apply for membership on behalf of geotechnical engineers in Serbia and Montenegro.
6. When the former Soviet-Union ceased to exist, similar problems to those in Yugoslavia arose. 1992 the Russian Society of SMFE was established on the base of the former national committee (219 members, 181 in the ISSMFE list of members). Geotechnical engineers of the other republics were invited to join. During an international congress on numerical methods in geomechanics in St Petersburg in June 1993, a first membership meeting took place, where the membership-situation was discussed. Separate member societies seem to be planned in Belorussia and Ukraina, but the well-known serious economic drawbacks prohibit any further development for now.
7. In Poland, in 1992 the organisational structure was reviewed since – as in all former Eastern bloc countries – the representation was realized by national committees associated to national academies of science. The 3rd International Seminar on Renovation and Improvements to Existing Quay Structures in May 1993 in Gdansk demonstrated the sound activity of the Polish National Committee on Geotechnics with its now independent status.
8. Following the well-organized and informative 9th Danube-European CSMFE in October 1991, our Hungarian colleagues have also succeeded in re-arranging their organisational structure by transforming the national committee into an independent union. A recent highlight of their activity was the symposium in memory of Jaky's 100th birthday, held in September 1993 in Budapest.
9. The splitting of Czechoslovakia into two separate republics changed the situation of that member society, too. There are now a Czech and a Slovakian member society, but they have decided to act externally as still one member of ISSMFE, which was a very reasonable and hopefully exemplary action.

The main event was the X. ECSMFE held in Florence in May 1991. It was hosted by Italy in a most impressive way and run on a high level by exchanging experiences on soil deformation in geotechnical research and practice. In connection with this event, a European delegates' meeting was held with 28 attendants. Two offers to host the 11th ECSMFE by the Dutch and the Danish societies were gratefully considered. Following their presentations, voting yielded a 10:7 priority for Copenhagen in 1995.

In Northern Europe, there is a well established cooperation between Finland, Sweden, Norway, Denmark and Iceland. Regional conventions with unspecified topics and open discussions are held in a four years' cycle. Their 10th meeting (X NGM 92) was held in Aalborg, Denmark, in May 1992. 40 years' anniversaries were celebrated by the Finnish Member Society and the Danish Geotechnical Institute.

Since continuity of regional conferences should be proven in terms of their necessity, it was decided to stop the sequence of Baltic Conferences on SMFE in its earlier form – all the more, when it was revealed that this title had already been used since 1968 by the Baltic Societies. Regional workshops with selected topics and reduced scope rather than large congresses seem to be more adequate in the light of economic conditions.

Several occasions in Western Europe gave opportunities to have official contact visits to member societies in the Netherlands (40th anniversary; 4th Int. Conference on Geotextiles and Geomembranes; 4th Young Geotechnical Engineers' Conference), in Belgium, France (5th Young GEC) and Switzerland. In September 1993, the Hellenic Society of SMFE together with the French Committee of SMFE organised a brilliant symposium "Hard Soil – Soft Rock" in Athens, Greece.

A most encouraging type of conference is the Young Geotechnical Engineers' Conference. It is a gratifying sign that there is no lack of hosts. They were run

annually 1989 in Raubichi (Belorussia), 1990 in Delft, 1991 in Grenoble, 1992 in Lisbon and 1993 in Boeblingen (Germany). Having attended all of them, I was deeply impressed each time by the concern and enthusiasm of those young scientists and, above all, by the in most cases high level of their research. It may be mentioned, too, that sponsors in Western host countries enabled a free of charge attendance for the participants coming from Eastern countries.

A notable international cooperation has been developed in Europe by means of eight "European Technical Committees" on matters of:

ETC1 – Stabilization of Landslides (chairman: Togrol);  
ETC2 – Earthquake Engineering Problems in Europe (Viggiani);  
ETC3 – Piles (Franke/van Impe);  
ETC4 – Pressuremeter Testing (Gambin), now changed into an International TC;  
ETC5 – Laboratory Testing (De Quelerij);  
ETC6 – Reinforced Soil (McGown);  
ETC7 – Numerical Methods in Geotechnical Engineering (Sagaseta);  
ETC8 – Geotechnics of Landfill Design and Remedial Works (Jessberger).

Reports were given by the chairmen to the delegates of the European member societies at their meeting in Florence:

ETC1 presented a third volume on the state of its work and asked for two more years to collect the still incoming contributions for the final report. This was agreed upon.

ETC2 presented a final report to the 10th ECSMFE and asked to be disbanded, which was accepted.

ETC3 Its chairman, Prof van Impe, organized a 2nd International Geotechnical Seminar on Bored and Auger Piles in June 1993, which strengthened the interaction between practising geotechnical engineers and researchers.

ETC4 held an international symposium in April 1990 in Oxford and presented its final report. The topic will be followed up by activities of the existing international TC.

ETC5 had to be re-activated in October 1990 under the hand of a new chairman. It is at work in close contact to two other groups, who work within the framework of CEN and ISO on laboratory testing to be codified in Europe. Some of its members are equally involved in the SPRINT programme of the European Community.

ETC6 had an international conference in Glasgow in September 1990, the proceedings of which could be presented to the 10th ECSMFE. Since the chairman Prof McGown had asked for a change in the chairmanship of the committee, Prof Schlosser, France, took over and organised an international symposium "Soil Reinforcement: Full Scale Experiments of the 80's" in Paris in November 1993 as a supported project of COMETT.

ETC7 also held an international symposium in Santander, Spain, in September 1990. The proceedings of this were available at the congress in Florence. Since it is intended to achieve a documentation (manuals or recommendations or standard drafts) which may be taken over into international committees later on, the working life of this committee was extended until the end of this international congress period in early 1994.

ETC8 started its activity in 1990 by translating German recommendations into English. The first edition was published in 1991, the second is available at this congress.

Although not being an ISSMFE institution, the draft committee of CEN working on Eurocode 7 Part 1 "Geotechnical Design, General Rules" under chairmanship of N Krebs Ovesen may be added to this list as this special task took much energy, money and time from the European members who were involved. A working document containing a 5th version was finished in June 1993 to be published as a European Pre-Standard in 1994.

Bilateral cooperations are also observed to develop in geotechnics and will hopefully yield to Europe-wide activities in both joint research and education. The geotechnical engineering practice is already in the forefront here, designing and constructing the large works to improve the infrastructure in terms of transportation, environment and modernized production.

## Appendix 6e

### NORTH AMERICAN ACTIVITIES 1991–93 (J K Mitchell)

Geotechnical activities in the North American Region of ISSMFE have been extensive since the last meeting of the Council in May 1991. Some of the highlights are given in this report.

### PANAMERICAN ISSUES

At meetings of delegates from the North and South American Regions of ISSMFE in Rio de Janeiro, Brazil in 1989 and in Viña Del Mar, Chile in 1991 it was agreed that a Panamerican Committee for Soil Mechanics and Foundation Engineering should be formed. The purposes of the Committee will be to provide improved communication, coordination, and cooperation among the Member Societies of the North and South American Regions of ISSMFE; to provide consistent procedures for sponsorship and organization of Panamerican Conferences; and to develop policies and guidelines that will assist in conducting administrative work efficiently and effectively. After review and comment by the Member Societies on initial drafts of the proposed organization and operating procedures, a final draft has been prepared and distributed for adoption and implementation at the XIII ICSMFE in New Delhi in January 1994.

The IX Panamerican Conference on Soil Mechanics and Foundation Engineering was held in Viña Del Mar, Chile from August 26–30, 1991. There were approximately 300 delegates. A major topic, both in the main sessions and on the technical field trips, was tailings dams. The X Panamerican Conference will be hosted by Mexico and held in Guadalajara in the summer of 1995.

### REGIONAL ACTIVITIES

Detailed reports on most of the many geotechnical conferences held throughout the Region, special events, awards, new publications, and other activities in Canada and the USA are contained in the Canadian Geotechnical Society and US National Society News sections of *Geotechnical News*, published quarterly and distributed to all Canadian and US members of ISSMFE by BiTech Publishers Ltd. Regrettably, it has not yet been possible to establish a consistent and comparable flow of news and information to and from ISSMFE colleagues in Mexico, which comprises the third Member Society of the North American Region.

In keeping with the established policy of rotating the office of ISSMFE Vice President for North America among the three member societies, Victor Milligan will assume the office commencing January 1994 in New Delhi.

### CONFERENCES

The First International conference on Calibration Chamber Testing was held at Clarkson University, Potsdam, New York on June 28–19, 1991. There have

been several successful and well-attended conferences in the USA sponsored by the US National Society and the American Society of Civil Engineers, including a Geotechnical Engineering Congress in Boulder, Colorado in June 1991; an International Conference on Centrifuge Testing, also at Boulder in June 1991; the ASCE Specialty Conference on Grouting, Soil Improvement and Geosynthetics in New Orleans, February, 1992; and the ASCE Specialty Conference on Stability and Performance of Slopes-II in Berkeley, California in June 1992, which attracted a record number of participants (800). Major geotechnical conferences held in the US during 1992-93 that involved ISSMFE, USNS, or ASCE sponsorship were Geotechnical Practice in Dam Rehabilitation, Raleigh, North Carolina, April 1993, and The Third International Conference on Case Histories in Geotechnical Engineering, St Louis, Missouri, June 1993.

The Seventh International Conference on Expansive Soils, which was co-sponsored by ISSMFE, was held in Dallas, Texas, August 2-5, 1992. There were 222 registrants from 23 countries that participated in the technical sessions and two post-conference tours.

A special symposium was held in Mexico in August 1992 at which memorial proceedings were issued in memory of the late Raul J Marsal, who made many contributions to the advancement of soil mechanics in Mexico and throughout the Americas. A two-volume proceedings is now available for the 1987 International Symposium on Geotechnical Engineering of Soft Ground. A two-day workshop on Foundation Performance During Earthquakes and Its Influence on Building Codes was held in Mexico City in August 1992.

Several conferences and meetings were held in Canada, including the 44th Canadian Geotechnical Conference in Calgary, Alberta, September 1991, and the 45th CGS Conference in Toronto, Ontario in October 1992 with 300 delegates, which emphasized innovation conservation, and rehabilitation. The 46th Conference was held in Saskatoon, Saskatchewan in September 1993 and had the theme Geotechnique – Past, Present and Future.

The ISSMFE is joining with the CGS in sponsorship of the First International Conference on Environmental Geotechnics to be held in Edmonton, Alberta, July 10-15, 1994. It is anticipated that as many as 800 delegates may attend this conference, which marks the first major effort by ISSMFE to greatly expand its activities in the area of environmental geotechnology.

#### MISCELLANEOUS ITEMS

The USNS has underwritten the new H Bolton Seed Medal

#### **Appendix 6f**

#### **REPORT ON ACTIVITIES IN THE SOUTH AMERICA REGION MAY 1991 – DECEMBER 1992** **L Décourt**

##### **1. Introduction**

Five, out of the ten countries belonging to the South America Region, Argentina, Brazil, Equador, Peru and Venezuela, have replied to our letter asking for information.

##### **2. Argentina – Sociedad Argentina de Mecanica de Suelos**

From 5 to 9 of August, 1991 the 1st Argentinian Symposium on Geotextiles was held in Buenos Aires.

Scheduled for the next months are the following events:

- September/1992 : Course on Introduction to Rock Mechanics by Dr. Jorge Soares et al.
- November/1992 : Course on Geology for Engineers.

#### **3. Brazil**

##### CONFERENCES

- November/1991 : Rio de Janeiro – 2nd Symposium on Tailing Dams
- November/1991 : São Paulo – 2nd Engineering Seminar on Special Foundations
- December/1991 : Brasilia – 1st Symposium on Non Saturated Soils
- May/1992 : São Paulo – Symposium on Soils of the City of São Paulo
- September/1992 : Rio de Janeiro – 1st Brazilian Conference on Stability of Slopes
- November/1992 : Belo Horizonte – Workshop – Brazilian needs in Geotechnical Engineering
- November/1992 : Brasilia – Seminar on Applications of Geosynthetics in Geotechnical Engineering.

#### **4. Equador**

The Equatorian Society is basically engaged in the preparation of a conference on land slides. Initially this symposium was to be the second in South America, but now they want it to be the first Pan American Symposium. I intend to discuss this matter with Prof. J.K. Mitchell during the Board Meeting.

Anyway, being either South American or Pan American, this symposium is scheduled for August 1993.

#### **5. Peru – Comité Peruano de Mecanica de Suelos, Fundaciones y Mecanica de Rocas**

##### CONFERENCES

Several conferences have been scheduled

- May : Use of Gabions in Civil Engineering
- June : Brazilian Experience on the Design of Reservoirs and Hydro Electric Power Plants
- August : Foundations in Difficult Soils
- September : Symposium on Design of Pavements
- October : The use of Geotextiles in Civil Engineering
- November : Tunnels in Expansive Rocks

A National Conference on Soil Mechanics is scheduled for the near future

## 6. Venezuela – Sociedad Venezolana de Mecanica del Suelo e Ingenieria de Fundaciones

### CONFERENCES

#### – XII Venezuelan Geotechnical Symposium

This event is scheduled for November and will deal with 25 years of Geotechnical experiences with the Caracas Metro. During the Opening of this event the III Conference Gustavo Perez Guerra will be given.

### PUBLICATIONS

Two issues of the Bulletin of the SVMSIR have been published.

### **REPORT ON ACTIVITIES IN THE SOUTH AMERICA R REGION AUGUST 1991 – DECEMBER 1993 L. Décourt**

In this report the most important activities of the Societies in the period from August of 1992 to December, 1993 are summarized.

### **Brazil**

### EVENTS

The main events promoted by the Associação Brasileira de Mecânica dos Solos were:

- Fair on Dynamics in Civil Construction. São Paulo, from 12 to 13 August. 1992
- COBRAE I First Brazilian Conference on Stability of Slopes. Rio de Janeiro, from 3 to 5 November, 1992
- Tunnels in Soils, São Paulo, 3 December, 1992

### PUBLICATIONS

The Geotechnical Journal Solos e Rochas keeps on being edited each four months.

- The ABMS News are edited monthly.

### ELECTIONS

As far as the elections are concerned, the Brazilian Society supports Prof. Michele Jamiolkowsky and Mr. Luis Valenzuela, respectively for the offices of President and Vice President for South America of the ISSMFE.

The Associação Brasileira de Engenharia de Fundações, (Brazilian Association of Foundation Engineering) a sister Society of ABMS

created the Grillo Lecture in Honour to Prof. Odair Grillo the first soil mechanics engineer, and the first soil mechanics and foundations professor in Brazil. These conferences are to be given every two years. Exceptionally this year instead of one three conferences will be given in November 25 by professors Victor F.B. de Mello, Sigmundo Golombek and Luciano Décourt.

### **Chile**

### EVENTS

The main activities of the Sociedad Chilena de Geotecnia were the following:

- 3rd Geotechnical Congress

This conference was held in La Serena in May of 1993.

- Intensive participation in the ISSMFE, TC-7

### LECTURES

Six important lectures were given in the period from August 1992 to June 1993 by Prof. Charles Fair Hurst, President of ISRM, Dr. George Zagorski, Vice President of National Seal Company (USA), Prof. Don Deere (USA), Prof. Michele Jamiolkowski (Italy) and Mr. Bayard Materon (Colombia)

### PUBLICATIONS

- Sochige News No. 13
- Special Volume, International Seminar on Seismic design, abandon and reclamation of dams, IX CPMSIF.
- Vol. IV of the IX PACSMFE
- Proceedings of the Third Chilean Geotechnical Conference

### ELECTIONS

The Chilean Society informs that supports Prof. M. Jamiolkowski and Mr. L. Valenzuela for respectively President and Vice President for South America of the ISSMFE.

### **Equador**

The Sociedad Ecuatoriana de Mecanica de Suelos Y Rocas is promoting the First Pan-American Symposium on landslides. The Symposium, originally scheduled for September of 1993 was postponed to August of 1994.

## Paraguay

### EVENTS

The Sociedad Paraguaya de Geotecnia is organizing a large program of investigation on the occurrence of soft rocks in the Basin of the Prata River. This program involves many countries other than Paraguay like Argentina, Bolivia, Brazil and Uruguay. A first meeting held in the central office of ABMS was attended by the regional Vice Presidents of International Societies of Soil Mechanics, Rock Mechanics and Engineering Geology and also the Presidents of the societies of Brazil and Paraguay.

### ELECTIONS

Paraguay supports Prof. Jamiolkowski for the Presidency of the ISSMFE.

## Peru

### EVENTS

The Comite Peruano de Mecanica de Suelos, Fundaciones Y Mecanica de Rocas promoted the following events:

- August 1992 – Applications of Rock Mechanics in the design of tunnels
- October 1992 – Applications of Geosynthetics in Civil Engineering
- November 1992 – Structural solutions of foundations in difficult soils
- February 1993 – Design and construction of roads
- May 1993 – Foundation of structures
- December 1992 – VII Conference on Soil Mechanics and Foundation Engineering

### ELECTIONS

Peru supports Prof. Jamiolkowski for the Presidency of the ISSMFE.

From the other societies of the South America Region no information was received.

## Appendix 7

### **PERMANENT COORDINATING SECRETARIAT MEETING LISBON 21ST JUNE 1993**

Report by Secretary General

A meeting of the Permanent Coordinating Secretariat was held in Lisbon on 21 June 1993 with Professor Lousberg as Secretary. It was held concurrently with the Three Presidents' Meeting, subsequent to which a combined meeting was held.

## CONFERENCES

A check was made of conference dates for the three sister societies over the next few years and it was noted that there were no clashes. The XI ECSMFE in Copenhagen in 1995 is being co-sponsored by IAEG who may hold their Council Meeting at this venue.

## ISRM JOURNAL

The ISRM Secretary General explained that the ISRM Journal is sent by DHL directly to members in 5 countries at \$10 per person for the 4 copies per annum. An alternative operation is to send copies in bulk to KLM in Amsterdam, who will insert sheets from National Groups at no extra cost, and post to individuals.

## IAEG STATUTES

The IAEG Secretary General advised that the new IAEG statutes were now available.

## IUGS MEMBERSHIP

All three sister societies are now affiliated members of the International Union of Geological Sciences. A proposal has been made that the Working Party on the World Landslide Inventory (WP/WLI) on which there are members from all the sister societies, should become an IUGS Commission.

## DIRECTORY

After lunch with the three Presidents, at their request the meeting discussed the possibility of producing a combined Directory for the three sister societies on computer disc. There was discussion on what might be included, in addition to details of individual members; for example, the statutes of the Societies, details of Technical Committees/Commissions, Board Members, educational material available and similar material. This matter was also discussed at the Three Presidents' Meeting and at the subsequent combined meeting, where it was agreed that a comprehensive data base for the three sister societies should be established, which could be accessed as desired by each of the three societies. A commercial organisation could be used to set up the data base and retrieval system.

## Appendix 8

### **14TH ICSMFE, HAMBURG, SEPTEMBER 6-12, 1997**

Report by U Smolczyk

The Congress will be held in the Congress Centre which is located in the centre of the city of Hamburg. The congress facilities are abundant: there are 17 halls of various sizes starting with 3,000 persons audience down to 50.

The center is connected to an international luxury hotel but there are another 25 international hotels available. Thus accommodation in several price classes will be no problem. It should be mentioned that even small hotels provide a good standard at moderate prices.

The place is easy to get to. By taxi the airport is only 20 min away. Intercity trains stop right next door to the congress place. An efficient signposting system guides car drivers straight to an underground car park with 1000 vehicles capacity. Public transport is well developed. Rapid transit underground and suburban rails links, buses and even port ferries are all included in the same public transport system. In the city you are never more than 500 m away from a rapid transit rail station. Tickets are valid for any means of transport and a special Congress Ticket allows participants to use public transport free of charge.

Just a few minutes' walk from the congress are ten shopping malls with any kind of exclusive and normal shopping facilities. Also, opera, museums, theatres and a beautiful park with its own Japanese garden are in walking distance.

It is assumed that more than 1,000 participants may be expected. The congress itself will last six days. Using extensive fair facilities, an exhibition of foundation engineering will be complementary. It is assumed that in 1997 the reclamation of Eastern Europe will have come to a stage when civil engineering will be needed extensively. Thus we expect a vital interest of building companies to document their capacities in realizing difficult foundation problems.

The programming has just commenced by a first meeting in early December. As here in Delhi, most probably there will be a combination of plenary sessions and parallel discussion sessions. Based on good experiences with German national conventions, it is intended to provide ample possibilities to get an active exchange of experiences between science and practice. Therefore topics like environmental geotechnics, underground works in soft ground, development of underground space for various kinds of usage, developments in modern foundation engineering techniques, application of geotextiles, improvement of ground will be on stage. Of course, the usual topics of soil mechanics will be considered adequately, too.

There will be no problem to offer interesting by-programmes and tours. We shall rather run into difficulties when we shall make the choice. Technical excursions will lead to projects where participants can look how the results of modern geotechnics are applied in practice. Post conference tours will be offered to all four directions, and naturally a visit to Berlin with her large building programmes to become the German capital will be included.

At present, the German Geotechnical Society is about to prepare the main contracts and to define the budget items. It seems that the congress expenditure may amount to 1.2 million dollars. Depending on the number of participants we hopefully will be able to remain with the congress fee for participants and companions below the present level here.

## Appendix 9

### INTERNATIONAL AFFILIATIONS

Report by Secretary General

#### IUGS

The Council of the International Union of Geological Sciences at its August 1992 meeting in Kyoto admitted ISSMFE into affiliated Membership of IUGS. In accordance with IUGS policy an annual account of ISSMFE activities was submitted to IUGS in December 1992.

A proposal is under consideration to structure the UNESCO Working Party on World Landslide Inventory (WP/WLI0) as a Commission of IUGS. ISSMFE representation on WP/WLI is through TC11 on Landslides.

#### UATI

The Secretary General attended the biennial General Assembly of the Union of International Technical Associations and Organisations in Paris 5/6 April

1993. It was announced at this meeting that ISSMFE had resumed its membership of UATI.

One of the matters given prominence at the meeting was the need to focus on University-Industry cooperation. UATI had been asked by UNESCO to organise a congress on this topic in Brussels 23-26 June, 1993.

UATI/WFEO Joint Executive Committee is focusing its attention mostly at present on developing activities under the IDNDR Joint Working Committee. The President of the Joint Working Committee, M Villevielle, gave an outline of the five projects assigned to them by the IDNDR Scientific and Technological Committee, viz.: Megacities, Seismic and Wind Resistant Structures, a Roving Seminar, Floods and Storms, and the specific case study of Lake Nyos in Cameroon. Work under Megacities has been entrusted to the Institution of Civil Engineers in London (see item 18). A Roving Seminar project had been instituted in the Caribbean. Work had been done on floods and storms, particularly in relation to early warning and detection systems. Studies had also been made on Lake Nyos.

A presentation was made to the meeting by Mr John Mackenzie, Secretary General of WFEO who saw 3 major areas in which UATI/WFEO cooperation would be fruitful, viz: Sustainable Development, Environmental Engineering and IDNDR activities.

Subsequent to this meeting and after discussion with the ISSMFE President, Dr Morgenstern, letters dated 24 June were sent from the ISSMFE Secretariat to M Pecoux, UATI Secretary General, one informing him that ISSMFE would be interested in participating in any IDNDR projects with a geotechnical interest in which UATI was involved, and the other proposing that UATI could sponsor a civil engineering library distribution scheme similar to, but more comprehensive than, the ISSMFE Model Library Scheme. The possibility of ISSMFE taking a lead role in such an initiative was expressed.

No reply has been received from UATI with respect to IDNDR, but a favourable response was received with respect to the Library Distribution Scheme. This letter requested that ISSMFE should send to UATI a draft project proposal with costs sometime in October, to enable it to be put to the UATI Administrative Board at its meeting on 5 November 1993 in Brussels.

A proposed Library Distribution Scheme, prepared by the Secretary General and approved by the Board at its meeting in Athens on September 19, was sent to UATI on September 29, 1993.

## Appendix 10

### COMITE FRANCAIS DE LA MECANIQUE DES SOLS SOUS-COMITE FRANCOPHONIE"

#### French Model Library

Report by M Gambin

In the late 80's Technical Committee TC-21 investigated the possibility of setting up a model library for distribution to research or educational institutions in developing countries at a low cost or free of charge.

The list of books written in English was prepared as early as 1988. Further to the request of President Morgenstern at the Council Meeting in Florence, May 1991, tentative list of French books is proposed here which has been eagerly awaited by countries such as Morocco, Tunisia, Egypt, Romania, Algeria and Iran, to quote those countries who have a National Society affiliated to the ISSMFE. This list prepared by the French Society is being circulated among other French speaking countries such as Belgium, Canada and Switzerland to obtain full agreement of their respective National Societies. A final list with cost involved shall be presented at New Delhi or shortly before hand.

## SIMSTF / ISSMFE

### BIBLIOTHÈQUE TYPE POUR LE GÉOTECHNICIEN PROJECT DE LISTE D'OUVRAGES

(Model Library – Tentative list)

#### 1er niveau (1st level)

Injection des Sols  
H Cambefort, Eyrolles, 1967

Aide Mémoire d'hydraulique souterraine  
M Cassan, Eyrolles, 1986

Les Essais in-situ  
M Cassan, Eyrolles, 1988

Mécanique des Sols  
J Costets et G Sanglerat, Dunod, 1992

La Pratique des Sols de Fondation  
G Filliat, Rédacteur en chef, Le Moniteur, 1981

Remblais et Fondations sur sols compressibles  
J P Magnan, presses ENPC, 1984

Éléments de Mécanique des Sols  
F Schlosser, Presses ENPC, 1989

Guide pour l'étude et la réalisation des soutènements  
Y Tcheng, UTI, Sedima, 1981

Règles Techniques de conception et de calcul des fondations des ouvrages de Génie Civil  
Fascicule 62, Titre V, CCTG  
LCPC/SETRA, 1992

Fondations superficielles, fondations profondes  
Documents Techniques Unifis (D.T.U.) 13-11, 13-12, 13-2  
CSTB, Paris, 1978-1992

Instructions Techniques pour la surveillance et l'entretien des Ouvrages d'Art:  
a) Fondations en site terrestre (Fascicule 11), 1979  
b) Fondations en site aquatique (Fascicule 10), 1979  
c) Ouvrages de soutènement (Fascicule 51), 1985  
LCPC/SETRA

#### 2e niveau (2nd level)

Dimensionnement des ouvrages en palplanches en acier  
A Houy, Imprimerie Quablez, Metz, 1986

Remblais sur argiles molles  
S Leroueil, J P Magnan, F Tavenas, Lavoisier, 1985

Capacité portante et tassements des fondations à partir des essais in-situ  
J Nuyens, P U Bruxelles & Eyrolles, 1973

Dynamique des Sols  
A Pecker, Presses ENPC, 1984

Fondations et ouvrages en terre  
G Philponnat, Eyrolles, 1979

MUR 73  
LCPC/SETRA, 1973

Les Pieux Fores  
LCPC/SETRA, 1976

Réalisation des Remblais et couches de forme,  
Guide Technique dit G.T.R. (2 fascicules)  
LCPC/SETRA, 1992

Recommandations AFPS 1990 (Tomes I et II)  
AFPS, Presses ENPC, 1990 et 1991

Recommandations Clouterre  
Presses ENPC, 1991

## Appendix 11

### SETS OF BOOKS SENT BY SOCIEDAD ESPAÑOLA DE MECANICA DE SUELO Y CIMENTACIONES TO SOUTH AMERICAN ISSMFE MEMBER SOCIETIES.

- Quinto Congreso Europeo de Mecanica del Suelo y Cimentaciones (Abril, 1972) Madrid.
- Memorias del Simposio Nacional sobre Rocas Blandas (Noviembre, 1976) Madrid.
- Memorias del Simposio Nacional sobre Tuneles (Diciembre, 1974) Madrid.
- Simposio sobre "Uso Industrial del Subsuelo" (Abril, 1981) Madrid.
- Simposio sobre Terraplenes, Pedraplenes y Otros Rellanos (Marzo 1986) Torremolinos.
- El Agua y el Terreno en las Infraestructuras Viarias (Noviembre, 1989).
- Geotecnia y Cimientos I: Propiedades de los suelos y de las rocas (1971), por J A Jiménez Salas et al.
- Geotecnia y Cimientos II: Mecanica del suelos y de las rocas (1981), por J A Jiménez Salas et al.
- Geotecnia y Cimientos III: Cimentaciones, excavaciones y Aplicaciones de la Geotecnia (1980) por J A Jiménez Salas et al.

## Appendix 12

### ISSMFE NEWS

Report by Secretary General

### ITEMS FOR ISSMFE NEWS

The experiment of appointing Regional assistant editors has been disappointing as the response from them has been very poor. This highlights the difficulty of getting material for ISSMFE News. For example a note in the December 1992 issue asking for interesting or unusual photographs with some 250 word description has evinced no response. On the other hand, a direct request to Professor Jamiolkowski for an article on Pisa resulted in the excellent article which appeared in Vol 20, No 2, May 1993. Clearly more short articles of this type should be sought. In an effort to improve the flow of material, a letter dated 15 June 1993 was sent from the Secretariat to all Member Societies asking if they could each appoint a suitable person to send items of interest to the Secretariat. The letter listed the sort of items which would be suitable for inclusion in ISSMFE News. Only a small number of positive responses with suggested names has been received, but a further letter has been sent and it is to be hoped that this will in time lead to regular contributions from Member Societies.

## NORTH AMERICA

In response to a request from the President the Secretary General wrote to John Gadsby of BiTech, 18th September 1992, regarding the possibility of distributing ISSMFE News in Canada and USA, but also expressing the view that inclusion of an ISSMFE section in Geotechnical News may be a better solution. There has been an understanding for some years that such a section should be included and ISSMFE News is sent to BiTech for them to extract relevant items. However, BiTech have not always included a specific ISSMFE section.

BiTech quoted a price of about USD 1.00 per copy for inserting separate copies of ISSMFE News into their mailshots. The cost of distributing 6000 copies, four times a year, to members in Canada and USA is thus USD 24,000 or approximately GBP 16,000. This compares with a total budget figure for ISSMFE News of GBP 6,500. The GBP 16,000 represents about GBP 2.70 per member, compared with ISSMFE membership fee which for Canadian and USA members averages barely GBP 3.00 per member.

### **Appendix 13**

#### **ISSMFE AUDITED ACCOUNTS 1991, 1992**

##### **Report by Secretary General**

##### **1 JAN 1991 TO 31 DEC 1991**

The ISSMFE audited accounts for 1991 show an increase in cash balance of GBP 31,212, and a decrease of CHF 43,315. Taking GBP 1 = CHF 2.535 gives a net increase of GBP 18,464 compared with a budgeted deficit of GBP 22,280. It can be seen from the attached summary tabulation of accounts and budget items that subscription receipts exceeded the budgeted amount by GBP 5,806 (probably because it was a Council Meeting year) and other income exceeded budget by GBP 12,398, arising mainly from higher than expected interest rates in the UK for 1991, together with GBP 3,875 from the 1989 World Geoguide. Expenditure was substantially less than budgeted on a number of items, in particular travel and entertainment (GBP 8,119), YGEC (GBP 6,000) as there was no request for any money to support YGEC activities, and staff emoluments and office (GBP 6,900) as the University of Cambridge is not at the moment asking for rental payments on the office space and facilities used by ISSMFE. Corporation Tax exceeded budget by GBP 2,134, which reflected the higher interest received on which the corporation tax is based.

##### **1 JAN 1992 TO 31 DEC 1992**

The ISSMFE audited accounts for 1992 show an increase in cash balance of GBP 10,858 plus CHF 13,354. Taking GBP 1 = CHF 2.2175 on 31st December 1992 gives an increase in cash balance of GBP 16,880. This compares with a budgeted deficit of GBP 11,650.

It can be seen from the summary tabulation of accounts and budget items that subscriptions exceeded the budgeted amount by GBP 2,569 and other income exceeded budget by GBP 4,352, mainly because of higher than expected interest rates.

Office expenses, photocopying, telephone, fax, stationery and postage were a little less than budgeted, but the main items of saving in expenses were travel and entertainment (GBP 11,508 less) and staff emoluments (GBP 7,494 less). Other major savings against budget were GBP 5,000, as no video lectures were made, and GBP 6,000, as there were no requests for YGEC expenditure. The newsletter showed a slightly greater cost than expected (GBP 631) and corpo-

ration tax was GBP 2,066 higher, reflecting higher interest earned. There was also an expenditure of GBP 840 on reproducing slides which was not allowed for in the budget.

#### **SUMMARY OF ACCOUNTS AND BUDGET ITEMS 1991**

RECEIPTS	Actual GBP	Budget GBP	Actual-Budget GBP
Subscriptions	63,806	58,000	+5,806
Other Income	23,398	11,000	+12,398
<b>EXPENDITURE</b>			
Travel and Entertainment	16,881	25,000	-8,119
Photocopying	897	1,500	-603
Telephone, Telex and Fax	1,221	1,320	-99
Stationery	586	700	-114
Postage	2,022	2,000	+22
Auditors Fees & Bank Charges	922	800	+122
List of Members	0	0	0
Newsletter	5,826	6,500	-674
Corporation Tax	4,634	2,500	+2,134
Kevin Nash Medal	0	1,500	-1,500
YGEC	0	6,000	-6,000
Model Library	0	1,000	-1,000
Office Equipment	1,196	1,500	-304
Video Lectures	4,090	4,500	-410
Staff Emoluments and Office Costs	30,100	37,000	-6,900

#### **SUMMARY OF ACCOUNTS AND BUDGET ITEMS 1992**

RECEIPTS	Actual GBP	Budget GBP	Actual-Budget GBP
Subscriptions	70,569	69,000	+2,569
Other Income	17,352	13,000	+4,352
<b>EXPENDITURE</b>			
Travel and Entertainment	13,492	25,000	-11,508
Photocopying	291	1,500	-1,209
Telephone, Fax	1,395	1,450	-55
Stationery	512	700	-188
Postage	1,427	2,000	-573
Auditors Fees & Bank Charges	1,073	900	+173
List of Members	0	0	0
Newsletter	7,431	6,800	+631
Corporation Tax	4,566	2,500	+2,066
Kevin Nash Medal	0	0	0
Office Equipment	889	800	+89
Video Lectures	0	5,000	-5,000
Staff Emoluments and Office Cost	31,506	39,000	-7,494
YGEC	0	6,000	-6,000
Model Library	836	1,000	-164
Slides	840	0	+840

INTERNATIONAL SOCIETY FOR SOIL MECHANICS AND FOUNDATION ENGINEERING

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 1991

	Credit Suisse SFr	Barclays Bank £	Investment Accounts £	University of Cambridge £
CASH BALANCE AT 1 JANUARY 1991	129,381	64,124	101,322	(4,542)
ADD: RECEIPTS				
Subscriptions	148,014	5,418	-	-
Lexicon sales and other publications	-	861	-	-
Travel refund	-	397	-	-
Interest received	-	6,939	11,326	-
World Geoguide	-	3,875	-	-
	<u>277,395</u>	<u>81,614</u>	<u>112,648</u>	<u>(4,542)</u>
LESS: PAYMENTS				
Emoluments and staff costs	-	21,116	-	8,984
Travel and entertainment	-	16,881	-	-
Photocopying	-	-	-	897
Telephone, telex and fax	-	1,183	-	38
Postage	-	-	-	2,022
Stationery	-	353	-	233
Newsletter	-	5,826	-	-
Audit fees	-	799	-	-
Bank charges	313	-	-	-
Corporation tax	-	4,634	-	-
Master videos	-	4,090	-	-
Office equipment	-	1,196	-	-
	<u>313</u>	<u>56,078</u>	<u>-</u>	<u>12,174</u>
ADD: TRANSFERS FROM OTHER ACCOUNTS	-	70,648	-	12,000
LESS: TRANSFERS TO OTHER ACCOUNTS	180,016	12,000	-	-
CASH BALANCE AT 31 DECEMBER 1991	<u>SFr97,066</u>	<u>£84,184</u>	<u>£112,648</u>	<u>£(4,716)</u>
INCREASE/(DECREASE) IN CASH BALANCE	<u>SFr(32,315)</u>	<u>£20,060</u>	<u>£11,326</u>	<u>£(174)</u>

Information: At 31 December 1991 - £1 = SFr 2.5350

Audited by Coopers and Lybrand Deloitte.

INTERNATIONAL SOCIETY FOR SOIL MECHANICS AND FOUNDATION ENGINEERING

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 1992

	Credit Suisse SFr	Barclays Bank £	Investment Accounts £	University of Cambridge £
CASH BALANCE AT 1 JANUARY 1992	97,066	84,183	112,648	(4,716)
ADD: RECEIPTS				
Subscriptions	143,709	5,762	-	-
Lexicon sales	-	355	-	-
Slide sales	-	563	-	-
Travel and postal refund	-	403	-	-
Interest received	-	6,511	9,520	-
	<u>240,775</u>	<u>97,777</u>	<u>122,168</u>	<u>(4,716)</u>
LESS: PAYMENTS				
Emoluments and staff costs	-	21,987	-	9,519
Travel and entertainment	-	13,492	-	-
Photocopying	-	-	-	291
Telephone, telex and fax	-	1,395	-	-
Postage	-	-	-	1,427
Stationery	-	244	-	268
Newsletter	-	7,431	-	-
Audit fees	-	870	-	-
Bank charges	355	43	-	-
Corporation tax	-	4,566	-	-
Model library	-	836	-	-
Office equipment	-	889	-	-
Slides	-	-	-	840
	<u>355</u>	<u>51,753</u>	<u>-</u>	<u>12,345</u>
ADD: TRANSFERS FROM OTHER ACCOUNTS	-	51,842	-	9,000
LESS: TRANSFERS TO OTHER ACCOUNTS	<u>130,000</u>	<u>9,000</u>	<u>-</u>	<u>-</u>
CASH BALANCE AT 31 DECEMBER 1992	<u>SFr110,420</u>	<u>£88,866</u>	<u>£122,168</u>	<u>£(8,061)</u>
INCREASE/(DECREASE) IN CASH BALANCE	<u>SFr13,354</u>	<u>£4,683</u>	<u>£9,520</u>	<u>£(3,345)</u>

Information: At 31 December 1992 - £1 = SFr 2.2175

Audited by Coopers and Lybrand Deloitte.

## Appendix 14

### ISSMFE ORDINARY BUDGET

	YEAR						
	1992 GBP	1993 GBP	1994 GBP	1995 GBP	1996 GBP	1997 GBP	
<b>RECEIPTS</b>							
Member Society							
Subscriptions	63,800	68,000	70,000	70,000	72,000	74,000	
Interest (less Corp. Tax)	11,465	8,000	7,000	7,000	7,500	8,000	
	<u>75,265</u>	<u>76,000</u>	<u>77,000</u>	<u>77,000</u>	<u>79,500</u>	<u>82,000</u>	
<b>EXPENDITURE</b>							
<b>Emoluments &amp; Staff</b>							
Costs	31,507	40,500	42,000	42,000	44,000	44,000	
Office costs & equipment	889	800	7,500	8,000	9,000	9,000	
Photocopying & printing	290	1,600	500	500	600	1,000	
Telephone & Fax	1,396	1,600	2,000	2,200	2,500	2,500	
Postage	1,427	2,200	1,800	1,900	2,000	2,500	
Stationery	510	740	600	700	800	1,000	
Audit fees/Bank charges	1,075	1,000	1,200	1,200	1,250	1,300	
Travel and entertainment	13,090	25,000	38,000	30,000	30,000	30,000	
	<u>50,184</u>	<u>73,440</u>	<u>93,600</u>	<u>86,500</u>	<u>90,150</u>	<u>91,300</u>	
<b>SURPLUS (DEFICIT)</b>	25,081	2,560	(16,600)	(9,500)	(10,650)	(9,300)	
<b>ACCUMULATED SURPLUS ORDINARY &amp; EXTRAORDINARY BUDGETS</b>	253,160	233,420	223,570	217,220	207,470	207,770	

### ISSMFE – EXTRAORDINARY BUDGET

	1992 GBP	1993 GBP	1994 GBP	1995 GBP	1996 GBP	1997 GBP
<b>RECEIPTS</b>						
Corporate Member Subscriptions			4,000	7,000	10,000	10,000
Conference Income			30,000	15,000	10,000	30,000
Royalties: Proceedings/Reports			3,000	3,000	3,000	3,000
Sales of Slides	563	2,000	2,000	2,000	2,000	2,000
Sales of Videos		2,000	500			
Lexicon and other Sales	355	400	500	500	500	500
	<u>918</u>	<u>4,400</u>	<u>40,000</u>	<u>27,500</u>	<u>25,500</u>	<u>45,500</u>
<b>EXPENDITURE</b>						
Conference Support		6,000	15,000	6,000	6,000	6,000
Proceedings and Reports						
Model Library	836	1,000	500	600	700	1,000
Other Initiatives			4,000	5,000	5,000	5,000
Videos		5,000				
Slides	840		1,400	1,400	1,400	1,400
Kevin Nash Gold Medal		0				1,000
List of Members		7,400	2,000			10,000
ISSMFE NEWS	7,431	7,300	9,000	10,000	10,000	10,000
UATI Subscriptions			1,350	1,350	1,500	1,500
	<u>9,107</u>	<u>26,700</u>	<u>33,250</u>	<u>24,350</u>	<u>24,600</u>	<u>35,900</u>
<b>SURPLUS (DEFICIT)</b>	(8,189)	(22,300)	6,750	3,150	900	9,600