

**Minutes of the 5th National Advisory Committee (NAC) meeting of
the National Information Centre of Earthquake Engineering (NICEE)
held at IIT Kanpur on 01 April 2006**

The meeting was attended by:

Professor Mahesh Tandon, MD, Tandon Consultants Pvt. Ltd., N Delhi **Chairman**
Professor Sanjay G. Dhande, Director, IIT Kanpur
Professor S.C. Srivastava, Dean, Research and Development, IIT Kanpur
Professor C.S. Manohar, Department of Civil Engineering, I.I.Sc. Bangalore
Professor S.K. Deb, Department of Civil Engineering, IIT Guwahati
Mr. Alok Bhowmick, Consulting Engineer, New Delhi
Mr. Santosh Kumar, Department of Telecom, Kanpur
Professor Sudhir K. Jain, Dept of Civil Engineering, IIT Kanpur **Convener**
Professor Bithin Datta, Head, Dept of Civil Engg, IIT Kanpur (Permanent Invitee)
Mr. R. Misra, Librarian, P.K. Kelkar Library, IIT Kanpur (Permanent Invitee)
Professor C.V.R. Murty, Dept of Civil Engineering, IIT Kanpur (Special Invitee)
Professor Durgesh C. Rai, Dept of Civil Engineering, IIT Kanpur (Special Invitee)
Professor Javed N. Mallik, Dept of Civil Engineering, IIT Kanpur (Special Invitee)
Dr. K.K. Bajpai, Dept of Civil Engineering, IIT Kanpur (Special Invitee)
Ms. Snigdha Sanyal, Dept of Civil Engineering, IIT Kanpur (Special Invitee) and
Ms. Snehal Kaushik, Dept of Civil Engineering, IIT Kanpur (Special Invitee)

Representatives of HUDCO, Ministry of Home Affairs, Railway Board, and Department of Atomic Energy could not participate. Mr. Nilesh Shah, Consulting Engineer, Surat had to drop his participation at the last minute and sent his detailed written suggestions for consideration of the Committee.

1. Professor Mahesh Tandon in his opening remarks commended the activities being carried out by NICEE. He suggested that NICEE should highlight the areas where further research and development are critically needed in the Indian context. In particular, he mentioned the following areas:
 - Probabilistic seismic zone maps (with contours of PGA)
 - Seismic microzonation: must develop a common understanding on what is expected in microzonation.
 - Liquefaction potential analysis, e.g., comparison of methods of measurements as per Indian and International standards
 - Non-structural damages, e.g., damage to contents in hospitals, museums, etc.
 - Full scale experimental verification of seismic retrofitting techniques.

Professor Tandon emphasized that a very accurate analysis but with very low quality of hazard quantification has no meaning. Similarly, of late seismic retrofitting methods such as lintal bandage are being used in the country which need good experimental verification.

2. Professor Bithin Datta, Head, Civil Engineering Department, IIT Kanpur mentioned that NICEE is not only popular among the engineers and professionals but the administrators are also aware of NICEE and its activities. He praised the activities undertaken by the NICEE and the important role being played by it. He endorsed the idea of Professor Tandon that NICEE should also provide a direction to the research agenda in our country.
3. Professor S.C. Srivastava, Dean Research and Development, IIT Kanpur expressed his satisfaction on NICEE activities in dissemination of information about earthquake engineering. He felt that NICEE should also have interaction with persons from other departments apart from civil engineering as they can also provide valuable input towards database management and towards communication needs in case of earthquake emergency.
4. Professor Sanjay G. Dhande, Director, IIT Kanpur in his remarks expressed that IITK is very happy to see how NICEE has shaped up, thanks to the leadership provided by Professor Jain and participation of other faculty and staff colleagues. NICEE is disseminating excellent publications and its web site is being frequented by its users. He pointed out that even architects have mentioned to him that they have learnt a lot in the training programmes conducted on earthquake resistant construction by IITK. The complementary activity of NPEEE has done a great job in capacity building of the engineering and architectural colleges. He mentioned that it is a very tough job to change perception of the society and to bring about modifications in the regulatory mechanism of the country.
5. Professor Dhande mentioned that IITK has decided to extend considerable support to earthquake engineering activities by investing in the new pseudo dynamic test facility at IIT Kanpur. Also, with construction of a new building adjacent to the Western Lab Extension NICEE will have considerably more space enabling it to expand its operations.
6. Professor Dhande felt that NICEE must now address a question: what is the future direction for its growth. For instance, can NICEE take on the role of activist organizations such as the Centre for Science and Environment (CSE) and the Tata Energy Research Institute (TERI). Following the examples of CSE and TERI, NICEE could do a proactive job of pushing the agenda of seismic safety in our country and orient itself towards social championship. Professor Dhande pointed out that no other academic institution (including all other IITs) have an organization such as NICEE and he congratulated members of the Advisory Committee and the people associated with NICEE. He assured the Committee that IITK administration will take a positive view of the needs of NICEE.
7. Professor Sudhir K. Jain, Coordinator, NICEE, welcomed all the members, expressed his gratitude to Professors Tandon, Datta, Srivastava and Dhande for their words of encouragement. He then made a presentation on NICEE activities and discussed various issues including statement of accounts and operation of NICEE funds. He pointed out that the NICEE activities are growing at a very fast pace and these require more financial inputs. He hoped that with its organic growth NICEE would emerge as an activist organization giving intellectual leadership to the country towards seismic risk reduction as mentioned by Professor Dhande.
8. Mr. Santosh Kumar suggested that NICEE web site should include information about construction materials appropriate for aseismic constructions (e.g., light weight

partitions). He also mentioned that there is a need to evaluate existing utility buildings like telephone exchanges as per new codes.

9. Mr. Alok Bhowmick remarked that the issues of "practice at site" and "good engineering practices" are yet to penetrate into the vocabulary of professionals and that therefore we have a long way ahead. Hence, NICEE must focus on the professionals and in that sense a top-down approach is perhaps needed, rather than spending too much effort at raising awareness of the masses (bottoms up approach).
10. Professor S K Deb remarked that his vision is that the NICEE web site should be able to cater for needs of all segments of society: academics, professionals, public, school children, etc. In this context he gave the example of USGS web site.
11. Dr. K.K. Bajpai suggested that NICEE may be able to raise some financial resources by seeking subscriptions from consulting firms, for instance, by allowing them to have their own page on NICEE web site, etc.
12. Mr. R. Mishra, Librarian remarked that NICEE has been acquiring books, monographs, and other publications and stocking these in the Central Library. He felt that NICEE should also focus on subscription to journals; for instance, it could subscribe to the electronic journals in such a manner that other interested users of NICEE too could benefit from such subscriptions. He also volunteered to coordinate with the Directors of Libraries in the state governments to see that the NICEE publications are well disseminated through the public library systems of the different states.
13. Professor Tandon informed that Indian Concrete Institute (ICI) tried revenue generation through advertisements on its web site and it has been successful. ICI was typically charging Rs. 10,000-15,000 for advertisement on its web site. He felt that NICEE too could try the same route; for instance, suppliers of base isolators, shock transmission units, testing laboratories for base isolators and STUs, etc may be interested to advertise on NICEE web site.
14. The members endorsed the proposed pricing of the new distance learning products to be released by NICEE.
15. Members suggested that the computer programme RESIST may also be useful to the consulting structural engineers and that NICEE should try and make it available at cost of around Rs 5,000/- for Indian professionals (with an annual maintenance charge of about Rs 1,000/-).
16. The idea of selling NICEE publications through the Indian Buildings Congress was welcomed by the Committee. Mr. Alok Bhowmick suggested that the EERI monograph on Fundamentals of Seismic Protection for Bridges by Mark Yashinsky and M.J. Karshenas can also be sold through IRC. Professor Jain responded that he tried this but did not receive any response from IRC despite oral and written requests and that it will be wonderful if any member of the Committee could coordinate with the IRC in this regard.
17. The efforts of Ms. Snigdha S. Sanyal (IITK) and Prof. Keya Mitra (BESU Howrah) for preparing the new NICEE brochure were acclaimed by the Committee. The Committee encouraged wide dissemination of this brochure.
18. The Committee decided that Professor C.S. Manohar and Professor S.K. Deb will constitute the Committee for deciding the next Best Masters' Thesis Award.

19. Professor C.S. Manohar suggested that the "Literature Review Workshop" be renamed as "Literature Survey Workshop".
20. It was felt that the experimental set ups designed and developed by Prof Manohar and Dr Venkatesh at IISc through NPEEE grant be also acquired at IITK and shown to the participants of the MTech Workshops. It was also suggested that either Professor Manohar or Dr Venkatesh from IISc be invited during the M.Tech. workshop at IIT Kanpur for the demonstration of experiments.
21. It was suggested that NICEE should try and obtain a list of books and publications purchased by different IITs through the NPEEE book grant and put the list on its web site for information of its users.
22. The idea of charging Rs. 5,000/- as deposit for borrowing publications from NICEE was dropped for the time being by the Committee considering logistics issues.
23. It was suggested that videos of experiments could be made and used as teaching tools. The Committee requested Dr. K.K. Bajpai and Professor C.S. Manohar (and his colleagues at IISc) to take the lead on this.
24. The Committee also recommended that in future, in addition to the M.Tech. workshop, NICEE may announce dates of "open house" three or four times a year so that visitors can come and access the NICEE library during those dates.
25. Professor Tandon informed that ICI has about 8000 members and a tie up between NICEE and ICI could be mutually beneficial, for instance: (a) NICEE brochure and products list could be mailed out to all ICI members, (b) ICI may sell the publications and products of NICEE to its members, and (c) if ICI can help raise at least a part of the costs, NICEE could mail out Earthquake Tips to all members of ICI. These suggestions were welcomed by the Committee and Professor Tandon was requested to initiate discussions with the concerned office bearers of ICI on this.
26. The Committee endorsed the idea of a booth by NICEE in the forthcoming National Conference on Earthquake Engineering (NCEE) at San Francisco. It recommended that NICEE should strive to have more such booths in large conferences in India and outside to propagate and showcase its work.
27. The Committee reviewed the financial condition of NICEE and agreed to the following:
 - i. Even though the funding position is satisfactory, considering the growing activities of NICEE efforts must continue to raise funds both for the current expenses as well as for enhancing the endowment corpus.
 - ii. NICEE should continue the policy of voluntary payment for its publications, that is, NICEE should continue to provide the publications free of charge to those who cannot, or do not wish to, pay for the same.
 - iii. Besides approaching major donors, NICEE should continue to seek small donations from its users as was done very successfully last year
28. It was suggested that NICEE web site should have a new feature consisting of "Question of the Week" wherein an expert or a panel of experts pick one question every week and answer it. Such a feature will bring many of the NICEE users to its web site regularly and will eventually lead to building up of a good set of questions and answers.
29. The Committee discussed the letter of Mr. Nilesh Shah, who could not attend the meeting:

- i. The idea of holding an exhibition was welcomed and could be clubbed alongwith a major conference in the country.
 - ii. The idea of sub-centres of NICEE in different cities was also welcomed: a business model needs to be developed for the same and the Committee felt that Mr Shah could provide leadership in this regard by trying a pilot project in Surat or elsewhere in Gujarat.
 - iii. NICEE will be happy to sponsor translation of Earthquake Tips and requested members to help find volunteers. Professor Jain mentioned that the Hindi translation is currently in progress by the Vigyan Prasar, Delhi.
 - iv. The idea suggested by Mr Shah regarding sample drawings / calculations of real projects was discussed in considerable details. Even though the Committee found challenges in implementing such an idea, it was felt that (a) a pilot by Mr Shah could lead the way, and (b) *Question of the Week* (Para 28 above) if implemented may to some extent contribute to meet this need.
30. Professor Manohar volunteered to explore the possibility of collaborations with the NCSI (National Centre for Science Information) at IISc Bangalore; the Committee welcomed the same.
31. Professor Tandon suggested that it could be very useful to develop a 15-20 minute film on Earthquake Safety meant for school children in the age group of 5-10 years. The film may be a modified version of an internationally available video. The earthquake experts could visit the schools, show the film and answer the questions/queries of the children.

The meeting ended with vote of thanks to Professor Mahesh C. Tandon for chairing the meeting.

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Sudhir K. Jain
Convener, National Advisory Committee, NICEE

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Professor Mahesh C. Tandon
Chairman, National Advisory Committee, NICEE