

File No.NMEICT (MS)/PAB/22
Government of India
Ministry of HRD
Department of Higher Education

27th December, 2011

To

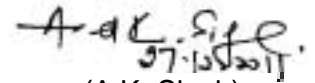
All Members of Empowered Committee of Experts
(Project Approval Board) of National Mission on
Education through Information and Communication
Technology (As per list enclosed)

Sub: Minutes of the 22nd Meeting of Empowered Committee of Experts (Project Approval
Board) of National Mission on Education through Information and Communication
Technology (NMEICT) held on 9th December, 2011

Sir/Madam,

Enclosed please find Minutes of the 22nd Meeting of Empowered Committee of
Experts (Project Approval Board) of National Mission on Education through Information
and Communication Technology (NMEICT) held on 9th December, 2011 under the
Chairpersonship of Secretary, Department of Higher Education, Ministry of
Human Resource Development, Shastri Bhavan, New Delhi for necessary action.

Yours faithfully,



(A.K. Singh)

Director (ICT)

Tel: 011-23384276

Copy to:

1. PSO to Secretary (HE)
2. PS to AS(TEL)
3. PS to JS&FA
4. US(TEL)

Project Approval Board of National Mission on Education through Information and
Communication Technology (NMEICT)
List of Members

S.No	Name, Designation and Address
1.	Secretary, Department of Higher Education, Ministry of Human Resource Development, Shastri Bhawan, New Delhi Chairperson
2.	JS & Financial Adviser, Department of Higher Education, Ministry of Human Resource Development, Shastri Bhawan, New Delhi
3.	Secretary, Planning Commission , Yojana Bhawan, New Delhi-110001
4.	Secretary, Department of Telecommunications, Sanchar Bhawan, New Delhi-110001
5.	Secretary, Department of Information Technology, Ministry of Communication and Information Technology, CGO Complex, Lodhi Road, New Delhi-110001
6.	Secretary, Department of Space, Lok Nayak Bhawan New Delhi-110001
7.	Dr. A.Mukhopadhyay Adviser/Scientist 'G', SERC Division, M/o Science & Technology, D/o Science & Technology. Technology Bhawan, New Delhi-110016
8.	Director, Indian Institute of Technology, Powai, Mumbai - 400076
9.	Director, Indian Institute of Technology, Roorkee-247667 Uttarakhand
10.	Director, Indian Institute of Technology, North Guwahati Guwahati-781039 Assam

S.No.	Name, Designation and Address
11.	Director, Indian Institute of Technology, P.O. Kharagpur -721302
12.	Director, Indian Institute of Technology, P.O. IIT Chennai Chennai -600036
13.	Director, Indian Institute of Technology, Kanpur-208016 UP
14.	Director, Indian Institute of Science, Bangalore-560012 Karnataka
15.	Director, Indian Institute of Technology, Hauz Khas New Delhi-110016
16.	Vice-Chancellor, Indira Gandhi National Open University (IGNOU), Maidan Garhi, New Delhi
17.	Vice-Chancellor, North Eastern Hill University (NEHU), Shillong
18.	Vice-Chancellor, Visvesvarya Technological University, Belgaum- 590018
19.	Shri R.P. Agrawal 31 Greenwood Society Phase-II Sector – Omega I Pocket P-2 Greater Noida-201308
20.	Prof. U.B.Desai Director IIT Hyderabad Ordnance Factory Estate, Yeddumailaram-502205 Hyderabad Andhra Pradesh
21.	Prof. M.K.Surappa Director IIT Ropar Nangal Road, Rupnagar (Ropar) Punjab 140001

S.No.	Name, Designation and Address
22.	Prof. Sudhir K. Jain Director Indian Institute of Technology Gandhinagar Vishwakarma Government Engineering College Complex, Chandkheda, Visat-Gandhinagar Highway, Ahmedabad -382424 (Gujarat)
23.	Prof.Prem K. Kalra Director IIT Rajasthan IIT Rajasthan Camp Office Department of Computer Science & Engineering MBM Engineering College JODHPUR - 342 011
24.	Prof. Madhusudan Chakraborty Director, IIT Bhubaneswar Office of the Director Indian Institute of Technology Bhubaneswar Samantapuri (Rearside of Hotel Swosti Plaza) Nandan Kanan Road Bhubaneswar-751 013
25.	Prof. Anil.K.Bhowmik Indian Institute of Technology Patna Navin Government Polytechnic Campus Patliputra Colony Patna 800 013
26.	Shri Pramod Bhasin Chairman, National Association of Software and Services Companies (NASSCOM), International Youth Centre Teen Murti Marg Chanakyapuri New Delhi 110 021
27.	Dr. Ajay Khare Director School of Planning & Architecture, Transit Campus: Sports Complex, MANIT, Bhopal-462051
28.	Prof. S.G.Deshmukh Director IIIT Gwalior Morena Link Road, Gwalior 474 010
29.	Dr. M.D.Tiwari Director IIIT Allahabad Deoghat, Jhalwa Allahabad

MINUTES OF THE 22nd MEETING OF PROJECT APPROVAL BOARD OF NATIONAL MISSION ON EDUCATION THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY HELD ON 9TH DECEMBER, 2011 AT 4.00 P.M. IN CONFERENCE ROOM (FIRST FLOOR), CSL LIBRARY, SHASTRI BHAVAN, NEW DELHI.

The 22nd Meeting of the Empowered Committee of Experts (Project Approval Board) (PAB) of National Mission on Education through Information & Communication Technology was held on 9th December, 2011 at 4.00 p.m. in Conference Room, Central Secretariat Library (CSL) Building, Shastri Bhavan, New Delhi under the Chairpersonship of Secretary, Department of Higher Education, MHRD.

The list of participants is at Annexure.

Mrs. Vibha Puri Das, Secretary, Department of Higher Education welcomed all the participants. Thereafter, the agenda items were discussed and the following decisions were taken:

Item No.1:

Chairperson requested all the members to give their comments on the Minutes of the 21st PAB Meeting.

Professor Ananth pointed out that the commitments in the NPTEL project like the terms for the SMEs in content creation, the rules for conducting workshops and dealing with the associated payments as well as the budget for NPTEL Phase II were all approved before the PAB was constituted in 2009 and the norms evolved for the NMEICT as a whole. For example, the honoraria for the SMEs in the project per course was explicitly approved to be a maximum of Rs.2.50 lakhs per course, payable once the Project Implementation Committee (PIC) receives the uploadable course in four quadrants after due review.

The PAB agreed that the payment of honorarium to a course creator could be on a cumulative basis, as one could take more than a year to complete a course and the instructors could work on more than one course simultaneously. The honorarium when calculated on a per year basis, however, should not exceed the 3-months salary limit in vogue. However, if the courses were developed over the last three years, cumulative payments can all be made at once after completion. For outstanding work, however, on a cases by cases basis, exceptions can be made to this rule. But this should be a rare occasion. Exceptional cases should be brought to the notice of PAB and then PAB will clear it. In the case of NPTEL, PIC Chairman should take a view and inform PAB of such exceptions.

Thereafter, the Minutes of the 21st Meeting of the Project Approval Board held on 11th August, 2011 were confirmed.

Item No.2

The Action Taken Report on the Minutes of the 21st Meeting of the Project Approval Board held on 11th August, 2011 was noted by the PAB.

It was suggested by PAB that the extensions given by the Standing Committee to different projects need to be monitored. The Sakshat portal may under MIS include the number of times the project has been given extensions. PIs may be asked to update the details of their project on the sakshat portal. PIs may also be informed that in case they fail to update the details in respect of their project periodically, Standing Committee will not consider their case for extension. Project deliverables **achieved/to be achieved** should be clearly indicated. Activity link should also be provided on the sakshat portal. As regards the courses being developed by CEC-UGC – PAB wanted to know whether peer review had already taken place for the e-content generated by CEC. PAB also emphasized that a rigorous and critical analysis of the e-content must be done by the Standing Committee/experts before launching/uploading the same.

Item No.3

Approval of New Projects recommended by Standing Committee

3.1. E-COURSE DEVELOPMENT, Project investigator: Dr N.BASKARAN, DEPARTMENT OF PHILOSOPHY, NATIONAL COLLEGE, TIRUCHIRAPALLI-1 Control Number: Ne04011010497

PAB opined that since this is a new project and UGC is developing e-content for all PG courses on saturation basis, it was decided by PAB that the above institutions may be referred to UGC. PI may get in touch with UGC.

3.2. Development of e-courses in B.com, M.com, MBA Prof. H. Venkateshwarlu Haripuram, Principal, University College of Commerce & Business Management, Osmania University, Hyderabad

Since the work of creating e-content for all the UG & PG courses has been assigned to CEC & UGC, it was decided by PAB that CEC & UGC may consider involving the above PI in e-content development. PI may get in touch with CEC & UGC.

3.3. e-content for all media courses PI: Dr. N.S. AshoK Kumar, Professor & Coordinator, Dept of Electronic Media Bangalore University, Palace Road, Bangalore

CEC & UGC are developing e-content for all the UG & PG courses, it was decided by PAB that the above institutions may be referred to CECIUGC. PI may get in touch with UGC. PAB further suggested that e-content being created by CEC and UGC must be significantly higher and better in quality than what is being offered. Since IGNOU has approved its entire contents and its material is respected, CECIUGC needs to go above that. Letter to CECIUGC should be written.

34. Designing, developing and Delivery of subject Hospital Support Services e-content for students of Hospital and Health care Management by Dr. L. Kalyan Viswanath Reddy, Hemchandracharya North Gujarat University, Gujarat

PAB decided that this is not a saturation mode project, AIIMS is doing virtual lab kind of thing. If the subject is part of UGC, then it can be taken. But this is not a priority area. Since the project does not come into the core focus area of NMEICT, the PI may be advised to consult Ministry of Health in this regard.

35. e-Content Generation For Specialized Training Programs Of Bio-Medical and Electronics Product Design domain, PI: Chetan Manchanda, CDAC, Mohali
Control Number:-CE-10011111669

PAB decided that sanctioning authority for such type of project should be clear. It can then be only considered. Ministry of Health may be consulted in this regard for ascertaining who will be the sanctioning authority for these types of degree/diplomas as the project falls under contested category.

36. Development of E-content for academic courses and professionals in the areas of the IT enabled Management, Dr. Deepali Singh, De-0403100569, ABV-Indian Institute of Technology and Management, Gwalior

PAB deliberated on the issue and was of the opinion that the PI may be asked to develop e-content for one academic course i.e. E-CRM and sanctioned Rs.7 lakhs for release as recommended by the Standing Committee.

37. e-Content Development for the course "Extension Education, Dr. Avani Maniar, Department of Extension and Communication, M.S University, Vadodara.
Control No. _AE-11071011058

As the purview of the course "extension education" for which the e-content is being developed was not clear, the same was not approved.

Item No.4

NIFT Chennai coordinated consortium

Title: E-content for Fashion Design and Technology subjects

CONTROL NUMBER: De-10081011 211

PAB approved the proposal for Rs.388.50 lakhs for creating of 60 courses as recommended by the Standing Committee. Initially 30% amount may be released. However, the reviewers for e-content to be generated should include the outside experts.

Item No.5

GNUKhata,

PI, Shri Manik Shingare and Krishnakant Mane of Master Dinanath Mangeshkar College of Arts and Commerce, Aurad, **Shajani,Tq.Nilanga,Distt.Latur**

PAB approved to run the project from IIT Bombay itself as recommended by the Standing Committee. Prof. Kannan Moudgalaya is requested to manage the utilization of funds, with the work to be delivered by the original **PIs** of the project, namely, Krishna Kant Mane and Manik Shingare.

Item **No.6**

Directions of PAB in cases where Principal Investigators (PIs) are no longer in the institutions concerned- Case of Visvesvaraya Technological University (VTU), **Mysore**

The **PAB** approved that the new PI could continue with the projects assigned to the Visvesvaraya Technological University. PAB also opined that PI age should be less than 65 years so that he can continue up to 70 years.

Item No.7

Development of Vocational Educational Modules and use of **Haptic** Devices – Virtual **Laboratories** and **VLSI** and Embedded Systems, Mizoram University

It was **informed** to PAB that the **IIT Delhi** had to review proposals from the following institutions and **PIs** were called:

1. Mizoram University.
2. NIST Behrampur
3. VJTI Mumkbai
4. NIT Durgapur.

Out of the four institutes only 2 **PIs** i.e. VJTI Mumbai & NIST Behrampur presented their proposals. The Expert Committee recommended that the proposal by NIST Behrampur (Open source VLSI) and Embedded Systems Tools) was good and could be considered under VL projects umbrella. The PI was suggested to look into the possibility of collaborating with **IITB** group doing the VL project on **VLSI** Design and Verification. The project from VJTI Mumbai was not considered to be well focused for sanction under the VL projects umbrella. The **PIs** are requested to re-consider and re-submit the proposal to VL Co-ordinator at **IIT, Delhi**.

PAB accepted the report of **IIT Delhi**.

Item No.8

Status of Expenditure under **NMEICT**

Noted by PAB.

Item **No.9**

Brainstorming for Future **Roadmap** of **NMEICT**

Due to paucity of time, the agenda could not be discussed and deferred for the next meeting of PAB.

Additional Agenda

Additional Item **No.1**

Requirement of funds by BSNL

Noted by PAB.

Additional Item No.2

Approval for release of funds to various Project Investigators (**PIs**) recommended by Standing Committee

21. ERP – Dr. Y.N. Singh, Professor **IIT** Kanpur

As recommended by Standing Committee for release of 2nd installment to the PI, PAB approved release of 2nd installment of Rs.2.84 crores.

22. Talk to Teacher, Dr. Kannan Moudgalya, **IIT** Bombay

As recommended by the Standing Committee, PAB approved the release of 2nd installment as per the following details:

IIT Bombay - **Rs.10.94** crore
Amrita University Rs.24.12 crore
Dayalbagh Educational Institute – 0.52 crores
Total – Rs.35.58 crores to PI.

Prof. Kannan Moudgalya, PI of the project explained that Talk to a Teacher project has project elements that rely on synchronous education. The 1,000 teacher training programme is an example of it. This method allows the instructor and the students to have live audio-video interactions. Using the same methodology, **IIT** Bombay's regular courses were transmitted live free of cost. Prof. Kannan also pointed out that Spoken Tutorials, another component of the Talk to a Teacher project, was also doing well. Spoken Tutorial based workshops are now conducted free of cost on open source software packages for college students from various

parts of the country. Preliminary studies show that this methodology is quite effective. More than 100 workshops are now conducted in a month and about 500 workshops will be completed by 31st March 2012.

Dr. Phatak, Co-PI of the project reported that over 6000 teachers have been trained in 7 workshops conducted so far. The 8th workshop on Photo-Voltaics, is to start from 12th December, and has over 1200 teachers registered. He added that, to demonstrate further scalability of the model, a plan is being finalized to conduct a workshop on 'Research methodologies to engage 10000 teachers, jointly with a faculty colleague from IIT Madras.

Moreover the participants, in their feedback, uniformly acknowledged the benefits they derived from these engagements, which brings together teachers from across the nation, who get to interact with expert faculty from IITs. He also mentioned that he found increasing participation by women, which was very encouraging. Amrita university team is continuously upgrading the A- view used for two-way interactive audio-video communication on internet, based on the feedback given by workshop faculty, and making it into an industry grade product. He mentioned that IITB and Amrita are working together to open source some key components, so that a much wider use is possible.

PAB commended the positive results and desired to know if and when we could move towards making this program self sustaining? It was responded by saying that, for a long time, the teaching faculty in the country were used to receiving funding support for **such** workshops, and only now some realization is felt that teachers **and/or** their Institutions should bear such costs. These workshops have kick-started an important process of dialog and discussions amongst a very large number of teachers, and that that this dependence will change with time, but that we must continue our model while attempting a graded reduction in funding support for workshop participation. PAB was told that a specific question was asked in the feedback-form for the workshop conducted recently. Nearly 60% of the participants have indicated their willingness to meet the cost of their travel and food expenses during the 10-day workshop, and half of them have indicated that they will even be willing to pay fees, if it is reasonable. This 'partial support model will be tried in conducting the planned workshop for 10000 teachers.

PAB raised the question about testing the effectiveness of this project. How to ascertain that the students, who are to be taught by participating teachers of these workshops, are actually benefitted? It was told that this was indeed an important issue, and the planned review process will include collection and evaluation of the feedback from students and teachers, after the participating teachers have taught the **course(s)** from these workshops to their own students in their respective colleges. A tie-up has been already forged with ISTE, who have agreed to conduct such independent reviews from sample colleges in coming years. Unfortunately, such teaching happens only after one semester or a year after the workshop, and the feedback can be collected only when such teaching ends, which is one more semester away. It was mentioned that first such survey would be carried out by ISTE at the end of next semester, and then onwards, this would be a continuous process.

2.3. OSCAR ++, PI: Sridhar Iyer, Control No.: Se-16021010546

PAB approved release of Rs. 60 lakhs to the PI as recommended by the Standing Committee.

2.4. IGNOU (Sakshat portal), Uma Kanjilal, Control no. Ue 22031010754

PAB approved release of Rs.9.5 lakh for sakshat portal as recommended by the Standing Committee. The amount may be released from the funds of the Mission Secretariat of NMEICT.

Additional Item No. 3

Office Space at IGNOU for the Mission Secretariat of NMEICT

It was informed that the space provided by IGNOU is not sufficient to accommodate the Secretariat and coordinate all the activities of the project smoothly and rigorously especially keeping in view the expansion of the project with joining of Senior Consultants/Consultants including support staff in different areas of expertise. The frequency of meetings in NMEICT has also increased rapidly for which the requirement of one Board Room and Conference Room is necessary. It was decided that VC, IGNOU be requested to provide the additional space for the use of NMEICT.

Additional Item No. 4

NPTEL, PI: Prof. M. S. Ananth, IIT Madras

Discussed vide agenda item No.1 while confirming the Minutes of the 21st Meeting.

Others issues:

Prof. S.V. Raghavan, Scientific Secretary to Principal Scientific Advisor to the Government of India informed that Department of Space has agreed to provide initially two transponders for DTH for one year on lease basis.

- PAB was also of the view that literature about the projects should be there. On the ministry **website**, salient achievements of NMEICT Scheme should be there.
- User manual of Virtual lab project should be there so that people begin using it. Linking with some UNESCO **website** should be there so that it get publicity.
- The PI of **Haptic Devices** project suggested that the funding of their project may be routed through IIT Delhi instead of IIT Bombay.
- In response to Prof Raghavan's observation that NKN has been established in a number of Institutes, Dr Phatak agreed to start using the 1 Gbps infrastructure for the workshops, after sorting out the connectivity and access issues on the LAN within the Institute, and suggested that similar access should be possible for the participating Workshop Remote Centres.

- In response to the Prof Raghavan's announcement that fiber connectivity is planned for all villages and that a pilot for 50 locations is expected to be completed within next 180 days; Dr Phatak offered to conduct such empowerment workshops, on a pilot basis, at some of these sites for school teachers, in Hindi and **Marathi**. He agreed to prepare a proposal after discussing all pertinent issues with the relevant authorities of the concerned states of School education.
- In response to a point raised by chairperson in expanding the use of Aakash tablet, Dr Phatak observed that the experience and expertise at IIT Bombay in developing and testing low cost devices, as also our expertise in free and open source software, will enable us to participate vigorously in these efforts. He mentioned that specific software distributions for open source access, as also the workshop (and other) content with proper formatting for distribution on this low cost device, could be easily achieved, with suitable expansion of the current project scope at IIT Bombay.

The meeting ended with a Vote of Thanks to the Chair.

Attendance of the **22nd** Meeting of the Project Approval Board (PAB) of the National Mission on Education through Information & Communication Technology (NMEICT) held on **9th** December, 2011 at 4.00 p.m. under the Chairpersonship of Secretary, Department of Higher Education, Ministry of Human Resources Development In Conference Room (**1st Floor**), **Central** Secretariat Library (CSL) Building, Shastri Bhawan, New **Delhi**

S.No.	Name, Designation and Address	Phone No., Fax and Email
1	Ms. Vibha Puri Das Secretary (HE) MHRD, Shastri Bhawan, New Delhi	Chairperson
2	Dr. S.V. Raghavan, Scientific Secretary to Principal Scientific Advisor, Govt. of India Vigyan Bhawan, New Delhi	sv.raghvan@nic.in
3	Shri. N.K.Sinha Additional Secretary(TEL) & Mission Director (NMEICT) Department of Higher Education, MHRD, Shastri Bhawan, New Delhi	23387781 nksinha.edu@nic.in
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7	Prof. M.S. Ananth Former Director IIT, Madras	ananth@iitm.ac.in
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