# 6. Reports of IAEE Activities

Statutes of IAEE
Minutes of Meetings
IAEE Executive Committee
National Delegates

# STATUTES OF THE INTERNATIONAL ASSOCIATION FOR EARTHQUAKE ENGINEERING

Adopted by the Preparatory Committee for Establishing the International Organization on Earthquake Engineering February 20, 1962. Revised: January 1965; January 1966; March 1972; June 1973; April 1974; December 1979; September 1980; July 1984.

### Art. 1 NAME

1-1 The name of this organization is "International Association for Earthquake Engineering" (hereinafter referred to as the "Association"). The initials IAEE may be used as the abbreviated name of the Association.

### Art. 2 OBJECT

- 2-1 The object of the Association is to promote international cooperation among scientists and engineers in the field of earthquake engineering through interchange of knowledge, ideas, and results of research and practical experience.
- 2-2 The Association will accomplish its object by:
  - (a) holding world conferences,
  - (b) interchanging information, and
  - (c) extending technical cooperation.

# Art. 3 MEMBERSHIP

- 3-1 The Association is composed of National Organizations of Earthquake Engineering (defined in Art. 3-3, and hereinafter referred to as "National Organizations") approved for membership by the Executive Committee. The Executive Committee has the right to terminate the membership of any National Organization by a two-thirds majority vote.
- 3-2 Individual members of affiliated National Organizations shall be deemed to be individual members of the Association.

- 3-3 A National Organization is composed of members, individual or corporate, accepted into membership according to the statutes of that particular organization. A member of the Association may belong to more than one National Organization, and these need not include that of his country of residence. A National Organization must have: (a) a Constitution or Statutes; (b) a President, Chairman, or equivalent Executive Officer; (c) a Secretary; and (d) an address for its secretariat. The total membership of a National Organization shall be not less than 8. Only one National Organization from a country shall become a member.
- 3-4 To become a member of the Association, an existing National Organization must send a letter to the Secretary General of the Association, signed by the Executive Officer and Secretary, formally applying for membership and indicating that if accepted the National Organization will do its best to further the object of the Association, to cooperate with it, to abide by its statutes, and enclosing: (a) its Constitution or Statutes; (b) the names of its current officers; (c) the address of the secretariat; and (d) the names of its current members.
- 3-5 Each National Organization shall designate a Delegate and a Deputy Delegate to represent it in the Association. There shall be only one Delegate and Deputy Delegate from each National Organization. The term of office of the Delegate and Deputy Delegate shall be four years, but reappointments can be made. National Delegates shall serve for not more than two successive terms.

### Art. 4 ADMINISTRATION

- 4-1 The authority of the Association shall be exercised through:
  - (a) The General Assembly of Delegates
  - (b) The Executive Committee
  - (c) The Officers

# Art. 5 GENERAL ASSEMBLY OF DELEGATES

- 5-1 The General Assembly of Delegates shall be composed of all Delegates representing National Organizations affiliated with the Association. The Deputy Delegate shall represent the National Organization in the absence of the Delegate.
- 5-2 The sessions of the General Assembly of Delegates shall be presided over by the President of the Association.

- 5-3 The functions of the General Assembly of Delegates shall be:
  - (a) to elect a President, an Executive Vice-President, and Directors according to Art. 5-7;
  - (b) to confirm recommendations for Honorary Members of the Association;
  - (c) to approve the selection of the place of the next world conference according to Art. 5-8;
  - (d) to approve Association policies and procedures;
  - (e) to amend these Statutes according to Art. 11.
- A session of the General Assembly of Delegates shall be held 5-4 during each world conference, at which time Officers and Directors referred to in paragraph (a) of Art. 5-3 shall be elected. A quorum for a session of the General Assembly of Delegates shall be one-half of the National Delegates. Attendance at a session of the General Assembly of Delegates shall include: (a) National Delegates, who alone may vote; (b) Deputy National Delegates, with no voice or vote if the National Delegate is present; (c) members of the Executive Committee, with voice but no vote; and (d) other persons, with no vote, at the specific invitation of the President. If there is no quorum and the General Assembly meeting cannot be held, the business scheduled for the meeting shall be transacted by correspondence. In such a case it shall be the duty of the Secretary General to ensure that the elections to the Executive Committee are held through the post and that the process be completed within six months of the preceding world conference. In such an event, to save time, the formality of seconding names proposed by a Delegate as required in Art. 5-7 shall be waived. Further, in such a case the persons securing the highest number of votes shall be declared elected and the requirement of a majority of votes shall be waived.
- 5-5 At sessions of the General Assembly of Delegates, a majority vote of the Delegates present shall be required on all matters put to vote, unless otherwise provided for in the Statutes.
- 5-6 For matters requiring interim action by the General Assembly of Delegates, decision may be taken by postal ballot. This will require a majority of votes cast for adoption, with the total vote cast at least half of the eligible votes, except as required by Art. 11-1.
- 5-7 The President shall appoint a nominating committee consisting of himself and two former elected Presidents or Executive Vice-Presidents not now serving in that office. This nominating

committee shall submit to the Secretary General no later than one month prior to the session of the General Assembly of Delegates at the world conference a slate of nominations approved by the Executive Committee consisting of one name each for the offices of President, Executive Vice-President. and eight Directors. Additional nominations for these offices may be made from the floor at the General Assembly of Delegates at the world conference by any National Delegate present, to be seconded by another National Delegate. The candidate receiving a majority (more than one half of total votes) shall be elected. When more than two choices are available and none of the choices receives a majority of the votes on the first ballot count, that choice receiving the fewest votes shall be deleted, and a second ballot conducted. The procedures shall be repeated successively until one of the choices receives a majority of the votes. In the event of a tie vote for any office, the President shall cast the deciding ballot.

The General Assembly of Delegates shall select the place for 5-8 the next world conference from a list of candidate countries who have filed with the Secretary General a letter of invitation from the affiliated National Organization. If more than two choices are available and none of the choices receives a majority of the votes on a first ballot count, the choice receiving the fewest votes shall be deleted, and a second ballot conducted. This procedure shall be repeated successively until one of the choices receives a majority of the votes. In the event of a tie vote, the President shall cast the deciding ballot. If at the time of the session of General Assembly of Delegates no valid invitations have been received, a quorum is not present, or a single candidate does not receive a majority, the Secretary General shall arrange for the location of the next world conference by correspondence within a period of six months of the preceding world conference.

# Art. 6 EXECUTIVE COMMITTEE

6-1 The Executive Committee shall consist of the President,
Executive Vice-President, other Vice-President, not more
than eleven Directors, the Secretary General and Consultative
Members. Eight Directors shall be elected by the General
Assembly of Delegates and the three others shall be optionally
selected by the Executive Committee, in order to improve the
geographical distribution of the Directors. Not more than one

- Director shall be from one country. The past Presidents and Honorary Members shall be Consultative Members without vote. In addition the Executive Committee may co-opt any person suitably qualified as Consultative Member without vote.
- 6-2 The secretary General shall be nominated by the National Organization of the country where the Central Office of the Association is located, and shall be confirmed by the Executive Committee. The term of service of the Secretary General shall be at the pleasure of the Executive Committee, subject to reconfirmation at intervals not to exceed six years.
- 6-3 Not more than three members of the Executive Committee, minus the Consultative Members, shall be from any one country. When the Executive Vice-President is not from the country selected to hold the next world conference, the President, after consulting the National Delegate of that country, shall name an additional Vice-President from that country.
- 6-4 Officers and Directors referred to in paragraph (a) of Art. 5-3 shall be eligible for one re-election or reappointment to the same position.
- 6-5 The President shall be Chairman of the Executive Committee.
- 6-6 The functions of the Executive Committee shall be:
  - (a) to transact the business of the Association in accordance with the decisions and policies approved by the General Assembly of Delegates;
  - (b) to decide on admissions and withdrawals from the Association;
  - (c) to assist the National Organization in the host country in the planning of the next world conference;
  - (d) to make recommendations to the General Assembly of Delegates for its approval either in session or by postal vallot:
  - (e) to fill any vacancy in the Officers that may occur between world conferences.
- 6-7 The Executive Committee shall meet during each world conference. During the interval between world conferences, the Executive Committee shall function through correspondence.
- 6-8 Voting of the Executive Committee shall take place according to the relevant provisions of Arts. 5-5, 5-6, and 11-1.

### Art. 7 OFFICERS

7-1 Officers of the Association are:

President

Executive Vice-President

Vice-President, if provided by Art. 6-3

Secretary General

- 7-2 The functions of the President shall be:
  - (a) to preside at meetings of the Executive Committee and at sessions of the General Assembly of Delegates;
  - (b) to act on behalf of the Association in the conduct of the affairs of the Association in accordance with policies and procedures approved by the General Assembly of Delegates.
- 7-3 The functions of the Executive Vice-President shall be to assume the duties of the President in case the President is unavailable.
- 7-4 The functions of the Secretary General shall be:
  - (a) to administer the Central Office of the Association;
  - (b) to maintain the records of the Association;
  - (c) to print and distribute publications of the Association;
  - (d) to keep in trust the money contributed to the Association and to provide an annual accounting of the Association funds:
  - (e) to receive the report of the nominating committee (Art. 5-7) and invitations for world conference location (Art. 5-8).
  - (f) to arrange for minutes of the session of the General Assembly of Delegates at the world conference to be taken and distributed, including records of business transacted, movers and seconders of all motions, including nominations.

# Art. 8 HONORARY MEMBERS

- 8-1 Honorary Members shall be selected on the basis of their distinguished service to earthquake engineering.
- 8-2 The Executive Committee shall nominate Honorary Members, to be confirmed by the General Assembly of Delegates.

### Art. 9 FINANCES

9-1 There shall be no dues nor assessments to member National Organizations of the Association.

- 9-2 Operating expenses of the Central Office of the Association shall be met by the National Organization of the country in which the Central Office is located.
- 9-3 Each National Organization shall be responsible for meeting its own expenses.
- 9-4 Expenses of a world conference shall be met by the host country.
- 9-5 The foregoing shall not preclude any member National Organization from voluntarily contributing to the funds of the Association or to the organizing expenses of a world conference.

# Art. 10 GENERAL

- 10-1 The Central Office of the Association shall be located in the country determined by the Executive Committee.
- 10-2 The official language of the Association shall be English.

### Art. 11 AMENDMENTS

11-1 Adoption of any amendment to the Statutes shall require twothirds affirmative vote of the Delegates present at the session
of the General Assembly of Delegates; or two-thirds affirmative
vote of the Delegates by postal ballot, provided the postal votes
cast shall not be less than two-thirds of the eligible votes. No
vote shall be taken on an amendment to the Statutes until at
least three months have elapsed since the complete text of the
proposed amendment has been distributed to the National
Delegates.

# MINUTES OF THE EXECUTIVE COMMITTEE MEETING OF IAEE

The Executive Committee meeting of the IAEE was held on August 3, 1988, in Room "Unkai" of the New Otani Hotel, Tokyo, Japan, from 15:00 to 17:00.

1. The meeting was opened and presided over by the President, Dr. Hajime Umemura.

### 2. Those present were:

President:

Directors:

H. Umemura

Executive Vice-President: J. Petrovski

Vice-President:

K. Kubo Y. Osawa

Secretary General:

J. Carmona

B. Chandra M. Erdik

G. Grandori A. Hizon J. Kuroiwa

A. Lopez-Arroyo

T. Paulay J. Penzien

Consultative Members:

R.W. Clough R. Flores G.W. Housner D.E. Hudson J. Krishna S. Okamoto

Observers:

T. Katayama G. Rytchagov N. Skladnev

### 3. Adoption of Agenda

The agenda for the meeting was adopted.

4. Report by the 9WCEE Steering Committee Chairman

Dr. K. Kubo, the Chairman of the 9WCEE Steering Committee, briefly reported on matters related to the preparation for the 9WCEE. He commented on the following three items newly adopted in the 9WCEE.

(a) A new topic "Urban Seismic Risk Mitigation, Socioeconomic

Aspects and Human Behavior" was included in the scientific program.

- (b) The Abstract Volumes, which include all accepted abstracts, have been prepared for the convenience of participants and to serve as reference material on present trends in earthquake engineering.
- (c) The Proceedings will be published several months after the Conference to reduce risk of overprinting.
- 5. Report by the President (Appendix I)

Dr. H. Umemura, the IAEE President, delivered a summary report on the activities of the Association during the period from August 1984 to July 1988.

6. Report by the Secretary General (Appendix II)

A brief report of the IAEE Central Office activities prepared by Dr. Y. Osawa, the Secretary General of the IAEE, was introduced by Dr. T. Katayama because of ill health of Dr. Osawa.

7. Approval of the Membership Application from the Icelandic National Society of Earthquake Engineering

The Executive Committee unanimously approved the membership application filed with the IAEE Central Office by the Icelandic National Society of Earthquake Engineering on June 27, 1988. The Executive Committee confirmed that the President of the Icelandic National Society can attend the General Assembly to be held on August 6 as an official National Delegate.

8. Central Office Location and Secretary General Nomination

It was agreed that the Central Office of the IAEE will be located in Japan in accordance with the Japanese invitation made by Dr. K. Kubo, the Vice-President of the IAEE. Following Dr. Y. Osawa's wish to retire from the chair of the Secretary General, Dr. T. Katayama was nominated as the new Secretary General by the Japanese National Organization. The nomination was unonimously approved and confirmed by the Executive Committee.

9. Recommendations of Honorary Members and Consultative Members

The President explained that he had requested the nominating committee consisting of Dr. J. Krishna, Dr. D.E. Hudson and Dr. J. Petrovski to nominate Honorary and Consultative Members to be confirmed by the General Assembly of Delegates Dr. J. Petrovski, the Executive Vice-President, announced the following names;

- Dr. H. Umemura and Dr. R.W. Clough for Honorary Members, and Dr. Y. Osawa and Dr. G.B. Warburton for Consultative Members
- Dr. Petrovski also explained that all other recommendations had been carefully considered.
- 10. Topics to be taken up at the General Assembly of Delegates on August 6, 1988.
  - 10.1 Approval of a Slate of Nominations for New Officers and Directors

The President explained the procedure adopted for nominating new officers and directors by the Nominating Committee consisting of Dr. J. Krishna, Dr. D.E. Hudson and the President himself. The following names were introduced according to the slate submitted by the Nominating Committee:

President:
Executive Vice-President:
Directors:

G. Grandori
A.S. Arya
N.N. Skladnev

B. Chandra M. Erdik L. Esteva

A. Lopez-Arroyo

T. KoboriT. PaulayJ. Penzien

The slate was approved by the Executive Committee to be presented to the General Assembly of Delegates.

10.2 Confirmation of the List of Candidate Countries for  $10\mbox{WCEE}$ 

The following five countries were confirmed to be submitted to the General Assembly of Delegates as candidates for the host country of the Tenth World Conference on Earthquake Engineering: India, China, France, Egypt and Spain.

- 10.3 Progress Report on IDNDR (Appendix III)
- Dr. J. Petrovski, the Executive Vice-President, reported on the development of the International Decade for Natural Disaster Reduction, a program adopted at the 42nd General Assembly of the United Nations in December, 1987 It was agreed that a joint IAEE/IASPEI Committee be formed for the IAEE's stronger commitment to the IDNDR.
- 10.4 Draft of the IAEE Resolution (Appendix IV)

Items 1, II and III of the draft resolution were introduced to be adopted at the General Assembly of Delegates.

### REPORT OF THE IAEE PRESIDENT IN 9WCEE

The following report will summarize the activities of the IAEE since the Eighth World Conference on Earthquake Engineering in July 1984.

# 1. International Decade for Natural Disaster Reduction

The idea of the International Decade for Natural Disaster Reduction was originated at the Eighth World Conference on Earthquake Engineering, and fostered by enthusiastic efforts of scientists and engineers in the field of earthquake engineering. This is an important undertaking for the Association.

Dr. Frank Press, President of U.S. National Academy of Sciences, made a proposal, in his keynote address at the Eighth World Conference on Earthquake Engineering (8WCEE) in San Francisco, to immediately start planning an "International Decade for Natural Hazard Reduction (IDHR)". The Executive Committee and the General Assembly of National Delegates, at 8WCEE, endorsed the proposal under the leadership of the international earthquake engineering community, and recommended a prompt action for implementation. The Executive Committee asked Executive Vice President J.T. Petrovski to lead the IAEE. The complete presentation was printed in the IAEE section of International Journal of Earthquake Engineering and Structural Dynamics (JEESD).

The project has been seriously received in many countries. The idea has been endorsed at several international gatherings on natural disaster reduction, and attracted the attentions of a number of international organizations, such as the International Lithosphere Program, the International Association of Seismology and Physics of the Earth's Interior (IASPEI), the Euro-International Committee on Concrete (CEB), the International Council for Building Research Studies and Documentation (CIB), the International Association for Bridge and Structural Engineering (IABSE), the International Association for Shell and Spatial Structures (IASS), the International Union of Laboratories for Testing and Research for Materials and Structures (RILEM), the Wind Engineering Research Council, the Council on Tall Buildings and Urban Habitat.

The forty-second United Nations (UN) session adopted a resolution in support of the IDNHR program in December, 1987. The proposed resolution, initially co-sponsored by Morocco and Japan, gathered 93 co-sponsors which exceeded 80 votes required to pass a resolution by a simple majority. The resolution designated the 1990s as a decade in which the international community, under the auspices of the United Nations, would pay special attention to fostering international co-operation in the field of natural disaster reduction. The decade is now called "International Decade for Natural Disaster Reduction (IDNDR)".

The IAEE should formulate how to cooperate with the U.N. system to bring the IDNDR program to fruition in the next few years. The IAEE Secretary General and the Executive Vice-President were assigned to contact United Nations.

2. International Strong Motion Array Council (ISMAC)

The IAEE Executive Committee approved the formation of the International Strong Motion Array Council (ISMAC) in 1981 under the chairmanship of Professor W.D. Iwan. The council held three meetings:

1) San Francisco in 1984 during the 8WCEE, 2) Tokyo in 1985 in conjunction with the 23rd General Assembly of the International Association of Seismology and Physics of the Earth's Interior (IASPEI) and 3) Vancouver in 1987 on the occasion of the XIX General Assembly of the International Union of Geodesy and Geophysics (IUGG).

Some of specific tasks have been assigned to sub-committees. Network and Array Design Committee, chaired by Professor J. Prince, was formed in 1984, 1) to survey design principles, and 2) to recommend installation and configuration guidelines for strong-motion arrays and networks. Mobile Arrays Committee, chaired by Professor M. Erdik, was formed in 1984 to discuss ISMAC's option and role for involvement in international mobile arrays. Sub-committee on Minimum Instrumentation Standards for Arrays was formed in 1987, 1) to survey the specifications of digital strong-motion instruments, and 2) to recommend minimum instrument specifications for different array applications. Joint with IASPEI, a working group on the Effect of Surface Geology on Seismic Motion was formed to develop a plan for an international experimental program and to test methods of estimating the effects of surface geology on seismic motion. The first joint meeting was held in Vancouver in 1987.

The Council co-sponsored an international workshop on Strong-Motion Data Processing with IASPEI in Vancouver in 1987, 1) to exchange information on current practice in data processing, and 2) to agree upon standard testing procedures for instrumentation and processing.

The travel expenses of the committee members were partially supported by UNESCO. The assistance is much appreciated.

3. Guideline for Earthquake Resistant Non-engineered Construction
The monograph committee for non-engineered construction, chaired by
Dr. A.S. Arya, started the work of revising the Monograph in 1984. The
committee met in Mexico City in 1985 to discuss the revised manuscript
"Basic Concepts on Seismic Codes: Part 2 on Non-engineered
Construction". The travel grants from UNESCO made the committee meeting
in Mexico City possible. The UNESCO assistance is deeply appreciated.

The monograph, entitled "The Guideline for Earthquake Resistant Non-engineered Construction," was printed in July, 1987, with a financial aid from the Kajima Foundation.

4. Ninth World Conference on Earthquake Engineering
The following tasks related to the organization of the World
Conference have been traditionally been the responsibility of the IAEE
President: 1) to receive and acknowledge abstracts, 2) to appoint
reviewers, and 3) to transmit the reviewed and ranked abstracts to the
Organizing Committee for final decision.

The President received approximately 1,497 abstracts from 45 countries. Upon the request of the President in May, 1987, a total of 74 scientists and engineers from 14 countries agreed to review the

abstracts. Three reviewers were appointed for each abstract. The review committee carefully examined the reviewers' rating, and the decisions were notified to the contact person of each abstract in early January, 1988.

There have been many requests to the President Office for the support of travel funds to attend the 9WCEE. I felt very sorry for not being able to help these people. It may be time to seek some means to meet these requests.

### 5. Earthquake Hazards

Since the 8WCEE, there have been reports of disastrous earthquakes.

A Chilean Earthquake occurred on March 3, 1985. Professor R. Flores Alvarez, National Delegate of Chile, reported that although modern construction behaved quite well, in general, the losses reached nearly 2 million dollars, affecting public works, hospitals, schools and 200,000 dwellings.

A magnitude 8.1 occurred on September 19, 1985, in the west coast of Mexico, followed by a magnitude 7.5 earthquake on September 20, 1985. Two successive earthquakes caused tragetic damages to human lives and properties in Mexico City, located more than 350 km from the epicenter.

On September 13, 1986, an earthquake of magnitude 6.2 occurred approximately 20 km from the city of Kalamata, Greece, and killed 20 persons and injured 300 persons. One five-story reinforced concrete and another five-story apartment buildings collapsed.

An earthquake of magnitude 5.4 hit El Sarvador on October 10, 1986. The epicenter was only 2.2 km south of downtown San Salvador. Approximately 10 mid-rise engineered buildings were either severely damaged or collapsed. Large amplitude accelerations were recorded. About 1,400 people were estimated to be killed and 7,000 injured.

An earthquake of magnitude 6.8 occurred on November 15, 1986, in the sea 40 km to the east of Taiwan. Fifteen persons were killed and 41 were injured. Thirty-six buildings collapsed including three mid-rise buildings.

An earthquake of magnitude 5.9 occurred on October 1, 1987, approximately 20 km to the west of Los Angeles. The earthquake killed six persons.

We want to send our deepest sympathy to those suffered from the earthquakes.

#### 6. The Central Office

The Central Office of the IAEE was supported by Japan Association for Earthquake Disaster Prevention. Dr. Yutaka Osawa has served as Secretary General after the Sixth World Conference on Earthquake Engineering in New Delhi in 1977. The Office was assisted by Professors T. Katayama, T. Minami, and S. Otani of the University of Tokyo in addition to Ms. M. Ohta of Association for Building Research Promotion for secretarial services.

The Central Office has revised and published "Earthquake Resistant Regulations - A World List," which contains the earthquake design load requirements of each countries. The publication may be useful for intended revision of an earthquake resistant design code.

"International Directory of Earthquake Engineering" will be published soon after the 9WCEE, which will contain the national organization for earthquake engineering, and a list of research institutions with their principal contact persons. It is no more possible to list individual names of researchers in the volume.

It is unfortunate for the Association that Dr. Osawa expressed his desire to retire from the Office of Secretary General due to the reason of poor health. On behalf of the Association, I want to congratulate on his excellent services and devotion to the Association. We all owe him an immense debt of gratitude.

### 7. Concluding Remarks

At this time, I want to state my personal views. I have observed the preparation of the Ninth World Conference as the President of the Association and chairman of the Funds Sub-committee under the 9WCEE Organizing Committee. It requires overwhelming efforts to organize this size of the conference. We have reached a stage to review the type of the conference in order to continue the conference.

Toward IDNDR, the association should make active efforts to reduce the earthquake disaster. The association should coordinate different activities of the world in the area of earthquake disaster mitigation. We should propose a fundamental concept for anti-earthquake measures and plans, that may be adopted in various countries and regions.

Finally, I want to express my thanks to all of you. I have been delighted by the assistance I received during my service as the IAEE President.

# REPORT OF THE IAEE SECRETARY GENERAL IN 9WCEE

### 1. General

The last Conference was held in San Francisco during July 21-28, 1984. The Conference was sponsored by U.S. Earthquake Engineering Research Institute. The Steering Committee was headed by Professor Joseph Penzien. More than 1,500 persons registered from 60 countries. The proceedings were published in seven volumes and distributed during the Conference.

The General Assembly of National Delegates and the Executive Committee Meetings were also held in this period at the same place. At the General Assembly of National Delegates, the following Officers and Directors were elected:

President Executive Vice-president Vice-president

Secretary General Directors

H. Umemura (Japan) J. Petrovski (Yugoslavia) K. Kubo (Japan)

Y. Osawa (Japan) I. N. Burgman (U.S.S.R.) J. Carmona (Argentina) B. Chandra (India)

M. Erdik (Turkey) L. Esteva (Mexico) G. Grandori (Italy) A. Hizon (Philippines) J. Kuroiwa (Peru)

A. Lopez-Arroyo (Spain) T. Paulay (New Zealand) J. Penzien (U.S.A.)

The Central Office was approved to locate in Tokyo. Japan was selected as the host country for the 9WCEE at the General Assembly of National delegates. Professor Rodrigo Flores, Professor D.E. Hudson and Professor S.V. Poliakov were recommended by the Executive Committee for Honorary Members.

The IAEE Executive Committee and the Assembly of National Delegates endorsed the idea of an "International Decade for Natural Hazard Reduction" and recommended prompt action for implementation.

During the period of 1984 to 1988, the Association functioned through correspondence and an informal Executive Committee meeting.

### 2. Membership of IAEE

The application for membership was received by the Central Office from three national organizations:

Dr. Mohamed Sobaih, President of Egyptian Society for Earthquake Engineering submitted an application on April 29, 1985.

Dr. Huixian Liu, President of Chinese Association of Earthquake Engineering, submitted an application on September 12, 1985.

Adrian S. Scarlet, Chairman of Israeli Association for Earthquake Engineering (ISAEE) submitted an application on October 28, 1985.

The Executive Committee voted favorably to the applications. We want to welcome the new member countries. The number of IAEE member

countries has grown up to 37. These countries are Argentina, Australia, Austria, Bulgaria, Canada, Chile, China, Colombia, Egypt, El Salvador, Ethiopia, France, German Democratic Republic, Federal Republic of Germany, Ghana, Greece, India, Indonesia, Iran, Israel, Italy, Japan, Mexico, New Zealand, Nicaragua, Peru, Philippines, Portugal, Romania, Spain, Switzerland, Turkey, United Kingdom, Union of Soviet Socialist Republics, United States of America, Venezuela, and Yugoslavia.

A membership application was filed to the Central Office by the Icelandic National Society of Earthquake Engineering with the Statutes of the Society and list of current officers on June 27, 1988. This matter must be dealt with during the Executive Committee meeting.

3. Change of National Delegates

The following changes of National Delegates were notified to the Central Office:

Austria: from Dr. R.L. Grossmayer to Dr. R.G. Flesch,

France: from Mr. J. Despeyroux to Mr. V. Davidovici,

German Democratic Republic: from Dr. P. Bormann to Dr. P. Knoll,

India: from Dr. S. P. Singh to Mr. V. Ramachandran,

Israel during the 9WCEE: Dr. Rosenthal,

Italy: from Dr. G. Grandori to Dr. G. Augusti,

Portugal: from Dr. J.F. Borges to Dr. A. Ravara, U.S.A.: from Dr. M.S. Agbabian to Mr. F.E. McClure,

Venezuela: from Ing. A.E. Olivares to Ing. P. Lustgarten, and

Yugoslavia: from Dr. D. Jurukovski to Dr. P. Fajfar.

### 4. Nomination Committee

The nominating committee, consisting of Dr. H. Umemura, Dr. D.E. Hudson and Jai Krishna, submitted a slate of nominations for the offices of President, Executive Vice President, and eight Directors to the Secretary General. The nomination follows:

For President: Dr. G. Grandori (Italy)

For Executive Vice-President: Dr. A. S. Arya (India)

For Directors: Prof. B. Chandra(India)

Prof. M. Erdik (Turkey)
Prof. L. Esteva (Mexico)

Dr. A. Lopez-Arroyo (Spain)

Dr. T. Kobori (Japan)

Prof. T. Paulay (New Zealand)

Prof. J. Penzien (U.S.A.)

Dr. N.N. Skladnev

# 5. International Journal of Earthquake Engineering and Structural Dynamics

Upon request by the IAEE Executive Committee, the advisory Editorial Board of the International Journal of Earthquake Engineering and Structural Dynamics (EESD) agreed to expand "IAEE news" section and to reserve at least one page in each issue. The IAEE Central Office was assigned to provide the news to the general editor.

At the Advisory Editorial Board meeting in Lisbon on the occasion of the Eighth European Conference on Earthquake Engineering, the journal was reported to publish 8 issues in 1987 to meet an increase in the amount of materials received by the publisher. It was suggested to place

the length limit to future papers. Professor R.W. Clough expressed his desire to retire from the position of General Editor on the occasion of the Ninth World Conference on Earthquake Engineering, and Professor G.B. Warburton agreed to succeed the position for the period 1988-1991.

# 6. Informal Executive Committee Meeting

An informal Executive Committee Meeting was held in Tokyo on September 29, 1986, on the occasion of the International Seminar on Regional Development Planning for Disaster Prevention. Those present were President H. Umemura, Vice President K. Kubo, Secretary General Y. Osawa, Directors L. Esteva, A.O. Hizon, J. Kuroiwa, Consultative Member S. Okamoto, and Observers A.S. Arya, M. Hashizume, Y. Ishiyama, T. Katayama, T. Minami, K. Nakagawa, K. Toki, J.N. Vargas, and R. Yarar. The progresses in the preparation of the Ninth World Conference on Earthquake Engineering, the International Decade of Natural Hazard Reduction, and the work by Monograph Committee were reported.

### 7. Earthquake Resistant Regulations - A World List

"Earthquake Resistant Regulations - A World List" has been revised again on the occasion of the 9WCEE. The Central Office requested National Delegates to furnish information on the status of the regulations in the member countries. It is unfortunate that no response was received from many member countries. Sixteen countries revised the earthquake resistant regulation. Some are unavailable in English.

### 8. Directory for Earthquake Engineering Research

Directory of Earthquake Engineering Research will be revised after the Ninth World Conference of Earthquake Engineering. The directory contains, for each member country, the national organization and officers, a list of institutions working of earthquake engineering research with its principal contact member.

### 9. Financial Report

The expenses to operate the Central Office in Tokyo since April 1984 were as follows:

The Japan Association for Earthquake Disaster Prevention has generously provided the funds.

### 10. Concluding Remarks

Finally, let me add my personal thanks to the Association, to which I have served since the Sixth World Conference on Earthquake Engineering succeeding late Dr. John Kazuo Minami. I feel sorry but I have decided to retire from the Office of the IAEE Secretary General due to my personal reason. There have been much more activities in which I wanted to be of service to the Association. I sincerely wish all of you present in this hall to continue your work, which, I believe, will serve the welfare of the mankind.

Thank you.

# ORGANIZATION OF INTERNATIONAL DECADE FOR NATURAL DISASTER REDUCTION AND POSSIBLE ACTIVITIES OF IAEE

Report of the IAEE Executive Vice-President in 9WCEE

The concept of a cooperative international program to reduce impact of natural hazards and creation of IDNDR, was first presented by Dr. Frank Press, President of U.S. National Academy of Sciences in his keynote address at the Eighth World Conference on Earthquake Engineering in July 1984 in San Francisco. After the Conference, international interest began to build not only with respect to reducing the toll of earthquakes, but also with respect to other natural hazards. Interest in establishing an IDNDR continued to grow and U.S. National Academy of Sciences appointed Advisory Committee on IDNDR under chairmanship of Professor George W. Housner. The Advisory Committee with contribution of Japan, Mexico and Canada prepared an impressive monograph introducing the concept of IDNDR and pointing to opportunities for reducing global risk from natural hazards through the application of science and technology.

With enthusiasm of Dr. Frank Press, President of U.S. National Academy of Sciences, being for the last four years eminent proponent of the idea of creation IDNDR, and under initial co-sponsorship of Japan and Morocco, a resolution was adopted by the Forty-second session of United Nations General Assembly "to designate the 1990's as a decade in which the international community, under the auspices of the United Nations, will pay special attention to fostering international cooperation in the field of natural disaster reduction."

On the request of United Nations Secretary General, International Ad Hoc Group of Experts for IDNDR, composed of 24 high-level scientific experts in the relevant disciplines and government experts in disaster relief operations, has been established to assist Secretary General in planning of the activities and modes of organization of IDNDR. International Group of Experts assisted by Steering Committee of United Nations Agencies, held first meeting in Geneva on 5 - 8 July, 1988, considering ten basic questions of organization of the activities. Three additional meetings will be organized in 1988 and 1989 in United States, Morocco and Japan in order to finalize the activities and their organizational modes to be implemented within IDNDR.

Extending hazard mitigation success to a global level is the obvious objectives of the IDNDR. With extensive participation of United Nations system, the key effort in organizing the activities of IDNDR should be set by coordinated national, bi-lateral, regional and international activities, hoping that each interested nation will declare its own plan of action. With establishment of national committees on IDNDR and efficient regional coordination, rational synthesis of existing knowledge and its practical implementation in mitigation of the risks from natural hazards could be achieved through development of pilot projects on major hazards in each region and thematic pilot projects to transfer scientific and technological achievements and to cover identified gaps. The role of the IAFE in creating, organizing and implementing the results of these pilot

projects for earthquake disaster mitigation on national, regional and international level is of basic importance.

<u>Earthquake</u> <u>Risk</u> <u>Reduction</u> is based on a sequence of studies and actions which can be summarized in the following: earthquake monitoring; earthquake hazard assessment; vulnerability and earthquake risk assessment; earthquake risk reduction through undertaking engineering measures, land use planning, economic and general development planning, legislation, control insurance, public information, education and emergency measures.

In the <u>Developed Earthquake Prone Countries</u>, earthquake hazard is identified with establishment of reliable earthquake monitoring system, appropriate data banks on intensity and frequency of occurrence of the earthquakes, and probabilistic presentation of earthquake hazard in a form of seismic zoning and microzoning for different return periods. Legislative measures and technical regulations are well established based on consistent experimental, theoretical and empirical studies. Engineering measures are consistently implemented for more than 30 years for buildings and structures, transportation and communication systems, lifelines, equipments, etc. Only recently, more consistent methods and techniques are developed for assessment of vulnerability and seismic risk, and rather limited quantifications are made for different elements at risk and their incorporation in land use and development planning process.

<u>Development</u> <u>Earthquake</u> <u>Prone</u> <u>Countries</u> are implementing with limited success developed technologies for earthquake risk reduction mainly due to luck of expertise, limited resources, and discontinuity of the original actions.

Considering an integral implementation of developed technologies for earthquake risk reduction and the need for their further improvement future efforts within IDNDR should be concentrated in the following areas: improvement of earthquake monitoring systems and establishments of reliable data banks and information systems on regional level; establishment of uniform methods and procedure for earthquake damage assessment and its presentation; synthesis of existing knowledge, methods and procedures for implementation of engineering resources, quality-control and legislative measures; establishment of inventory of dominant elements at risk on international and regional level development and better quantification of relevant parameters for assessment of vulnerability and earthquake risk and their presentation to be directly implemented in the planning and decision making process; organization of intensive training of specialists in all fields; development of efficient systems for earthquake preparedness; creation of national systems for public information and continuous education.

Further quantification, verification and practical implementation of the scientific and technological achievements for earthquake risk reduction could be received with organization and development of regional and thematic pilot projects in which IAEE in close cooperation with IASPEI and national committees should concentrate their future efforts.

#### TARE RESOLUTION

1. The IAEE Executive Committee and the Assembly of National Delegates wish to express their great appreciation to the Host Organizations, the Science Council of Japan, the Japan Association for Earthquake Disaster Prevention, and the five academic societies listed below, for the invitation to have the Ninth World Conference on Earthquake Engineering in Tokyo and Kyoto and to the 9WCEE Steering Committee for the excellent planning and execution of this highly successful and fruitful event:

Architectural Institute of Japan,
Japan Society of Civil Engineers,
The Japan Society of Mechanical Engineers,
Japan Society of Soil Mechanics and Foundation Engineering,
and Seismological Society of Japan.

- II. The Executive Committee and the Assembly of National Delegates would like to express their deep appreciation to Dr. Yutaka Osawa, our retiring Secretary General, for his selfless dedication to the promotion of the activities of the IAEE. Without his efforts, smooth management of the Association would never have been possible.
- III. By recognizing the profound importance of the International Decade for Natural Disaster Reduction (IDNDR), which was adopted as an official UN program at the Forty-Second General Assembly of the United Nations held in December, 1987, the Executive Committee and the Assembly of National Delegates express their strong involvement in promoting, organzing and participating in the activities of the IDNDR.
- IV. The Executive Committee and the Assembly of National Delegates expresses their deep appreciations to Professor Emeritus Hajime Umemura, our retiring President, for his selfless dedication to providing outstanding leadership to the IAEE.

# Establishment of Joint Committee on Geotechnical Hazards for IDNDR

Following the resolution of the General Assembly of National Delegates of IAEE at the 9WCEE, and considering the important role of the international non-governmental organizations in promoting, organizing and performing the activities within framework of the International Decade for Natural Disaster Reduction (IDNDR), it is recommended to establish a JOINT COMMITTEE ON GEOTECHNICAL HAZARDS FOR IDNDR tentatively composed of IAEE and IASPEI, and to invite the International Society for Soil Mechanics and Foundation Engineering (ISSMFE) and the International Association of Volcanology (IAVCEI, Working Group in the Mitigation of Volcanic Disasters) to participate in the activities of the Joint Committee for IDNDR.

The Joint Committee for IDNDR could consist of seven members: three nominated by the IAEE, two nominated by the IASPEI, and one each nominated by the ISSMFE and the IAVCEI.

The IAEE Committee on IDNDR as a part of the JOINT COMMITTEE ON GEOTECHNICAL HAZARDS FOR IDNDR is proposed to be composed of the following members:

Professor George W. Housner, Chairman Professor Jakim Petrovski, Member Professor Kenzo Toki, Member

Members of the Joint Committee from IASPEI and their invited international associations (ISSMFE and IAVCEI) will be nominated by their respective associations.



Dr. R. Blazques, Deputy National Delegate from Spain, receiving congratulations on the occasion of Spain being chosen as the Host Country of 10 WCEE



**Executive Committee Meeting of IAEE** 

### MINUTES OF THE GENERAL ASSEMBLY OF DELEGATES

The General Assembly of the International Association for Earthquake Engineering was called to order by the President Dr. H. Umemura on August 6, 1988 in the Room "Tsuru" of the New Otani Hotel, Tokyo, Japan, from 14:00 to 18:00.

- 1. Thirtyone delegates from the following countries were recognized:
  - 1. Argentina
  - 2. Australia
  - 3. Austria
  - 4. Canada

  - 5. Chile 6. China
  - 7. Egypt
  - 8. France
  - 9. German Democratic Republic
  - 10. Germany, Federal Republic of
  - 11. Iceland
  - 12. India
  - 13. Indonesia
  - 14. Iran
  - 15. Israel
  - 16. Italy
  - 17. Japan
  - 18. Mexico
  - 19. New Zealand
  - 20. Peru
  - 21. Philippines
  - 22. Portugal
  - 23. Romania
  - 24. Spain
  - 25. Switzerland
  - 26. Turkey
  - 27. United Kingdom
  - 28. U.S.A.
  - 29. U.S.S.R.
  - 30. Venezuela
  - 31. Yugoslavia

- J. Carmona
- K. McCue\*
- R.G. Flesch
- S.M. Uzumeri
- R. Flores
- H. Liu
- M. Sobaih
- V. Davidovici
- P. Knoll
- G.K. Klein
- R. Sigbjornsson
- V. Ramachandran
- T. Boen
- A.A. Moinfar
- I. Rosenthal
- G. Augusti T. Kobori
- L. Esteva
- R. Park
- R. Torres
- A. Hizon\*
- A. Ravara
- E-S. Georgescu\*
- R. Blazquez\*
- H. Bachmann\*
- R. Yarar
- G.B. Warburton
- F.E. McClure
- N.N. Skladnev\*
- A. Olivares\* P. Fajfar

- \* Authorized Deputy Delegates
- The President reported the retirement of Dr. Y. Osawa from 2. the office of Secretary General and introduced Dr. T. Katayama as the successor. The location of the Central Office in Tokyo, Japan and the appointment of T. Katayama as Secretary General were accepted.

- 3. The President introduced the National Delegate from Iceland, whose application for IAEE membership had been approved by the Executive Committee Meeting on August 3, 1988.
- 4. The Agenda for the meeting was approved.
- 5. Report by the President (Appendix I)

The President outlined his memorandum, the main items of which are as follows:

- (a) IAEE's role in the activities for the 'International Decade for Natural Disaster Reduction'
- (b) A summary of committee activities for the International Strong Motion Array Council and the Monograph Committee on Earthquake Resistant Non-engineered Construction
- (c) Activities associated with the 9WCEE
- (d) A brief summary on major earthquake hazards since 1984
- (e) Recent activities of the Central Office
- 6. Report by the Secretary General (Appendix II)

The Secretary General presented the following items concerning the IAEE matters:

- (a) Officers, Directors and Honorary Members elected at the Executive Committee and the General Assembly during the 8WCEE in 1984.
- (b) Report on IAEE membership
- (c) Change of National Delegates since 1984
- (d) Introduction of the slate of nomination for the new officers and Directors
- (e) Recent development in the publication of 'Earthquake Engineering and Structural Dynamics', and the change of editors
- (f) Report on the Informal Executive Committee Meeting in Tokyo on September 29, 1986
- (g) Revision of the IAEE publications 'Earthquake Resistant Regulations A World List' and 'Directory of Earthquake Engineering Research'
- (h) Financial Report

7. Selection of Place for the Tenth World Conference

The delegates from India, China, France, Egypt and Spain invited the 10WCEE to be held in their respective countries. By ballot of the National Delegates, Spain was selected as the host country of 10WCEE to be held in Madrid in 1992.

- 8. Election of New Officers and Directors
  - (a) G. Grandori from Italy was unanimously elected President.
  - (b) A. S. Arya from India and L. Esteva from Mexico were nominated for the Executive-Vice President; by ballot, L. Esteva was elected.
  - (c) National Organization of Spain nominated A. Lopez-Arroyo for the Vice-President.
  - (d) Eliminating the two elected officers, six names on the slate of nomination were introduced by the Secretary General: They are B. Chandra (India), M. Erdik (Turkey), T. Kobori (Japan), T. Paulay (New Zealand), J. Penzien (U.S.A.) and N. N. Skladnev (U.S.S.R.). Seven persons were nominated from the floor: J. Castro (Philippines), D. Jurukovski (Yugoslavia), J. Monge (Chile), A. Ravara (Portugal), H. Sandi (Romania), S. M. Uzumeri (Canada) and L. Xie (China). As a result of voting the following Directors were elected:
    - B. Chandra (India)
    - M. Erdik (Turkey)
    - D. Jurukovski (Yugoslavia)
    - T. Kobori (Japan)
    - T. Paulay (New Zealand)
    - J. Penzien (U.S.A.)
    - A. Ravara (Portugal)
    - L. Xie (China)

(alphabetical arrangement)

9. Confirmation of recommendations for Honorary Members and Consultative Members

The following Honorary Members and Consultative Members selected by the Executive Committee were introduced and approved by the Delegates:

> For Honorary Members; Ray W. Clough Hajime Umemura

For Consultative Members; Yutaka Osawa Geoffrey B. Warburton

- 10. Progress Report on IDNDR Project (Appendix III)
- J. Petrovski reported on the advancements in activities of the 'International Decade for Natural Disaster Reduction' since 1984, in connection with the United Nations Resolution.
- 11. Adoption of Resolution (Appendix IV)

Three resolutions were read by the Secretary General and were accepted with an additional resolution from the floor; an appreciation for the leadership of the President.

- 12. Reports by the Committee Chairmen
- W. D. Iwan, A. S. Arya and R. W. Clough gave progress reports on the International Strong Motion Array Council, the Monograph Committee for Earthquake Resistant Non-engineered Construction and the Editorial Board for Earthquake Engineering and Structural Dynamics.

### 13. Other Business

- (a) The Canadian delegate made a request that the Central Office shall prepare a format for collecting information on the load factors, material design requirements and other Items to be Included in the 'Earthquake Resistant Regulations A World List'.
- (b) The delegate of the Philippines proposed to award a plaque to Y. Osawa for his services to IAEE as the Secretary General; the expenses should be born by the National Delegates. The proposal was unanimously accepted.
- (c) The Indian delegate gave a short report on the earththquake of 26 April 1988 with epicenter at Dharamasala, India.
- (d) In reply to the question of the delegate from New Zealand, the President stated that the style and procedure of holding the World Conference are in principle to be decided by the national organization of the host country.

# MINUTES OF THE JOINT EXECUTIVE COMMITTEE MEETING OF IAEE

The joint meeting of the old and new Executive Committee of IAEE was held on August 9, 1988 in Room "C-2" of the Kyoto International Conference Hall, Kyoto, Japan, from 17:50 to 18:30.

### 1. Those present were:

New Exec. Comm.	Consultative members	Old Exec. Comm.
President G. Grandori	Consultative members R.W. Clough R. Flores	President H. Umemura
Exec. Vice-President L. Esteva	D.E. Hudson J. Krishna S. Okamoto	Exec. Vice-President J. Petrovski
Vice-President A. Lopez-Arroyo	H. Umemura (new)	Vice-President K. Kubo
Secretary General T. Katayama		
Directors B. Chandra D. Jurukovski T. Kobori T. Paulay J. Penzien A. Ravara L. Xie		Directors J. Carmonoa B. Chandra L. Esteva G. Grandori J. Kuroiwa A. Lopez-Arroyo T. Paulay J. Penzien

2. Introduction of Officers, Directors and Consultative members.

By the request of G. Grandori, the new President, the attendees introduced themselves.

3. Adoption of the Agenda

The proposed agenda of the meeting was adopted.

- 4. Proposed Schedule for IDNDR Project (Appendix V)
- J. Petrovski proposed to establish a Joint Committee on Geotechnical Hazards for IDNDR as an international non-governmental

organization, tentatively composed of IAEE and IASPEI, and to invite the International Society for Soil Mechanics and Foundation Engineering (ISSMFE) and the International Association of Volcanology and Chemistry of Earth's Interior (IAVCEI, Working Group in the Mitigation of Volcanic Disasters) to participate in its activities. The proposal was unanimously approved under agreements that the word 'Geotechnical' covers wide fields of engineering and earth science and that the International Association for Bridge and Structural Engineering (IABSE) should also be invited to join the Committee.

Three members from IAEE to the Committee were nominated:

- $G.\ W.\ Housner\ (U.S.A)$ , Chairman
- J. Petrovski (Yugoslavia), Member
- K. Toki (Japan), Member

### 5. Selection of Board of Directors

The following additional Directors were selected taking geographical distribution of the Directors into consideration:

- J. Monge (Chile)
- N. N. Skladnev (U.S.S.R)
- S.M. Uzumeri (Canada)

### 6. Adjournment of the Meeting

The President expressed his wish to meet all the Executive Committee members at the 10WCEE in Madrid, Spain in 1992 and the meeting was adjourned.

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