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10th March, 2011

To

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

Sub: Agenda Papers for 19th Meeting of the Empowered Committee of Experts (Project Approval Board) of National Mission on Education through Information and Communication Technology (NMEICT) to be held on 15th March, 2011 at 4.00 p.m.

Sir/Madam,

Enclosed please find Agenda Papers for 19th Meeting of the Empowered Committee of Experts (Project Approval Board) of National Mission on Education through Information and Communication Technology (NMEICT) to be held on 15th March, 2011 at 4.00 p.m. under the Chairpersonship of Secretary, Department of Higher Education, Ministry of Human Resource Development in **Conference Room (First Floor), Central Secretariat Library (CSL) Building, Shastri Bhawan, New Delhi**

2.   Kindly make it convenient to attend the meeting.

Yours faithfully,

(Dr. Harvinder Singh)
Director (TEL) &
Nodal Officer (NMEICT)
Tel: 011-23382604

Copy to:

PSO to Secretary (HE), PS to AS&FA and Additional Secretary(TEL) – for information.

AGENDA FOR 19TH MEETING OF PROJECT APPROVAL BOARD OF NATIONAL MISSION ON EDUCATION THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY TO BE HELD ON 15th MARCH, 2011 AT 4.00 P.M. IN CONFERENCE ROOM (FIRST FLOOR), CENTRAL SECRETARIAT LIBRARY (CSL) BUILDING, SHASTRI BHAWAN, NEW DELHI

Agenda Item No.1

The Minutes of the 18th Meeting of the Project Approval Board held on 24th January, 2011 are placed below (**Appendix-1**) for kind perusal and confirmation please.

Agenda Item No.2

The Action Taken Report on the Minutes of the 18th Meeting of the Project Approval Board held on 24th January, 2011 is given at **Appendix-2.**

Agenda Item No.3

Review of Decision-National Programme on Radio Enabled Learning by Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi.

1. Project Approval Board (PAB) of NMEICT in its 9th meeting held on 3rd & 11th September, 2009 approved a pilot project, namely, **"National Programme on Radio Enabled Learning by Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi"** and decided that Rs. 75.00 lakhs may be released to IGNOU which will coordinate the programme. The proposal was accordingly processed in the Department during 2009-10, but no funds could be released to IGNOU, as the then Divisional Head had opined that the project is to be implemented by/or Commonwealth Educational Media Centre for Asia (CEMCA), which is a body of Commonwealth of Learning (COL), an international organization. Government of India also contribute Rs. 4.00 crores per year from Non-Plan funds of COL under an international agreement. In view of this, it may be considered whether the funds may be provided to an international agency out of National Mission of Education through Information and Communication Technology (NMEICT), which apparently, does not have such a provision. The file was then referred to IFD/AS&FA. IFD requested Distance Learning Division of the Department of Higher Education, MHRD to re-examine the proposal with reference to Mission Document as well as the international agreement signed with COL etc. IFD also requested to re-examine the other aspects of the pilot project and ensure that there is neither duplication nor overlapping in the accumulation of funds for the pilot project to be undertaken.

2. A letter was sent to CEMCA, requesting Director, CEMCA to let the Department of Higher Education, MHRD know as to how this project activity is different from the activities for which CEMCA is mandated. In response, Director, CEMCA, vide his letter dated 17.08.2010 has informed that "*in consonance with the mission of Commonwealth of Learning, Commonwealth Educational Media Centre for Asia promotes the meaningful, relevant, and appropriate use of information and communication technologies to serve the educational and training needs of Commonwealth member states in Asia".*

Director, CEMCA has further informed that:

- The three year plan of COL has been approved by the Education Ministers of Commonwealth Countries. While CEMCA's mandate is to develop systems and models using technology both conventional and new media and to build capacity among the Higher Education Institutions in the region, it cannot undertake specific content building measures and create open education resources for a specific country.

- CEMCA neither has staff, infrastructure nor financial resources to embark on a large scale project like Radio Enabled Learning. CEMCA would like to create two full courses in Humanities and Social Sciences as the basic model for Radio Enabled Learning. CEMCA has already organized two National Base Camps and invited more than Fifty Higher Education Institutions to participate in the awareness programs on Radio Enabled Learning and National Mission on Education through Information and Communication Technology.

- CEMCA has already motivated 27 institutions to produce sample programs on Radio Enabled Learning. After seeing these models, CEMCA's intention of producing two full courses as basic models has gained more relevance and importance.

- In conclusion, it has been stated that while CEMCA has a mandate to develop new systems and models using technology using its own resources, it does not have the wherewithal of creating contents and Open Education Resources.

3. A copy of letter dated 17.08.2010 received from Director, CEMCA is enclosed (**Appendix-3)** for perusal.

4. In view of the above position, PAB of NMEICT is requested to review its decision mentioned in paragraph 1 above and give appropriate directions in this regard.

Agenda Item No.4

Low Cost Access-cum-Computing Device
Control Number: PIN-11081011216

Ministry has all along followed an inclusive approach towards the design and development of the Low Cost Computing-cum-Access device. The ministry started its efforts, subsequent to lukewarm response from known corporates in this sector, by holding discussions on this concept with a group of Professors / experts at IISc, Bangalore, IIT Kanpur, IIT Kharagpur, IIT Madras and IIT Bombay. B.Tech and M.Tech students were guided to produce the mother board for such low cost devices with ample flexibility to change components. One mother board design was generated under Ministry's guidance in the B.Tech project of a student at VIT, Vellore. The cost of bill of material worked to 47 $ at that point of time. The PCB of the mother board was got fabricated at IIT Kanpur. It could be seen that by customizing the device to the needs of learners across the country, and utilizing the processor capabilities of processors suitable for the purpose, it was possible to substantially reduce the prices of such access-cum-computing devices.

A number of teams then started working together with the HRD Ministry and improving upon design parameters and customization guidance for Indian students. The efforts of some of the teams working with those design philosophies were presented to the public by Hon,ble HRM on 22nd July 2010.

The academic institutions under the purview of MHRD had fulfilled their commitment of making possible a Low Cost Access-cum-Computing device design.

No academic institution has the capability or wherewithal to undertake large scale manufacturing activities. Thus, the need was felt to involve corporates already in the business of manufacturing computing devices. However, in the interests of fairness, it was also necessary to ensure competition among interested parties so that the final price of the device was brought down

A project was then placed before the joint Apex and PAB meeting on 01/09/2010 by IIT Rajasthan and the said meeting duly approved an amount of `. 41.50 crores to be given to IIT Rajasthan towards procurement, lab testing and field testing of 100,000 Low Cost Access-cum-Computing devices.

Of this Rs. 25.00 crore were for testing and Rs. 16.50 Crores was apportioned towards procurement of these devices, based on the ex-works price of US$ 35 per device as announced by Hon'ble HRM. The detailed heads of expenditure under Rs. 25.00 crore component are as follows:

Sl. No.	Item	INR [crores]
1	Optimisation, Engineering and Functional testing [manpower for 6 months]	3.50
2	Field Testing Costs [one lakh LCADs]	3.50
3.	Lab Setup [equipment costs]	15.00
4.	Manpower for testing labs [2 years]	03.00
	TOTAL	**25.00**

The amount of Rs. 16.50 crore was to be debited against the head earmarked for ,teachers empowerment, in the NMEICT budget.

The technical specifications of the device are attached at **Annexure A** to this note.

As part of the process for the design and procurement of 100,000 pieces of the Low Cost Access Device, Ministry of HRD invited Expressions of Interest (published on 13th October 2010). The last date for submission of Expressions of Interest to the Director, IIT Rajasthan was 15th November 2011.

Thereafter, a Technical Evaluation Committee was set up to evaluate the Expressions of Interest that were received. This Committee met at IIT Rajasthan, Jodhpur on 25th November and evaluated the 6 bids that were received.

The company that was shortlisted by the committee was issued an RFP. However, the said company was unable to meet the RFP conditions as per GFR 2005 and hence was unable to supply the devices.

Therefore, once again in consultation with MHRD, a new public tender was floated for this project on 11th January, 2011 following norms set out in GFR 2005. The last date for submission of bids was February 14th, 2011.

A total of 6 bidders submitted their bids against this subject tender. Technical and Financial evaluation committees were formed for the purpose of evaluation of these bids (The names of members of both these committees are given at **Annexure B**).

After a thorough evaluation, the Committees found that the lowest bid received was for US$ 39.98, ex-works.

In line with CVC guidelines, IIT Rajasthan negotiated further with the L1 bidder. Post these negotiations, the following price has been arrived at:

Sl. No.	Price Type	Firm No.2
1.	Ex-works	$37.98
2.	Freight, Insurance, Duties and Levies, C&F etc	$2.00 (by sea)
3.	Service Charges (if any)	$4.00
4.	Other charges, e.g., maintenance, design documentation etc. (if any)	$6.00
5.	Total Price (Delivered at IIT Rajasthan, Jodhpur)	$49.98 (Equiv to Rs. 2271.59)

1 US$ = ` 45.45 – Information downloaded from RBI website on 16.02.2011 at 6.33.08pm on the date of financial evaluation

Since at that time, it was not clear what the other related costs would be (e.g Freight, insurance etc), strategically, IIT Rajasthan sought a sanction only for the amount as per the ex-works cost (i.e._____)

The original sanction from PAB towards procurement of the Low Cost Computing-cum-Access device was made for ` 16.50 Crores, on the basis of US$ 35 ex-works cost per device.

As can be seen from the above, the lowest bid that has been received is for US$ 37.98 ex-works. Also, there are other charges totalling US$ 12 per device (Freight, Insurance, Duties and Levies, Maintenance etc). Thus the total cost per device works out to US$ 49.98 (or Rs. 2271.59 calculated at Rs. 45.45 per US$).

For 100,000 devices, the amount required is Rs. 22.72 Crores. The amount sanctioned is Rs. 16.50 Crores. Thus there is an additional requirement of Rs. 6.22 Crores.

1. The purpose of acquiring one lakh units of Low Cost Access-cum- Computing Devices [LCACDs] is to have extensive field testing across the country. The proposal was to issue these LCACDs to teachers of colleges as well as universities for the purpose of testing and feedback. It is expected that during field trials the teachers will acquire knowledge of not only using these devices, but also understand shortcomings in the device, if any. Through teachers, students will get empowered. It will also serve another purpose of popularizing the Mission and increasing use of contents and facilities which can be accessed by students and teachers.

2. It may be mentioned that besides e-content in engineering subjects, efforts are on for developing and providing e-content in other subjects. By 31st March, 2011 most of the colleges and universities would be connected and it would be very timely intervention for propagating the Mission.

3. Another aspect is to test all the functionalities expected from LCAD. For that purpose the following need to be tested -

    i)   Contents created by NPTEL.

    ii)   Experiments using virtual labs

    iii)   Countrywide classes and spoken tutorials shall also be accessed using these devices so that entire gamut of functionality required for such devices could be field tested.

Triple objectives of testing, empowering teachers and students and popularizing the Mission would be served.

If this step fails, nation will have to pay heavily [nearly ten times more] for procurement of PCs for desired benefits from various components of the Mission.

6.   IIT Rajasthan has requested for sanction of an additional amount of ` 6.22 crores for enabling them to go ahead with the procurement of 100,000 pieces of the Low Cost Access-cum-Computing Device.

7.   The following proposals are put up for the approval of PAB :

i)   Testing of LCADs   = ` 25.00 crore [break up is already furnished] - – to be debited to the head for Testing and Development

ii)   Procurement of 1,00,000 units of LCADs = ` 22.72 crore   - to be debited to the head for Teachers Empowerment

EXPRESSION OF INTEREST

Government of India, Ministry of Human Resource Development has declared its intention to develop a Low-Cost Access Device at a cost of $35 (Rs. 1500) or below for Institutions of higher learning. The specifications and minimum functionalities of such devices are available in the public domain in the Invitation to Innovate published by MHRD. The Invitation to Innovate is also posted on the websites <http://www.sakshat.ac.in/> and <http://www.education.nic.in/>. The specifications and minimum functionality of the desired devices are copied below:

MINIMUM FUNCTIONALITIES

Support for video web Conferencing facility / Multimedia content viewer for example .pdf, docx, .ods, .adp, .doc, .xls, .jpeg, .gif, .png, .bmp, .odt, .zip, AVI, AC3 etc. / Searchable PDF reader / Unzip tool for unzipping zip files / Possibility of installing suitable firmware upgradation / Computing capabilities such as Open Office , SciLab , cups (for printing support) / Media player capable of playing streamed as well as stored media files / Internet browsing, JavaScript, pdf plug-in java / Wireless communication for Audio/video I/O / Cloud computing option / Remote device management capability, Rendering YouTube and other online video services (open source flash players, e.g., gnash or swfdec).

Other Preferable:
- ☐ Playback: AVCHD
- ☐ Multimedia I/O Interfaces: DTV, IPTv, DTH
- ☐ Internet browsing: flash player (adobe)

SPECIFICATIONS

Suitable motherboard/ System on Chip to provide the above mentioned functionalities / Qwerty keyboard, mouse and a minimum display of 7" colour LCD/TFT (Touch screen optional) or suitable All-in-one projection system / Minimum of 2 USB 2.0 ports and USB hosts / RF, Certification- all "CE Certificate" (FCC Guidelines) / Three hours or more uninterrupted operation through Battery or Battery-less device / Battery charger with Adapter or Hybrid super Capacitor quick charger / SD card slot (with support for minimum of 8GB) / RGB / Support for Connecting LCD projector/ Support for external hard disk drive (minimum 32 GB) / Suitable Ethernet port / WLAN card (IEEE 802.11 a, b , g, n) desirable / Alternative Battery support through solar cell, or Hybrid Capacitor will be desirable / Web cam (embedded webcam desirable) / Adequate RAM and Hard disk drive or NAND flash may be provided so as to meet the desired functionalities / Shock resistant casing of suitable form factor for the device, environmental Shield desirable/ Operating temperature Zero Degree centigrade to 48 Degree centigrade. Max humidity 80% shock resist = 2g / ROHS Compliant

Other Preferable:
- ☐ HDMI port

Expressions of Interest for design, production of such devices with the same or added functionality at a cost of $35 or lower than that, is invited.

Expressions of Interest may be submitted by registered firms who are manufacturers or companies with a capability of design, sourcing, manufacture and delivery of the Low-Cost Access Device. EoIs can also be submitted by a consortium, but at least the lead member of the consortium will have to meet the qualification criteria given above. All EoIs submitted must provide documentary proof of capability and in

case of a consortium, the consortium agreement duly signed by all members must also be submitted along with the EoI.

All Expressions of Interest submitted must include the proposed solution along with time-lines, clearly detailing the road-map for cost reduction (below $35) and improvement of functionality. The proposed steps which would be taken to ensure quality, timely delivery and maintenance of the devices are to be included in the EoI.

The Participants are required to supply 100 pieces of their device for Quality Assurance before they are shortlisted to participate in the project of delivering 1,00,000 Tablets/Laptops/Access-Devices by January 2011. It is expected that successful field trial of 1,00,000 pieces, the requirement may further grow to ten (10) million pieces within a short span of one year.

Expressions of Interest meeting the above criteria and guidelines must be submitted at the following address:
The Director,
Indian Institute of Technology Rajasthan
Near Computer Science & Engineering Department
MBM Engineering College, Jodhpur – 342 011.
Rajasthan, India.
Email ID: drpremkalra@gmail.com
Telephone: 0291 - 2512141

The last date for submission of Expression of Interest is 4 weeks from the date of publication.

A Technical Evaluation Committee (TEC) was constituted to evaluate the bids received. The TEC comprised of the following:

1. Mr. Shashi Ullal - Industry
2. Mr. Trilochan Singh – Industry
3. Mr. Ashok Hingorani – Industry
4. Prof. Mangala Sundar Krishnan – IIT Madras (Member Standing Committee, NMEICT)
5. Dr. Y.N. Singh – IIT Kanpur (Member Standing Committee, NMEICT)
6. Dr. A.K. Routray – IIT Kharagpur
7. Dr. Uma Kanjilal – IGNOU (Member Standing Committee, NMEICT)
8. Dr. A.K. Tripathi – BHU (Member Standing Committee, NMEICT)
9. Dr. C.G. Mahajan – IISER Mohali (Member Standing Committee, NMEICT)
10. Dr. K Santeppa – Anurag Project, DRDO Hyderabad
11. Dr. P Bhattacharya – MoRD
12. Dr. J.K. Mukherjee - BARC

The Finance Committee that was constituted for this purpose consisted of the following members:

1. Dr. Rakesh Kumar – Registrar IIT Delhi
2. Mr. Ratan Lahoti – Registrar National Law University, Jodhpur
3. Mr. Ishwari Prasad Gupta – Sr. AO, AG Office (Retd.,)
4. Mr. K.N. Dakhale – Asst. Registrar – IIT Kanpur
5. Mr. K.K. Mathur – OSD Finance, IIT Rajasthan
6. Mr. Amardeep Sharma – Asst. Registrar – IIT Rajasthan

Agenda Item No.5

Approval of Pilot project - e-content Development of Marketing Management, PI: Jaydeep Badiyani

The following item was placed before the PAB in its 18th meeting held on 24th January, 2011 and the same was deferred for the next meeting:

The Standing Committee in its meeting held on 21st August, 2010 recommended the following project:

e-content Development of Marketing Management, SUBMITTED BY :- Jaydeep Badiyani, Institute: Bhavnagar University, CONTROL NUMBER :- JE-20071011105

The Standing Committee recommended Rs.14 lakhs for preparation of two pilots.

A copy of the Appraisal done by the Standing Committee is enclosed at **Appendix_____.**

Extracts of the Minutes of the Standing Committee Meeting held on 21st August, 2010 are given below:

e content Development of Marketing Management

SUBMITTED BY :- Jaydeep Badiyani

Institute: Bhavnagar University

CONTROL NUMBER :- JE-20071011105

The PI proposed the development of two separate marketing management courses for students of management and commerce streams. The commerce stream is extremely important for Gujarat. The proposed courses are aimed also at distance learners, as 30% of the students of Bhavnagar university study through this mode.

The projected expenses are within the norms allowed by the mission.

The SC recommends this proposal with the following conditions:

1. Detailed outlines of the two courses have to be provided
2. Should conform to the syllabus of UGCIAICTE
3. Should follow the four quadrant approach
4. Each course should have material for 40 hours of instruction

The PI need not present this proposal again.

However, the PI may submit the budget along with detailed appraisal in the prescribed format. The detailed appraisal will be conducted in the next meeting of the Standing Committee to be notified.

Agenda Item No.6

Approval of Pilot project - e-Content generation for students of science in graduate programmes – PI: Dr.Mandira Sikdar

The following item was placed before the PAB in its 18th meeting held on 24th January, 2011 and the same was deferred for the next meeting:

The following project was recommended by the Standing Committee in its meeting held on 9th October, 2010:

e-Content generation for students of science in graduate programmes, ME-24091011358, Dr.Mandira Sikdar, Navrachna University, Vadodara, Gujarat.

The Standing Committee recommended Rs.7 lakhs for preparation of one pilot.

A copy of the Appraisal done by the Standing Committee is enclosed at **Appendix_____.**

Extracts of the Standing Committee Meeting held on 9th October, 2010 are given below:

ME-24091011358
e-Content generation for students of science in graduate programmes.
Dr.Mandira Sikdar, Navrachna University, Vadodara, Gujarat.

- Science courses - biology and chemistry -first year undergraduate
- title modification to be added in proposal.
- Lecture topics and learning objectives to be added
- 7 lakhs
- 100% release at the beginning.

Agenda Item No.7

Approval of Projects recommended by Standing Committee

The Standing Committee in its various meeting recommended the following projects:

Project recommended by Standing Committee in its meeting held on 21st August, 2010

7.1 Production of courseware e-content development, video programmes and learning object repositories on climate change, SUBMITTED BY: I. A. Aram and B. K. Panda

The SC recommended that this project be supported for a total sum of Rs. 56 lakh. Rs.14 lakhs may be given at the beginning for preparation of two courses to be completed in first six months. Based on the quality of these courses, the rest of the money will be released.

A copy of the Appraisal done by the Standing Committee is enclosed at **Appendix_____.**

Extracts of the Meeting are given below:

Production of courseware e-content development, video programmes and learning object repositories on climate change

SUBMITTED BY :-   I. A. Aram and B. K. Panda

Institute: Anna University

CONTROL NUMBER :-   DE-09071011047

The PIs have proposed a creation of eight courses in the general area of climate change, at a total project cost of Rs. 61 lakhs, including Rs. 5 lakhs of overhead charges.

The SC found the proposal well thought out and well articulated. Moreover, the courses are proposed to be developed in the important area of climate change. The SC made the following additional observations:

1. The PIs were told that the mission did not pay overheads.

2. The PIs were also told that the courses should conform to the four quadrant approach, should not just learning object repositories.

3. There is one course on climate that is mandated to be taken by all college students. The PIs should include this course in their bouquet of eight courses.

4. The PIs have not provided the information for the ten point format. They should provide that.

5. The SC recommends that this project be supported for a total sum of Rs. 56 lakh.

6. The PIs should plan to prepare two courses in the first six months. Based on the quality of these courses, the rest of the money will be released.

7. The PIs need not make another presentation to the SC.

However, the PI may submit the budget along with detailed appraisal in the prescribed format. The detailed appraisal will be conducted in the next meeting of the Standing Committee to be notified.

Project recommended by Standing Committee in its meeting held on 4th September, 2010

7.2 e-Content Development for the course: "Family and Community Resource Management" by Dr. Neerja Jaiswal, The Maharaja Sayajirao

Recommendations of the Standing Committee: Rs.7 lakhs be given for a pilot to be completed in six months.

A copy of the Appraisal done by the Standing Committee is enclosed at **Appendix_____**.

Extracts of the Minutes of the meeting held on 4th September, 2010 are given below:

e-Content Development for the course: "Family and Community Resource Management" by Dr. Neerja Jaiswal, The Maharaja Sayajirao University of Baroda, Gujarat, India.
Control Number: DE-28081011280

Deliberations:

The Standing Committee members requested the PI for details on a sample course module. They also suggested that the budget had to be reworked so as not to exceed the maximum of Rs. 7 lakhs and the faculty honoraria shall be stated clearly. The committee recommended to the PI that the course be finished sooner than 10 months (suggested a period of 6 months).

Recommendation of the Committee:

The SC found the proposal acceptable for pilot. The PI was advised to provide detailed budget. However, detailed appraisal in the prescribed format will be conducted in the next meeting of the Standing Committee to be notified.

Project recommended by Standing Committee in its meeting held on 18th September, 2010

7.3 Generation of Exhaustive E-content on Theory and Practice of Literacy Translation for Students of Intermediate and Advanced Levels by Dr. Hemang A. Desai, N.V. Patel College of Pure and Applied Sciences, Gujarat, India.

Recommendations of the Standing Committee: Rs.7 lakhs to be given for a pilot to be completed in six months.

A copy of the Appraisal done by the Standing Committee is enclosed at **Appendix_____**.

Extracts of the Minutes of the meeting held on 18th September, 2010 are given below:

Generation of Exhaustive E-content on Theory and Practice of Literacy Translation for Students of Intermediate and Advanced Levels by Dr. Hemang A. Desai, N.V. Patel College of Pure and Applied Sciences, Gujarat, India.
Control Number: HE-10091011329

Objectives:
1. To develop exhaustive, quality e-content on Theory and Practice of Literacy Translation targeting students (regular/external/distance)
2. To exploit the potential of translation as a distinctive approach to increase access to English language training across the population.

Deliverables:

1. Translation of poetry, short fiction, critical, persuasive and augmentative discourses from English into an Indian regional language and vice versa.
2. A few workshops for dissemination and incorporating feedback will be organized.

Total Budget Required: 11,60,000/-

Deliberations: Well presented and organized with all the necessary quadrants of learning. The SC requested the PI to contact the reviewers for consent to content review.
Recommendation of the Committee: The SC found the proposal acceptable for pilot. However, detailed appraisal in the prescribed format, along with budget, will be conducted in the next meeting of the Standing Committee to be notified.

7.4 Creation of E-contents on Fermentation Technology by Dr. Ramesh Kothari, Department of Microbiology, Christ College, Gujarat, India.

Recommendations of the Standing Committee: Rs.6.71 lakhs be given for a pilot to be completed in six months.

A copy of the Appraisal done by the Standing Committee is enclosed at **Appendix_____**.

Extracts of the Minutes of the meeting are given below:

Creation of E-contents on Fermentation Technology by Dr. Ramesh Kothari, Department of Microbiology, Christ College, Gujarat, India.
Control No: RE-02091011297

Objectives:

To provide theoretical and practical information in the understanding of fermentation technology to undergraduate students.

Deliverables:
E-contents for 40 theory lectures and 10 practicals will be created with audio, video and simulations.

Total Budget required: Rs. 6.71 lakhs

Deliberations. Very well laid out and presented.

Recommendations. The SC found the proposal acceptable for pilot. However, detailed appraisal in the prescribed format, along with budget, will be conducted in the next meeting of the Standing Committee to be notified.

Agenda Item No.8

Strengthening of Mission Secretariat

This item was placed before the PAB in its 18th meeting held on 24th January, 2011 and the same was deferred for the next meeting.

A proposal for manpower strength of the Mission Secretariat was put up in 13th PAB meeting held on 25th February 2010.

The PAB in its above meeting approved the proposal. However, while approving the proposal, the PAB advised that there should be flexibility and at this stage, there is no need to identify the areas for consultants. The advertisement should only cover requirements of consultants in different fields without indicating the number of positions for the fields. It would be advisable to have consultants who have knowledge of ICT also. Retired professionals in the age group of 60-70 may also be considered. Candidates in service can be considered on deputation terms.

It has been observed that the response to our two advertisements was not encouraging due to the high criteria of Ph.D. qualifications of equivalent research experience and 20 years experience with at least 15 years in teaching in university/deemed university/PG college or research at senior position in national/international level research organization. Due to this criteria, Professors/Asso. Professors working in colleges/research organization on regular basis are not joining the Mission.

The Selection Committee also interviewed the applicants who did not have Ph.D. but have equivalent research experience and also those who did not have research experience but had experience in education/administration field. One of the persons selected namely Shri Pradeep Kaul fall in this category.

Therefore, it is proposed that in future also, we may relax the condition of teaching experience in case of Sr. Consultants and professionals even with administrative experience of similar nature in education field may also be allowed so that the Mission can get good response to its future recruitment.

Future Expansion

Keeping in view the expansion plans of the Mission and its activities across the country, the following is submitted:-

1. We may constitute Committees for finding the prospective PIs and the institutes in the areas/courses which have not yet been covered for e-content development. We also need to cover a large number of disciplines and organize workshops across the country so as to make the presence felt in all regions . For this purpose, 2 more Senior Consultants will be required in the Mission's HQs at Delhi.

2. Presently the review meetings in respect of projects sanctioned under the Mission are being conducted in Delhi only. Due to large number of projects to be reviewed and continuously monitored, it is proposed to constitute Review Committees of experts zone-wise i.e. for North, West, South, East and Central so as to regularly and continuously monitor the progress and review & upgrade the e-contents being generated under various projects. For this purpose, 5 Senior Consultants from the Mission who will be placed in these regions/zones to work as Conveners for all these zonal committee meetings will be required.

3. To assist these Senior Consultants, 14 Junior Consultants/ Support Staff will also be required.

In view of the above, it is requested that the present sanctioned position of Sr. Consultants may be enhanced from 6 to 13 and the Jr.Consultants/Support staff from 20 to 34.

Work Flow Chart of Mission Secretariat is enclosed at **Appendix _____.**

Project Approval Board may consider the proposal and take a decision.

Agenda Item No.9

Virtual Labs - Remote triggered experiments

The detailed Agenda will be sent separately.

Agenda Item No.10

UGC proposal

The detailed Agenda will be sent separately.

MINUTES OF 18TH MEETING OF PROJECT APPROVAL BOARD OF NATIONAL MISSION ON EDUCATION THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY HELD ON 24TH JANUARY, 2011 AT 3.00 P.M. IN CONFERENCE ROOM NO.112-C, SHASTRI BHAWAN, NEW DELHI

The **18th** Meeting of the Empowered Committee of Experts (Project Approval Board) (PAB) of National Mission on Education through Information & Communication Technology was held on 24th January, 2011 at 3.00 p.m. in Conference Room No.112-C Wing, Shastri Bhawan, New Delhi under the Chairpersonship of Secretary, Department of Higher Education.

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

Mrs.Vibha Puri Das, Secretary, Department of Higher Education welcomed all the participants. Thereafter, 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 17th PAB Meeting. No comments were received. Thereafter, the Minutes of the 17th Meeting of the Project Approval Board held on 26th November, 2010 were confirmed.

Item No.2

The Action Taken Report on the Minutes of the 17th Meeting of the Project Approval Board held on 26th November, 2010 was noted by the PAB.

However, it was felt that there is an urgent need to popularize the Mission. AS (TEL) apprized PAB that IIM Ahmedabad has not yet refunded the money sanctioned to it. Since IIM Ahmedabad is not getting any grant from Ministry of HRD, the institute may be once again advised to refund the money with interest. This was accepted by PAB.

Item No.3

Review of Decision-National Programme on Radio Enabled Learning by Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi.

Deferred for the next meeting.

Item No.4.

Development of Analysis and Indexing tools for harnessing educational videos, PI, Gaurav Harit IIT, Rajasthan (Control Number GRE01091011292)

This item was placed before the Project Approval Board in its 17th Meeting held on 26th November, 2010. The PAB had decided to refer the matter to Standing Committee with the direction to have re-look at the proposal, especially the financial aspects involved.

The projects was re-evaluated by the Standing Committee in its meeting held on 4th December, 2010. This agenda item was, therefore, again placed before the PAB with the recommendations of Standing Committee. PAB considered this item and approved Rs.32.45 lakhs for this project.

Shri R.P.Agrawal, Member, PAB also suggested that in the recommendations of the Standing Committee it should be expressly mentioned as to what exact benefit would be derived out of the project so recommended to PAB.

Item No.5

Development of Low Cost Mobile Robots- Robotics for Education: Swagat Kumar, IIT Rajasthan Control Number SIN19061010920

This item was placed before the Project Approval Board in its 17th Meeting held on 26th November, 2010. The PAB had decided to refer the matter to Standing Committee with the direction to have re-look at the proposal, especially the financial aspects involved.

The projects was re-evaluated by the Standing Committee in its meeting held on 4th December, 2010. This agenda item was, therefore, again placed before the PAB with the recommendations of Standing Committee. PAB considered this item and approved Rs.155.80 lakhs for this project.

Item No.6

CEC Main project - Production of Courseware e-content Development, Video Programmes & LORs, Consortium for Educational Communication, New Delhi

This item was placed before the Project Approval Board in its 17th Meeting held on 26th November, 2010. The PAB had decided to refer the matter to Standing Committee with the direction to have re-look at the proposal, especially the financial aspects involved.

The projects was re-evaluated by the Standing Committee in its meeting held on 4th December, 2010. This agenda item was, therefore, again placed before the PAB with the recommendations of Standing Committee. PAB considered this item and approved Rs.5.40 crores (30% of Rs.12 crores and 30% of Rs.6.50 crores) for this project.

Item No.7

E-Kalpa Creating Digital Environment for Design in India, Ravi Poovaiah,   IIT, Bombay

This item was placed before the Project Approval Board in its 17th Meeting held on 26th November, 2010. The PAB had decided to refer the matter to Standing Committee with the direction to have re-look at the proposal, especially the financial aspects involved.

The projects was re-evaluated by the Standing Committee in its meeting held on 4th December, 2010. This agenda item was, therefore, again placed before the PAB with the recommendations of Standing Committee. PAB considered this item and approved Rs. 650 lakhs for the first year and Rs.198 lakh (approximately one third of Rs. 595 lakhs) for the second year for this project.

Item No.8

Robot Enhanced Teaching of Subjects in Engineering Colleges, Prof. Kavi Arya, IIT, Bombay

This item was placed before the Project Approval Board in its 17th Meeting held on 26th November, 2010. The PAB had decided to refer the matter to Standing Committee with the direction to have re-look at the proposal, especially the financial aspects involved.

The projects was re-evaluated by the Standing Committee in its meeting held on 4th December, 2010. This agenda item was, therefore, again placed before the PAB with the recommendations of Standing Committee.

PAB considered this item and approved Rs. 127.82 lakhs for the first year and Rs. 78.21 lakh (approximately one third of Rs. 234.64 lakhs) for the second year.

Item No.9

Approval of Pilot projects recommended by the Standing Committee

This item was placed before the Project Approval Board in its 17th Meeting held on 26th November, 2010. The PAB had decided to refer the matter to Standing Committee with the direction to have re-look at the proposal, especially the financial aspects involved.

The projects was re-evaluated by the Standing Committee in its meeting held on 4th December, 2010. This agenda item was, therefore, again placed before the PAB with the recommendations of Standing Committee. PAB considered this items and approved the following pilot projects as per details given below:

9.1. **Developing ICT based pedagogical practices for management accounting, Dr. Manoj Shah**
    Control No.ME24091011361

    Rs. 7 lakh for one pilot.

9.2. **Development of e-contents on foundation course on analytical biochemistry and separation techniques, Dr. Charmy Kothari, Christ college, Rajkot.**
    Control No. DE-21091011349

    Rs. 7 lakh for one pilot.

PAB also approved that grant-in-aid for the above mentioned two pilot projects (9.1 and 9.2) will be routed through Indian Institute of Technology, Gandhinagar.

PAB also considered the following Pilot projects recommended by the Standing Committee in its meeting held on 9th October, 2010:

9.3. **e-content of zoology experiments. Z-101 (Earlier proposed name of the project Virtual laboratory for Zoology), Dr. Nikunj Bhatt, V.P& R.P.T.P Science College. Vallabh Vidyanagar. Anand, Gujarat.**

    Control No.:DE-18091011346

PAB approved Rs.7 lakhs for this pilot project and also approved that grant-in-aid for this project will be routed through Indian Institute of Technology, Gandhinagar.

9.4. Development of e-Contents for Foundation Course on Pharmaceutical Microbiology, Dr. Navin R. Sheth, Department of pharmaceutical sciences, Saurashtra University, Rajkot

Control No. DE-24091011360

PAB approved Rs.7 lakhs for this pilot project and also approved that grant-in-aid for this project will be routed through Indian Institute of Technology, Gandhinagar.

Item No.10

Assimilation of Open Source Software in Science and Engineering Education, Prof. Prabhu Ramachandran, IIT, Bombay

This item was placed before the Project Approval Board in its 17th Meeting held on 26th November, 2010. The PAB had decided to refer the matter to Standing Committee with the direction to have re-look at the proposal, especially the financial aspects involved.

The projects was re-evaluated by the Standing Committee in its meeting held on 4th December, 2010. This agenda item was, therefore, again placed before the PAB with the recommendations of Standing Committee.

Prof. Kannan Moudgalya made a presentation on this project and explained the various aspects of this project.

PAB considered this item and approved Rs. 192.5 lakhs for the first year and Rs. 126 lakh (one third of Rs. 378 lakhs) for the second year.

PAB also directed that identification of commercial softwares for which open source equivalents need to be developed on priority basis will be one of the additional deliverables for this project.

Item No.11

Extension of pilot of Vocational modules and Haptic Devices by Amrita Vishwa Vidyapeetham

This item was placed before the Project Approval Board in its 17th Meeting held on 26th November, 2010. The PAB had decided to refer the matter to Standing Committee with the direction to have re-look at the proposal, especially the financial aspects involved.

The projects was re-evaluated by the Standing Committee in its meeting held on 4th December, 2010. This agenda item was, therefore, again placed before the PAB with the recommendations of Standing Committee.

PAB considered this item and approved extended pilot project at a cost of Rs.159.23 lakhs and also approved the first installment as Rs.90 lakhs. The balance would be released after assessing the performance, possibly after 3 months.

Item No.12

Strengthening of Mission Secretariat

Deferred for the next meeting.

Item No.13

Salary of Senior Consultants

PAB considered this matter. AS&FA was of the view that salary of senior consultants may be regulated as per the current norms fixed by EdCIL (India) Limited. Prof. Surendra Prasad, Director, IIT, Delhi was of the view that a Professor level person is unlikely to come less than Rs.75,000/- per month as Senior Consultant. PAB, after deliberations, decided to have this matter internally discuss in MHRD in the first instance.

Item No.14

Hiring of Accommodation for Mission Secretariat

PAB was apprised of the status of this matter.

PAB, after deliberations, directed that fresh tenders may be floated in this regard. PAB also authorized the Chairperson, PAB to take a decision for hiring of accommodation for Mission Secretariat of NMEICT which could be ratified by the PAB later on.

ADDITIONAL AGENDA ITEMS

Additional Item No.1

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

Prof.Anup Kumar Ray from IIT, Kharagpur explained before PAB the difficulties being experienced by him in getting the work done by the various experts, especially in view of the conditions relating to payment of honorarium in respect of this project. He also requested PAB for exemption from these conditions in respect of this project in which intellectual inputs of various experts is of paramount importance. PAB, after deliberating on the issue, took note of the payments made in this regard. AS(TEL), however, said that MHRD is trying to resolve this matter in consultation with Ministry of Finance. As indicated by IFD, MHRD has been mentioning the provision of SR 12 relating to payment of honorarium. He also suggested that MHRD could also perhaps include this issue in the Cabinet Note which MHRD is preparing.

Additional Item No.2

Standing Committee Members to take over the job of Consultant/Coordinator

PAB considered this proposal and decided that individual proposals like this one need not be placed before the PAB. The proposals of generic nature need to be put up before the PAB. PAB, therefore, directed to undertake a detailed exercise in this regard and a concrete and generic proposal keeping in view the overall objectives of NMEICT may be brought forward and placed before PAB.

Additional Item No.3

e-content Development of Marketing Management

> SUBMITTED BY :- Jaydeep Badiyani
> Institute: Bhavnagar University
> CONTROL NUMBER :- JE-20071011105

> Deferred for next meeting.

Additional Agenda Item No.4

e-Content generation for students of science in graduate programmes.

ME-24091011358
Dr.Mandira Sikdar, Navrachna University, Vadodara, Gujarat.

Deferred for next meeting.

TABLE AGENDA

Table Agenda Item No.1

Pleas of CMD, EdCIL for increasing of consultancy fee

PAB considered the proposal of EdCIL (India) Limited sent vide letter No.CMD/NMEICT/2009/110 dated 11th January, 2011 for increase of service charges/consultancy fee.   After deliberations, PAB noted that EdCIL had voluntarily accepted 5% service charges at the time of signing of service agreement with MHRD. In view of this there appears to be no need at this juncture for raising the service charges beyond 5%. However, PAB directed that this matter may be discussed internally in MHRD in the first instance and a dialogue with EdCIL at appropriate level may also be undertaken so as to clearly understand the logic and justification for sending such a proposal to MHRD.

Table Agenda Item No.2

PAB considered the proposal of Chairman, UGC submitted to PAB vide DO No.F.3-1/2011(CM) dated 13th January, 2011. This proposal is subsequent to the discussions held on 18th December, 2010 regarding possible role and contribution of UGC and its Inter-University Centres (IUCs) in NMEICT. Chairman, UGC presented this proposal before PAB and expressed his willingness to undertake a bigger role for UGC in e-content generation under NMEICT. The UGC proposes to take up the task of content creation, up-dation, hosting and delivery using expertise available in universities and colleges in collaboration with its IUCs.

During the presentation, Chairman, UGC indicated that UGC is currently revising and updating some contents of curriculum/syllabus of some courses. He also stated that UGC could also consider more than 32 subjects for e-content generation.   After detailed deliberations on the proposal of UGC PAB gave it's "In-principle" approval to the proposal of UGC and requested Chairman, UGC to submit a concrete and specific proposal indicating activities to be undertaken, objectives, deliverables, scaling up, popularizing and extension of activities and plans, review by the peer group, user validation capital and revenue expenditure, cost benefit analysis, social

impact, outcome, roadmap, time-lines and financial requirements. It was also noted that no financial costing for e-contents was given in the said proposal.

With regard to involving INFLIBNET in this project, Dr.Jagdish Arora made the presentation before PAB. While noting this, PAB desired that such revision/updation of contents may go parallel to the creation of e-contents.

Thereafter, Shri Jagdish Arora, Director, INFLIBNET Ahmadabad made a presentation about the project – **National Library and Information Services Infrastructure for Scholarly Content (N-LIST)**. He also submitted revised budget as per suggestions given by the Standing Committee in its meeting held on 15.1.2011. Prof. Kannan Moudgalaya. Chairman, Standing Committee, MNE-ICT also presented the proposal for the N-LIST project along with revised budget estimates. He mentioned that the two major objections raised by the members of Standing Committee as well as by the PAB were resolved by the PIs. The proposal for N-LIST has now been revised to increased number of beneficiary institutions both for cross subscriptions as well as in terms of number of colleges that can access electronic resources. It was mentioned that N-LIST project will now benefit more than 4,000 colleges by the end of March 2012, 34 technical institutions and 100 universities under the cross-subscription arrangements. After getting satisfactory answer of purchase of electronic books on "one-time payment and perpetual access basis" and alternative resources under the NLIST Programme, the PAB approved purchase of electronic books on subscription basis as well as on perpetual access basis both for the previous financial year as well as for the current financial year. The total budget approved for the project is Rs.4011.50 lakhs. Since most of the amount is to be used for subscription of electronic resources and is payable in January-March, 2011. It was resolved that the entire amount may be released as soon as possible. PAB, taking note of various aspects of the proposal, approved a total amount of Rs.40.115 crore to be released to IIT, Delhi for this project. PAB also suggested that efforts may be made to cover all centrally funded institutions under N-LIST project.

Presentation

- Shri R.Saji Kumar from BSNL made a presentation on connectivity to universities and colleges under NMEICT and inter-alia apprized PAB of the current status in this regard. 185 universities and more than 10,000 colleges were reported to have been connected with 1 Gbps and 51482 VPN connections respectively.

Other Issues

PAB also made the following suggestions:

- For popularizing the Mission, constant touch with State Governments/Universities/Institutions at least by sending say one letter a month should be maintained.
- For Logo and jingles of NMEICT, some universities may be asked to conduct a competition in this regard.
- Suitable tickers about NMEICT on e-gyan channel run by IGNOU may be considered.
- For media strategy for creating awareness about NMEICT, proposals from Delhi based institutions such as Jamia Millia Islamia may be invited.
- For creating awareness about NMEICT, MHRD may consider making of posters, of suitable size, containing objectives of NMEICT and sending these posters to UGC for onward transmission to all universities/colleges.
- The lists of universities to be covered under NMEICT and NKN may be sent to all Members of PAB.

- Details of clear-cut Deliverables and time-lines of the projects approved by PAB may be enclosed as an Annexure to the sanction letter while releasing the grant-in-aid.
- A strategy for performance audit of the project sanctioned under NMEICT may be formulated and discussed in the next PAB.
- Efforts may be made to know the per student cost/per rupees mileage in a given project. This may also be added in the 10-point Appraisal Format of Standing Committee.
- Mission Secretariat may be strengthened to maintain data-base of various activities of NMEICT.
- Information may be collected as to how many institutions are actually using the resources made available under N-LIST.
- Key areas may be identified in which e-books are to be purchased and its enlisting will also be done under N-LIST.
- The manpower in the MHRD dealing with NMEICT may be augmented suitably in view of increase in workload.
- A representative from UGC may also be requested to attend the meeting of VCs and Directors, NITs to be held on 28th Jan, 2011.
- Mechanism for getting feedback from universities on connectivity matters under NMEICT may be put in place urgently.

There being no other item, the meeting ended with a Vote of Thanks to the Chair.

Attendance of the 18th Meeting of the Project Approval Board (PAB) of the National Mission on Education through Information & Communication Technology (NMEICT) held on 24th January, 2011 at 3.00 p.m. under the Chairpersonship of Secretary, Department of Higher Education, Ministry of Human Resources Development in Conference Room No.112-C Wing, Shastri Bhawan, New Delhi

S.No.	Name, Designation and Address	Phone No., Fax and Email
1	Ms. Vibha Puri Das Secretary (HE) MHRD, Shastri Bhawan, New Delhi	**Chairperson**
2	Mr. N.K.Sinha Additional Secretary(TEL) Department of Higher Education, MHRD, Shastri Bhawan, New Delhi	23387781 nksinha.edu@nic.in
3	Dr. M.D.Tiwari Director IIIT Allahabad Deoghat, Jhalwa Allahabad	mdt.iiita.ac.in 0532-2922222 09415235175
4	Dr. S.G. Deshmukh Director ABV- IIITM Gwalior- 474010	director@iiitm.ac.in. 0751-2449807 09425786444
5	Prof. Kannan Moudgalya IIT, Bombay	9869326979 022-25767213 kannan@iitb.ac.in
6	Shri Anup K. Ray IIT Kharagpur	akray@cet.iitkgp.ernet.in 09434753375 9932675583
7	Prof. Somnath Sengupta Dean Continuing Education IIT, Kharagpur	deance@hijli.iitkgp.ernet.in ssg@ece.iitkgp.ernet.in 03222-282033 03222-283548 03222-282299
8	Dr. B.K. Murthy Director & HOD (NKN) DIT Ministry of Communication & Information Technology New Delhi	bkm@mit.gov.in 9810601683 011-24360234

9	Shri S.K. Ray AS & FA Ministry of Human Resources Development Shastri Bhawan New Delhi	9868886588 skray@nic.in
10	Shri R.P Agrawal Chairman BOG IIT, Delhi	9910823311 0120-2395012 rpa1949@gmail.com
11	Prof. S. Prasad Director IIT, Delhi Hauz Khas New Delhi	director@admin.iitd.ac.in sprasad@ee.iitd.ac.in
12	Shri G. Panda Dy Director IIT, Bhubaneswar	ganapati.panda@gmail.com gpanda@iitbbs.ac.in
13	Dr. H. Maheshappa Vice Chancellor Visvesvaraya Technological University Belgaum Karnataka	9880288083 vc@vtu.ac.in
14	Dr. Jagdish Arora Director, INFLIBNET Ahmedabad	9725051200 jarora@inflibnet.ac.in
15	Shri R. Saji Kumar Addl. GM (NWP-BB) BSNL Corporate Office New Delhi	rsajikumar@bsnl.co.in 9868280066
16	Shri Ashok Kumar Rai Scientist "D (cs)	ashok@inflibnet.ac.in
17	Dr. Bibhuti B. Sahao Asst. Librarian	bibhuti@library.iitd.ac.in
18	Prof. Sukhadeo Thorat Chairman University Grants Commission 9, Bahadur Shah Zafar Marg, Delhi 110002	**Tel: 011- 23239628,23221313** Ph.:011 23232701 E-mail: www.ugc.ac.in
19	Dr. Harvinder Singh Director (TEL) & Nodal officer (NME-ICT) Department of Higher Education, MHRD, Shastri Bhawan, New Delhi	23382604 harvinder.edu@nic.in

20	Shri A.K. Singh Director (ICT) Deptt. of Higher Education Ministry of HRD Shastri Bhawan New Delhi-110001	011-23384276 011-23384276 09968720084 anandksingh.edu@nic.in
21	Shri Raj Kumar Under Secretary Department of Higher Education Room No. 225 "C" Wing MHRD, Shastri Bhawan New Delhi	23384187 raj64in@indiatimes.com

ACTION TAKEN NOTE ON THE

MINUTES OF 18TH MEETING OF PROJECT APPROVAL BOARD OF NATIONAL MISSION ON EDUCATION THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY HELD ON 24TH JANUARY, 2011

Item No.	Action Taken
Item No.1: Chairperson requested all the members to give their comments on the Minutes of the 17th PAB Meeting. No comments were received. Thereafter, the Minutes of the 17th Meeting of the Project Approval Board held on 26th November, 2010 were confirmed.	Minutes confirmed
Item No.2 The Action Taken Report on the Minutes of the 17th Meeting of the Project Approval Board held on 26th November, 2010 was noted by the PAB. However, it was felt that there is an urgent need to popularize the Mission. AS (TEL) apprized PAB that IIM Ahmedabad has not yet refunded the money sanctioned to it. Since IIM Ahmedabad is not getting any grant from Ministry of HRD, the institute may be once again advised to refund the money with interest. This was accepted by PAB.	IIM Ahmedabad has been reminded to refund the money.
Item No.3 **Review of Decision-National Programme on Radio Enabled Learning by Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi.** Deferred for the next meeting.	Being put up in the current meeting as an Agenda Item.
Item No.4. **Development of Analysis and Indexing tools for harnessing educational videos, PI, Gaurav Harit IIT, Rajasthan (Control Number GRE01091011292)** This item was placed before the Project Approval Board in its 17th Meeting held on 26th November, 2010. The PAB had decided to refer the matter to Standing Committee with the direction to have re-look at the proposal, especially the financial aspects involved. The projects was re-evaluated by the Standing Committee in its meeting held on 4th December, 2010. This agenda item was, therefore, again placed before the PAB with the recommendations of	Release of funds is under process.

Standing Committee. PAB considered this item and approved Rs.32.45 lakhs for this project. Shri R.P.Agrawal, Member, PAB also suggested that in the recommendations of the Standing Committee it should be expressly mentioned as to what exact benefit would be derived out of the project so recommended to PAB.	
Item No.5 **Development of Low Cost Mobile Robots- Robotics for Education: Swagat Kumar, IIT Rajasthan Control Number SIN19061010920** This item was placed before the Project Approval Board in its 17th Meeting held on 26th November, 2010. The PAB had decided to refer the matter to Standing Committee with the direction to have re-look at the proposal, especially the financial aspects involved. The projects was re-evaluated by the Standing Committee in its meeting held on 4th December, 2010. This agenda item was, therefore, again placed before the PAB with the recommendations of Standing Committee. PAB considered this item and approved Rs.155.80 lakhs for this project.	Release of funds is under process.
Item No.6 **CEC Main project - Production of Courseware e-content Development, Video Programmes & LORs, Consortium for Educational Communication, New Delhi** This item was placed before the Project Approval Board in its 17th Meeting held on 26th November, 2010. The PAB had decided to refer the matter to Standing Committee with the direction to have re-look at the proposal, especially the financial aspects involved. The projects was re-evaluated by the Standing Committee in its meeting held on 4th December, 2010. This agenda item was, therefore, again placed before the PAB with the recommendations of Standing Committee. PAB considered this item and approved Rs.5.40 crores (30% of Rs.12 crores and 30% of Rs.6.50 crores) for this project. **Item No.7** **E-Kalpa Creating Digital Environment for Design in India, Ravi Poovaiah, IIT, Bombay** This item was placed before the Project Approval Board in its 17th Meeting held on 26th November, 2010. The PAB had decided to	Funds released.

refer the matter to Standing Committee with the direction to have re-look at the proposal, especially the financial aspects involved. The projects was re-evaluated by the Standing Committee in its meeting held on 4th December, 2010. This agenda item was, therefore, again placed before the PAB with the recommendations of Standing Committee. PAB considered this item and approved Rs. 650 lakhs for the first year and Rs.198 lakh (approximately one third of Rs. 595 lakhs) for the second year for this project.	Release of funds is under process.

Item No.8

Robot Enhanced Teaching of Subjects in Engineering Colleges, Prof. Kavi Arya, IIT, Bombay

This item was placed before the Project Approval Board in its 17th Meeting held on 26th November, 2010. The PAB had decided to refer the matter to Standing Committee with the direction to have re-look at the proposal, especially the financial aspects involved. The projects was re-evaluated by the Standing Committee in its meeting held on 4th December, 2010. This agenda item was, therefore, again placed before the PAB with the recommendations of Standing Committee. PAB considered this item and approved Rs. 127.82 lakhs for the first year and Rs. 78.21 lakh (approximately one third of Rs. 234.64 lakhs) for the second year.	Release of funds is under process.

Item No.9

Approval of Pilot projects recommended by the Standing Committee

This item was placed before the Project Approval Board in its 17th Meeting held on 26th November, 2010. The PAB had decided to refer the matter to Standing Committee with the direction to have re-look at the proposal, especially the financial aspects involved.

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9.1. Developing ICT based pedagogical practices for management accounting, Dr.Manoj Shah
  Control No.ME24091011361
 	
  Rs. 7 lakh for one pilot.
	Release of funds is under process.

9.2. **Development of e-contents on foundation course on analytical biochemistry and separation techniques, Dr.Charmy Kothari, Christ college, Rajkot.** **Control No. DE-21091011349** Rs. 7 lakh for one pilot.	Release of funds is under process.

PAB also approved that grant-in-aid for the above mentioned two pilot projects (9.1 and 9.2) will be routed through Indian Institute of Technology, Gandhinagar.

PAB also considered the following Pilot projects recommended by the Standing Committee in its meeting held on 9th October, 2010:

9.3. **e-content of zoology experiments. Z-101 (Earlier proposed name of the project Virtual laboratory for Zoology), Dr. Nikunj Bhatt, V.P& R.P.T.P Science College. Vallabh Vidyanagar. Anand, Gujarat.** **Control No.:DE-18091011346** PAB approved Rs.7 lakhs for this pilot project and also approved that grant-in-aid for this project will be routed through Indian Institute of Technology, Gandhinagar.	Release of funds is under process.
9.4. **Development of e-Contents for Foundation Course on Pharmaceutical Microbiology, Dr. Navin R. Sheth, Department of pharmaceutical sciences, Saurashtra University, Rajkot** **Control No. DE-24091011360** PAB approved Rs.7 lakhs for this pilot project and also approved that grant-in-aid for this project will be routed through Indian Institute of Technology, Gandhinagar.	Release of funds is under process.

Item No.10

Assimilation of Open Source Software in Science and Engineering Education, Prof. Prabhu Ramachandran, IIT, Bombay

This item was placed before the Project Approval Board in its 17th Meeting held on 26th November, 2010. The PAB had decided to refer the matter to Standing Committee with the direction to have re-look at the proposal, especially the financial aspects involved.

The projects was re-evaluated by the Standing Committee in its meeting held on 4th December, 2010. This agenda item was, therefore, again placed before the PAB with the recommendations of Standing Committee.	Release of funds is under process.
Prof. Kannan Moudgalya made a presentation on this project and explained the various aspects of this project.	
PAB considered this item and approved Rs. 192.5 lakhs for the first year and Rs. 126 lakh (one third of Rs. 378 lakhs) for the second year.	
PAB also directed that identification of commercial softwares for which open source equivalents need to be developed on priority basis will be one of the additional deliverables for this project.	
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Item No.12 **Strengthening of Mission Secretariat** Deferred for the next meeting.	Being put up in the current meeting as an Agenda Item.
Item No.13 **Salary of Senior Consultants** PAB considered this matter. AS&FA was of the view that salary of senior consultants may be regulated as per the current norms fixed by EdCIL (India) Limited. Prof. Surendra Prasad, Director, IIT, Delhi was of the view that a Professor level person is unlikely to come less	File is put up to AS&FA.

than Rs.75,000/- per month as Senior Consultant. PAB, after deliberations, decided to have this matter internally discuss in MHRD in the first instance.	
Item No.14 **Hiring of Accommodation for Mission Secretariat** PAB was apprised of the status of this matter. PAB, after deliberations, directed that fresh tenders may be floated in this regard. PAB also authorized the Chairperson, PAB to take a decision for hiring of accommodation for Mission Secretariat of NMEICT which could be ratified by the PAB later on.	Fresh Tender issued. Report of the Committee constituted for short-listing and recommending the space and location is awaited.
ADDITIONAL AGENDA ITEMS **Additional Item No.1** **Developing suitable pedagogical methods for various classes, intellectual calibers and research in e-learning, IIT Kharagpur** Prof.Anup Kumar Ray from IIT, Kharagpur explained before PAB the difficulties being experienced by him in getting the work done by the various experts, especially in view of the conditions relating to payment of honorarium in respect of this project. He also requested PAB for exemption from these conditions in respect of this project in which intellectual inputs of various experts is of paramount importance. PAB, after deliberating on the issue, took note of the payments made in this regard. AS(TEL), however, said that MHRD is trying to resolve this matter in consultation with Ministry of Finance. As indicated by IFD, MHRD has been mentioning the provision of SR 12 relating to payment of honorarium. He also suggested that MHRD could also perhaps include this issue in the Cabinet Note which MHRD is preparing.	Noted
Additional Item No.2 **Standing Committee Members to take over the job of Consultant/Coordinator** PAB considered this proposal and decided that individual proposals like this one need not be placed before the PAB. The proposals of generic nature need to be put up before the PAB. PAB, therefore, directed to undertake a detailed exercise in this regard and a concrete and generic proposal keeping in view the overall objectives of NMEICT may be brought forward and placed before PAB.	Noted

Additional Item No.3
 	
e-content Development of Marketing Management
 	
     SUBMITTED BY :- Jaydeep Badiyani
     Institute: Bhavnagar University
     CONTROL NUMBER :- JE-20071011105
 	
     Deferred for next meeting.
	Being put up in the current meeting as an Agenda Item.

Additional Agenda Item No.4 **e-Content generation for students of science in graduate programmes.** **ME-24091011358** **Dr.Mandira Sikdar, Navrachna University, Vadodara, Gujarat.** Deferred for next meeting.	Being put up in the current meeting as an Agenda Item.
TABLE AGENDA **Table Agenda Item No.1** **Plea of CMD, EdCIL for increasing of consultancy fee** PAB considered the proposal of EdCIL (India) Limited sent vide letter No.CMD/NMEICT/2009/110 dated 11th January, 2011 for increase of service charges/consultancy fee. After deliberations, PAB noted that EdCIL had voluntarily accepted 5% service charges at the time of signing of service agreement with MHRD. In view of this there appears to be no need at this juncture for raising the service charges beyond 5%. However, PAB directed that this matter may be discussed internally in MHRD in the first instance and a dialogue with EdCIL at appropriate level may also be undertaken so as to clearly understand the logic and justification for sending such a proposal to MHRD.	Noted
Table Agenda Item No.2 PAB considered the proposal of Chairman, UGC submitted to PAB vide DO No.F.3-1/2011(CM) dated 13th January, 2011. This proposal is subsequent to the discussions held on 18th December, 2010 regarding possible role and contribution of UGC and its Inter-University Centres (IUCs) in NMEICT. Chairman, UGC presented this proposal before PAB and expressed his willingness to undertake a bigger role for UGC in e-content generation under NMEICT. The UGC proposes to take up the task of content creation, up-dation, hosting and delivery using expertise available in universities and colleges in collaboration with its IUCs.	UGC has been reminded to submit the proposal.

During the presentation, Chairman, UGC indicated that UGC is currently revising and updating some contents of curriculum/syllabus of some courses. He also stated that UGC could also consider more than 32 subjects for e-content generation. After detailed deliberations on the proposal of UGC PAB gave it's "In-principle" approval to the proposal of UGC and requested Chairman, UGC to submit a concrete and specific proposal indicating activities to be undertaken, objectives, deliverables, scaling up, popularizing and extension of activities and plans, review by the peer group, user validation capital and revenue expenditure, cost benefit analysis, social impact, outcome, roadmap, time-lines and financial requirements. It was also noted that no financial costing for e-contents was given in the said proposal. With regard to involving INFLIBNET in this project, Dr.Jagdish Arora made the presentation before PAB. While noting this, PAB desired that such revision/updation of contents may go parallel to the creation of e-contents. Thereafter, Shri Jagdish Arora, Director, INFLIBNET Ahmadabad made a presentation about the project – **National Library and Information Services Infrastructure for Scholarly Content (N-LIST)**. He also submitted revised budget as per suggestions given by the Standing Committee in its meeting held on 15.1.2011. Prof. Kannan Moudgalaya. Chairman, Standing Committee, MNE-ICT also presented the proposal for the N-LIST project along with revised budget estimates. He mentioned that the two major objections raised by the members of Standing Committee as well as by the PAB were resolved by the PIs. The proposal for N-LIST has now been revised to increased number of beneficiary institutions both for cross subscriptions as well as in terms of number of colleges that can access electronic resources. It was mentioned that N-LIST project will now benefit more than 4,000 colleges by the end of March 2012, 34 technical institutions and 100 universities under the cross-subscription arrangements. After getting satisfactory answer of purchase of electronic books on "one-time payment and perpetual access basis" and alternative resources under the NLIST Programme, the PAB approved purchase of electronic books on subscription basis as well as on perpetual access basis both for the previous financial year as well as for the current financial year. The total budget approved for the project is Rs.4011.50 lakhs. Since most of the amount is to be used for subscription of electronic resources and is payable in January-March, 2011. It was resolved that the entire amount may be released as soon as possible. PAB, taking note of various aspects of the proposal, approved a total amount of Rs.40.115 crore to be released to IIT, Delhi for this project. PAB also suggested that efforts may be made to cover all centrally funded institutions under N-LIST project.	IFD has concurred in to release Rs.35.115 crore to IIT Delhi. Release of funds is under process.

Presentation • Shri R.Saji Kumar from BSNL made a presentation on connectivity to universities and colleges under NMEICT and inter-alia apprized PAB of the current status in this regard. 185 universities and more than 10,000 colleges were reported to have been connected with 1 Gbps and 51482 VPN connections respectively.	Noted
Other Issues PAB also made the following suggestions: • For popularizing the Mission, constant touch with State Governments/Universities/Institutions at least by sending say one letter a month should be maintained. • For Logo and jingles of NMEICT, some universities may be asked to conduct a competition in this regard. • Suitable tickers about NMEICT on e-gyan channel run by IGNOU may be considered. • For media strategy for creating awareness about NMEICT, proposals from Delhi based institutions such as Jamia Millia Islamia may be invited. • For creating awareness about NMEICT, MHRD may consider making of posters, of suitable size, containing objectives of NMEICT and sending these posters to UGC for onward transmission to all universities/colleges. • The lists of universities to be covered under NMEICT and NKN may be sent to all Members of PAB. • Details of clear-cut Deliverables and time-lines of the projects approved by PAB may be enclosed as an Annexure to the sanction letter while releasing the grant-in-aid. • A strategy for performance audit of the project sanctioned under NMEICT may be formulated and discussed in the next PAB. • Efforts may be made to know the per student cost/per rupees mileage in a given project. This may also be added in the 10-point Appraisal Format of Standing Committee. • Mission Secretariat may be strengthened to maintain data-base of various activities of NMEICT. • Information may be collected as to how many institutions are actually using the resources made available under N-LIST. • Key areas may be identified in which e-books are to be purchased and its enlisting will also be done under N-LIST. • The manpower in the MHRD dealing with NMEICT may be augmented suitably in view of increase in workload. • A representative from UGC may also be requested to attend the meeting of VCs and Directors, NITs to be held on 28th Jan, 2011. • Mechanism for getting feedback from universities on connectivity matters under NMEICT may be put in place urgently.	Noted

File No.NMEICT (MS)/PAB/19
Government of India
Ministry of HRD
Department of Higher Education

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14th March, 2011

To

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

Sub: Revised Agenda Item No.4 - 19th Meeting of the Empowered Committee of Experts
(Project Approval Board) of National Mission on Education through Information
and Communication Technology (NMEICT) to be held on 15th March, 2011 at
4.00 p.m.

Sir/Madam,

This is further to our letter of even number dated 10th March, 2011 enclosing
therewith Agenda and papers for 19th Meeting of the Empowered Committee of Experts
of NMEICT to be held on 15th March, 2011 at 4.00 p.m. in Conference Room (First
Floor), Central Secretariat Library (CSL) Building, Shastri Bhawan, New Delhi, enclosed
please find Revised Agenda Item No.4.

2.   Kindly make it convenient to attend the meeting.

Yours faithfully,

(Dr. Harvinder Singh)
Director (TEL) &
Nodal Officer (NMEICT)
Tel: 011-23382604

Copy to:

PSO to Secretary (HE), PS to AS&FA and Additional Secretary(TEL) – for information.

19TH MEETING OF EMPOWERED COMMITTEE OF EXPERTS (PROJECT APPROVAL BAORD) OF NATIONAL MISSION ON EDUCATION THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY

REVISED AGENDA ITEM NO.4 – LOW COST ACCESS-CUM-COMPUTING DEVICE

For the development of low cost access-cum-computing device under the National Mission on Education through Information and Communication Technology, an amount of Rs.41.50 crore was approved in the meeting of National Apex Committee/Project Approval Board of NMEICT held on 01.09.2010 which included Rs.16.50 crore for procurement of Low Cost Access-cum-Computing Devices (LCADs). Against this approval, Ministry of Human Resource Development, Department of Higher Education has so for released Rs.25.00 crore to Indian Institute of Technology, Rajasthan so far.

Indian Institute of Technology, Rajasthan has sent a report (enclosed at **Appendix-A)** on the matter and also requested for additional requirement of funds to the tune of Rs.6.22 crore. Thus for procurement of LCADs the grant requested is now Rs.22.72 crore. These figures, according to Indian Institute of Technology, Rajasthan, are based on the L1 of the tender. In this regard, a meeting of the Standing Committee of NMEICT was held on 14th March, 2011 to examine the request of Indian Institute of Technology, Rajasthan. A copy of minutes, containing recommendations of the Standing Committee, is enclosed at **Appendix-B.**

The following revised proposals are put up for approval of Project Approval Board (PAB):

(I) Testing of LCADs = Rs.25.00 crore – debited to the head for Testing and Development

(II) Procurement of 1,00,000 units of LCADs = Rs.22.72 crore – to be debited to the head for Teachers Empowerment

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