New Delhi, the 26th March, 2009

Subject: Minutes of the Third Meeting of the Empowered Committee of Experts (Project Approval Board) of the National Mission on Education through Information and Communication Technology (ICT) – regarding.

A copy of the Minutes of the Third Meeting of the Empowered Committee of Experts (Project Approval Board) of the National Mission on Education through Information and Communication Technology (ICT), a Centrally Sponsored Scheme, held on 25th March, 2009 at 3.30 p.m. in Conference Room (No.112, C-Wing), Shastri Bhawan, New Delhi under the Chairpersonship of Secretary, Department of Higher Education, Ministry of Human Resource Development, is sent herewith for information and necessary action.

(Dr. D.K. Paliwal)
Deputy Educational Adviser (DL)
Tele: 23385409

All members of the Project Approval Board of National Mission on Education through Information and Communication Technology (ICT) [As per list enclosed].

Copy, with a copy of Minutes, to: Sr. PPS to Secretary (HE) & Chairperson, PAB and JS(BC) & Member Secretary, PAB for information.

Copy, with a copy of Minutes, also to:

1.   Shri Amitabh Bhattacharya,
      Principal Adviser (Education),
      Planning Commission,
      New Delhi.

2.   Shri Furqan Qamar,
      Adviser (Education),
      Planning Commission,
      New Delhi.

3. Shri R. Chandrashekhar,
    Special Secretary,
    Department of Information Technology,
    Electronics Niketan, CGO Complex,
    Lodhi Road, New Delhi

4. Shri N. Ravi Shanker,
    Joint Secretary,
    Department of Information Technology,
    Electronics Niketan, CGO Complex,
    Lodhi Road, New Delhi.

5. Shri Subodh Kumar,
    Additional Secretary,
    Department of Telecommunications,
    Sanchar Bhawan, New Delhi

6. Shri S. Mohan,
    Director (Finance),
    Ministry of Human Resource Development,
    New Delhi

7. Ms. Shakila Shamsu,
    Joint Adviser (Edn),
    Planning Commission,
    New Delhi

8. Shri A.K. Singh,
    DDG (TPF),
    Department of Telecommunications,
    Sanchar Bhawan,
    New Delhi.

9. Dr. S.K. Saxena,
    Director/T,
    Department of Telecommunications,
    Sanchar Bhawan,
    New Delhi.

10. Shri A.R. Sinha,
    Director (Bgt),
    Department of Telecommunications,
    Sanchar Bhawan,
    New Delhi

11. Prof. Ajay Chakraborty,
    Dean (CE),
    Indian Institute of Technology,
    Kharagpur.

12. Dr. Prem K. Kalra,
    Professor,
    Indian Institute of Technology,
    Kanpur

13. Shri Ranjan Bose,
    Professor, Deptt. of EE,
    Indian Institute of Technology,
    Delhi

14. Prof. K. Mangala Sunder,
    Professor, Chemistry and
    NPTEL Coordinator,
    Indian Institute of Technology,
    Madras,
    Chennai.

15. Shri Kannan Moudgalaya,
    Head, CDEEP,
    IIT, Bombay.

16. Shri Ratnajit Bhattacharjee,
    Associate Professor,
    Department of ECE,
    IIT, Guwahati,
    Assam

17. Shri Kushal Sen,
    NPTEL Video Coordinator,
    IIT, Delhi

18. Dr. C.S. Kumar,
    Associate Professor,
    Medical Engineering Department,
    IIT, Kharagpur

19. Dr. Kavi Arya,
    Associate Professor,
    CSE Department,
    IIT, Bombay, Mumbai

20. Shri Krishnashree Achuthan,
    ECE Department,
    Amrita University

21. Prof. Joseph John,
    EE Department,
    IIT, Kanpur

22. Ms Jayanti Sivaswamy,
    IIIT, Hyderabad,
    Centre for IT in Education
    In Visual Information Technology,
    Hyderabad

23. Dr. Bikash Mohanty,
    Professor,
    Department of Chemical Engineering,
    IIT, Roorkee

24. Dr. P. Venkat Rongon,
    Vice Chancellor,
    Amita University, Coimbatore

25. Shri Kamal Bijlani,
    Head, E-learning Initiative,
    Amirita Vishwa Vikdya Peetham,

26. Shri C.M. Markan,
    Reader,
    Dept. of Physics & Com. Science,
    Dayalbagh Educational Institute, Agra.

27. Dr. Soami P. Satsangee,
    Reader, USIC,
    Dept. of Physics & Com. Science,
    Dayalbagh Educational Institute. Agra.

28. Shri Raghu Raman,
    Amrita University

Project Approval Board of National Mission on Education through Information and Communication Technology (ICT)

List of Members

1. Secretary,
   Department of Higher Education,
   Chairperson
   Ministry of Human Resource Development
   Shastri Bhawan, New Delhi.   Chairperson

2. Additional Secretary, & Financial Adviser,
   Department of Higher Education.
   Ministry of Human Resource Development,
   Shastri Bhawan, New Delhi

3. Secretary,
   Planning Commission
   Yojana Bhawan,
   New Delhi.   (Fax No : 23096575)

4. Secretary,
   Department of Telecommunications
   Sanchar Bhawan,
   New Delhi.   (Fax No.23711514)

5. Secretary,
   Department of Information Technology
   Ministry of Communication and Information Technology,
   CGO Complex, Lodhi Road,
   New Delhi   Fax No.24363134)

6. Secretary,
   Department of Space,
   Lok Nayak Bhawan,
   New Delhi.   (Fax No. 080 2345328)

7. Dr. A. Mukhopadhyay
   Adviser/Scientist 'G', SERC Division,
   M/o Science & Technology, D/o Science & Technology,
   Technology Bhawan,
   New Delhi – 110 016.   (Fax No.26602193)

8. Director,
   Indian Institute of Technology,
   Powai
   Mumbai-400076   (Fax No. 91-22-2572354)

9. Director,
   Indian Institute of Technology,
   Roorkee-247667
   Uttrakhand)   (Fax No.91-1332-273560)

10. Director,
    Indian Institute of Technology,
    North Guwahati   (Fax No.361-2690762)
    Guwahati-781039(Assam)   (Fax No.361-2692321)

11. Director,
    Indian Institute of Technology,
    P O Kharagpur-721302   (Fax No.3222-282000)

12. Director,
    Indian Institute of Technology.
    PO IIT,
    Chennai -600036   (Fax No.44-22578003)

13. Director,
    Indian Institute of Technology (Fax No.512-2597790)
    Kanpur-208016 (U.P)   (Fax No.512-2590260)

14. Director,
    Indian Institute of Science,
    Bangalore-560 012
    Karnataka   (Fax No.080-23600036)

15. Director,
    Indian Institute of Technology,
    Hauz Khas,
    New Delhi-110 016   (Fax No.26582659)

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MINUTES OF THE THIRD MEETING OF THE EMPOWERED COMMITTEE OF EXPERTS (PROJECT APPROVAL BOARD) OF THE NATIONAL MISSION ON EDUCATION THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) HELD ON 25TH MARCH, 2009 AT 3.30 P.M. IN CONFERENCE ROOM NO. 112-C WING, SHASTRI BHAWAN, NEW DELHI UNDER THE CHAIRPERSONSHIP OF SECRETARY, DEPARTMENT OF HIGHER EDUCATION

The third meeting of the Empowered Committee of Experts (Project Approval Board) (PAB) of National Mission on Education through Information and Communication Technology (ICT) was held at 3.30 p.m. on 25th March, 2009 in the Conference Room No. 112-C Wing, Shastri Bhawan, New Delhi, under the Chairpersonship of Secretary, Department of Higher Education

2.   The list of participants is at Annex-1.

3.   Shri R.P. Agrawal, Secretary, Higher Education, welcomed all the members and appreciated the good work being done by the members of the Committees formed by the PAB under the centrally sponsored scheme of National Mission on Education through Information and Communication Technology and, thereafter, agenda items were discussed and the following decisions were taken:

Agenda Item No. 1

Minutes of the second meeting of Project Approval Board held on 17.3.2009 were confirmed.

Agenda Item No. 2

PAB considered the proposal for Establishment of Mission Secretariat of the National Mission on Education through Information and Communication Technology and approved the same. PAB authorized JS (DL) & Member Secretary, PAB to discuss the matter with Director, IIT, Delhi, to work out the modalities of making the Mission Secretariat operational with IIT, Delhi.

1

Prof. (Dr.) Prem K. Kalra, Convener of the Standing Committee briefed PAB of the work done by the Standing Committee and the proposals deliberated on by the Standing Committee. He also circulated a list of proposals with the recommendations of the Standing Committee and said that the Standing Committee deliberated in detail in its meetings and found these proposals worthy of achieving the goals outlined in the Mission Document of the National Mission on Education through ICT. The recommendations of the Standing Committee, as circulated in the meeting of PAB on 25.3.2009, is at Annexe-II. Director (Finance) specifically wanted to know whether the proposals being recommended by the Standing Committee are covered under the various components of the Mission document. Convener, Standing Committee replied in the affirmative. PAB, then considered the recommendations of the Standing Committee and approved the proposals placed before it by the Standing Committee as given in the attached Annexure-I.
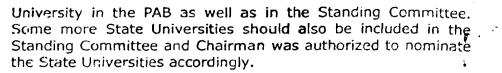
At the time of discussion on the proposal of Virtual University, DEA (DL) has opined that this project may not be called as Virtual University, because as per provision under section 2 (f) of the UGC Act, 1956, the university can only be established by or under a legislation enacted by either State Legislature or Parliament. Alternatively, IIT concerned with this project, may award the degree to the candidates completing the courses under this proposed dispensation.

PAB has deliberated on the component of e-journals in the Mission document and approved Rs. 20.00 crore for release to Indian Institute of Technology, Delhi for providing complementary facility of INDEST to the member institutions of INFLIBNET and vice-versa. It was emphasised by the Secretary (HE) that the beneficiary institutions must be made to pay some part of the cost so as to appreciate its value.

PAB has requested the Standing Committee to take the trouble of appraising the remaining proposals and finalize the recommendation by 28th March, 2009 and submit to the Chairperson, who was authorized to approve them on behalf of PAB.

Additional Agenda Item No. 1

PAB ratified the constitution of the Standing Committee and while doing so, suggested for proper representation of the Universities, State as well as Central in Standing Committee as well as PAB. It was accordingly decided to include the representations of University of Pune and North Eastern Hill

University in the PAB as well as in the Standing Committee. Some more State Universities should also be included in the Standing Committee and Chairman was authorized to nominate the State Universities accordingly.

Additional Agenda Item No. 2

PAB considered this agenda item and approved the same.

4.   The meeting ended with a vote of thanks of the Chair.

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List of Participants

1. Secretary,
   Department of Higher Education
   Ministry of Human Resource Development
   New Delhi   (in Chair)

2. Shri S. Mohan,
   Director (Finance),
   Ministry of Human Resource Development,
   New Delhi

3. Ms. Shakila Shamsu,
   Joint Adviser (Edn),
   Planning Commission,
   New Delhi

4. Shri N. Ravi Shanker,
   Joint Secretary,
   Department of Information Technology,
   New Delhi.

5. Shri A.K. Singh,
   DDG (TPF),
   Department of Telecommunications,
   Sanchar Bhawan,
   New Delhi.

6. Dr. S.K. Saxena,
   Director/T,
   Department of Telecommunications,
   Sanchar Bhawan,
   New Delhi.

7. Shri A.R. Sinha,
   Director (Bgt),
   Department of Telecommunications,
   Sanchar Bhawan,
   New Delhi.

8. Prof. S. Prasad,
   Director,
   Indian Institute of Technology,
   Delhi

9. Prof. Sanjay G. Dhande,
   Director,
   Indian Institute of Technology,
   Kanpur

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10.   Prof. Ajay Chakraborty,
Dean (CE),
Indian Institute of Technology,
Kharagpur.

11.   Dr. Prem K. Kalra,
Professor,
Indian Institute of Technology,
Kanpur

12.   Shri Ranjan Bose,
Professor, Deptt. of EE,
Indian Institute of Technology,
Delhi

13.   Shri S.C. Saxena,
Director,
Indian Institute of Technology,
Roorkee.

14.   Dr. A. Mukhopadhyay,
Adviser, Department of Science & Technology,
New Delhi

15.   Prof. K. Mangala Sunder,
Professor, Chemistry and
NPTEL Coordinator,
Indian Institute of Technology,
Madras,
Chennai.

16.   Shri Kannan Moudgalya,
Head, CDEEP,
IIT, Bombay.

17.   Shri Ratnajit Bhattacharjee,
Associate Professor,
Department of ECE,
IIT, Guwahati,
Assam

18.   Shri Kushal Sen,
IIT, Delhi

19.   Dr. C.S. Kumar,
Associate Professor,
Medical Engineering Department,
IIT, Kharagpur

20.   Dr. Kavi Arya,
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IIT, Bombay, Mumbai

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    IIT, Roorkee

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    Vice Chancellor,
    Amita University, Coimbatore

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    Head, E-learning Initiative,
    Amirita Vishwa Vikdya Peetham,

27. Shri C.M. Markan,
    Reader,
    Dept. of Physics & Com. Science,
    Dayalbagh Educational Institute, Agra.

28. Dr. Soami P. Satsangee,
    Reader, USIC,
    Dept. of Physics & Com. Science,
    Dayalbagh Educational Institute, Agra.

29. Shri Raghu Raman,
    Amrita University

30. Shri N.K. Sinha,
    Joint Secretary (DL) and
    Member Secretary, PAB,
    Department of Higher Education,
    Ministry of Human Resource Development,
    New Delhi

31. Dr. D.K. Paliwal,
    Deputy Educational Adviser (DL),
    Department of Higher Education, MHRD,
    New Delhi

32. Shri Raj Kumar,
    Under Secretary (DL),
    Department of Higher Education, MHRD, New Delhi

Table A: **Nationally coordinated activities under the National Mission on education through ICT**

1	Teachers empowerment, students empowerment and integration of tools for empowerment (synchronous delivery)	IIT Bombay	IIT Allahabad Amrita University DEi University, Agra	Rs. 10.0 crores
2	Software tools, open source tools, simulation tools	IIT Roorkee	IIT Bombay DEi University, Agra	Rs. 10.0 crores
3	ERP	IIT Kanpur	Amrita University DEI University, Agra IIT Roorkee NIT Hamirpur	Rs. 2.0 crore
4	VSAT, mobile, integration	IIT Roorkee	DSCL New Delhi IIM Ahmedabad	Rs. 3.0 crores
5	Virtual Labs	IIT Delhi	IITB, IITG, IITK, IITKGP, IITM, IITR, IIT Allahabad, IIT Hyderabad, Amrita University, DEI University, Agra	Rs. 22.0 crore
6	Developing suitable pedagogical methods for various classes, intellectual calibers and e-learning	IIT Kharagpur	IITB, IITD, IITG, IITK, IITM, IITR, BHU, IGNOU, Jadavpur University, NCERT	Rs. 5.0 crores
	TOTAL (A)			Rs. 52.0 crores

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Table B: Content generation:

1	Content Creation (Non-technical) E-content creation in the areas of economics, mathematics, commerce, history, zoology and botany	Delhi University	Rs. 2.0 crore
2	Proposal for production of courseware	CEC, UGC, New	Rs. 1.0 crore

		Delhi	
3.	UG Course content in cultural education, rural development, proficiency in Indian music, drawing and painting, journalism and mass communication	DEI University, Agra	Rs 0.75 crore
4	Vocational courses and the use of haptic devices	Amrita University	Rs. 1.25 crore
5	Vocational courses E-enabled with delivery through ICT and conversion to regional languages	DEI University	Rs. 1.0 crore
	TOTAL (B)		Rs. 6.0 crores

Table C: Research and developmental project proposals:

1	Project E-Yantra: Robot enhanced teaching of subjects in engineering colleges	IIT Bombay	Rs. 1.0 crore
2	Quantum and nano computing virtual centre	DEI University, Agra, IIT Kanpur, IIT Delhi, IIT Madras	Rs. 2.0 crore
3	Proof of concept exercise for planning e-literacy programme	IIM Ahmedabad	Rs. 0.1 crore
4	Virtual Technical University	IIT Kanpur	Rs. 6.0 crore
5	Development of low cost synchronization oscillators for standalone communication networks for efficient information broadcasting in geographically challenging locations	DEI University, Agra supported by Nokia-Siemens network	Rs. 1.0 crores
	TOTAL ©		Rs. 10.1 crores

Grand total (A+B+C)   Rs. 68.1 crores

Premlata