File No.NMEICT(MS)/PAB/24 Government of India Ministry of Human Resource Development Department of Higher Education

1st October, 2012

To,

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

Sub:Agenda papers for 24th Meeting of the Project Approval Board of National Mission on Education through Information and Communication Technology to be held on 4th October, 2012 at 4.00 p.m.

Sir/Madam,

Encosed please find Agenda Papers for 24th Meeting of the Project Approval Board of National Mission on Education through Information and Communication Technology scheduled to be held on 4th October, 2012 at 4.00 p.m. at Shastri Bhawan, New Delhi under the Chairmanship of Secretary (HE), Ministry of Human Resource Development, Government of India, New-Delhi.

The meeting will be held at the following venue:

Conference Room No.112-C Wing (First Floor) Department of Higher Education, Ministry of Human Resource Development Shastri Bhavan Dr.Rajendra Prasad Road New Delhi

Kindly make it convenient to attend the meeting.

Yours faithfully,

(A.K. Singh)

Director (ICT) & Nodal Officer (NMEICT) Tel: 011-23384276

Copy to:

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

AGENDA FOR 24th MEETING OF PROJECT APPROVAL BOARD OF NATIONAL MISSION ON EDUCATION THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY TO BE HELD ON 4TH OCTOBER 2012 AT 4.00 P.M. IN CONFERENCE ROOM NO.112-C-WING (FIRST FLOOR), SHASTRI BHAVAN, DR.RAJENDRA PRASAD ROAD, NEW DELHI

Item No.	Subject	Page No.
Item No.1	Confirmation of the Minutes of the 23 rd Meeting of the Project Approval Board held on 28 th February, 2012	2
Item No.2	Action Taken Report on the Minutes of 23 rd Meeting of the Project Approval Board held on 28 th February, 2012	3
Item No.3	Approval of projects recommended by the Standing Committee	4-10
Item No.4	Request for extending VPNoBB to Study Centers of Dr.B.R.Ambedkar Open University, Hyderabad	11-10
Item No.5	 Issues related with BSNL/MTNL Give Aakash as a bundle with connectivity to colleges not having any computer Status of migration to NKN Signing of SLA with BSNL/MTNL 	12
Item No.6	 Status of projects awarded to: Pilot project namely, content creation (non-technical) e-content creation in the areas of economics, mathematics, commerce, history, zoology and botany, Delhi University. Projects awarded to IIM Ahmedabad. Content Generation for Undergraduate Courses In Agricultural Entomology - CSK Himachal Pradesh. 	13-16
Item No.7	Future Roadmap of NMEICT - Continuation in XII Plan Period	17
Item No.8	Strategy for Popularization of NMEICT	18-20
Item No. 9	Approval for Sitting fee to Members of DTH Committee	21
Item No.10	Virtual Lab, IIT Delhi - Approval of extension upto 31 st March, 2013	22
Item No.11	Budget Estimates for 2012-13 for TSG/Mission Secretariat of NMEICT	23
Item No.12	Representation of Mr Sushil Prakash, Senior Consultant, NMEICT.	24-25
Item No.13	Consideration of Sitting Fee to Members of Project Reviewing and Supervising Group (PRSG) under NMEICT	26
	 Presentations: 10,000 Teachers Training Programme by IIT, Bombay (Part of Talk to Teacher Project sanctioned under NMEICT Mission) DTH BSNL/MTNL Server Committee 	-
	Any other item with the permission of Chair	-

The Minutes of the 23rd Meeting of the Project Approval Board held on 28th February, 2012 are placed below (**Appendix-1 - Page No.27 to 37**) for kind perusal and confirmation please.

The "Action Taken Report" on the Minutes of the 23rd Meeting of the Project Approval Board held on 28th February, 2012 is given at **Appendix-2 (Page No.41 to 50)**.

Approval of projects recommended by the Standing Committee

3.1. 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.

This item was placed in the 23rd PAB and it was deferred for the next meeting.

The Standing Committee of NMEICT in its meeting held on 22nd February, 2012 recommended Rs.119 lakhs for the 17 courses.

The Extracts of the SC Meeting held on 22nd Feb, 2012 are given below:

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.

Prof. Sandhya Kode had made presentations earlier on the same and had been requested to revise her proposal from its proposed budget of Rs. 10 lakhs to the lowest possible. The learning-by-doing as a pilot was given and was well received at Rs. 30 lakhs for three courses. However, the facilities created in the pilot and the experience gained in the process would have to be taken into account and her current proposal for 17 courses at the rate of Rs. 7 lakhs is reasonable. Any cost overrun will be indicated by her and prior sanction will be taken before approving additional budget. It was also suggested by here than a number of courses are elementary and therefore she will not include in the content creation process, the research and analysis requirements of the Bloom's taxonomy for the Butterfly model. The committee approved her proposal in its entire form since the course contents created will be a valuable add on to on the content creation schemes by including interactive learning in the design of the course itself. A sum of Rs. 119 lakhs for 17 courses is recommended.

PAB may please consider the above Proposal.

3.2. E-content generation for PG Programme in Environmental Science Management", PI: Dr. Suresh Jain, Inst: TERI University

The Standing Committee of NMEICT in its meeting held on 8th June, 2012 recommended that the balance amount of Rs. 75 lakhs be released to the PI.

The Extracts of the SC Meeting held on 8th June, 2012 are given below:

The Standing Committee of NMEICT in its meeting held on 8th June, 2012 recommended that the balance amount of Rs. 75 lakhs be released to the PI.

The Extracts of the SC Meeting held on 8th June, 2012 are given below:

E-content generation for PG Programme in Environmental Science Management" PI: Dr. Suresh Jain Inst: TERI University Control No.:

Four courses completed in June 2012:

Air quality management, water quality management, environmental stat., environmental law & policy. Seven courses uploaded, waiting for review: environmental management system, environmental remote sensing, science policy, etc. They have created these courses using four Quadrant approach using flash. About 150MB per hour.

The PI wants to offer certificates to people who undergo the course, based on a test. There will be no charges at all. The SC has no objections, so long as no money is charged.

Approved budget is Rs. 1.5 crore. Rs. 75 lakh has been given and also spent. The PI wants the rest of the funds released. They promise to complete the remaining courses by 31 March 2013.

The SC recommends that the balance amount of Rs. 75 lakhs be released to the Pl.

3.3. RTP Based Wireless H.264 Scalable Video Streaming for High Speed Econtent Delivery over WLAN, PI: Prof. Aditya K. Jagannatham Inst: IIT Kanpur, Control No.ACO29031212526

The Standing Committee of NMEICT in its meeting held on 8th June, 2012 recommended that this project be funded.

The Extracts of the SC Meeting held on 8th June, 2012 are given below:

RTP Based Wireless H.264 Scalable Video Streaming for High Speed E-content Delivery over WLAN PI: Prof. Aditya K. Jagannatham Inst: IIT Kanpur Control No.ACO29031212526

Scalable Video Coding (SVC) Video rate should be adjusted based on (a) the link speed and (b) the device capability.

The PIs have already developed a codec for wired LAN. Now propose to develop for wireless, tablets and cellular networks. It is based on H.264. Akash has a fixed rate codec at present. It will be useful to have a variable codec. The proposed codec will address this. This codec will be released as open source. The proposed strategy involves layers of improved compression.

The PI proposes to develop this codec in one year. The cost of the project is Rs. 15 lakh. This codec can be demonstrated soon on wired LAN, if necessary.

This is an extremely important area. The PI has already demonstrated the feasibility of this approach for the wired LAN. The SC recommends that this project be funded.

3.4. 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

The Standing Committee of NMEICT in its meeting held on 8th June, 2012 strongly recommended this project.

The Extracts of the SC Meeting held on 8th June, 2012 are given below:

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

Developing suitable pedagogical methods for various classes, intellectual calibers and research in e-learning.

What has been completed: 450 faculty members from 50 institutions have participated. Eighty courses have been completed with 22 units or more. Ten courses have been completed with 40 units.

The proposal is to complete 120 courses and complete the 80 pilots (from 22 units to 40 units). In addition, to organize 6 national seminars, 6 national training workshops, 12 regional seminars, 12 regional training workshops, 1 national conference, 1 international conference

The budget for this project is Rs. 16 crore. It is proposed to be completed in three years.

The SC commends the PI for an excellent work in the pilot project. It asks the PI to come up with methods to adopt the methods proposed in this approach and to evaluate the efficacy. The PI mentioned that this was too difficult to be undertaken in this phase, although an initial effort will be undertaken.

The SC strongly recommends this project.

3.5. NPTEL, PI: Mangala Sunder, Inst: Coordinated by IITM

The Standing Committee of NMEICT in its meeting held on 27th July, 2012 deliberated the project.

The Extracts of the SC Meeting held on 27th July, 2012 are given below:

4. NPTEL PI: Mangala Sunder Inst: Coordinated by IITM Control No.:

Prof. Mangala Sunder gave a staus report of NPTEL. He explained the process followed by NPTEL. 240 courses got completed in Phase I. There are plans to create more than 900 courses in Phase 2 and Phase 3 together. About 250 courses have been uploaded to the portal in the current phase. But not all of these 250 are complete - some of these are still in progress.

The SC appreciates the work put in by the NPTEL Team. The SC urges the PI to take efforts to increase the pace of the work, especially in areas where only a few courses have been made. The SC suggests that NPTEL should include many more faculty members from institutions other than IITs to help achieve this. The current level of only 10% of the courses being made by faculty of non-IITs is very small. Increasing this number could also make the NPTEL courses more acceptable to other institutions, as many more will feel a part of this project.

The PI informed that he has exhausted most of the funds received so far. Because of lack of funds, he is unable to place the order for a high cost server. The PI presented the UC.

The SC finds the utilisation certificate to be in order, in general. It will, however, not be possible for the SC to verify each and every transaction and to report whether right price is paid for each item. This should be the responsibility of the institution where the project is carried out.

The SC recommends that the balance funds may be released to the PI by the MHRD at the earliest.

The PI is invited to suggest names of experts at the earliest, so that a PRSG for NPTEL can be formed at the earliest.

PAB may please consider the above Proposal.

3.6. Title: 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

The Standing Committee of NMEICT in its meeting held on 27th July, 2012 deliberated the project.

The Extracts of the SC Meeting held on 27th July, 2012 are given below:

Title: 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, Control no.:

Kannan Moudgalya reccused himself as a memberof the standing Committee, as he is the PI of this Project.

Kannan Moudgalya presented a new proposal on a 10,000 teacher training programme and spoken tutorials. He already presented a detailed report on the current status of this project in the SC meeting held on 22 June 2012.

It is proposed to include IIT Kharagpur as a new partner in this project. Prof. Somnath Sengupta, Dean of Continuing Education at IIT Kharagpur, is the Co-PI from IIT Kharagpur.

The current proposal is for the second phase of this project. The present 1,000 teacher training programme is now proposed to be enhanced to a 10,000 teacher training programme. The PIs propose to conduct 15 of such training programmes, each of ten day duration. They also propose to establish 10 nodal centres and 500 remote centres. The objective of the nodal centres is to help coordinate the nearby remote centres. The PIs will try to bring the nodal centres to the level of IIT Bombay and IIT Kharagpur during the course of this project, with respect to the conduct of such training programmes. The remote centres will be distributed across the country. Most of the Nodal and Remote Centres will be institutions other than IITs.

One important benefit in having large numbers of Remote centres all over the country is the reduction in the travel time of participants for these training programmes: they can go to a nearby centre. As a result of this exercise, the TA/DA per person for a ten day training programme is estimated to come down to Rs. 6,500 from Rs. 9,500, which was the estimated amount in Phase 1. If the PIs succeed in establishing remote centres in areas with large number of teachers wishing to enroll in the training programmes, the actual TA/DA in this phase can end up being lower than Rs. 6,500 per person.

The PI has already presented the status of the spoken tutorial activity in the SC meeting held on 22 June 2012. In the next phase, he proposes to create 500 original spoken tutorials and 5,000 dubbed spoken tutorials. He also plans to train 1,50,000 students in three years.

During the presentation, Prof. Phatak mentioned that the budget was incorrect by Rs. 60 lakhs with respect to the creation of 500 Remote Centres. The SC asks the PI to correct this mistake and to re-upload the proposal on the Sakshat site.

The budget for both of the two activities mentioned above for three years amounts to Rs.197.20 crore, after taking the above mentioned correction into account. Out of this, Rs. 60.75 crore is IIT Kharagpur's part. The balance is IIT Bombay's part. The major component of this budget is the TA/DA for the 1,50,000 teachers, proposed to be trained through 15 courses. This works out to Rs. 97.50 crore, which is calculated on the basis of Rs.6,500 per teacher. The next major component of this budget is for establishing nodal and remote centres, which comes to Rs. 40.50 crore.

The Standing Committee appreciates the work done by the PI in coming up with methodologies to scale up the training programme from 1,000 teachers at a time to 10,000 teachers. The SC welcomes the initiative to train 1,50,000 teachers at a substantially lesser TA/DA compared to the previous phase. The SC urges the PIs to explore ways to reduce this amount further. The SC wishes that the number of simultaneous participants be increased from 10,000 to a larger number, at least for a few courses. The SC wishes that eventually the number of remote centres should cover all engineering colleges and through them, good academic programmes can reach all colleges and all 8.5 lakh teachers.

The SC also appreciates the excellent work done through spoken tutorials. The SC commends the PI for coming up with a model to conduct a large number of workshops without the payment of TA/DA and without domain experts. The spoken tutorial methodology will be useful to promote IT literacy, to improve employment and to bridge digital divide.

The SC strongly recommends this project proposal.

PAB may please consider the above Proposal.

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

The Standing Committee of NMEICT in its meeting held on 27th July, 2012 recommended this project.

The Extracts of the SC Meeting held on 27th July, 2012 are given below:

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

Prof. Mrs. Venkatachalam, Head of Centre of Studies in Resources Engineering (CSRE), IIT Bombay, presented this proposal a third time to the SC. She proposed it the first time in the SC meeting held in March 2011, with a budget of Rs.5.06 crore. While appreciating the proposal, the SC had asked her to reduce the budget. The PI presented a revised proposal in the SC meeting held on 23 March 2012. At that time, the budget was brought down to about Rs. 3 crore. They had achieved this reduction by

asking the partner institutions to contribute to some of the resources, such as data and software, without billing this project. After this second presentation to the SC, the PI was asked to see if they could reduce the budget under manpower, travels and honorarium. In the current meeting, the costing under these heads is reduced, bringing the overall budget down to Rs. 2.502 crore. The PI mentioned that although the budget is halved, there will be no change in the deliverables of the project, as envisioned during the first presentation to the SC. The duration of this project is 30 months.

The SC appreciates the efforts put in by the PI and the Co-PIs to present an acceptable proposal, without affecting the final deliverables and quality. The SC recommends this project proposal.

Mrs. Venkatachalam proposes that the Head of CSRE, IIT Bombay, will be ex-officio PI of this project. The SC accepts this suggestion.

PAB may please consider the above Proposal.

Request for extending VPNoBB to Study Centers of Dr.B.R.Ambedkar Open University, Hyderabad

This item was placed in the 23rd PAB and it was deferred for the next meeting.

Vice-Chancellor, Dr.B.R.Ambedkar Open University, Hyderabad vide letter dated 14th December, 2011 informed that the University has a wide networks of 23 Regional Coordination Centers at District Headquarters and 219 Study Centers spread across the entire State of Andhra Pradesh. These centers are located mostly in Government Colleges. The University envisages to cover these centers through a VPN for the purpose of reaching the remote distance learners to provide educational instructional material.

As the Regional Co-ordination Centers and Study Centers are the constituent parts of their University, they requested the BSNL to extend the VPNoBB to their 70 Study Centers in the first phase and paid an amount of Rs.86,861/- on 30.6.2011.

The University has received an email message on 26.11.2011 from DGM, NOC, Bangalore of BSNL stating that the Study Centers are not eligible and the University should take up the same with MHRD for its inclusion.

In view of the above, Vice-Chancellor, Dr.B.R.Ambedkar Open University, Hyderabad requested MHRD to consider their Regional Co-ordination Centers and Study Centers eligible for VPNoBB as they are constituent parts of the University and facilitate the Varsity in reaching the unreached, which is mandate as part of ODL.

The above is put up to PAB for consideration.

Issues related with BSNL/MTNL

- Give Aakash as a bundle with connectivity to colleges not having any computer
- Status of migration to NKN

This item was placed in the 23rd PAB and it was deferred for the next meeting. Subsequently the issue was placed in the 3rd National Apex Committee Meeting of NMEICT on 3rd July, 2012.

The above is for information of PAB.

Status of projects awarded to:

This item was placed in the 23rd PAB and it was deferred for the next meeting.

6.1 Pilot project namely, Content Creation (Non-technical) e-content Creation in the areas of Economics, Mathematics, Commerce, History, Zoology and Botany, University of Delhi

The Pilot project namely, content creation (non-technical) e-content creation in the areas of economics, mathematics, commerce, history, zoology and botany was awarded to University of Delhi. For this project an amount of Rs.1.00 crore was released to University of Delhi vide sanction letter dated 31.3.2009. The Institute of Life Long Leaning (ILLL) is executing this project.

The Delhi University was invited in the Peer Review Committee Meeting of NMEICT held on 24.1.2011 for review of their project. However, due to change of PI, it was decided to skip this review as the original PI was not there and suggested that the new PI be given two to three months time to prepare a comprehensive project report.

Again they were called in the Standing Committee Meeting held on 6th August, 2011 and in the Evaluation Committee Meeting held on 3rd and 4th Sept, 2011. They did not attend any of the meetings.

Vide letter dated 3.6.2011 Ministry of HRD sought the status of this project. Also vide letter dated 27.9.2011 VC, Delhi University was requested to look into the matter and provide the present status of the project and whether it would be possible for ILLL to deliver the outcomes not later than 31st December, 2011, but no response has been received so far.

The above is put up to PAB for information please.

6.2. Projects awarded to IIM-Ahmedabad

The following two projects were awarded to IIM-Ahmedabad and the status is given below:

6.2.1. Proof of Concept Exercise for Better Planning of e-learning Programme – IIM-Ahmedabad

6.2.2. Awareness Building and Publicity Strategy Formulation

For the above projects, MHRD has released the following amount:

Proof of Concept Exercise for Better Planning of e-learning	Rs.5,00,000/-
programme	
Awareness Building and Publicity Strategy Formulation	Rs.61,00,000/-

PAB had approved the in its 3rd meeting an amount of Rs.10 lakhs for the project namely, Proof of Concept Exercise for Better Planning of e-learning programme and MHRD had released an amount of Rs,5 lakhs to IIM Ahmadabad for the above mentioned project.

For Awareness Building and Publicity Strategy Formulation project an amount of Rs.61 lakhs was released to IIM Ahmadabad for this project as per the PAB approval. Later on IIM Ahmadabad had expressed its inability to execute the project and they were accordingly requested to refund the amount with interest.

The PI vide its letter dated 4th March, 2011 refunded Rs.53,53,644/- after deducting Rs.5,91,890/- pending for the project "Proof of Concept Exercise for Better Planning of e-learning programme" and Rs.1,55,466/- as travel and stay expenses for the project "Awareness Building" by clubbing together both the above projects.

As per their letter for the project Proof of Concept Exercise for Better Planning of elearning programme total amount of Rs.10,91,890/- has been spent against sanction of Rs.10 lakhs. Further, no work for the project Awareness Building and Publicity Strategy Formulation has been carried out by IIM Ahmadabad. Accordingly, MHRD vide its letter dated 19th April, 2011 had requested IIM Ahmadabad to refund the amount of Rs.5,91,890/- for "Proof of Concept Exercise for Better Planning of e-learning programme" as the details of the amount spent in excess of sanction have not been provided, the present status of the project and peer review report have not been submitted to MHRD and refund an amount of Rs.1,55,466/- for the project Awareness Building and Publicity Strategy Formulation. IIM-Ahmedabad has not responded even after number of reminders.

The matter was also discussed in the Standing Committee Meeting of NMEICT held on 24th Sept, 2011. It was decided by SC that PIs for both the projects should be called for SC meeting for discussion.

PI was called in the SC meeting held on 15th Oct, 2011 and 26th Nov, 2011 but did not attend the meetings.

The above is put up to PAB for information please.

6.3. Content Generation For Undergraduate Courses In Agricultural Entomology - CSK Himachal Pradesh

The Director of the Institute vide letter dated 28.10.2011 informed that the funds for the project could not be received in time and requested for extension of project by one year along with permission to utilize the funds during the year 2011-12. The matter was discussed in the Standing Committee Meeting held on 26th November, 2011.

The extracts of Standing Committee Meeting held on 26th November, 2011 are given below:

Ajay Sood CSK Himachal Pradesh Krishi Vishvavidyalaya, Palamur AS7220099850 CONTENT GENERATION FOR UNDERGRADUATE COURSES IN AGRICULTURAL ENTOMOLOGY

Rs. 25 lakh was received by HPKV on November 2010. Apparently, the PI did not come to know of the arrival of the funds until much later. The Director of research, HPKV informed MHRD by a letter dated 28th Oct. 2011 (after almost a year) that they needed an extension.

The PI says that he cannot complete the course by 31st March 2012. He wants a one year extension.

The SC members asked the PI whether he could expedite the work and get the courses completed by 31st March 2012. The PI said that it was not possible. The SC members asked the PI whether he could complete at least one course by 31

March. The PI said this was also not possible. The SC then asked the PI whether he could complete at least the first quadrant of a course by 31st March. The PI was not agreeable to this also.

The PI is not in a position to complete any significant amount of work by 31st March. As it is not in a position to give an extension beyond 31st March, the SC asks the PI not to start the work.

There has been quite a bit of time after the receipt of the funds to complete the project. Unfortunately, as this information was not communicated to the PI in time, this difficult situation has arisen. The SC members suggested that whenever a sanction letter is sent to the Head of an Institution, a copy of it should be sent to the PI also.

The SC also suggests that MHRD should invite the VC of HPKV to find out what went wrong and how to prevent such occurrences in the future. This meeting will also give an opportunity to explain to the VC of HPKV the different ways in which the university can participate in the Mission.

As suggested by Standing Committee, letter dated 9th February, 2012 was written by MHRD but no response has been received so far.

The above is put up to PAB for information.

Future Roadmap of NMEICT - Continuation in XII Plan Period

This item was placed in the 23rd PAB and it was deferred for the next meeting. Subsequently the issue was placed in the 3rd National Apex Committee Meeting of NMEICT on 3rd July, 2012.

The above is for information of PAB.

Strategy for Popularization of NMEICT

This item was placed in the 23rd PAB and it was deferred for the next meeting.

NMEICT is one of the flagship Mission Mode projects of the Govt. of India. Launched in 2009, enough work has been now accomplished in different facets of the Mission and a stage has been reached where there is a lot of content available and users now need to be made aware of the Mission and the facilities/content available

Any popularization strategy will necessarily need to be multi-modal. Hence, it is proposed that different media channels be used to spread awareness. Some details are provided below

Brand Building:

Branding exercise for the mission to ensure sustained inputs and tangible takeaways from the mission in a continuous basis

1. Brand Logo & Symbols

- 1. Design (through a national level competition)
- 2. Usage criteria
- 3. Monitor usage

2. Brand Slogan

- 1. Competition (through a national level competition)
- 2. Usage Criteria
- 3. Monitor Usage
- 3. Brand Audit
 - 1. Design
 - 2. Conduct
 - 3. Analyze

4. Brand Identity

- 1. Create
- 2. Implement
- 3. Monitor
- 4. Assess

Media Channels:

Print Media:

- 1. Press Releases
- 2. Posters
- 3. Brochures

New Media (Web)

- 1. Email
- 2. Link Exchange
- 3. Revamping the brand positioning of the Sakshat Portal

Electronic Media

- 1. Documentary
- 2. Short Films
 - 1. On national mission objectives
 - 2. On interviews of PAB and Steering Committee
 - 3. On success stories
 - 4. On Projects and PIs

Other Channels:

- 1. Workshops
- 2. Demonstration Vans

Visit to Universities and Mobilizing University Resources

- 1. Coordinate meetings and workshops at various locations highlighting the National Mission
- 2. Mobilize essential resources for awareness building through these visitis and gatherings
- 3. Metrics for measuring effectiveness

Annual Conference Event on National Mission

- 1. Bringing in International experts and Press
- 2. Highlighting the work that has been done
- 3. Rating of the various projects done and awarding the best projects across various categories
- 4. Using this annual conference event for more and better branding of the mission

Strategies and alternatives for conducting regular activities to ensure that the mission achieves top of the mind recall for higher education in India

Offline

- 1. Letters
- 2. Word of Mouth spreading
- 3. Evangelism
- 4. Mention in Minister's speeches
- 5. Monitoring and assessment of effectiveness

Online

- 1. Media coverage
- 2. Road shows
- 3. Blogs
- 4. Groups (e.g. Google, Yahoo etc)
- 5. Social Networking sites

Once the base momentum has been created, it will need to be sustained. This can be done by setting up a support infrastructure that ensures continuous support, information sharing and coordination among different stakeholders for the mission through IVRS, SMS and inbound call centre to

- 1. Design solution(s)
 - 1. IVRS
 - 2. SMS
 - 3. Voice

- Implement solution(s)
 Location choice

 - 2. Hardware
 - 3. Software
 - 4. Toll-free number
 - 5. Personnel
- 3. Effectiveness assessment and Feedback loops

Put up to the PAB for kind information.

Approval for Sitting fee to Members of DTH Committee

This item was placed in the 23rd PAB as Table Agenda and it was deferred for the next meeting.

The Ministry of HRD vide order No. F.16-49/2010-DL dated 24th December, 2010 constituted a 15 member Committee on Direct to Home (DTH) under NMEICT Project under the Chairmanship of Prof. S.V. Raghavan, Scientific Secretary, Office of the Principal Scientific Adviser to the Government of India.

Further, as per the constitution of the DTH Committee, a Technical Expert Committee, DTH consisting of six experts was further constituted on 12th December, 2011.

It is submitted that the DTH Committee has so far held meetings on six occasions whereas, the DTH Technical Committee has met on two occasions.

DTH Committee is a Committee of Domain Experts, at par with Standing Committee of NMEICT. Standing Committee Members are paid a sitting fee of Rs.1000/- per meeting. The proposal is for payment of sitting fees to the Members of the DTH Committee and DTH Expert Committee.

The Education Secretary (HE) in the capacity of PAB Chairman, has kindly approved payment of Rs.1000/- as sitting fee to each of the Committee Member for each of the meetings in the past.

The above is submitted to PAB for ratification.

21

Virtual Lab, IIT Delhi - Approval of extension upto 31st March, 2013

This item was placed as Table Agenda in the 23rd PAB and it was deferred for the next meeting.

The Co-PI of the Virtual Lab Project, IIT Delhi vide letter dated 20th Jan, 2012 informed that the project is under progress and approximately 60 labs have been developed with an average of 6 to 8 experiments each so far. The ECE labs have started its limited field trials also, whereas other disciplines are planning to start field trials with the commencement of first semester of this academic year. Therefore, requested for extension upto 31st March, 2013.

All the Projects under NMEICT have been extended upto 31st December, 2012 vide MHRD letter dated 4th July, 2012 (**Appendix-3- Page No.51**).

The above is for information of PAB.

Budget Estimates for 2012-13 for TSG/Mission Secretariat of NMEICT

The Department of Higher Education, Ministry of HRD had signed a Service Agreement with EdCIL (India) Limited for establishing a Mission Secretariat for the National Mission on Education through Information and Communication Technology (NMEICT). The Mission Secretariat consists of a Technical Support Group (TSG), Consultants and the Support Staff dedicated to the Scheme to provide support to the Department of Higher Education, MHRD for smooth execution of the project.

Besides being providing support in organizing various meetings like Standing Committee, Implementation-cum-monitoring Committee, Project Approval Board, etc, the TSG is also providing on the spot payment facility for Travelling Allowance and Honorarium being paid to the members and the participants of various Committees. A budget (recurring and non-recurring) of Rs.435.63 lakhs for the Mission Secretariat of NMEICT for the year 2011-12 was provided against which an amount of approx.Rs.182 lakhs (approximately) has been spent on the project during the year 2011-12.

The Budget Estimates for the Mission Secretariat of NMEICT for the year 2012-13 have been provided for a total amount of Rs.391.81 lakhs including Non-recurring Expenditure of Rs.54.01 lakhs and Recurring Expenditure of Rs.319.14 lakhs as per the details enclosed at **Appendix-4 – (Page No.52)**

The Budget proposed for the year 2012-13 for the Mission Secretariat is well within the overall ceiling of 1% of the total outlay fixed for the project.

The PAB is requested to consider and approve budget of Rs.391.81 lakhs for the Mission Secretariat for the year 2012-13 and release of 1st installment of Rs.196 lakhs (being 50% of the total budget) after adjusting the unspent amount available with EdCIL.

Representation of Mr Sushil Prakash, Senior Consultant, NMEICT

In respect of fixation of consultancy fee, the Project Approval Board of NMEICT in its 20th Meeting held on 2nd May, 2011 vide Additional Item No.2 approved as follows:

"after deliberations PAB approved a <u>consolidated</u> remuneration up to Rs. 75,000/- per month for senior consultants. PAB further decided that if a pensioner is engaged as consultant or senior consultant etc., his pension will be adjusted as per existing norms"

Shri Sushil Prakash has been engaged as Senior Consultant under NMEICT project w.e.f. 02.01.2012.

It may be mentioned that as per the details on record, Shri Sushil Prakash belongs to 1976 batch of Indian Telecom Service and had worked with Department of Telecommunications (DOT), Government of India from August, 1976 to 31st January, 1997 (19.4years). Presently, from the said Government organization, he is drawing a pension of Rs. 11,222/-. Shri Sushil Prakash had also worked with Bank of America from 1.2.1997 to 3.4.2009 (12years). Shri Sushil Prakash had also last worked with TATA Tele services Limited from 15.5.2009 to 30.12.2011 (2.8years), wherein as per the last pay slip for the month of November, 2011 he had drawn net salary of Rs. 93,390/-.

The Integrated Finance Division of MHRD had advised in the matter of fixation of remuneration of Shri Sushil Prakash, Senior Consultant as follows:

- i) Fix the remuneration at Rs. 75,000/- per month and pay him that amount if the contract (i.e. terms and conditions of appointment) specifically provides that he would be paid a consolidated amount of Rs. 75,000/- p.m. and pension received, if any, would not be deducted from the above consolidated pay.
- ii) If the contractual terms do not include the above provision, then the amount of pension being received by him i.e. Rs. 11,222/- may be deducted from his consolidated remuneration of Rs. 75,000/- and he be paid a sum of Rs. 63,778/- per month as consolidated pay.

No contract in respect of terms and conditions of appointment has been signed with Mr.Sushil Prakash and all the terms and conditions of appointment has been communicated through an appointment letter. Accordingly, the consultancy fee of Shri Sushil Prakash has been fixed in terms of MHRD letter dated 22.03.2012 i.e. by deducting Rs.11,222/-, the amount of pension being received by him from his consolidated remuneration of Rs. 75,000/- and he is being paid a sum of Rs. 63,778/- as a consolidated fee. For the purpose of fixation of fees, the last pay drawn in government organization (Indian Telecom Services) has been considered and not the last pay drawn in private sector (TATA Tele services Limited).

Shri Sushil Prakash has represented vide his letter dated 18.04.2012, requesting to review the consultancy fee of Rs. 63,778/- per month and fix it to Rs. 75,000/- per month w.e.f. 02.01.2012 (**Appendix-5 - Page No.56**), in view of the details mentioned therein in his representation. For computation of fees, Shri Sushil Prakash has considered his last basic pay of Rs. 93,390/- of TATA Tele services Limited instead of Indian Telecom Services.

The case of Shri Sushil Prakash is unique in that he was not a Government servant immediately prior to his appointment as Consultant. As there is ambiguity in the terms for such cases. The PAB may advise in respect of fixation of remuneration of Shri Sushil Prakash, Senior Consultant.

Consideration of Sitting Fee to Members of Project Reviewing and Supervising Group (PRSG) under NMEICT

The Standing Committee of NMEICT in its meetings held on 13th January, 2012; 2nd Feb, 2012; 23rd March, 2012 and 13th July, 2012 formed Project Reviewing and Supervising Group (PRSG) for various projects under NMEICT.

Prof.Kannan Moudgalya, IIT Bombay has enquired if there is Honorarium to be paid to the Members of PRSG.

The PAB in its 7th meeting held on 2nd July, 2009 approved "that Rs.2,000/- and Rs.1,000/- be paid respectively as Honorarium and Sitting Fee to the Domain Experts for their contribution in evaluating each project and to the Members of the Standing Committee for their participation in each of the meetings".

The IFD of MHRD has already approved that "the non-official Members of the PAB are being paid a sitting fee of Rs.1,000/- and the Subject Experts for evaluating the DPRs an amount of Rs.2,000/- each. Further, IFD of MHRD has also agreed for payment of Sitting Fee of Rs.2,000/- for the Members of Evaluation Committee.

In view of the above, PAB is requested to consider the amount of Honorarium to be paid to the Members of PRSG.

MINUTES OF THE 23RD MEETING OF PROJECT APPROVAL BOARD OF NATIONAL MISSION ON EDUCATION THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY HELD ON 28TH FEBRUARY, 2012 AT 3.00 P.M. IN CONFERENCE ROOM (SECOND FLOOR), ROOM NO.220, A-WING, SHASTRI BHAVAN, NEW DELHI

The 23rd Meeting of the Empowered Committee of Experts (Project Approval Board) (PAB) of National Mission on Education through Information & Communication Technology was held on 28th February, 2012 at 3.00 p.m. in Conference Room (Second Floor), Room No.220, A-Wing, Shastri Bhavan, New Delhi under the Chairpersonship of Secretary, Department of Higher Education, MHRD.

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

Shri N. K Sinha, Additional Secretary (TEL), 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 22nd PAB Meeting.

Since no comments were received, the Minutes of the 22nd Meeting of the Project Approval Board held on 9th December, 2011 were confirmed.

Item No.2

The Action Taken Report on the Minutes of the 22nd Meeting of the Project Approval Board held on 9th December, 2011 was noted by the PAB. During the discussion following suggestions were made by the members of PAB:

- As material created under NPTEL does not conform to the syllabi of the universities, colleges are hesitant to use it. Both UGC and AICTE should be requested to write to all universities/colleges to the extent possible to adopt it and use it. Email should be sent to 500 universities requesting the universities to write to all the colleges affiliated with them. Otherwise such a good effort is not getting full mileage.
- UGC and AICTE should be asked to motivate the institutions to include material created under NPTEL in the syllabi. If this is done then students will demand it. As knowledge is more important than examination, UGC and AICTE have to say for it and this can be done with the help of UGC and AICTE.
- Both UGC and AICTE should be invited in the next PAB meeting.
- As NPTEL material is not in the editable form, something should be done in the NPTEL charter to give facility of editing to the colleges willing to use it. But if somebody edits it, then it should be stated that it has been modified.

 One special session of PAB should be called for review of what has been done till now and what has been prepared is useful to the students or educational institutions. PAB agreed that once the Evaluation Committee's report is available, discussion and focused attention on delivery part for e-content material can be held.

Item No. 3: Report on Development of the LCAD project sanctioned to IIT Rajashtan -Change of PI.

Mission Director reminded the PAB about the genesis of this programme. The National Apex Committee and Project Approval Board (PAB) of NMEICT in its meeting held on 1st September, 2010 had approved the proposals submitted by IIT Rajasthan towards procurement and hardware and software optimization of the Low Cost Access Device, as well as for setting up a testing lab at IIT Rajasthan for testing these devices.

Mission director also stated that Ministry has released a total of Rs.47.72 crores owards these projects, of which Rs.25.00 crores was meant for testing and delopment of LCAD and Rs.22.72 crores towards teacher empowerment 'A' which included procurement of 1 lakh low cost access devices. These devices were to be distributed to teachers for their field trial.

Based on information given by IIT Rajasthan, it is understood that about 600 'Aakash' LCAd were given to students for testing and feedback, which was both postitive and negative. A scan of the individual student feedback forms received from IIT Rajasthan showed that, in general, students are very enthusiastic about this device, but they have also pointed out some areas where improvement is required. Negative feedback related to known issues like (a) heating of the device, (b) need for longer battery life, (c) need for capacitive instead of resistive touch screen etc. Many of these issues related to the original specs given in the tender floated by IIT Rajasthan and were not an issue with the device itself. Also, since this is an innovative device being produced for the first time in the world at such a cost, like in any new device, there will be a period where such issues will crop up and will need to be resolved. Similar issues were encountered even when the iPad was first introduced, and with improvements in subsequent releases, it has gone on to become a best seller all over the world.

Mission director informed the PAB that a meeting was held at the Ministry on November 15, 2011 to resolve the issues arising from the student feedback. The vendor and Director IIT Rajasthan were present in this meeting. As a result of discussions at this meeting, the vendor agreed to make changes including upgrading the processor from 366 MHz Arm 11 based processor to a 700 MHz Arm Cortex A8 processor, improving the firmware and replacing the battery of 2100 mAH with a battery of 3200 mAH capacity with no enhancement in cost. The minutes of this meeting reflect this agreement. However, for various reasons, after October, 2011, the project went into a tail-spin.

Now, Director, IIT Rajasthan, the PI of this project has sent a letter to the Ministry requesting that the project be shifted from IIT Rajasthan as they do not wish to carry on with this project due to some intractable problems. It is stated in the letter that this decision is being taken pursuant to a discussion in the IIT Rajasthan Board of Governors meeting.

On the issue of Item 5 of the Agenda, relating to letter from IIT Rajasthan purporting to point to a national loss to exchequer, Mission Director pointed out that vendor has agreed to accept payment in Indian Rupees at the fixed rate of Rs.2276/- per unit. Hence, this issue has no relevance any longer.

In terms of changing the PI from IIT Rajasthan to another organization, Mission Director stated that the funds belong to the Mission and hence it was not a problem to change the PI. Director, IIT Bombay stated that such changes have been done in many cases earlier too.

One possibility was to change the PI but continue with the existing LC. Opinion was sought from various bankers who have said that if all parties concerned (in this case IIT Rajasthan, vendor and new PI) agree and give an NOC to the existing bank, then the applicant name can be changed from IIT Rajasthan to new PIs' organization. The existing LC can be amended if required to add new clauses like adherence to agreed testing protocol (which was not mentioned in either the agreement or LC signed by IIT Rajasthan)

In view of the above, PAB was, inter alia, requested to consider the following:

- Change of PI and transfer of money (along with interest) from IIT Rajasthan to new PI for LCAD Project.
- Transfer of contract on as-is-where is basis to the new PI which would also mean that the rates for acquiring LCAD would remain the same for the new PI also.
- Authorizing new PI to enter into a new agreement (if required) with the vendor already declared successful by IIT Rajasthan through their tender process and to either open a new LC, or operate the existing LC with suitable amendments.
- New PI to be mandated to negotiate with the vendor to accept payment for devices at the rate which is lower of the two rates:
 - Rs.2276/- per device (arrived at through the IIT Rajasthan tender)
 - o The Rupee rate arrived at through the new tender for Aakash II
- IIT Rajasthan to be responsible for any action or disputes arising from the actions taken by it between the sanction of the project till the date of takeover by the new PI
- The original project continues as it is only a change of PI.

The PAB deliberated the above issues and decided that:

- PAB is not and has not earlier been part of the tendering process. What needs to be discussed and decided is that the project be transferred to a new PI as requested by Director IIT Rajasthan and the project should be closed successfully and amicably.
- As IIT Bombay is willing, the project is transferred to IIT Bombay with Prof. Phatak of IIT Bombay as the new PI.
- As requested by Prof. Phatak, all issues in this project relating to the period before takeover by IIT Bombay will remain the responsibility of IIT Rajasthan, the earlier PI. The responsibility of the new PI would be to finalize the terms of all further deliveries so as to complete the original tendered quantity of 100,000 devices keeping in mind the new specifications, to set up a rigorous testing procedure, and to ensure the project is completed successfully.

- Prof. Phatak, the new PI of this project will discuss with Prof. Rajat Moona, DG of C-DAC the possibility of C-DAC joining hands in this project as a Co-PI.
- A tripartite agreement would need to be signed prior to the taking over the project by IIT Bombay between IIT Rajasthan, the vendor (M/s Datawind) and IIT Bombay to ensure that all pending issues are closed and IIT Bombay takes the project forward with a clean slate.
- Regarding the issue of lower of two prices (Rs.2276/- and the price arrived at through the new tender), it was decided that since the new tender has not been floated yet, and is a subsequent event, the effective rate for this project will remain Rs.2276/- per device. However, IIT Bombay can negotiate with the vendor and can incorporate this clause in the new agreement.
- Regarding the issue of transfer of money from IIT Rajasthan to IIT Bombay, it was decided to take the opinion of IFD of the Ministry as to the best way of doing this incomplete compliance with all existing regulations. IFD's opinion will also be sought on the matter of transfer of agreement and LC to the new PI, IIT Bombay.

Progress Report of the Committee regarding continuous R&D and timely delivery of Aakash.

A high level Committee has been constituted under the Chairmanship of Secretary; Department of IT regarding continuous R&D and timely delivery of Aakash vide order no. 8(195)/ 2011-IPHW dated December 22, 2011. The Committee has so far met on 4th January, 2012, 17th January, 2012, 22nd January 2012 and 31st January, 2012. Copies of the Minutes of the meeting issued by Department of IT were seen by PAB. It was also informed that meeting has also been taken by Hon'ble Minister of Human Resource Development and Communication & IT and the copies of the minutes of the meeting issued by PAB. This was only to apprise PAB and no decision is required to be taken at this juncture.

Item No.5

Note on Loss to Exchequer

It was informed to PAB that IIT Rajasthan in one of correspondences has narrated that if present exchange rate of dollar, as insisted by M/s Datawind is taken into account in spite of para 3.2 of the agreement which put onus of cost of fluctuation of exchange rate on M/s Datawind, the cost of the device will be approx Rs. 2,700/-, against the market price of the device given by M/s Datawind of Rs.2,500/- per device. This may mean major concession and loss to the exchequer. It was further informed that that as per para 3.2 of the agreement, the per device cost comes to Rs.2,276/- per device, the loss to the exchequer, therefore, will be construed as per Rs.424/- per device.

It was further informed that Ministry have clearly directed to IIT Rajasthan that there are few contentious issues between IIT Rajasthan and Datawind which have bearing on the commercial agreement between the two and also on the LCAD project assigned to IIT Rajasthan and the final decision on all matters in the commercial transaction should lie with the two parties concerned(i.e. IIT Rajasthan and Datawind) and no pecuniary loss to the exchequer(if any), directly or on account of opportunity cost should lie on Government/ Mission funds. Since this is a commercial transaction between IIT

Rajasthan and Datawind, any loss to the exchequer arising from acts of omission or commission on the part of IIT Rajasthan, will be the sole responsibility of IIT Rajasthan and Government or Mission funds should not be put at stake.

It was further informed that this apprehension does not hold ground now that the vendor has agreed to accept payment @ Rs.2276/- per device (corresponding to USD 49.98 at exchange rate prevailing in April, 2011 i.e., the date of original agreement between IITR and the vendor – DATAWIND). This exchange rate fluctuations would not be able to bring about any loss to exchequer. The PAB was informed that this issue is now settled.

Item No.6

Progress on setting up of DTH Educational Channels under NME-ICT

It was informed to PAB that Satellite Communication & Navigation Programme, ISRO Bangalore vide letter No.SCNP / F.711/01/11 Dated December 15, 2011 has communicated that based on MHRD request, two Ku-band transponders (36X2 MHz spectrum) in INSAT/GSAT-8 is allotted to MHRD for NME-ICT programme.

It was further informed that Ministry of HRD vide order No. F.16-49/2010-DL dated 24th December, 2010 constituted a 15 member Committee on Direct to Home (DTH) under the Chairmanship of Prof. S.V. Raghavan, Scientific Secretary, Office of the Principal Scientific Adviser to the Government of India. The DTH Committee in its meeting held on December 29, 2011, also co-opted few experts from Prasar Bharti, Dept. of IT & CEC (under the provisions of the MHRD order No. F.16-49/2010-DL dated 24th December, 2010).

It was informed to the PAB that SAC Ahmedabad has been requested to give a plan to realize thousand channel project. This work is in progress with Department of Space. As need is to uplink the channels, two routes are available. If we want to do it immediately then teleport route is there and for this, the committee has discussed with the PSUs and asked for limited tender. TCIL and BECIL responded and TCIL turned out to be lowest. TCIL will be basically a consultant to be appointed for finding out the teleporting. They will go with normal tendering courses to find out the agency who will teleport as per the specifications. Approval of PAB was sought for going forward in this direction commercially.

The PAB noted the Progress on setting up of DTH Educational Channels under NME-ICT. PAB suggested that first NOC from I&B Ministry may be taken. As I&B Ministry does not give NOC to any other Ministry as part of their policy and the proposal has to be in a format that Ministry of I&B is able to respond. In fact, I&B Ministry should be requested to allot it to the institutions. PAB further suggested that allocation of channel may also be decided. It was suggested that CEC and IGNOU may be allocated some channels as they are already telecasting some channels. The Mission Director was authorized to talk to CEC, IGNOU and others and decide about the allocations of channels within 15 days. It was decided that the two transponders allotted to NMEICT should be made operational and nomination may be made within 90 days to take action for use of these transponders.

After detailed discussions, PAB approved the following as recommended by the DTH committee:

- (a) Regular annual payment of transponder leasing charges (for the two transponders allocated to NMEICT by the Deptt. of Space) to M/s Antrix Corporation (a PSU under Deptt. of Space) at the rate decided by the Deptt. of Space (currently Rs. 4.75 crore plus tax per transponder per year) and pro-rata payment for the 2 months of the current financial year.
- (b) Obtaining the services of M/s. Telecommunication Consultants India Limited (TCIL) a PSU under the Ministry of Communications and Information Technology for finding a Teleport Agency for engagement of up-linking 50 DTH channels of MHRD at one time payment decided by the DTH Committee through a transparent process as the PAB is not part of any tendering process.

Item No.7:

Approval of new projects recommended by the Standing Committee of NMEICT

7.1 Science Experiments using Computers by Dr. Ajith Kumar, Inter University, Accelerator Centre, Aruna Asaf Ali Marg, New Delhi Control Number ATE24121112305, new proposal.

The item was discussed. PAB approved upto Rs.10 lakh and decided that more details need to be given.

7.2. Village communication network leveraging on fibre to the village PI: Prof. Ashok Jhunjhunwala Inst: TCOE at IIT Madras and TCOE at IIT Bombay

The item was discussed. PAB approved budget of Rs. 1 crore for each of the IITs for a two year duration, coming to a total of Rs. 2 crore as recommended by the Standing Committee.

7.3. Enhancement & Roadmap to Aakash Platform PI: Prof. Ashok Jhunjhunwala Inst: TCOE at IIT Madras

The item was discussed. PAB approved budget of Rs. 25 lakh as recommended by the Standing Committee.

7.4. Aakash education proposal PI: Prof. Ashok Jhunjhunwala Inst: TCOE at IIT Madras

The item was discussed. PAB approved budget of Rs.5 crore as recommended by the Standing Committee.

For Items at 7.2, 7.3 and 7.4, PAB decided that output and outcome of both the projects needs to be recorded clearly.

7.5. Free and Open source software for campus collaboration: By Shri. Arun Prabhudesai from Enhance Education, Pune

Only for information and noted by PAB.

7.6 Popular science E-books: Demystifying the Brain by Prof. Srinivasa Chakravarty, IIT Madras

Only for information and noted by PAB.

Item No.8

Approval of projects recommended by the Standing Committee for next installment

8.1 Robotics for Education - Swagat Kumar - IIT Rajasthan

The item was discussed. PAB approved second installment of Rs.100 lakhs subject to UC, statement of account, and actions items (plan for the remaining period of project) being submitted by PI.

8.2. GNUKhata,

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

The item was discussed. PAB approved Rs,15 lakhs as recommended by the Standing Committee.

8.3. E-yantra, Dr.Kavi Arya

The item was discussed. PAB approved Rs.62 lakhs lakhs as recommended by the Standing Committee.

8.4. Virtual Labs project – IIT Delhi

Prof.Ranjan Bose of IIT-Delhi informed that for main phase lab he needs the 3rd installment to carry on the outreach activity and giving final touches on the lab. It is progressing well and the project is little ahead of the schedule. Extension of one year was also needed. For remote triggered lab as he needs to buy equipments and one third installment already released is not sufficient to buy the equipments release of 2nd installment is required immediately. Again for this one year extension is required. For the pilot phase lab also he needed extension of the time. He further intimated the PAB that on 23 January, 2012, 89 virtual labs were launched. In total under this project he has to do 80 simulation based labs, 35 remote triggered labs and 23 labs of pilot phase which have half of both types of labs. PAB suggested that AICTE should also be involved in the joint action plan to popularize the virtual labs in the engineering colleges. Help of UGC can also be taken in this regard. After deliberation PAB approved Rs.32.8 crores (3rd installment of simulation based labs and 2nd installment of remote triggered labs) as recommended by the Standing Committee.

8.5: Progress of the Quantum Nano Computing Centre project by Dr. Vishal Sahni, Dayalbagh Educational Institute, Agra.

The PI, Dr. Vishal Sahni made a brief presentation of the project. After deliberation PAB approved next installment of Rs. 1.5 crores as recommended by the Standing Committee.

8.6. Inflibnet / INDEST resources to Universities, IITs, NITs, IISERs and Colleges:

8.7. National Library and Information Services Infrastructure for Scholarly Contents (N-LIST)

Dr. Jagadish Arora, Inflibnet, Ahmedabad informed that most of the funds required under this project are recurring expenses to be paid annually and briefed other details of the current status of the project. The item was discussed in detail. After deliberation, PAB approved Rs.59.28 crores as recommend by the Standing Committee for the renewal of subscription.

8.8 Proposal for Enhancement of Production cost for E-content Module under NMEICT presented by CEC (Shri Sunil Mehru, Shri Nagesh and his colleagues on behalf of the PI Dr.Tilak Kem).

It was informed to PAB that PI proposed an enhanced rate of Rs 35,000 per module of half hour video production, web supplements for the contents, and creation of the four-frame content for online streaming from the current norm of Rs. 17,500 per module. But the Standing Committee of NMEICT recommended Rs.3.1 crores to CEC for next installment at the prevailing rate of Rs.17,500.

After deliberation PAB approved Rs.3.1 crores to CEC for next installment at the prevailing rate of Rs.17,500 per module as recommended by the Standing Committee. PAB suggested that PI should complete 19 subjects in saturation mode with this and no extra money is demanded.

8.9. E-Kalpa (Curriculum development in Design) Presented by Prof. Ravi Poovaiah, IIT Bombay

The item was discussed. PAB approved 3rd installment of Rs. 2 crores as recommended by the Standing Committee.

8.10. FOSSEE by Prof. Prabhu Ramachandran presented by Dr. Madhu, IIT Bombay.

The item was discussed. PAB approved Rs.50 lakhs as recommended by the Standing Committee.

8.11. 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.

Deferred for the next meeting.

Item No.9

Status of Expenditure under NMEICT

Noted by the PAB.

Request for extending VPNoBB to Study Centers of Dr.B.R.Ambedkar Open University, Hyderabad

Deferred for the next meeting.

Item No.11

Issues related with BSNL/MTNL

- Give Aakash as a bundle with connectivity to colleges not having any computer deferred for the next meeting.
- Provide wifi modems to all colleges As BSNL has already been intimated regarding this, PAB ratified it.
- Status of migration to NKN deferred for the next meeting.
- Status of LAN provisioning to the universities it was intimated to PAB that for 400 nodes LAN to be established in the universities, many universities gave consent, estimates have been prepared, survey work has been done and report has been given to universities so that it approves and give 25% of its share. Since, MHRD has already paid 75% of its share to BSNL, we can request them to start the work and complete our portion of the 300 nodes and when universities give their share of money, other 100 nodes can be completed.
- Mr. Anil Jain,Sr. GM, BSNL told that more than 3000 colleges have not given consent for VPNoBB connection. After deliberation, PAB approved to provide two connections for two months. Thereafter, if the colleges are willing to continue, it should be done so, otherwise it should be discontinued.

Signing of SLA with BSNL/MTNL – Deferred for the next meeting.

Item No.12

12.1 Pilot project namely, content creation (non-technical) e-content creation in the areas of economics, mathematics, commerce, history, zoology and botany

Deferred for the next meeting.

12.2. Projects awarded to IIM Ahmadabad

Deferred for the next meeting.

12.3. Content Generation For Undergraduate Courses In Agricultural Entomology - CSK Himachal Pradesh

Deferred for the next meeting.

Item No.13

Future Roadmap of NMEICT - Continuation in XII Plan Period

Deferred for the next meeting.
Item No.14

Strategy for popularization of NMEICT

Deferred for the next meeting.

Table Agenda

Item No. 1

Approval for Sitting fee to Members of DTH Committee

Deferred for the next meeting.

Item No. 2

Virtual Labs, IIT Delhi – Approval of extension up to 31st March 2013

Deferred for the next meeting.

Any other Item

Item No.1

Creation of Common Computing Infrastructure To Be Executed by NKN (NIC)

For server in 100 premier institutions, Prof. Raghvan and his team made a presentation. Prof. Huzur Saran of IIT Delhi told the PAB that objective is to be able to provide some computing recourses at the universities plus to have some central computing resources where ERP, virtual lab, etc can run in a reliable environment with disaster back up. As per the plan, NIC will take care of provisioning, security, system integration, performance and system tuning etc. NIC will do it at their two data centres at Delhi and Hyderabad. He further informed servers set up at NIC will be used exclusively for NMEICT purpose only. This service will be provided through Cloud Computing. The financial details of the project, as presented, are given below:

Approximate BoM at Delhi

Storage Boxes (500TB) With SAN switches	10 Crores
100 Server Quad Proc (> 8 Core) With 256GB RA Total of	10 Crores
3200 Cores	
Firewall / IPS (Multi Tenant)	5 Crores*
Network Switches / SLBs	5 Crores*
Software Stack and Provisioning service NMS	5 Crores
Other Operational Costs(24X7)	5 Crores
Total Cost for the cluster	40 Crores

Approximate BoM at a University

UPS and AC costing other infra (5years) Total Cost per University	20 Lacs 1.40 Crores
U	001.000
Software Stack and Provisioning service NMS/ DR Suite	
Firewall / IPS (Multi Tenant) Network Switches / SLBs	30 Lacs
64 Cores	
8 rack Server Quad Proc (> 8 Core) With 256GB RA Total of	70 Lacs
Storage Boxes (10 -20TB) With SAN switches	20 Lacs

Approx Project Costing for Compute/ Storage Infrastructure.

Infrastructure at Delhi	Rs 40 Crores
Infrastructure at Hyderabad	Rs 40 Crores
Infrastructure cost @ Rs.1.40 cr. per University for 100	Rs 140 Crores
universities	
Grand Total:	Rs 220 Crores

Detailed discussions were made. PAB suggested if firewall or NIC can be used then project cost will be Rs.200 crores. PAB decided Prof. Huzoor Saran IIT Delhi will be the PI for this project and approved Rs.40 crore for one data centre. PAB also decided that as a PI Prof. Huzoor Saran will submit the proposal to the Mission secretariat immediately.

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

Attendance of the 23rd Meeting of Project Approval Board of National Mission on Education through Information and Communication Technology held on 28TH February, 2012 aT 3.00 p.m. under the Chairpersonship of Secretary, Department of Higher Education, Ministry of Human Resources Development in Conference Room No. 220 (2nd Floor), A-Wing, Department of Fertilizers, Shastri Bhavan, New Delhi

S.No.	Name, Designation and Address	Phone No., Fax and Email
1.	Ms. Vibha Puri Das Secretary (HE) MHRD, Shastri Bhawan, Chairperson New Delhi	
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ACTION TAKEN ON THE REPORT

MINUTES OF THE 23RD MEETING OF PROJECT APPROVAL BOARD OF NATIONAL MISSION ON EDUCATION THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY HELD ON 28^{TH} FEBRUARY, 2012

Item No.	Action Taken
Item No.1:	
Chairperson requested all the members to give their comments on the Minutes of the 22 nd PAB Meeting.	Minutes confirmed
Since no comments were received, the Minutes of the 22 nd Meeting of the Project Approval Board held on 9 th December, 2011 were confirmed.	
Item No.2	
The Action Taken Report on the Minutes of the 22 nd Meeting of the Project Approval Board held on 9 th December, 2011 was noted by the PAB. During the discussion following suggestions were made by the members of PAB:	
 As material created under NPTEL does not conform to the syllabi of the universities, colleges are hesitant to use it. Both UGC and AICTE should be requested to write to all universities/colleges to the extent possible to adopt it and use it. Email should be sent to 500 universities requesting the universities to write to all the colleges affiliated with them. Otherwise such a good effort is not getting full mileage. 	_
 UGC and AICTE should be asked to motivate the institutions to include material created under NPTEL in the syllabi. If this is done then students will demand it. As knowledge is more important than examination, UGC and AICTE have to say for it and this can be done with the help of UGC and AICTE. 	
 Both UGC and AICTE should be invited in the next PAB meeting. As NPTEL material is not in the editable form, something should be done in the NPTEL charter to give facility of editing to the colleges willing to use it. But if somebody edits it, then it should be stated that it has been modified. 	
• One special session of PAB should be called for review of what has been done till now and what has been prepared is useful to the students or educational institutions. PAB agreed that once the Evaluation Committee's report is available, discussion and focused attention on delivery part for e-content material can be held.	

Item No. 3: Report on Development of the LCAD project sanctioned to IIT Rajashtan -Change of PI.

Mission Director reminded the PAB about the genesis of this programme. The National Apex Committee and Project Approval Board (PAB) of NMEICT in its meeting held on 1st September, 2010 had approved the proposals submitted by IIT Rajasthan towards procurement and hardware and software optimization of the Low Cost Access Device, as well as for setting up a testing lab at IIT Rajasthan for testing these devices.

Mission director also stated that Ministry has released a total of Rs.47.72 crores owards these projects, of which Rs.25.00 crores was meant for testing and delopment of LCAD and Rs.22.72 crores towards teacher empowerment 'A' which included procurement of 1 lakh low cost access devices. These devices were to be distributed to teachers for their field trial.

Based on information given by IIT Rajasthan, it is understood that about 600 'Aakash' LCAd were given to students for testing and feedback, which was both postitive and negative. A scan of the individual student feedback forms received from IIT Rajasthan showed that, in general, students are very enthusiastic about this device, but they have also pointed out some areas where improvement is required. Negative feedback related to known issues like (a) heating of the device, (b) need for longer battery life, (c) need for capacitive instead of resistive touch screen etc. Many of these issues related to the original specs given in the tender floated by IIT Rajasthan and were not an issue with the device itself. Also, since this is an innovative device being produced for the first time in the world at such a cost, like in any new device, there will be a period where such issues will crop up and will need to be resolved. Similar issues were encountered even when the iPad was first introduced, and with improvements in subsequent releases, it has gone on to become a best seller all over the world.

Mission director informed the PAB that a meeting was held at the Ministry on November 15, 2011 to resolve the issues arising from the student feedback. The vendor and Director IIT Rajasthan were present in this meeting. As a result of discussions at this meeting, the vendor agreed to make changes including upgrading the processor from 366 MHz Arm 11 based processor to a 700 MHz Arm Cortex A8 processor, improving the firmware and replacing the battery of 2100 mAH with a battery of 3200 mAH capacity with no enhancement in cost. The minutes of this meeting reflect this agreement. However, for various reasons, after October, 2011, the project went into a tail-spin.

Now, Director, IIT Rajasthan, the PI of this project has sent a letter to the Ministry requesting that the project be shifted from IIT Rajasthan as they do not wish to carry on with this project due to some intractable problems. It is stated in the letter that this decision is being taken pursuant to a discussion in the IIT Rajasthan Board of Governors meeting.

On the issue of Item 5 of the Agenda, relating to letter from IIT Rajasthan purporting to point to a national loss to exchequer, Mission Director pointed out that vendor has agreed to accept payment in Indian Rupees at the fixed rate of Rs.2276/- per unit. Hence, this issue has no relevance any longer.

With regard to PAB decisions, the following action were taken by Ministry of HRD i. PI for the project changed was from IIT, Rajasthan to IIT Bombav and decisions of PAB were conveyed to new PI and IIT Rajasthan. ii. IIT, Rajasthan and IIT Bombay were also requested to sign Tripartite Agreement as PAB per decision. iii. As per PAB decision IFD of MHRD was

consulted w.r.t transfer of funds and accordingly MHRD issued direction issued to IIT Rajasthan and IIT Bombay. In terms of changing the PI from IIT Rajasthan to another organization, Mission Director stated that the funds belong to the Mission and hence it was not a problem to change the PI. Director, IIT Bombay stated that such changes have been done in many cases earlier too.

One possibility was to change the PI but continue with the existing LC. Opinion was sought from various bankers who have said that if all parties concerned (in this case IIT Rajasthan, vendor and new PI) agree and give an NOC to the existing bank, then the applicant name can be changed from IIT Rajasthan to new PIs' organization. The existing LC can be amended if required to add new clauses like adherence to agreed testing protocol (which was not mentioned in either the agreement or LC signed by IIT Rajasthan)

In view of the above, PAB was, inter alia, requested to consider the following:

- Change of PI and transfer of money (along with interest) from IIT Rajasthan to new PI for LCAD Project.
- Transfer of contract on as-is-where is basis to the new PI which would also mean that the rates for acquiring LCAD would remain the same for the new PI also.
- Authorizing new PI to enter into a new agreement (if required) with the vendor already declared successful by IIT Rajasthan through their tender process and to either open a new LC, or operate the existing LC with suitable amendments.
- New PI to be mandated to negotiate with the vendor to accept payment for devices at the rate which is lower of the two rates:
 - Rs.2276/- per device (arrived at through the IIT Rajasthan tender)
 - The Rupee rate arrived at through the new tender for Aakash II
- IIT Rajasthan to be responsible for any action or disputes arising from the actions taken by it between the sanction of the project till the date of takeover by the new PI
- The original project continues as it is only a change of PI.

The PAB deliberated the above issues and decided that:

- PAB is not and has not earlier been part of the tendering process. What needs to be discussed and decided is that the project be transferred to a new PI as requested by Director IIT Rajasthan and the project should be closed successfully and amicably.
- As IIT Bombay is willing, the project is transferred to IIT Bombay with Prof. Phatak of IIT Bombay as the new Pl.
- As requested by Prof. Phatak, all issues in this project relating to the period before takeover by IIT Bombay will remain the responsibility of IIT Rajasthan, the earlier PI. The responsibility of the new PI would be to finalize the terms of all further deliveries so as to complete the original tendered quantity of 100,000 devices keeping in mind the new specifications, to set up a rigorous testing procedure, and to ensure the project is completed successfully.
- Prof. Phatak, the new PI of this project will discuss with Prof. Rajat Moona, DG of C-DAC the possibility of C-DAC joining hands in this project as a Co-PI.
- A tripartite agreement would need to be signed prior to the taking over the project by IIT Bombay between IIT Rajasthan, the vendor

	(M/s Datawind) and IIT Bombay to ensure that all pending issues are closed and IIT Bombay takes the project forward with a clean slate.	
•	Regarding the issue of lower of two prices (Rs.2276/- and the price arrived at through the new tender), it was decided that since the new tender has not been floated yet, and is a subsequent event, the effective rate for this project will remain Rs.2276/- per device. However, IIT Bombay can negotiate with the vendor and can incorporate this clause in the new agreement. Regarding the issue of transfer of money from IIT Rajasthan to IIT Bombay, it was decided to take the opinion of IFD of the Ministry as to the best way of doing this incomplete compliance with all existing regulations. IFD's opinion will also be sought on the matter of transfer of agreement and LC to the new PI, IIT Bombay.	
	o.4 ess Report of the Committee regarding continuous R&D and delivery of Aakash.	
Secreta of Aaka The Co 22 nd Ja meeting informe Resour minute PAB.	level Committee has been constituted under the Chairmanship of ary; Department of IT regarding continuous R&D and timely delivery ash vide order no. 8(195)/ 2011-IPHW dated December 22, 2011. Immittee has so far met on 4 th January, 2012, 17 th January, 2012, anuary 2012 and 31 st January, 2012. Copies of the Minutes of the g issued by Department of IT were seen by PAB. It was also ed that meeting has also been taken by Hon'ble Minister of Human rce Development and Communication & IT and the copies of the s of the meeting issued by Department of IT were also seen by This was only to apprise PAB and no decision is required to be at this juncture.	-
	n Loss to Exchequer	
It was narrate Datawi put onu of the device major of that as Rs.2,27	informed to PAB that IIT Rajasthan in one of correspondences has d that if present exchange rate of dollar, as insisted by M/s nd is taken into account in spite of para 3.2 of the agreement which us of cost of fluctuation of exchange rate on M/s Datawind, the cost device will be approx Rs. 2,700/-, against the market price of the given by M/s Datawind of Rs.2,500/- per device. This may mean concession and loss to the exchequer. It was further informed that a per para 3.2 of the agreement, the per device cost comes to 76/- per device, the loss to the exchequer, therefore, will be used as per Rs.424/- per device.	IIT, Rajasthan were conveyed that there should be no loss to exchequer.
that the which also or on all r concern excheor Govern betwee from ac the sol	further informed that Ministry have clearly directed to IIT Rajasthan are are few contentious issues between IIT Rajasthan and Datawind have bearing on the commercial agreement between the two and in the LCAD project assigned to IIT Rajasthan and the final decision matters in the commercial transaction should lie with the two parties ned(i.e. IIT Rajasthan and Datawind) and no pecuniary loss to the puer(if any), directly or on account of opportunity cost should lie on ment/ Mission funds. Since this is a commercial transaction en IIT Rajasthan and Datawind, any loss to the exchequer arising cts of omission or commission on the part of IIT Rajasthan, will be e responsibility of IIT Rajasthan and Government or Mission funds not be put at stake.	

It was further informed that this apprehension does not hold ground no that the vendor has agreed to accept payment @ Rs.2276/- per devic (corresponding to USD 49.98 at exchange rate prevailing in April, 201 i.e., the date of original agreement between IITR and the vendor DATAWIND). This exchange rate fluctuations would not be able to brir about any loss to exchequer. The PAB was informed that this issue is no settled.	ce 1
Item No.6	
Progress on setting up of DTH Educational Channels under NME-ICT	-
It was informed to PAB that Satellite Communication & Navigation Programme, ISRO Bangalore vide letter No.SCNP / F.711/01/11 Date December 15, 2011 has communicated that based on MHRD request, two Ku-band transponders (36X2 MHz spectrum) in INSAT/GSAT-8 is allotted to MHRD for NME-ICT programme.	ed decision payment
It was further informed that Ministry of HRD vide order No. F.16-49/2010 DL dated 24 th December, 2010 constituted a 15 member Committee of Direct to Home (DTH) under the Chairmanship of Prof. S.V. Raghava Scientific Secretary, Office of the Principal Scientific Adviser to the Government of India. The DTH Committee in its meeting held of December 29, 2011, also co-opted few experts from Prasar Bharti, Dept. IT & CEC (under the provisions of the MHRD order No. F.16-49/2010-D dated 24 th December, 2010).	n provision of two Ku- n, band transponders ie (36X2 MHz on spectrum) in of INSAT/GSAT-8 is
It was informed to the PAB that SAC Ahmedabad has been requested give a plan to realize thousand channel project. This work is in progress with Department of Space. As need is to uplink the channels, two route are available. If we want to do it immediately then teleport route is then and for this, the committee has discussed with the PSUs and asked for limited tender. TCIL and BECIL responded and TCIL turned out to be lowest. TCIL will be basically a consultant to be appointed for finding of the teleporting. They will go with normal tendering courses to find out the agency who will teleport as per the specifications. Approval of PAB was sought for going forward in this direction commercially.	to of HRD in ss consultation with es Ministry of Law. re or be ut ut
The PAB noted the Progress on setting up of DTH Educational Channel under NME-ICT. PAB suggested that first NOC from I&B Ministry may be taken. As I&B Ministry does not give NOC to any other Ministry as part their policy and the proposal has to be in a format that Ministry of I&B able to respond. In fact, I&B Ministry should be requested to allot it to the institutions. PAB further suggested that allocation of channel may also be decided. It was suggested that CEC and IGNOU may be allocated som channels as they are already telecasting some channels. The Missic Director was authorized to talk to CEC, IGNOU and others and decide about the allocations of channels within 15 days. It was decided that the two transponders allotted to NMEICT should be made operational ar nomination may be made within 90 days to take action for use of thes transponders.	pe of is ie ie ie ie in le ie id
After detailed discussions, PAB approved the following as recommended by the DTH committee:	d
 (a) Regular annual payment of transponder leasing charge (for the two transponders allocated to NMEICT by the Deptt. Space) to M/s Antrix Corporation (a PSU under Deptt. of Space) the rate decided by the Deptt. of Space (currently Rs. 4.75 cross) 	of at

plus tax per transponder per year) and pro-rata payment for the 2 months of the current financial year.	
(b) Obtaining the services of M/s. Telecommunication Consultants India Limited (TCIL) a PSU under the Ministry of Communications and Information Technology for finding a Teleport Agency for engagement of up-linking 50 DTH channels of MHRD at one time payment decided by the DTH Committee through a transparent process as the PAB is not part of any tendering process.	
Item No.7: Approval of new projects recommended by the Standing Committee of NMEICT	Under process
7.1 Science Experiments using Computers by Dr. Ajith Kumar, Inter University, Accelerator Centre, Aruna Asaf Ali Marg, New Delhi	
Control Number ATE24121112305, new proposal.	
The item was discussed. PAB approved upto Rs.10 lakh and decided that more details need to be given.	
7.2. Village communication network leveraging on fibre to the village PI: Prof. Ashok Jhunjhunwala Inst: TCOE at IIT Madras and TCOE at IIT Bombay	Payment has been made.
The item was discussed. PAB approved budget of Rs. 1 crore for each of the IITs for a two year duration, coming to a total of Rs. 2 crore as recommended by the Standing Committee.	
7.3. Enhancement & Roadmap to Aakash Platform PI: Prof. Ashok Jhunjhunwala Inst: TCOE at IIT Madras	Payment has been made.
The item was discussed. PAB approved budget of Rs. 25 lakh as recommended by the Standing Committee.	
7.4. Aakash education proposal PI: Prof. Ashok Jhunjhunwala Inst: TCOE at IIT Madras	Payment has been made.
The item was discussed. PAB approved budget of Rs.5 crore as recommended by the Standing Committee.	
For Items at 7.2, 7.3 and 7.4, PAB decided that output and outcome of both the projects needs to be recorded clearly.	
7.5. Free and Open source software for campus collaboration: By Shri. Arun Prabhudesai from Enhance Education, Pune	
Only for information and noted by PAB.	
7.6 Popular science E-books: Demystifying the Brain by Prof. Srinivasa Chakravarty, IIT Madras	
Only for information and noted by PAB.	

Item No.8	
Approval of projects recommended by the Standing Committee for next installment	
8.1 Robotics for Education - Swagat Kumar - IIT Rajasthan	
The item was discussed. PAB approved second installment of Rs.100 lakhs subject to UC, statement of account, and actions items (plan for the remaining period of project) being submitted by PI.	Payment has been made.
8.2. GNUKhata, PI, Shri Manik Shingare and Krishnakant Mane of Master Dinanath Mangeshkar College of Arts and Commerce, Aurad, Shajani,Tq.Nilanga,Distt.Latur	Under process
The item was discussed. PAB approved Rs,15 lakhs as recommended by the Standing Committee.	
8.3. E-yantra, Dr.Kavi Arya	
The item was discussed. PAB approved Rs.62 lakhs lakhs as recommended by the Standing Committee.	Payment has been made.
8.4. Virtual Labs project – IIT Delhi	
Prof.Ranjan Bose of IIT-Delhi informed that for main phase lab he needs the 3 rd installment to carry on the outreach activity and giving final touches on the lab. It is progressing well and the project is little ahead of the schedule. Extension of one year was also needed. For remote triggered lab as he needs to buy equipments and one third installment already released is not sufficient to buy the equipments release of 2 nd installment is required immediately. Again for this one year extension is required. For the pilot phase lab also he needed extension of the time. He further intimated the PAB that on 23 January, 2012, 89 virtual labs were launched. In total under this project he has to do 80 simulation based labs, 35 remote triggered labs and 23 labs of pilot phase which have half of both types of labs. PAB suggested that AICTE should also be involved in the joint action plan to popularize the virtual labs in the engineering colleges. Help of UGC can also be taken in this regard. After deliberation PAB approved Rs.32.8 crores (3 rd installment of simulation based labs and 2 nd installment of remote triggered labs) as recommended by the Standing Committee.	Payment has been made.
8.5: Progress of the Quantum Nano Computing Centre project by Dr. Vishal Sahni, Dayalbagh Educational Institute, Agra.	
The PI, Dr. Vishal Sahni made a brief presentation of the project. After deliberation PAB approved next installment of Rs. 1.5 crores as recommended by the Standing Committee.	Payment has been made.
 8.6. Inflibnet / INDEST resources to Universities, IITs, NITs, IISERs and Colleges: 8.7. National Library and Information Services Infrastructure for Scholarly Contents (N-LIST) 	
Dr. Jagadish Arora, Inflibnet, Ahmedabad informed that most of the funds required under this project are recurring expenses to be paid annually and briefed other details of the current status of the project. The item was discussed in detail. After deliberation, PAB approved Rs.59.28 crores as recommend by the Standing Committee for the renewal of subscription.	Payment has been made.

8.8 Proposal for Enhancement of Production cost for E-content Module under NMEICT presented by CEC (Shri Sunil Mehru, Shri Nagesh and his colleagues on behalf of the PI Dr.Tilak Kem).	
It was informed to PAB that PI proposed an enhanced rate of Rs 35,000 per module of half hour video production, web supplements for the contents, and creation of the four-frame content for online streaming from the current norm of Rs. 17,500 per module. But the Standing Committee of NMEICT recommended Rs.3.1 crores to CEC for next installment at the prevailing rate of Rs.17,500.	Payment has been made.
After deliberation PAB approved Rs.3.1 crores to CEC for next installment at the prevailing rate of Rs.17,500 per module as recommended by the Standing Committee. PAB suggested that PI should complete 19 subjects in saturation mode with this and no extra money is demanded. 8.9. E-Kalpa (Curriculum development in Design) Presented by Prof.	
Ravi Poovaiah, IIT Bombay	
The item was discussed. PAB approved 3 rd installment of Rs. 2 crores as recommended by the Standing Committee.	Payment has been made.
8.10. FOSSEE by Prof. Prabhu Ramachandran presented by Dr. Madhu, IIT Bombay.	
The item was discussed. PAB approved Rs.50 lakhs as recommended by the Standing Committee.	Payment has been made.
8.11. 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.	Put up in the current meeting as an Agenda Item.
Deferred for the next meeting.	
Item No.9	
Status of Expenditure under NMEICT	-
Noted by the PAB.	
Item No.10	
Request for extending VPNoBB to Study Centers of Dr.B.R.Ambedkar Open University, Hyderabad	Put up in the
Deferred for the next meeting.	current meeting as an Agenda Item.
Item No.11	an Agonaa Itom.
Issues related with BSNL/MTNL	

and when universities give their share of money, other 100 nodes can be completed.	
 Mr. Anil Jain,Sr. GM, BSNL told that more than 3000 colleges have not given consent for VPNoBB connection. After deliberation, PAB approved to provide two connections for two months. Thereafter, if the colleges are willing to continue, it should be done so, otherwise it should be discontinued. 	
Signing of SLA with BSNL/MTNL – Deferred for the next meeting.	
Item No.12	
12.1 Pilot project namely, content creation (non-technical) e-content creation in the areas of economics, mathematics, commerce, history, zoology and botany	
Deferred for the next meeting. 12.2. Projects awarded to IIM Ahmadabad	Put up in the current meeting as
Deferred for the next meeting. 12.3. Content Generation For Undergraduate Courses In Agricultural Entomology - CSK Himachal Pradesh	an Agenda Item.
Deferred for the next meeting.	
Item No.13	Put up in the
Future Roadmap of NMEICT - Continuation in XII Plan Period	current meeting as an Agenda Item.
Deferred for the next meeting.	
Item No.14 Strategy for popularization of NMEICT	Put up in the current meeting as
Deferred for the next meeting.	an Agenda Item.
Table Agenda Item No. 1	
Approval for Sitting fee to Members of DTH Committee	Put up in the current meeting as an Agenda Item.
Deferred for the next meeting.	
Item No. 2	
Virtual Labs, IIT Delhi – Approval of extension up to 31 st March 2013	Put up in the current meeting as an Agenda Item.
Deferred for the next meeting.	
Any other Item	
Item No.1	Payment has been made to IIT, Delhi
Creation of Common Computing Infrastructure To Be Executed by NKN (NIC)	
For server in 100 premier institutions, Prof. Raghvan and his team made a presentation. Prof. Huzur Saran of IIT Delhi told the PAB that objective is	

to be able to provide some computing recourses at the univers		
have some central computing resources where ERP, virtual I		
run in a reliable environment with disaster back up. As per th	e plan, NIC	
will take care of provisioning, security, system integration, performance		
and system tuning etc. NIC will do it at their two data centres at Delhi and		
Hyderabad. He further informed servers set up at NIC will be used		
exclusively for NMEICT purpose only. This service will be provided		
through Cloud Computing. The financial details of the		
presented, are given below:		
Approximate BoM at Delhi		
	10 Crores	
Storage Boxes (500TB) With SAN switches		
5		
100 Server Quad Proc (> 8 Core) With 256GB RA Total of	10 Crores	
3200 Cores		
Firewall / IPS (Multi Tenant)	5 Crores*	
Network Switches / SLBs	5 Crores*	
Software Stack and Provisioning service NMS	5 Crores	
Other Operational Costs(24X7)	5 Crores	
Total Cost for the cluster	40 Crores	
	40 010165	
Approximate BoM at a University		
Storage Boxes (10 -20TB) With SAN switches	20 Lacs	
8 rack Server Quad Proc (> 8 Core) With 256GB RA	70 Lacs	
Total of 64 Cores	10 2005	
Firewall / IPS (Multi Tenant) Network Switches / SLBs	30 Lacs	
Software Stack and Provisioning service NMS/ DR Suite	50 Lats	
UPS and AC costing other infra (5years)	20 Lacs	
Total Cost per University	1.40	
Total Cost per University	Crores	
	CIDIES	
Approx Project Costing for Compute/ Storage		
Infrastructure.		
Infrastructure at Delhi	Rs 40	
	Crores	
Infrastructure at Hyderabad	Rs 40	
	Crores	
Infrastructure cost @ Rs.1.40 cr. per University for 100	Rs 140	
universities	Crores	
Grand Total:	Rs 220	
Grand Total.		
	L.rores	
Detailed discussions were made PAR suggested if firewall	Crores	
Detailed discussions were made. PAB suggested if firewall or NIC can be used then project cost will be Rs 200 crores	Crores	
or NIC can be used then project cost will be Rs.200 crores.	Crores	
or NIC can be used then project cost will be Rs.200 crores. PAB decided Prof. Huzoor Saran IIT Delhi will be the PI for	Crores	
or NIC can be used then project cost will be Rs.200 crores. PAB decided Prof. Huzoor Saran IIT Delhi will be the PI for this project and approved Rs.40 crore for one data centre.	Crores	
or NIC can be used then project cost will be Rs.200 crores. PAB decided Prof. Huzoor Saran IIT Delhi will be the PI for	Crores	

No. F.16-19/2012-TEL Government of India Ministry of Human Resource Development Department of Higher Education TEL Division

.....

Shastri Bhawan, New Delhi Dated the 4th Jukg, 2012

To

All Principal Investigators for NMEICT Projects.

Subject : Extension of NMEICT Projects- reg.

Sir,

I am directed to refer to the above subject and to say that it has been decided with the approval of competent authority to extend the NMEICT Projects which are continuing and whose duration is ending on 30.6.2012, for a further period of six months i.e. upto $31^{\rm st}$ December, 2012 with no additional financial implications.

Yours faithfully,

(Sunil Bareja)

Under Secretary to the Government of India

BUDGET ESTIMATES FOR TECHNICAL SUPPORT GROUP OF NATIONAL MISSION ON EDUCATION THROUGH ICT (NMEICT)

(<u>Rs. In lacs</u>)

I. NON-RECURRING EXPENDITURE

S.No.	Name of Items / Description	F.Y. 2012-13
		Total Cost
Α	Computer Systems, laptops, printers and other Items for IT related area	25.51
В.	Procurement of Furniture	13.60
С	Procurement of Office Equipment	9.90
D.	Software (Server 2008, MS Office 2007 & Anti Virus 40 users, etc.)	5.00
	Sub-Total (I)	54.01

II. RECURRING EXPENDITURE

S.No.	Name of Items / Description	Total Cost
Α.	Expenditure related to Recruitment of Consultants &	15.00
	Support Staff	
В.	Consultancy Fee & Salary	132.24
С.	State Visit/Field Visit/Consultants/Resource Persons	25.00
D.	National & Local Meetings / Seminar / Workshop &	98.00
	Documentation Expenses	
E.	Administrative/TSG Expenses	43.90
F.	Contingency for items other than mentioned above	5.00
	Sub-Total – (II)	319.14
	Total – (I) & (II)	373.15
III	EdCIL's Overheads & Service Charges @ 5%	18.66
	Grand Total	391.81

BUDGET ESTIMATES FOR TECHNICAL SUPPORT GROUP/MISSION SECRETARIAT (NMEICT)

I. Non-Recurring Expenditure

	Non-Recurring Expenditure			(<u>Rs. In lacs</u>)
S.No.	Name of Items / Description	F.Y. 2012-13		
		Qty. (Nos.)	Unit Cost	Total Cost
Α	Procurement of Items for IT related area			
1.	Computer Desktops	10	0.45	4.50
2.	Laptops	4	0.55	2.20
3.	Intel Xeon 3.0 GHz 5450 Processor (server for connectivity with computers & laptops for accessing Internet & for back-up data etc.)	02	5.00	10.00
4.	Networking for 48 Ports / LAN Cabling, Switches, Rack other related work for all computers, servers etc.	01	4.00	4.00
5.	UPS 1/5 KVA for Power Back-up for Computers & Printers, etc.	27	0.08	2.16
6.	PRINTERS			
(i)	Network Printer (Heavy Duty)	02	0.45	0.90
(ii)	Black & White Laser Jet Printer	05	0.25	1.25
7.	Modem for internet connection	10	0.05	0.50
В.	Procurement of Furniture			
8.	Executive Tables	05	0.20	1.00
9.	Standard Tables	10	0.12	1.20
10.	Executive Chairs	05	0.08	0.40
11	Staff Chairs	10	0.06	0.60
12	Visitor Chairs	10	0.05	0.50
13	Conference Table & Chairs	L.S.	L.S.	3.00
14.	Heat Convectors	10	0.02	0.20
15.	Refrigerator (full size)	01	0.20	0.20
16.	Sofa Sets & Central Table	02	0.25	0.50
17.	Canteen Items (Crockery & Utensils)	L.S.	L.S.	0.50
18.	Video Conferencing Facility	01	4.00	4.00
19.	Carpets	L.S.	L.S.	0.50
20.	Internal Furnishings including Curtains, other items as per requirement after accommodation is finalized.	L.S.	L.S.	1.00

С	Procurement of Office Equipment			
21	EPABX System	01	1.50	1.50
22.	ADF Scanner [HP/Samsung]	01	0.40	0.40
23.	Shredders	02	0.25	0.50
24.	Photocopier Machines	01	2.50	2.50
25.	DG Set 40 KVA	01	L.S.	5.00
D.	Other Items			
26	Softwares (Server 2008, MS Office 2007 & Anti Virus	L.S.	L.S.	5.00
	40 users, etc.)			
	Sub-Total (I) (Non-Recurring Expenditure)			54.01

BUDGET ESTIMATES FOR TECHNICAL SUPPORT GROUP/MISSION SECRETARIAT (NMEICT)

II. Recurring Expenditure

п.	Recurring Expenditure			(<u>Rs. In lacs</u>)
S.No.	Name of Items / Description	F	.Y. 2012-	012-13
		Qty. (Nos.)	Unit Cost	Total Cost
Α.	Expenditure related to Recruitment of Consultants & Support Staff			
1.	Release of reflective advertisement on All India basis in all edition of TOI/H.T.	L.S.	L.S.	10.00
2.	Expert Fee for Resource persons for the Interview, meeting expenses & local conveyance etc.	L.S.	L.S.	5.00
В.	Consultancy Fee & Salary			
3.	CONSULTANTS/PROJECT MANAGER ETC.			
(i)	Senior Consultant	06	0.75	54.00
(ii)	Consultants/Jr. Consultants	04	0.50	24.00
(iii)	Project Manager	01	0.70	8.40
4.	Support Staff – for TSG/Mission Secretariat			
(i)	Category-I: Executive Asstt., Private Secretary, Supervisor/Jr. Supervisor	04	0.50	24.00
(ii)	Category-II: Executive Asstt.,/W.P.O.	10	0.15	18.00
(iii)	CatIII: Messenger	04	0.08	3.84
C.	State Visit/Field Visit/Consultants/Resource Persons			
5.	Boarding/Lodging/TA/DA for Consultants & Resource Persons for Visit / Field Visit, etc.	100	0.25	25.00
D.	Meeting / Seminar / Workshop expenses			
6.(i)	Meetings/Workshops (50 to 60 persons) – within Delhi	24	2.00	48.00
.(ii)	National Level Meetings (50 to 60 persons)	10	3.00	30.00
.(ii) 7.	Studies, Data Collections & Analysis, Report writing, Misc. work	L.S.	L.S.	10.00
8.	Documentation, Printing of Reports, Newsletter, Leaflets, Flyers & Other Contingency.	L.S.	L.S.	10.00

E.	Administrative Expenses			
9.	Rent for Building	12	1.00	12.00
		months		
10.	Security	L.S.	L.S.	1.00
11.	House – Keeping	L.S.	L.S.	1.00
12.	Pantry services	L.S.	L.S.	1.00
13.	Electricity & Water Charges	L.S.	L.S.	3.00
14.	Telephone, Fax & Internet charges	L.S.	L.S.	3.00
15	Printing of Brochures / other printing	L.S.	L.S.	2.00
16	Office Stationery (consumables)	L.S.	L.S.	3.00
17.	Local conveyance, OTA, etc.for staff	L.S.	L.S.	3.00
18.	Postage charges	L.S.	L.S.	3.00
20.	Newspaper, Magazine, Reports, CD, etc.	L.S.	L.S.	2.00
21.	Photocopying & Binding charges (material for	L.S.	L.S.	1.00
	machine)			
22.	Legal & Audit Expenses	L.S.	L.S.	0.50
23.	Vehicle on monthly basis (Swift/Indigo/Indica etc	02	0.35	8.40
	average hiring charges basis)			
F.	Contingency for items other than mentioned	L.S.	L.S.	5.00
	above			
	Sub-Total – (II)			319.14
	Recurring Expenditure			
	Add: Sub-Total (I)			54.01
	Non-recurring Expenditure			
	Total – (i) & (ii)			373.15
	EdCIL's Overheads & Service Charges @ 5%			18.66
	Grand Total			391.81

Note:

- 1. The un-utilized funds, if any, will be carried over to the next financial year and will be utilized for various activities of TSG / Mission Secretariat.
- 2. Service Tax @12.36% or actual.

Sushil Prakash Senior Consultant, NMEICT, MHRD Shastri Bhawan, New Delhi 110001, Mobile: 9212102222

То

Ms Binita Kukkar Assistant Manager (HR) EdCIL (India) Limited, Plot No: 18-A, Sector 16-A, Film City, Noida 201301 (Fax No: 0120-2515372)

Subject: representation for correct fixation of pay for Mr Sushil Prakash, Senior Consultant, NMEICT Your office order No: NMEICT/13(23)/2011-HR dated March 30, 2012

The Office Order referred above that states "Mr Sushil Prakash is engaged as Senior Consultant under NMEICT New Delhi on a contractual basis for the period 02.01.2012 to 31.03.2012 on a consolidated consultancy fee of Rs 63,778 per month" has come as big surprise to me as the mentioned consultancy fee is absolutely incorrect.

This letter is a representation that the consultancy fee of Rs 63,778 per month arrived at in the Office Order referred above be reviewed and may be correctly fixed to Rs 75,000 per month with effect from 02.01.2012. In support of my representation I would like to state the following:

- a. The offer letter from EdCIL No.10(560)/2010-Admn dated 23.12.2011 (copy attached) mentions that "During your contract assignment you will be paid consolidated fee Rs 75,000 per month subject to conditions that the consultancy fees and pension plus DA not exceeding your last pay drawn plus DA admissible on the last pay drawn, if you are pension holder"
- b. I was working with Tata Teleservices Limited till Dec 30, 2011, and my last basic pay was Rs 93,390.00 (copy of December 2011 pay slip is attached)
- c. I belong to the 1976 batch of Indian Telecom Service and took retirement from Government of India on 31.03.91, and now I draw a monthly pension of Rs 11,222.

Based on the above facts, my 'consultancy fees and pension plus DA' due to me on this assignment should not exceed Rs 93,390, my last basic pay drawn on 30.12.2011. Since my monthly pension is only Rs 11,222 the consultancy fees should be fixed at Rs 75,000 as the sum total of the two does not exceed Rs 93,390 my last basic pay drawn. Accordingly, please arrange to correct my consultancy fees to Rs 75,000 per month wef 02.01.2012.

plook forward to your assistance on the subject.

April 18, 2012

Annexures:

2. copy of December 2011 pay slip from last employer (Tata TeleServices Limited)

Copy to:

AS(TEL) & Mission Director, NMEICT

1. Offer letter from EdCIL dated 23.12.2001