

委員会報告 Report on the Activities and Achievements of the International Committee on Concrete Model Code

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ABSTRACT: This report presents the activities and achievements of an International Committee on Concrete Model Code initially established as a research committee by the Japan Concrete Institute in May 1992. The model code being drafted by the Committee is intended to serve as a basis for application in the Asian region taking into account the differences in natural and social environments in each country.

1. INTRODUCTION

A Research Committee on Concrete Model Code for Asia was set up by the Japan Concrete Institute in May 1992 under the chairmanship of Prof Jun Yamazaki of Nihon University to study the feasibility of having a model code for the Asian region. The study revealed that academicians and engineers in the region recognized the need for and supported the idea of having a model code which would be based on the Asian context, i.e. applicable to differences in economical, climatic and cultural environments of the region [1]. A survey on the design and construction practice in concrete work in the Asian region served as background for the framework of the model code [2].

In 1994 the Committee under the chairmanship of Prof Hiroshi Noguchi of Chiba University evolved itself into an international committee independent of JCI though JCI continues to give financial support through the local committee. In this report activities and achievements of the committee are introduced.

2. COLLABORATED INSTITUTIONS AND INDIVIDUAL MEMBERS

Current membership of the Committee consists of representatives from Australia, Bangladesh, Cambodia, China, Chinese Taipei, India, Indonesia, Japan, Korea, Pakistan, Philippines, Singapore and Thailand. The committee activities have also been recognized by the following organizations:

- Association of Structural Engineers of the Philippines (ASEP)
- China Civil Engineering Society (CCES)
- Engineering Institute of Thailand (EIT)
- Indian Concrete Institute (ICI)
- Indonesian Society of Civil & Structural Engineers (HAKI)
- Japan Concrete Institute (JCI)
- Korea Concrete Institute (KCI)
- Sri Lankan Standards Institution (SSI)

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3. MEETINGS

The International Committee executes its business mainly through correspondence. Two meetings per year have been scheduled generally in conjunction with planned events in the member countries. By doing so the committee can introduce the concepts of the model code to academicians and practical engineers participating in such events and at the same time receive their suggestions and comments. Since its formation, the international committee has met on 7 occasions. The details of each workshop are summarized below.

3.1 FIRST WORKSHOP (Tokyo, April 1994)

The Committee held a one day workshop in Tokyo in April 1994 to conclude the first stage of its investigation and discuss its future task. Nearly 100 participants which included international and local members took part in the symposium. A framework for the model code was drawn up.

3.2 SECOND WORKSHOP (Bangkok, December 1994)

During the Second Workshop at Chulalongkorn University, Bangkok, Thailand in December 1994 which was organized by the Engineering Institute of Thailand the concepts for the code were discussed and the following 3 working groups were set up:

- WG1: Design
Coordinator: Prof Toshimi Kabeyasawa, University of Tokyo, Japan
- WG2: Materials and construction
Coordinator: Dr Takafumi Noguchi, University of Tokyo, Japan
- WG3: Maintenance and management
Coordinator: Dr Sudhir Misra, Indian Institute of Technology, Kanpur, India

Each working group consists of members from both the international and local committees. The groups were asked to revise the proposed framework and contents of the model code for presentation at the next meeting.

3.3 THIRD WORKSHOP (Tokyo, March 1995)

The third workshop was held at the Tokyo Metropolitan University in March 1995 at which future tasks of the committee and the time frame for drafting and implementing of the model code was discussed and agreed upon (Table 1).

Table 1 Time frame for drafting and implementing of the model code

Year	1995	1996	1997	1998	1999	2000
Preliminary work	→					
First draft		→				
First draft-revised			→			
Draft I				→		
Draft I-revised					→	
Draft II						→
Adoption						→
Final draft						→
Implementation I						→
Implementation II						→
Implementation III						→

Note: The above time frame was slightly revised from the one originally approved at the Third Workshop

3.4 FOURTH WORKSHOP (EASEC-5, Gold Coast, July 1995)

The East Asia-Pacific Conference on Structural Engineering and Construction (EASEC) meet every other year. At EASEC-5 a special session was assigned to the committee and six papers concerning its activities and the current situation of concrete codes in Asia were presented. At the committee meeting the committee discussed the WG reports and the necessity to involve formal organizations in each member country and region in the committee work.

It was also agreed that future committee meetings, when possible, should be arranged to coincide with EASEC as it serves as one of the best occasions for the committee to discuss its activities among a wider audience.

3.5 FIFTH WORKSHOP (Jakarta, March 1996)

At the Jakarta workshop organized by the Indonesian Society of Civil & Structural Engineers committee members were requested to present papers relating to the Great Hanshin Earthquake (buildings, SRC buildings and bridges); high-rise buildings in the Asian countries and durability of civil engineering structures. The first drafts of the model code were presented by respective coordinators of the 3 working groups.

3.6 SIXTH WORKSHOP (Dalian, October 1996)

The Dalian workshop was organized by Dalian Institute of Technology in October 1996. Besides presenting papers on the recent research activities on concrete engineering in civil engineering in their respective countries, committee members discussed the Revised Draft I of the model code presented by the 3 working group coordinators.

Up to this workshop the committee was able to obtain recognition from formal institutions mentioned in Chap. 2 above.

3.7 SEVENTH WORKSHOP (Hyderabad, March 1997)

This seventh workshop was organized by JNT University, Hyderabad to coincide with an International Conference on Maintenance and Durability of Concrete Structures, March 4-6, 1997. A special session has been allotted to the committee in which the committee Chairman introduced the activities and future tasks of the committee. Progress reports on the drafting of the model code were presented by the 3 WG coordinators.

At the meeting Prof Taketo Uomoto of the University of Tokyo, Prof Ekasit Limsuwan of Chulalongkorn University and Prof Yew-Chaye Loo of Griffith University were elected Chairman and Vice Chairmen of the committee respectively.

3.8 FUTURE WORKSHOPS

August 1997	Jakarta, Indonesia
January 1998	EASEC-6, Taipei
August 1998	IABSE Colloquium, Puket, Thailand

4. PERMANENT BODY

The concept of having a permanent body responsible for the model code was discussed. The