

ANNEX I

## LIST OF PARTICIPANTS

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Mr. J.H. CRUCHET, representing the International Organization for Standardization  
Mr. J. GODCHOT, representing the International Social Science Council  
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ANNEX II

SUMMARY OF ACTIVITIES OF THE INTERNATIONAL  
ORGANIZATIONS REPRESENTED AT THE COMMITTEE

United Nations Environment Project (UNEP)

Since the last Advisory Committee meeting, UNEP has prepared a draft Memorandum of Understanding on the Environmental Aspects of Natural Disasters, between UNEP and UNDRR, UNIDO, ILO, Unesco, WHO and WMO. WMO and UNDRR have informed UNEP of their agreement with the content of the Memorandum and UNEP awaits an appropriate response from Unesco. The object of this Memorandum is to strengthen and make more effective the collective efforts of the United Nations system in the environmental aspects of natural disasters.

Simultaneously, UNEP prepared the in-depth Report on Natural Disasters which provides a comprehensive picture of the United Nations system's activities in this field. This report contains a review of significant recent accomplishments, an assessment of current needs, proposals to amend objectives and strategies, and a Work Plan for the whole United Nations system. Within this plan, UNEP intends to co-operate with Unesco in the International Symposium on Earthquake Prediction and in the panel meeting following the symposium.

International Seismological Centre (ISC)

The ISC continued to maintain regular publication of its Bulletin, the Regional Catalogue of Earthquakes, and the Bibliography of Seismology. The Director attended a meeting of experts called by Unesco to discuss plans for a Global Seismic Data Bank, and the Centre's Governing Council and Executive Committee have agreed to the concept of the data bank being incorporated with ISC, provided suitable arrangements can be made for its funding. The Centre is also represented on a IASPEI Working Group set up to advise on the photographic copying of historical seismograms and station bulletins. It is hoped that World Data Centre-A will undertake this work with technical guidance from the United States Geological Survey. The Centre is also co-operating with IASPEI and the United States Geological Survey in drafting an improved code for the reporting of earthquake observations with particular emphasis on giving more information necessary for the determination of earthquake magnitude.

International Standards Organization (ISO)

At the December 1977 meeting of the International Advisory Committee on Earthquake Risk, reference was made to the work of the International Standards Organization (ISO) which now has two technical committees which include in their programmes the study of seismic problems with a view to the preparation of standards. It was noted that these committees cover a wide field, from assembling seismological data to the earthquake-resistant design of conventional buildings and of special structures, such as nuclear power stations. This note is merely intended to up-date the written report submitted to the December 1977 meeting of the Committee.

Probably the most significant addition to the ISO work already in hand was provided in April 1978 on the occasion of the Belgrade meeting of the United Nations/ECE Working Party on the Building Industry ad hoc committee on "Requirements for construction in seismic regions". The meeting proposed that ISO be invited to participate in programmes of work aimed at developing a common

framework, general principles and methods of analysis and calculation which will serve as a basis for the preparation of national codes. Much of the pre-standardization work in this connection will be based on the draft seismic code of the European Association for Earthquake Engineering (EAE). But, whilst the code, when finalized, is primarily intended for adoption by ECE member countries, it may well prove to be applicable on a wider geographical basis. ISO will naturally be interested in, and involved with, this particular aspect.

The United Nations/ECE and ISO programmes, while independent of each other, are complementary in content and follow broadly the same time scales. The proposed collaboration is therefore most welcome and should augur well for future progress in this field.

#### International Social Sciences Council (ISSC)

The ISSC is an international interdisciplinary forum for the analysis and debate of trends and approaches in social sciences research and teaching. Its periodical "Social Science Information" (six issues per year) regularly features articles in the field of human societies and ecosystems, man and his environment, computers and the social sciences, sociology of education, etc. ISSC was founded in 1952 following a resolution adopted at the sixth session of the General Conference of Unesco. The Council consists of regular members (12 disciplinary associations), co-opted members (11) and associate members (11). Among the member associations of ISSC is the International Geographic Union (IGU) founded in 1922, with headquarters in Freiburg (Federal Republic of Germany) and 67 member countries. The International Geographic Union has established a Commission on Environmental Problems, a Commission on Geographical Education (which has met in London and in Argentina in 1978), a Commission on Population Geography, a Commission on Transport Geography and a Commission on the History of Geographical Thought. A regional conference of IGU was held in Nigeria in August 1978.

There is a liaison committee between ISSC-ICSU (International Council of Scientific Union) - ICPHS (International Council of Philosophy and Human Science) and Unesco which has met three times during the year.

#### League of Red Cross Societies (LICROSS)

In relief operations during the period 1965-1975, the League provided 123,688,243 Swiss francs in assistance to disaster victims of earthquakes only. Many other agencies and governments have also provided many millions during the same period. The loss of productivity, the cost of rehabilitation can only be estimated but can be counted in billions.

The League of Red Cross Societies, being an emergency organization, has had only limited direct participation in the field of prevention, being predominantly involved in the field of preparedness and relief. LICROSS emphasizes that preparedness and relief are connected with prevention and that all three must be combined to mitigate the awesome effects of earthquakes. In its role in rehabilitation through reconstruction, the League has been involved in encouraging local Red Cross Societies to follow the prescribed rules and codes in construction of offices and warehouses, such as has been done in Managua. This local Society has constructed an earthquake-resistant building for its new headquarters which were completely destroyed in 1972.

In Guatemala in 1977, temporary emergency housing was financed by the League and built by volunteers. This temporary housing was built, using earthquake-resistant materials and taking care to avoid the fragility of non-reinforced adobe dwellings and brick shingle roofs which were the cause of a great number of deaths in 1976. With the Government of Guatemala, 10,000 one-family temporary shelters of wood and aluminium roofing were constructed. At a later stage, steel/cement-based wooden walls were added for even stronger structures.

International Commission on Large Dams (ICOLD)

One of ICOLD's technical committees concerns itself with the seismic aspects of dam design. The committee ensures that seismic aspects are taken into consideration in the work of the other committees: materials, environmental effects of dams; deterioration. It may also be mentioned that the recent report entitled "La méthode des éléments finis appliquée à l'analyse et à la conception des barrages" (Application of the finite-elements method to the study and design of dams) contains a chapter on dynamic analysis.

The results of the survey on the behaviour of dams subjected to earthquakes and on induced seismicity, which was conducted through the national committees, are at present being analysed and will constitute important working material for question 51, Seismicity and seismic dam design, to be discussed at the ICOLD Congress in New Delhi, India, in 1979.

An initial report is scheduled, covering the findings of the survey, the reports of the technical committee and the reports of the XIIIth Congress.