

# Minutes of the 7<sup>th</sup> National Advisory Committee (NAC) meeting of the National Information Centre of Earthquake Engineering (NICEE) held at IIT Kanpur on 23 Apr 2008

The meeting was attended by:

- Prof Mahesh C. Tandon, Tandon Consultants Pvt. Ltd., NDelhi (Chairman)
- Dr. Kripa Shankar, Dy. Director, IIT Kanpur
- Dr. K. Muralidhar, Dean, Research and Development, IIT Kanpur
- Sri HS Kushwaha, Head, Reactor Safety Division, BARC, Mumbai
- Sri Alok Bhowmick, Consulting Engineer, New Delhi
- Dr. Sudhir K. Jain, Department of Civil Engineering, IIT Kanpur (Convener)
- Dr. CVR Murty, Head, Department of Civil Engineering, IIT Kanpur
- Dr. Shailesh Agrawal, Executive Director, BMTPC, New Delhi
- Sri Alok Srivastava, Country Manager, Cengage Learning India Pvt. Ltd., N Delhi
- Ar. Balbir Verma, Past President, Indian Institute of Architects, New Delhi
- Prof Amit Bose, Director, Design and Development Forum, New Delhi
- Prof Keya Mitra, Bengal Engineering and Science University, Howrah
- Dr. Dheeraj Sanghi, Head, Prabhu Goel Research Center for Computer and Internet Security, IIT Kanpur
- Prof R. Pradeep Kumar, IIIT Hyderabad
- Sri Hari Kumar, Geo Hazards International, New Delhi
- Dr. Durgesh C. Rai, Department of Civil Engineering, IIT Kanpur
- Dr. Javed Malik, Department of Civil Engineering, IIT Kanpur
- Dr. Amit Prashant, Department of Civil Engineering, IIT Kanpur
- Dr. KK Bajpai, Department of Civil Engineering, IIT Kanpur
- Dr. Ajanta Sachan, Department of Civil Engineering, IIT Kanpur
- Cdr Suresh Ailawadi, Retd., NICEE, IIT Kanpur

Prof CS Manohar (IISc Bangalore), Prof SK Deb (IIT Guwahati), Mr. Nilesh Shah (Consulting Engineer, Surat), Mr. Malay Chatterjee (HUDCO, Chandigarh), Mr. V. Roy (HUDCO, New Delhi), Prof SA Aggarwal (Dean RPG), and representatives of Dept. of Telecom, Ministry of Home Affairs, and RDSO Lucknow could not attend the meeting.

## 1. Introductory Remarks:

- 1.1. Dr. Sudhir K. Jain welcomed all the members and expressed his gratitude to all present for sparing their valuable time to attend the meeting. He pointed out the importance of the annual meeting of the Advisory Committee and how the past six meetings have made critical contributions to the growth of NICEE. In the past, the meeting used to be held during post-lunch session only. Since this year the agenda was fairly large, it was decided to hold a full-day meeting and he thanked everyone to have agreed to the same. He requested all present to introduce themselves and after the introductions, Dr. Jain briefly mentioned the important contributions of some of those present towards NICEE.
- 1.2. Dr. Kripa Shankar, Dy Director (and Acting Director) welcomed all present on behalf of IIT Kanpur. He pointed out that earthquake engineering is a question of life and death. He mentioned that it is a privilege for the Institute

8265



to host a Centre such as NICEE. He has seen the huge progress made by NICEE over the years and felt that the quality and richness of the publications coming out from NICEE has been continuously improving.

- 1.3. Professor Tandon in his opening remarks mentioned that NICEE was doing a wonderful work and that the entire IITK administration must be congratulated for being so supportive of the Centre. He commended the presence of several architects in the meeting and the manner in which they were working closely with NICEE. He felt that the building form (shape, size etc) is undergoing a tremendous change in some of the present-day constructions in our country. Even in smaller towns such as Jabalpur and Lucknow, one is seeing construction of some very tall buildings. It is important that while adopting new building forms, we do not forget the seismic safety issues and therefore the architects are an extremely important link in the chain for seismic safety.

## **2. Review of the Year 2007-08:**

Dr. Jain then went on to make presentation on the NICEE activities during the year 2007 – 08 and discussed various issues including Statement of Accounts and the state of NICEE funds. Some of the highlights of the year include:

- 2.1. Funding is now available for research and outreach in earthquake engineering from the Poonam and Prabhu Goel Foundation at IITK. This is having considerable impact on scaling up the efforts of NICEE.
- 2.2. When search is made for "earthquake engineering", NICEE web site is first on [www.google.co.in](http://www.google.co.in) and seventh on [www.google.com](http://www.google.com).
- 2.3. NICEE distributed more than 10,000 items of monographs/CDs etc during the year. In addition, ~7,000 copies of the periodical (Earthquake Engineering Practice) were distributed. The periodical has received an excellent response with current subscriber base of ~1800 persons; most (99%) of these are free-subscriptions.
- 2.4. Marathi translation of EQ Tips has been completed, and Hindi translation is nearing completion.
- 2.5. The mailing list of NICEE is growing at a rapid pace; as of April 21, 2008 it stands at 7919, compared to 4993 in March 2007. The target is to have 10,000 subscribers by April 2009.
- 2.6. Significant efforts have been initiated to engage the students of architecture towards earthquake safety. Lectures and quizzes at NASA Convention in Bhopal (December 2007) and the SAARCH Conference in Delhi (March 2008) were extremely successful. A new brochure has been created on publications meant for architects and mailed out to about 10,000 architects to sensitize them on their role in seismic safety. He acknowledged the tremendous help, support and participation of Prof Keya Mitra, Prof Amit Bose and Ar Balbir Verma towards these efforts.
- 2.7. A major initiative was undertaken to propagate "confined masonry" as a construction typology, considering its good seismic performance. NICEE has brought out a new monograph on the same by Dr Svetlana Brzev, and an international workshop was hosted at IITK in January 2008. He

Suf



acknowledged the financial support from EERI, WSSI and the Prabhu Goel Foundation at IITK for the workshop. Follow up actions will be taken during the Beijing Conference scheduled to be held in Oct 2008.

- 2.8. The sales of monographs during the year were Rs 6.1 lakhs (against Rs 9.2 lakhs the previous year) with median sale of Rs 400, and average sale of Rs 1160. He expressed gratitude to Prof Pradeep Kumar for his extraordinary initiatives to push the sales of NICEE publications in Andhra Pradesh.
- 2.9. Donations received during the year totaled ~Rs 7.0 lakhs from 128 donors (median donation Rs 2,000, average donation Rs 5,460), as compared to 114 donors the previous year who contributed Rs 11.5 lakh (there was a single donation of Rs 5 lakh from Computers and Structures Inc). Since inception, NICEE has received ~ Rs 30 lakh donations from ~302 donors (besides the original sponsors) indicating tremendous appreciation of NICEE's work by the professional community in India and overseas.
- 2.10. The total spending during the year was ~Rs. 40 Lakhs (~Rs 35 lakhs the previous year). This was covered as follows: sales (15%), special projects (17%), sponsorships (14%), interest income (12%), borrowing against future (22%), and Poonam and Prabhu Goel Foundation (20%).

### **3. General Remarks (on the Presentation and Past Year Activities):**

- 3.1. Ar. Balbir Verma commended the presentation by Professor Jain and appreciated the efforts put in by all to sustain the activities of NICEE. He also appreciated the way Advisory Committee minutes are recorded; a reading of the last meeting's minutes enabled him to develop a good appreciation of the entire effort. He felt that NICEE should focus on helping other developing nations, more so the SAARC nations. He mentioned that after the SAARCH Conference in Delhi, IIA had purchased the left over publications of NICEE and is currently distributing the same to its chapters in the country for wider publicity. He promised an all out support to NICEE from the architect fraternity.
- 3.2. Mr. Alok Bhowmick stated that the progress of NICEE during last seven years was quite visible. However, the penetration at school level should be taken up more forcefully through Internet based quiz and exams on the pattern of NSTS, Math Olympiad, etc. He also stressed the need for capacity building of professionals through training programs/ seminars at the regional level.
- 3.3. Mr. Alok Srivastava in his opening remarks made several suggestions:
  - a) NICEE must focus on three fronts: (i) wide distribution (some of it free) of quality information to different stakeholders, (ii) branding and positioning of NICEE, and (iii) sustenance through appropriate commercial viability.
  - b) For the penetration at school level he recommended approaching the CBSE chairman for introducing this subject at an appropriate level. NICEE could then create a curriculum and resource materials and provide it to established publishers for wide sales. This will enable NICEE to not only make a contribution but will also help it in branding.
  - c) Create a programme for memberships of NICEE.

8/25



- d) Create a "guidelines for builders for earthquake resistant constructions", following which builders could carry out due diligence in their respective projects.
  - e) Create a certification programme wherein NICEE could certify certain buildings to be safe from seismic view point.
  - f) Publish running articles (say weekly) in the vernacular dailies on the earthquake safety concepts which could be easily assimilated by the masses.
  - g) For branding purposes, monographs from NICEE should come out under "NICEE Press" brand.
- 3.4. Prof Amit Bose opined that we should also take up sensitization of policy makers. More often than not, the policy makers are not even aware of the impending danger of the kind of construction which is taking place in the country. When they are apprised of the same they may be willing to make necessary amends to the laws and enforcement. Prof Tandon felt that in the current age, media often governs the policies and the actions. Sometimes one single article in a newspaper or a single interview on a TV Channel may make a big difference. Ar Verma wondered if BMTPC would like to sponsor a media campaign to educate the masses what is meant by "earthquake resistant"; currently there is a lot of disinformation with advertisements claiming a certain brand of steel or cement to be good for earthquakes. Dr Shailendra Agrawal agreed to consider the same. It was felt that NICEE should try to engage a prominent member of the media in its efforts towards information dissemination about seismic risk and safety.

#### **4. Initiatives Towards Architects:**

- 4.1. Professor Jain pointed out that in the last meeting, it was decided to focus on the students of architecture in view of the fact that the NPEEE had earlier focused on the faculty of architecture. Considerable success was achieved towards this during the year.
- 4.2. Prof Keya Mitra briefed the positive impact which NICEE's presence had during NASA 2007 event at MANIT, Bhopal and that she continues to receive emails from some of the participants of the NASA event. The students were very enthusiastic and actively participated in the quiz based on Earthquake Tips. ~1000 students registered at the NICEE booth (and received free copy of EQ Tips) and 125 students submitted the answers to the first phase of the quiz. Of these, 24 students were selected to form 6 teams of 4 participants each and the quiz was actively contested. The following team won the cash award (Rs 5,000) and the certificate:
  - Mr. Dinesh B. Thakur, LS Raheja College, Mumbai
  - Mr. Ankit Garg, Appejay, Greater Noida
  - Mr. Abhishek Kumar, NIT Patna
  - Ms. Jiss Aleysa Job, SRM College Chennai.

sub



- 4.3. Prof Mitra mentioned that the student response in the quiz in SAARCH Conference was not as good as in NASA Convention because the time available to the students for preparation was less in Delhi event. The cash awards totaling Rs 10,000 were sponsored by the Indian Institute of Architects.
- 4.4. Ar. Balbir Verma suggested that NICEE should be present at all NASA events and a trophy be created at the Annual NASA Convention. This suggestion was endorsed by the Committee, and Cdr Ailawadi and Prof Mitra were requested to initiate the communications with NASA towards this.
- 4.5. The Committee welcomed and endorsed the workshop being conducted at IIT Kanpur during Jul 03 – 08, 2008 for the students of architecture who have completed third year.
- 4.6. Ar. Verma informed that talks were on with Bangladesh for the sensitization of their architects on earthquake safety concepts in lines with what was done in India through Indian Institute of Architects (IIA). He hoped that NICEE and IITK will extend the support to the Bangladesh efforts as they did for the programme in India. Similarly, sensitization programmes could also be held in Nepal, Bhutan and Sri Lanka. The IIA is also working with Region 4 of the International Union of Architects for similar efforts. The committee requested him to continue to coordinate these efforts and to come back to NICEE for any help needed.
- 4.7. Ar. Verma mentioned that there has been a lot of talk about seismic retrofitting of buildings but that the architects are not quite aware of their role in it. Hence, a monograph focusing on architects and retrofitting is needed. He also mentioned of a Japanese publication on retrofitting of Osaka City Hall, which IIA is interested in translating into English and publishing.
- 4.8. Ar Verma volunteered to carry with him several hundred copies of NICEE Brochure for Architects to some of the major international conferences, such as the ARCHASIA Conference (Oct 2008) for distribution to the participants. It was decided that efforts be made to publish the brochure in the IIA journal (Ar Verma agreed to coordinate with IIA) and in COA magazine (Prof Bose agreed to coordinate with COA).
- 4.9. Prof Tandon expressed appreciation for the "IITK-GSDMA Guidelines on Measures to Mitigate Effects of Terrorist Attacks on Buildings" and felt that a brief monograph for architects be developed on minimizing impact of terrorist attack on the buildings and their occupants.
- 4.10. Prof Bose suggested that either a Power Point Presentation or an e-course needs to be developed on "What should an architect know about codal provisions for his building projects". This may include the glimpses of other countries' seismic codes as well. He felt that the flat slab buildings are becoming common for shopping malls and parking structures, even in high seismic regions such as Delhi and there is a need to explain to the architects the problems associated with such buildings.
- 4.11. Professor Tandon felt that there are several serious issues related to new building typologies coming up in our country, for instance, the seismic safety of the glass facades. The Committee suggested that a large one-day seminar be conducted in Delhi (for instance, at the India Habitat Centre)

sub



on "Present Day Buildings: Safety Concerns". The focus should be not only on seismic safety, but also on fire safety, construction safety, safety against terrorism etc. Dr Agarwal agreed to have BMTPC take the lead alongwith NICEE for organizing this event.

#### **5. Workshops and Open House @ IITK for PG Students:**

- 5.1. Dr. KK Bajpai stated that the PG students workshop was earlier held for one week and was meant only for M. Tech students. Duration has now been extended to 10 days and Ph.D scholars are also being encouraged to attend this program. In the workshop held in Aug 2007, 71 students had participated. The recommendations of the Sub-Committee consisting of Prof C S Manohar (IISc Bangalore), Prof S K Deb and Prof H Kaushik (both of IIT Guwahati) for thesis awards were approved:

Best Thesis Award:

Mr. John K. Abraham, Karunya Institute of Technology, Coimbatore

Certificate of Merit:

Mr. Yogesh G. Waingankar, VNIT Nagpur

Mr. Yogesh S. Bamane, Pune Institute of Engg and Technology, Pune.

Mr. Shriram V. Hazare, Pune Institute of Engg and Technology, Pune.

- 5.2. The committee also agreed with views of the sub-committee that the objective of these workshops is to help improve the standard of thesis research in the colleges and therefore the IIT and IISc students should not be included in the consideration of thesis awards. It was decided that in case any outstanding Masters thesis comes from the IITs/IISc or any PhD/MS thesis appear to be worthy of an award, a special "Jury Award" be given to the concerned students.
- 5.3. It was suggested that the award winning theses be put on the web for others to benefit from the same. This proposal was accepted and Dr. KK Bajpai was requested to implement this, possibly with the help of Dr. Pradeep Kumar.
- 5.4. Cdr Suresh Ailawadi informed that the Open House was attended by 15 participants for a period of five days during Jan 15 - 19, 2008. The participants of the Open house felt that the duration should be extended to 10 days and also they should be given some more preparation time. Cdr Ailawadi was requested that the Open House be announced well in advance giving more time to the participants to prepare themselves.

#### **6. Translation Projects:**

The committee was informed that Oriya translation of IAEE manual (credit to Prof Dhanada Mishra) and Marathi translation of Earthquake Tips (credit to Ms Shubhada Gadkar and the reviewers Prof M. M. Basole) is now complete. Hindi translation of EQ Tips (credit Vigyan Prasara and reviewer Ar Snigdha Sanyal) is nearing completion, and Telegu translation is in progress under the leadership of Dr. Pradeep Kumar. Dr. Kumar is also planning to get the same translated into Urdu. Prof Mitra is leading the efforts to take up the work of translation of EQ Tips

*Sub*



in Bengali. The Committee commended the efforts of all concerned on this. Committee felt that some funding for the translations and subsequent printing of the vernacular versions of EQ Tips will considerably facilitate these efforts, and that since the original Tips were sponsored by BMTPC, they be approached first for seeking appropriate funding for the translation projects. Dr Agrawal expressed that BMTPC will be happy to consider such a proposal.

## **7. Web site of NICEE**

- 7.1. Prof Murty felt that currently there are too many items on the front page of NICEE web site and that the layout needs to be redone. He also pointed out that the site needs to be optimized for the search engines.
- 7.2. An effort to improve the ranking of web site by www.google.com needs to be taken up in a professional manner. Prof. Tandon felt that the site should enable the visitors to download a lot of useful materials, not only the materials of NICEE but also of the others by giving suitable links to other sites.
- 7.3. It was decided to create special corners for architects (Prof Murty volunteered), public policy (Prof Rai volunteered) and school children (Prof Pradeep Kumar and Dr Sachan volunteered). In the first instance, new pages will be created giving links to all relevant materials both on NICEE site as well as others.
- 7.4. Mr Srivastava felt that to improve ranking of the site, it should be made more vibrant and active. For instance:
- Can the site be interactive?
  - Can we do webinars through the site?
  - Can people ask questions on the site and receive answers?
  - Homepage should have all key words on earthquake safety.
  - Can the site encourage social networking?
  - Site should host "share your photos" where people can share the photos of disasters or collapsed structures.
  - NICEE should have a catchy slogan such as "Helping Live Safely" or "Helping You Live Safely".
  - Site should have something new every few days to encourage people to visit it frequently.
- 7.5. Dr Sanghi felt that it is important that the contents on the site be improved continuously, and suggested:
- Can site host the homepages of experts in earthquake engg?
  - Can site host theses in earthquake engg?
  - It may provide list of various events in earthquake engg.
  - It may host advertisements.
  - Can we approach someone at the top in Google India to see if they can give free charitable status to NICEE and provide publicity

*Sub*



to NICEE free of charge as is given by Google for the charitable organizations registered in the US.

- 7.6. Dr Bajpai felt that the site could host job opportunities.
- 7.7. Dr Pradeep Kumar suggested that the site should have terminology/glossary of earthquake engg.
- 7.8. After considerable discussions, the Committee felt that at this point, NICEE may avoid advertisements on the site since these may adversely affect the donations and image of NICEE. Instead, the site may have a mention similar to that on Wikipedia encouraging the visitors to make a donation.

## **8. Distribution and Sales of Publications**

- 8.1. It was felt that the sales income of NICEE should be pushed up and a sales target of Rs 12 lakh was decided for the financial year 2008-09.
- 8.2. Mr Srivastava made several suggestions in this regard:
  - Offer to all the existing and new engineering colleges complete sets of NICEE publications at substantial discount.
  - He will help NICEE connect with large library suppliers who may be able to push some of the NICEE publications to the libraries.
  - He will help NICEE connect with some of the large book sellers such as Wheelers, Higgins Botham, Landmark, Crossword, Reliance Retail.
  - It will be useful to have Earthquake Tips reprinted in a small standard size paper with a catchy title such as "Tremors".
  - He offered to help sale of some of the publications in South Asia (Pakistan, Sri Lanka, etc)
- 8.3. Considerable discussion took place on the pricing policy of NICEE publications. The current list prices being rather low, many wholesalers of the books are reluctant to carry the publications of NICEE. In the absence of book trade network taking up our books, the reach of our books is rather low considering the potential. The Committee felt that while some rationalization of the list price is needed, massive increase in prices should be avoided as far as possible. For instance, several publications and CDs are currently priced as low as Rs 50 and there is no extra charge for postage within the country. Else, it will violate the philosophy of NICEE and people will start to see NICEE as another commercial organization. Mr Srivastava felt that a clarity should be developed as to which publications are available for free distribution and which are not.
- 8.4. Prof Tandon suggested that some of magazines/ journals of the professional societies such as the ICI may be willing to include list of publications of NICEE free of cost. He suggested that a draft letter be sent to him for onward transmission to the ICI for this purpose.

Sub



## **9. Initiative Towards School Children**

- 9.1. It was felt that besides the "children's corner" at the web site, several more concrete activities should be undertaken by NICEE to sensitize children about earthquake safety.
- 9.2. Mr Srivastava suggested that NICEE Should try to partner with EDUCOMP, a highly successful company into the school education system.
- 9.3. Professor Pradeep Kumar shared some of the initiatives undertaken by him in Andhra Pradesh for the school children, which were deeply appreciated by the Committee.
- 9.4. Dr Sachan volunteered to take up some activities in the local schools after discussing with a few school authorities. She may write a proposal to Vigyan Prasar for funding of the same. She also proposed to collaborate formally or informally with Prof Pradeep Kumar in view of his experiences in this line.

## **10. Recognition of Individuals**

The National Advisory Committee in its last meeting (April 2007) decided "a few individuals who make extra-ordinary contributions to the functioning of NICEE may be mentioned in the Annual Report." In view of this, the Committee considered a number of persons for such a mention in this year's Annual Report. It was felt that some individuals, even though not at IITK, are working so closely with NICEE that they are for all practical purposes a part of NICEE and hence it may not be appropriate to include them in the mention. In view of this, the Committee finalized the following persons to be mentioned in the Annual Report for the financial year 2007-08:

- **Dr Prabhu and Mrs Poonam Goel:** for extending considerable financial support to the activities of NICEE.
- **Ms Shubhada Gadkar:** for her dedicated efforts at Marathi translation of the IITK-BMTPC Earthquake Tips.
- **Mr Atop Lego, Itangar (Arunachal Pradesh):** for spreading the NICEE literature in one of the remote but highly seismic regions of the country, and for his enthusiasm to recruit supporters and donors for NICEE in that part of the country.

## **11. Financial Position**

- 11.1. The Committee put on record its deep appreciation towards Dr Prabhu Geol, his wife Mrs Poonam Goel, and Director Professor S G Dhande for permitting utilization of some of the funds of the Poonam and Prabhu Goel Foundation at IITK towards research and outreach in earthquake engineering. This will enormously help NICEE in its mission to ensure safe built environment and has already started to make a difference in scaling up the efforts of NICEE.
- 11.2. After considerable debate, the Committee suggested that NICEE may now initiate the "Institutional Membership" wherein the organizations could contribute Rs 1 lakh/year (or more) and enjoy certain privileges (such as free copies of publications, discounts on bulk purchase of publications for distribution to their clients/employees, supply of literature, etc). The

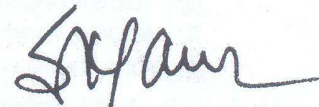
*Sub*



coordinator was encouraged to approach agencies such as Nuclear Power Corporation, Atomic Energy Regulatory Board, Indian Nuclear Society, BMTPC, NBCC, all state PWDs, all developing authorities, etc with the request to enroll them as "Institutional Members."

- 11.3. The members suggested that in some instances large organizations (such as NBCC) may sponsor a substantial number of copies of the periodical (say 1000 or 5000 copies) to be distributed with their compliments to the interested engineers in their organizations or outside.
- 11.4. Ar Verma agreed to help draft some of the letters for requests such as b) and c) above, and in raising some of the sponsorships for NICEE.
- 11.5. Mr Kushwaha agreed to help with some of the sponsorships/ institutional memberships from different organizations within the Department of Atomic Energy. It was also felt that BRNS may be approached for sponsorship of the periodical.

There being no other points the meeting was adjourned with a 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  
Indian Institute of Technology Kanpur

