File No.NMEICT(MS)/PAB/25
Government of India
Ministry of Human Resource Development
Department of Higher Education

Dated the 7th December, 2012

To

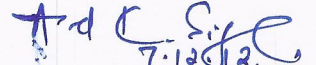All Members of the Project Approval Board
of National Mission on Education through Information
& Communication Technology

Subject: Minutes of 25th meeting of the Project Approval Board (PAB) of NMEICT held on 6th November, 2012

Sir/Madam,

Enclosed please find Minutes of 25th meeting of the Project Approval Board of NMEICT held on 6th November, 2012 at 3:00 P.M. at Shastri Bhawan, New Delhi under the Chairmanship of Secretary (HE), Ministry of Human Resource Development, Government of India, New Delhi for necessary action.

Yours faithfully,

(A.K. Singh)
Director (ICT) &
Nodal Officer (NMEICT)
Tel # 011- 2338 4276

Encl :aa

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 Uttrakhand
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 Bhubaneshwar 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 25TH MEETING OF PROJECT APPROVAL BOARD OF NATIONAL MISSION ON EDUCATION THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY (NMEICT) HELD ON 6TH NOVEMBER 2012 AT 3.00 P.M. IN CONFERENCE ROOM (FIRST FLOOR), CSL LIBRARY BUILDING, SHASTRI BHAWAN, OLD RAJENDRA PRASAD ROAD, NEW DELHI

The 25th Meeting of the Empowered Committee of Experts (Project Approval Board) (PAB) of National Mission on Education through Information and Communication Technology (NMEICT) was held on 6th November, 2012 at 3.00 p.m. in Conference Room, Central Secretariat Library (CSL) Building, Shastri Bhawan, New Delhi under the Chairmanship of Secretary, Department of Higher Education, Ministry of HRD.

The list of participants is at **Annexure.**

Additional Secretary (TEL) and Mission Director (NMEICT) & Member Secretary, PAB welcomed all the participants. Thereafter agenda items were discussed and following decisions were reached:

Item No.1
Confirmation of the Minutes of the 24th Meeting of Project Approval Board

Additional Secretary (TEL) and Mission Director (NMEICT) & Member Secretary, PAB, invited observations from the members on the "Minutes of the 24th Meeting of the PAB." Since no observations on the same were received, the "Minutes of the 24th Meeting of the Project Approval Board held on 4th October, 2012" were confirmed.

Item No.2

"Action Taken Report" on the Minutes of the 24th Meeting of PAB

Additional Secretary (TEL) and Mission Director (NMEICT) & Member Secretary requested all the members to give their observations and comments on the "Action Taken Report" on the Minutes of the 24th Meeting of the Project Approval Board held on 4th October, 2012.

Additional Secretary (TEL) and Mission Director (NMEICT) & Member Secretary mentioned that Study Centers of Open Universities should be similar to what we had considered for the Regional Centers and should be in conformity with the Madhav Menon Committee Report. The centers where actually some teaching is taking place should get the connectivity of 10Mbps. Due Diligence shall be done to identify 100 centers. It was further mentioned that as per the criteria, the strength of the students in those centers should be 5000 or more student's enrollment.

He apprised that for many of the projects not considered in the last meeting and requiring thorough consideration, financial due diligence has now been done. Thereafter, the said "Action Taken Report" was noted by PAB.

Item No.3
Intimation of "Financial Due Diligence of projects" earlier approved by PAB:
Talk to a Teacher (also known as Teachers empowerment, students empowerment, and integration of tools for empowerment – synchronous delivery) – Phase 2, PI: Kannan Moudgalya, D. B. Phatak and Somnath Sengupta Inst.: IIT Bombay and IIT Kharagpur

Additional Secretary (TEL) and Mission Director (NMEICT) & Member Secretary, PAB informed the members/participants that during the last PAB Meeting, the PAB had considered and approved the Talk to a Teacher project submitted by IIT Bombay. It was apprised that this project has a target of training at least 1,50,000

technical teachers in the country in a 3-year time-frame. At that time, members had agreed that this project has good deliverables and had requested PI to deliver the same in the shortest possible time.

Members had suggested that a financial due diligence should be done to ensure that the estimates were in order. It was brought to the notice of the PAB that for similar programs, AICTE provides (for 2 weeks training course) for each of the participants, a cost that is about 2.5 times higher than the cost indicated by PI for this project. Subsequently, PI had detailed discussions with IFD and Mission Secretariat. AS (TEL) also informed the PAB that during the discussions with IFD, it was found that the average cost per participant for a two weeks course in this project is estimated to be Rs. 6,500/- per teacher, out of which around Rs.4,000/- is for boarding/lodging, TA etc., the normative rates of which are fixed by Govt. of India. He also explained in depth that the Committee found that it was difficult to further compress the cost.

Additional Secretary (TEL) & Mission Director (NMEICT) further mentioned that as the milestones are reached in this project, funds will be released in phases as this is 3 years long project. It is estimated that for training 1,50,000 teachers over 3 year's period, it shall need 15 mega workshop of 10,000 teachers each. Since the workshops of this project would occupy the infrastructure for about 15 months out of three years, the infrastructure would be available for other programs for the balance time. It was suggested that as the methodology, the hub and spoke model and fully equipped remote centers would be available; other programs could make use of it. That way the fixed cost could be amortized over a wider base. But for this, boarding, lodging etc. will have to be borne by the university or UGC whoever is utilizing this training facility. It was also pointed out that the money that has been sanctioned is not going to the PI but to the IITs and will be spent as per the control systems in place at the IIT.

Additional Secretary (TEL) & Mission Director (NMEICT) informed that IIT Bombay should be requested to go ahead with the project as the job of teacher training is

important. Replying to a query he intimated that there is Project Review & Monitoring Committee which is constituted now almost for all the projects.

On the query regarding review of 10,000 Teachers programme, Prof. Kannan Moudgalya apprised the PAB that IIT Bombay has tied up with ISTE. There is a definite procedure that is being followed to evaluate the deliverables of the project. Cost comparison is made with QIP Programme of AICTE for training of teachers to teach a course. He further apprised that IIT Bombay had already conducted courses for training 10,000 teachers simultaneously. In first phase, they have trained 12,000 teachers and 1,50,000 teachers will be trained in the second phase. Prof. Kannan pointed out that it has been observed that this method allows women to participate in large numbers. He further informed that IIT Kharagpur has joined as a Partner and also stated that they were trying to develop ten nodal centers equivalent to the level of IITs for training infrastructure for conducting the programme.

Additional Secretary (TEL) & Mission Director (NMEICT) stated that it was needed to train all the technical teachers in the country and also said that we do not have enough resources to spend large amount of money to train each and every teacher in the country using conventional techniques. If others could join, they were welcome to contribute.

Chairman, PAB apprised the members that all the issues being discussed were discussed in the last PAB meeting itself, and after a long discussion the project was approved. He stressed upon the need to use the created infrastructure effectively.

PAB further deliberated and opined that it is a good programme; it should be monitored and popularized properly. Report should be submitted to the PAB from time to time as to know what is going on in this programme.

Additional Secretary (TEL) & Mission Director (NMEICT) also stressed the need to ensure optimal utilization of the infrastructure. He suggested that we should try and synergize with National Teachers Training Mission. PAB further observed that after training teachers we should have mechanisms to test whether they have become more effective or not.

Chairman, PAB reiterated that in the long run we need to develop a model which is self-sustaining through a corpus created from the savings accruing to the organizations carrying teachers training programs by adopting this technique. A separate meeting in this regard required to be done with UGC, AICTE, NCTE, National Mission on Teachers and Training and other partners. Chairman PAB also said that the funds should be released depending upon the progress of the Project.

PAB noted that the project stood approved with the modified budget of Rs. 192 Crores.

Item No.4

4.1 E-content generation in 17 subjects in Electronics and Communication using Learning-by-doing (or 'butterfly') model by Prof. Sandhya Kode and Prof. Kannan Srinathan, IIIT Hyderabad.

PI of the Project Prof. Sandhya Kode intimated the PAB that they, the PIs have executed the pilot project for 3 courses. These courses have been used by 150 teachers who are trained and it has been received well by the teachers. Those Teachers had gone back and were training students also. All this was through learning by doing mode in which the idea was that concepts were to be learnt by doing rather than by simply spending a lot of time on lectures only. In the proposed project, PI proposed to take up 17 courses.

Prof. Mangal Sunder, IIT Madras explained how these courses were different from NPTEL programme. He apprised that these were complimentary learning models and both NPTEL and these models could co-exist nicely. Different models of learning need to be built at the same time keeping in view the strength of students in the technical education. There were sufficient learning materials for every learner in both the models. The members were informed that through NPTEL model teachers are offered lectures; while on the other hand, learning by doing would be a self-sustaining programme.

The PI of the Project Prof. Sandhya Kode informed that the Washington Accord requires certain setting of objectives on which lessons shall be mostly built and on this the PI shall co-ordinate with Prof. Ray to bring in the pedagogy while creating the Courses.

Prof. Mangal Sunder further informed that there was a larger number of under graduates and post graduates students who chose different styles of learning. Those who wanted to learn by examples might pick up this model and those who were interested in learning quickly through lectures might go to NPTEL or any other site. There is sufficient learning for every level of cognitive ability of student.

After detailed deliberation PAB opined that alternative should be made available to the students. Some students might like to approach the subject through learning by doing and some other students may listen to the lecture and also benefit out of it. Since the PI would be creating an alternative for the students, it must be welcomed. But at the same time, it must be ensured that the PI was not repeating the same Courses as already undertaken by the NPTEL. PI should ensure that the work done under this project is synergized with NPTEL. Retired people who are academically good should be roped into the project, so that the country benefits; further the 17 subject proposed to be developed should cover entire gamut of the subject.

Based on the recommendations of the Standing Committee, the PAB approved this project at an estimated amount of Rs.119 Lakhs for development of 17 courses and suggested that the PI should ensure not to repeat the NPTEL course. The uniqueness proposed in this course should be maintained.

4.2. Developing suitable Pedagogical methods for various classes, Intellectual Calibers and Research in e-learning, PI: Prof. Anup K Ray, Anchor Institution: IIT Kharagpur, Control No: ARE 04061212597

Prof. A.K. Ray, PI of the project made a detailed presentation on the project developing suitable pedagogical methods. PAB was apprized that in this project curriculum content was being re-written keeping in view the changing 21st century needs. Queries were raised by the member participants about its linkages to NPTEL/Washington Accord and the rates at which that was to be done. It was clarified by the PI that every course had a learning strategy. NPTEL is one good course material; there are other course materials also. The PI added that there are 200 UG level courses, two to three faculties (teaching these courses) and 2 reviewers are involved. On a specific query, the PI clarified that there is a Contract Document signed by the faculty that they (faculty) are not violating any of the IPRs.

The PAB told the PI that pedagogy is important but at the same time as an outcome of this project benefit to the learners at the Government institutions and other educational institutions specially the technical ones should be kept in mind. Washington Accord is also equally important for us to get in, so we should involve NBA and Washington Accord people also so that they also offer their comments on it. Prof Ray assured that he will follow on this.

After detailed deliberation, PAB approved this project and the budget of Rs.16.00 Crores based on the recommendation submitted by the Standing Committee, NMEICT.

4.3 E-Resources for Geo-Informatics Applications, Education and Training, PI: Prof. Mrs. Venkatachalam, Head, CSRE, IIT Bombay with several Co-PIs, Inst: IIT Bombay representing 12 institutions, Control no: HE-11081011220

In the absence of the prospective PI, Prof. Kannan, IIT Bombay explained the rationale behind the project. The financial cost breakups were sought for the project, but it they were not available readily. Chairman, PAB expressed his strong displeasure for not reflecting the cost breakups for the project. Chairman, PAB categorically stated that financial cost breakups should be put up cogently, whenever new proposals are presented for approval to PAB. Chairman, PAB also advised more details should be provided for the new proposals being put up for consideration of PAB.

PAB advised that the cost breakups for this project be presented in its next meeting.

4.4. Digital Literacy and Empowerment of Teachers in ICT PI: Dr. Abhijeet Singh, Banaras Hindu University, (Control No. DMI04091212722)

The proposal could not be discussed since the Project Investigator (PI) was not present in the meeting.

Item No.5

Setting up of Teaching ends at leading Institutes in the Country for generation of Content for 50 DTH Educational Channels under NME-ICT

The PAB noted the progress on the DTH Project, that has taken place under the Chairmanship of Prof. S.V. Raghavan, Scientific Secretary, office of the Principal Scientific Adviser to the Government of India, and the 8th DTH meeting held on October 25, 2012, wherein a summary Proposal received from Director, IIT

Madras, for creating 153 Teaching Ends (TEs) on 24X7 basis to support 50 DTH channels, under NMEICT was discussed and a modified proposal on this was submitted to the PAB.

PAB noted the Non-Recurring budget requirement on account of establishment of 153 TEs etc., at various leading institutes in the country, from where (from each TE), on an average about 2 Hours and 40 minutes a day, live lectures with live interactivity shall be generated and for this an amount of Rs.197.77 Crores shall be required for the remaining 4 years of the XIIth Plan.

The Board also noted the Recurring budget requirement on account of Generation of Live Content & Live interactivity from the students across the country etc., and for this an amount of Rs.374.96 Crores shall be requires for remaining the 4 years of the XIIth Plan, wherein approximately 7300 Courses shall be generated.

The PAB deliberated and in principle approved the Recurring & Non-Recurring budget proposed for running a **'Pilot Project for running 50 DTH Channels'**, however the funds on this can be released only on receipt of the NoC from MI&B which could lead to WPC/NOCC/SACFA clearances from Ministry of Communication and IT is to uplink the DTH signals by the MHRD institutions.

The Members deliberated and felt that since the MHRD DTH project is required to involve a large number of institutions on a regular basis and further software and hardware networking on a large scale is required, it was recommended that for all this a Special Purpose vehicle (SPV) shall be required and in the first instance we may find out an existing institute that shall act as SPV for DTH, however in case an existing institution(s) is/are not able to take up the activities, we may in that case create a SPV for the DTH.

Chairman, PAB stressed that there was a need to have discussion with UGC and AICTE, for the suggested framework by which all the institutions will be in a position to work together. Additional Secretary (TEL) and Mission Director

(NMEICT) & Member Secretary, PAB mentioned that PAB would be informed about its institutionalization. All these will be subject to clearance of our license by the Ministry of I&B.   Unless we have the license there is no point in investing money. The PAB meanwhile felt other activities on DTH programme should continue as per DTH Committee recommendations

Item No.6
Re-constitution of Standing Committee

PAB authorized the Chairman to take decision in the matter.

Presentation:

Server Committee

Prof.Huzur Saran of IIT Delhi gave a presentation on the Server Committee.

Table Agenda
List of sanctioned projects where Progress is Slow

The list of sanctioned projects where progress is slow was noted by PAB.

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

ATTENDANCE OF THE 25th MEETING OF PROJECT APPROVAL BOARD OF NATIONAL MISSION ON EDUCATION THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY HELD ON 6TH NOVEMBER 2012 AT 3.00 P.M. IN CONFERENCE ROOM (FIRST FLOOR), CSL LIBRARY, SHASTRI BHAVAN, DR. RAJENDRA PRASAD ROAD, NEW DELHI

S.No.	Name, Designation and Address	Phone No., Fax and Email
1.	Shri Ashok Thakur Secretary (HE) MHRD, Shastri Bhawan, **Chairperson** New Delhi	
2.	Shri. N.K.Sinha Additional Secretary(TEL) & Mission Director (NMEICT) Department of Higher Education, MHRD, Shastri Bhawan, New Delhi	23387781 nksinha.edu@nic.in
3.	Shri A.K. Singh Director (ICT) Ministry of Human Resource Development, Department of Higher Education, Shastri Bhawan New Delhi	anandsingh.edu@nic.in
4.	Shri Ashok Nakra Director-Technical Room No.1004, Sanchar Bhawan, New Delhi	011-23372575 9013137711 dirt_dot@nic.in
5.	Ms. P. Uma Lakshmi Deputy Manager-BSNL BSNL Bhawan, Janpath, New Delhi	011-23734029 9868272344 pumalakshmi2@gmail.com
6.	Prof. Uma Kanjilal Director, ACIL, IGNOU, New Delhi	011-29571716 9810488895 ukanjilal@ignou.ac.in
7.	Shri G. Panda Deputy Director IIT, Bhubaneshwar	09437048906 gpanda@iitbbs.ac.in
8.	Prof. Anil K. Bhowmick Director IIT, Patna	09771435882 director@iitp.ac.in

9.	Shri M.K. Surappa Director IIT, Ropar	
10.	Shri A.K. Arora Scientist `F' Deity, New Delhi	011-24363077 9968663077 arora@mit.gov.in
11.	Shri V.M. Gupta Scientist `D' NKNDW, Deity, New Delhi	011-24362115 Vm.gupta@nic.in
12.	Dr. Archana Thakur Deputy Secretary UGC, New Delhi	011-23236977 archana@ugc.ac.in
13.	Prof. Kannan Moudgalya IIT-Bombay Mumbai- 400076	09869326979 022-25767213 kannan@iitb.ac.in
14.	Prof. M.S. Ananth IISc., Bangalore	080-22933114 09008020743 ananth@iitm.ac.in
15.	Prof. S.V. Raghavan, Scientific Secretary, Office of the Principal Scientific Adviser to the Govt. of India	
16.	Shri Navin Soi Director (Finance) MHRD, Shastri Bhawan, New Delhi	
17.	Prof. Anup Kumar Ray IIT, Kharagpur	03222-282116 09434753375 09932675583 anuptng@gmail.com akray@cet.iitkgp.ernet.in
18.	Dr. C.S. Arora Senior Consultant, NMEICT	011-23389093 cs.arora@nmeict.ac.in
19.	Shri Sushil Prakash Senior Consultant – NMEICT	sushil.prakash@nmeict.ac.in 9212102222
20.	Shri Pradeep Kaul Senior Consultant, NMEICT	9868274690 kaulp@rediffmail.com
21.	Prof. K. Mangala Sunder Chemistry Department IIT-Madras Chennai – 600036	09444008706 mangal@iitm.ac.in

22.	Satyaki Roy Associate Professor Design Programme & Media Technology IIT, Kanpur Kanpur – 208016	0512-2594060 09793000770 satyaki@iitk.ac.in
23.	Dr. Surya Kiran Reddy Progamme Manager IIIT, Hyderabad Gachibowli, Hyderabad	09882009202 suryakiran@research.iiit.ac.in
24.	Dr. Sandhya Kode IIIT, Hyderabad Gachibowli, Hyderabad	09618945633 Sandhya.kode@gmail.com
25.	Shri Huzur Saran IIT, Delhi	9810111788
26.	Shri R.S. Mani Senior Technical Director NIC, A-Block, CGO Complex, New Delhi	011-24361609 9868209134 rsm@nic.in
27.	Shri Sunil Bareja Under Secretary Department of Higher Education MHRD, Shastri Bhawan, New Delhi	9838146060