

Minutes of the 6th National Advisory Committee (NAC) meeting of the National Information Centre of Earthquake Engineering (NICEE) held at IIT Kanpur on 05 April 2007

The meeting was attended by:

Professor Mahesh Tandon, MD, Tandon Consultants Pvt. Ltd., N Delhi **Chairman**
Professor Sanjay G. Dhande, Director, IIT Kanpur
Professor Kripa Shanker, Dy 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
Mr. Alok Bhowmick, Consulting Engineer, New Delhi
Mr Malay Chatterjee, Executive Director, HUDCO, Chandigarh
Mr Piyush Agarwal, Executive Director, RDSO, Lucknow
Mr K K Vaze, Head, Reactor Structures Section, BARC, Mumbai
Professor Sudhir K. Jain, Dept of Civil Engineering, IIT Kanpur **Convener**
Professor CVR Murty, Head, Dept of Civil Engg, IIT Kanpur (Permanent Invitee)
Mr. R. Misra, Librarian, P.K. Kelkar Library, IIT Kanpur (Permanent Invitee)
Professor Keya Mitra, Dept of Architecture, BESU Howrah
Professor Durgesh C. Rai, Dept of Civil Engineering, IIT Kanpur (Special Invitee)
Dr Amit Prashant, Dept of Civil Engineering, IIT Kanpur (Special Invitee)
Dr. K.K. Bajpai, Dept of Civil Engineering, IIT Kanpur (Special Invitee)
Dr Ajanta Sachan, Dept of Civil Engineering, IIT Kanpur (Special Invitee)
Mr. Hemant Kaushik, Dept of Civil Engineering, IIT Kanpur (Special Invitee)

Professor S.K. Deb (IIT Guwahati), Mr Nilesh Shah (Consulting Engineer, Surat), and representatives of Dept of Telecom, Ministry of Home Affairs, and Department of Atomic Energy could not participate.

1. Introductory Remarks:

- a) Professor Sudhir K Jain welcomed all the members. He particularly mentioned his gratitude to Mr Malay Chatterjee for his enthusiasm since this is the first time HUDCO representative was able to attend the meeting even though HUDCO was the first organization to provide funding for NICEE.
- b) Professor Mahesh Tandon in his opening remarks commended the activities being carried out by NICEE. He suggested that NICEE should proactively launch a *distance learning* programme in earthquake engineering, and take up activities to sensitize and inform the school children about earthquake risk and protection against earthquakes.
- c) Professor Kripa Shanker, Dy Director, IIT Kanpur in his opening remarks pointed out that the NICEE gives enormous visibility to the Institute. NICEE is doing a very good job of bringing the fruits of earthquake engineering to the people to protect themselves against disastrous earthquakes. He agreed with the NICEE's philosophy that in many instances the concerned people need to be sent information even without them having to ask for it: they need to know the significance of information before they would be asking it.

- d) Mr Malay Chatterjee, Executive Director, HUDCO in his opening remarks highlighted the importance of capacity building for safer constructions. He discussed the numerous disaster-resistant demonstration houses and schools built by HUDCO along the coast of Orissa, and hundreds of Building Technology Centres established by HUDCO across the country. He felt that it is critically important that such Building Centres be sustained, strengthened and utilized for capacity building.
- e) Professor Sanjay G. Dhande, Director, IIT Kanpur in his remarks congratulated NICEE and the team behind it for an outstanding work. He agreed with the thoughts of Mr Tandon about the importance of distance learning and mentioned that IITK in general is very enthusiastic about distance learning. He assured the Committee that IITK will continue to enthusiastically support NICEE activities and is looking forward to early commissioning of the pseudo-dynamic test facilities in the Institute.
- f) Mr. Alòk Bhowmick remarked that while a lot has been done by NICEE, much remains to be done and NICEE has a long journey ahead. He pointed out that it is not only the issue of educating and sensitizing the masses, but even the professionals need to be addressed. There is a considerable gap in the knowledge of our professionals with respect to state-of-the-art.
- g) Mr Vaze expressed an appreciation for the work being done. He pointed out need to direct some efforts at the safety of mechanical equipment and systems. He informed the Committee about the data collection on actual performance of equipment during past earthquakes being undertaken by the nuclear industry currently. Experience based database can be critically helpful for qualification of many equipments.
- h) Dr. R. Mishra, Librarian remarked that UP now has a Library Legislation in order to promote the libraries. This channel could be effective in taking the information related to earthquakes to our schools. He informed the committee that as per information from the library records, about 862 visitors utilized the NICEE collections in the Central Library in the last two years.
- i) Dr Ajanta Sachan offered to volunteer her efforts towards any work that NICEE may like to undertake towards sensitization and education of school children about earthquake safety.
- j) Mr Piyush Agarwal felt that NICEE is doing an excellent job and that it will be good if there could be more effective coordination between NICEE and the different training schools of Indian Railways (e.g., IRICEN at Pune, and Staff College Baroda). The curricula of these training institutes need to be modified to include earthquake engineering principles. He also felt that the railway codes for earthquake forces need revision.
- k) Professor Keya Mitra desired that NICEE should undertake activities directed at architectural students, and develop a programme wherein the students could bring their final year thesis projects to NICEE for a review and guidance. [This suggestion was later taken up for further discussion.]
- l) Professor S.C. Srivastava, Dean Research and Development, IIT Kanpur mentioned that when he visits other engineering colleges/ institutions, he hears about the work being done by NICEE which is heartening. He felt that it is important that the common people be told not only about the problem but also about the solution for safer constructions. He pointed out the need to ensure that not only the buildings, but also the electrical and mechanical equipments are safe.

2. Professor Sudhir K. Jain, Coordinator, NICEE, expressed his gratitude to all the members 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 (a copy of his presentation and the accounts information was circulated to all members). Main highlights of his presentation were:
- a) NICEE has just launched a new periodical *Earthquake Engineering Practice*.
 - b) Besides a good number of new publications (with voluntary nominal price), a number of new distance learning products were launched and distributed during the year: the latter became a source of substantial income for NICEE. Total sales receipt during the year was about Rs 9.2 lakhs which is more than three times that of the previous year.
 - c) Several projects on translations into Indian languages are now in the process.
 - d) During the year, NICEE set up stalls/booths in a number of major conferences around the country (Delhi, Bangalore, Calcutta, Ahmedabad, Mumbai, Chandigarh, Guwahati and Surat) and in San Francisco. These booths provided some visibility to NICEE.
 - e) During the year, NICEE organized along with Indian National Academy for Engineering (INAE) a National Seminar on Engineering Response to Hazards of Terrorism, first such event in the country.
 - f) The total spending during the year by NICEE was about Rs 35 lakhs (40% higher than about Rs 25 lakhs during 2005-06). The break up for this was: 26% from sales, 20% from special projects, 41% from sponsorships, and the balance 13% from the interest income of the endowment. He pointed out that the donation of Rs 5 Lakhs by Computers and Structures Inc (India) in early part of the financial year was critical in scaling up the activities.
 - g) He pointed out that the NICEE activities are growing at an annual compound rate of about 40%.
 - h) NICEE has made a job offer to Comm. Suresh Ailawadi who took early retirement from Indian Navy and that he is expected to join shortly. It is expected that with his joining, it will help NICEE scale up its operations further.
 - i) The National Programme on Earthquake Engineering Education (NPEEE) has come to an end on March 31, 2007. NPEEE had been a considerable source of support, sponsorships and projects for NICEE. Hence, the year ahead will pose a major financial challenge to NICEE for sustaining its current level of activities.
3. Pending Follow up Actions of the Last Meeting
- a) Mr Bhowmick agreed to follow up with IRC once again if they would agree to distribute the NICEE publications, particularly the monograph by Yashinsky. If it still fails, the action item will be dropped.
 - b) Mr Tandon mentioned that the new person at the helm of affairs at ICI (Dr Krishna) is very dynamic and agreed to follow up with Dr Krishna if ICI could be persuaded to distribute and disseminate NICEE publications. Letter in this regard may be sent by NICEE to ICI with copy marked for his attention.
 - c) The Committee discussed the format of the Question of the Week and decided to encourage NICEE to proceed with it. A concern was expressed by Mr Bhowmick

that many questions on the SEFI discussion forum remain unanswered and that there is a need to proactively address this issue.

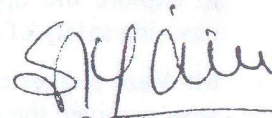
- d) Dr Manohar agreed to pursue with NCSI Bangalore as to what kind of collaborations are possible with NICEE.
- e) Dr Ajanta Sachan offered to take the lead for creation of a film on earthquake safety targeted at school children.
4. It was suggested that the current web site of NICEE should provide special corners for special interest groups. For instance, there could be a corner for the architects wherein all the materials targeted at them could be accessed. Similarly, there could be another corner for school children. Professor Murty volunteered to take this up.
5. Mr Chatterjee suggested that
 - a) NICEE may send a proposal to AICTE (attn Prof Damodar Acharya) with a copy to Mr Chatterjee seeking a large grant for a roving seminar in different cities, and that he will be happy to push AICTE for the same.
 - b) NICEE may submit a proposal to seek grants for publications etc to Dr Mohanty of Mission Directorate of JNNURM. He agreed to provide a copy of the guidelines of JNNURM to NICEE for the purpose and to help push the proposal.
6. The Committee felt that the Literature Survey Workshops are playing a very important role and should continue. The Committee reviewed the *Open House* organized this year for the first time and felt that it could be made to open not only to the students but also to professionals.
7. The Committee recommended that two activities be undertaken focused on architecture students:
 - a) An annual workshop be developed wherein the final year students of architecture from different colleges could bring their design projects and seek the advice and guidance of experts on earthquake resistant features in a studio environment.
 - b) NICEE may collaborate with National Association of Students of Architecture (NASA) such that lectures be delivered by experts on earthquake safety aspects in the NASA convention, and a NICEE sponsored award be given out to the student whose final year project is judged as outstanding for earthquake resistant features.
8. Mr Piyush Agarwal agreed to send out a circular to the railway engineers regarding the publications of NICEE and about the NICEE's new periodical.
9. Mr Tandon suggested that separate advertisements/announcements for NICEE periodical and NICEE publications may be made in the journals *Indian Highways*, and *The Indian Concrete Journal*. He offered to push these and other journals to announce NICEE information free of charge. Appropriate announcement may be sent to him for further action.
10. Professor Keya Mitra offered to find someone to translate IITK-BMTPC Earthquake Tips into Bengali.
11. It was felt that there is a need for some high quality material at a level even much lower than that of the EQ Tips: this is to be targeted at the grass roots level. For instance, Mr Piyush Agarwal felt something that could simply tell how to bend the bars; this could be easily done by reducing the text in EQ Tips. Professor Murty agreed to consider taking up such an effort.

12. Mr Vaze mentioned about the Indian Nuclear Society and offered to distribute information about NICEE and its publications to the membership of Indian Nuclear Society. Mr Hemant Kaushik was requested to work with Mr Vaze on this agenda.
13. The Committee felt that just as NICEE has recently been interested in the agenda of engineering response to hazards of terrorism, another important and connected area for intervention by NICEE is fire safety. It encouraged the Coordinator to pursue the options and possibilities in this area.
14. It was suggested that an internet based quiz on earthquake safety be organized for the school children. The top ranking children could then be invited to IITK and a final selection based on live performance in IITK. Dr Amit Prashant suggested that as an initial try Kanpur-based Physics teachers could be called to spend a day at NICEE and given books and reading materials. They could then go back to the schools and deliver the information to the students and conduct the quiz. Dr Murty volunteered to explore the possibilities.
15. Dr Durgesh Rai pointed out that while NICEE web site and publication/products list has a lot of substantial technical material, it still lacks *public policy on seismic safety* related materials. He suggested that NICEE may like to proactively look for elementary materials on public policy, since that is emerging as a big challenge in the developing countries wherein the decision makers do not fully understand the issues involved. Possibly a monograph could be developed authored by several experts. Dr Jain agreed to explore the options and also to see if one could use the *Beijing Document* for ensuring safety of communities.
16. Mr Vaze suggested that NICEE should also highlight the success stories in terms of what survived the earthquake and not just on the failures.
17. The Committee discussed the *Visiting Scholars Programme* suggested by Dr K K Bajpai and felt that this programme can indeed be very effective (it was said, it could be even better than the *Open House*). The Committee encouraged the Coordinator to launch the same.
18. The Committee felt that a few individuals who make extra-ordinary contributions to the functioning of NICEE may be mentioned in the *Annual Report*.
19. The Committee approved the Theses Awards for the 2003 Workshop as follows and congratulated the candidates. The Committee for selection of 2004 awards shall consist of Dr C S Manohar, Dr S K Deb, and Sri Hemant Kaushik.
 - a) Best Thesis:
Rohit Y Thawre, VNIT Nagpur
 - b) Certificate of Merit:
R Amuthasheela, College of engineering, Guindy
M Sunil, SJCE, Mysore
S Kiran, SJCE, Mysore
J P Shah VNIT, Nagpur
20. The Coordinator mentioned the leading role played by Late Professor N C Nigam in creation of NICEE and the current campaign by the family and friends of Nigam to raise funds for creation of a faculty chair at IIT Kanpur. The Committee felt that as a mark of gratitude towards the contributions made by Professor Nigam towards earthquake engineering generally and NICEE particularly, a contribution of Rs 1 lakh

be made this year and a similar amount next year from the interest income of NICEE endowment fund towards the Nigam Memorial Fund.

21. The Committee discussed the financial situation for next year in light of the closure of NPEEE support. It encouraged the Coordinator to pursue the following channels to continue the momentum gained by NICEE:
 - a) Push the sales income from publications and products. Develop souvenirs and mementoes.
 - b) Write more proposals for funding of specific activities.
 - c) Utilize donations of 2007-08 towards the current expenditure rather than taking these into the endowment.
 - d) Utilize the accumulated interest income in the endowment.
22. The Committee also encouraged the Coordinator to explore the possibility with the original promoters (Railway Board, HUDCO, Telecom Commission, Ministry of Agriculture and the BRNS) for a further enhancement of support to NICEE in view of its excellent performance.

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



Sudhir K. Jain
Convener, National Advisory Committee
National Information Centre of Earthquake Engineering