File No. NMEICT(MS)/Apex/2-PAB/16
Government of India
Ministry of Human Resource Development
Department of Higher Education

25th August, 2010

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

Sub: Agenda for Second Meeting of the National Apex Committee and 16th Meeting of Project Approval Board of National Mission on Education through Information and Communication Technology to be held on 1st September, 2010 at 10.30 a.m.

Sir/Madam,

This is in continuation to our letter of even number dated 16th August, 2010 regarding Second Meeting of the National Apex Committee and 16th Meeting of the Project Approval Board (PAB) of National Mission on Education through Information and Communication Technology to be held on 1st September, 2010 at 10.30 a.m. at Committee Room-B, Vigyan Bhavan Annexe, New Delhi under the Chairmanship of Hon'ble Minister for Human Resource Development.

2. The Agenda for the above meeting is enclosed. Detailed agenda papers will follow.

3. Kindly make it convenient to attend.

Yours faithfully,

(N.K. Sinha)
Joint Secretary (DL)
Tel: 011-23387781

Copy to: PS to HRM/PSO to Secretary (HE) – For information.
AGENDA FOR THE SECOND MEETING OF THE NATIONAL APEX COMMITTEE AND 16th MEETING OF PROJECT APPROVAL BOARD OF NATIONAL MISSION ON EDUCATION THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY TO BE HELD ON 1ST SEPTEMBER, 2010 AT 10.30 A.M. AT COMMITTEE ROOM-B, VIGYAN BHAWAN ANNEXE, NEW DELHI

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**PS:** Copies of some Appendices to the above Agenda Items will be placed in the Meeting.
Agenda Item No.1

The Minutes of the 1st Meeting of the National Apex Committee held on 11th September, 2009 are placed below (Appendix-I Page No.______) for kind perusal and confirmation please.
Agenda Item No.2

The Action Taken Report on the Minutes of the 1\textsuperscript{st} Meeting of the National Apex Committee of National Mission on Education through Information and Communication Technology held on 11\textsuperscript{th} September, 2009 is given at Appendix-II (Page No.______).
Agenda Item No.3

The Minutes of the 15th Meeting of the Project Approval Board held on 24th May, 2010 are placed below (Appendix-III Page No._______) for kind perusal and confirmation please.
Agenda Item No.4

The Action Taken Report on the Minutes of the 15th Meeting of the Project Approval Board held on 24th May, 2010 is given at Appendix-IV (Page No.______).
CONNECTIVITY TO COLLEGES AND UNIVERSITIES

A Centrally Sponsored Plan Scheme, namely, the National Mission on Education through Information & Communication Technology was approved by the Cabinet Committee on Economic Affairs on 2nd January, 2009. Under this scheme connectivity to over 18,000 colleges in the country including each of the departments of 419 universities/institutions of higher education on a single point rental basis through Department of Telecommunications, in a manner that would permit their seamless integration with the integrated National Knowledge Network.

With the availability of advanced technology, it became possible to provide connectivity to universities through Optical fibre cable (OFC) instead of copper wire connectivity as was previously conceived. Previously proposal was to provide on an average 400 nodes of 512 kbps to every university by copper wire connections. In the present proposal with in the same expenditure sanctioned for connectivity under NMEICT for 10 years connectivity at 1 GBPS per university and providing LAN for 400 nodes for the every university as per the CSS norms instead of 200 Mbps for 5 years. The position was also discussed in the meeting taken by Secretary Expenditure in connection with issues relating to NKN and NMEICT. It was appreciated with the using of latest technology within the same expenditure higher physical target were being achieved. The proposal to provide connectivity to colleges on OFC instead of copper wire with the savings accruing because of synergy between the two missions was appreciated. The note indicating the above position was sent to DIT as comments on the Cabinet note for NKN. The proposal was approved by HRM, the Chairmen of Apex Committee.

Bharat Sanchar Nigam Limited-Mahanagar Telephone Nigam Limited (BSNL-MTNL) combine has been entrusted with the task of providing connectivity under National Mission on Education through Information and Communication Technology (NMEICT) Scheme.

Department of Higher Education, Ministry of Human Resource Development has also almost finalized a draft Memorandum of Understanding (MoU) to be signed between Department of Higher Education, Ministry of Human Resource Development, BSNL and MTNL. This could not be signed as yet, as there were some issues cropped up with the Government's approval given to the National Knowledge Network Scheme to be administered by Department of Information Technology. DG, NIC, Department of Information Technology, vide his D.O. letter No.NIC/DIG/NKN/2010-98 dated 14th June, 2010 sent to Department of Higher Education, stated, inter alia, that since NKN is now formally underway, it is desirable that MHRD issue a letter to all the universities clearly indicating the transfer of the task of providing connectivity for universities to NKN project. It is stated here that in-principle approval for the establishment of
National Knowledge Network (NKN) was accorded by Cabinet Committee on Infrastructure (CCI) on 21.01.2010. Later on, on 28th March, 2010, CCI approved establishment of NKN with a financial of Rs.5990 crore.

To discuss common issues involving National Knowledge Network (NKN) and National Mission on Education through Information and Communication Technology (NMEICT) projects, a meeting was held at 11.00 A.M. on 22nd June, 2010 in the chamber of Secretary, Department of Higher Education, Ministry of Human Resource Development.

After detailed discussions, the consensus/ action points that emerged (subject to their formal acceptance by Deptt. of Information Technology in toto) are listed as under :

(a) Having regard to approvals accorded by CCA for NMEICT and CCI for NKN, the need was felt for achieving convergence to deliver the objectives in both the projects in a time bound manner. While NKN provides connectivity of 1Gbps to all universities, NMEICT was providing connectivity ready for delivery of content and virtual lab initiatives to the universities. Merely providing connectivity of 1Gbps to universities without LAN will not, therefore, provide a complete highway for delivery of content of NMEICT. Providing 1Gbps to all universities whether publicly or privately funded [to NKN PoPs] shall primarily be the responsibility of NKN/NIC. MHRD shall fund connectivity to the 419 universities as per sharing pattern under NMEICT till such time NKN is in a position to replenish the due amount for 419 universities to BSNL. NMEICT shall concentrate on providing LAN to all the universities and connectivity to the colleges. This would accelerate acceptance of the network by the universities and State Governments.

(b) To save the ground already covered, the number and location of 419 Universities for which BSNL has already made investment for providing 1Gbps connectivity would stand frozen meaning thereby that BSNL-MTNL combine will continue to work towards providing connectivity to the 419 universities at specified locations, so as to accomplish this task within a period of 3 months, with the active cooperation of NKN/NIC in providing adequate number of NKN PoPs across the country.

(c) The commitment made by the Ministry of Human Resource Development to the University that the connectivity will be provided free for 10 years shall be honored.

(d) NKN shall take over the responsibility of providing funds to BSNL for the 419 or more Universities @ Rs.2 crore per University at the earliest by way of re-appropriation of funds during the current year itself or in the first quarter of the next financial year at the latest.
Work done by BSNL for providing connectivity to Universities will conform to NKN specifications.

Funds made available by MHRD to BSNL for providing connectivity to Universities shall be used for providing connectivity to colleges after appropriate adjustment in accounts on receipt of funds from NKN.

The Technical Committee comprising experts from NIC, BSNL, NKN, other TSPs and academia would deliberate on designing suitable architecture and technology for connecting colleges on OFC and aggregating their traffic to bring them on NKN at suitable points. The Committee would consider physical and logical as well as financial aspects of the connectivity to formulate detailed recommendations.

NKN does not provide for LAN facilities. In case of Universities (beyond 419 Universities which are already being provided connectivity including LAN as a package of BSNL) getting connected directly by NKN/NIC, they will have to bear 100% expenditure on LAN. It may prove to be counter productive. For realizing the objectives of NMEICT, it may be necessary to provide 75% or 90% (in case of NER States) contribution to the Universities for LAN, MHRD would explore the possibility of funding this requirement.

Till such time, the required funds are made available by NKN to BSNL-MTNL combine, the Department of Higher Education shall provide further funds to BSNL-MTNL combine as per need as per sharing pattern under NMEICT, i.e. 75:25 for States other than NER States and 90: 10 in the case of NER States so that the job of providing connectivity to 419 Universities is not delayed.

The Cabinet Committee on Economic Affairs will be informed by MHRD about the change in approach in providing connectivity to the Universities.

A copy of the Minutes of this meeting is enclosed at Appendix-V (Page No.______).

Vide O.M.No.16-28/2009-DL dated 12th July, 2010, Department of Higher Education forwarded a copy of the Minutes of the abovementioned meeting to Department of Information Technology (DIT) for information and necessary action. Vide O.M. of even number dated 21st July, 2010, Department of Higher Education requested Department of Information Technology that formal acceptance of Department of Information Technology in toto to the consensus/action points emerged in the said meeting may be conveyed to Department of Higher Education. In response, DIT, vide its letter No.2(2)/2009-NKN(Vol.IV) dated 28.07.2010 suggested modifications in the
said Minutes and requested Department of Higher Education to send the modified Minutes to DIT.

On 6th August, 2010, 9th meeting of the High Level Committee on NKN was held under the Chairmanship of Dr. R. Chidambaram, Principal Scientific Adviser to Government of India. In this meeting, he expressed the view that it would not be possible for the NKN to provide connectivity to all the 419 universities in the current year. He asked for prioritization and to convey the priority list of Universities which could be connected by NKN during the current financial year. Department of Higher Education has decided (further details given in the succeeding paragraph) to provide connectivity to all the Colleges and Universities as the Department would be requiring a sure highway to provide e-contents to the colleges and universities.

BSNL, vide its letter No.64-53/09-BB dated 19.07.2010, inter alia, stated that it had already completed more than 70% work relating to the connectivity of the universities to the nearest NKN Point of Presence (PoP) and requested Department of Higher Education to facilitate the connectivity with the NKN so that BSNL is in a position to provide the connectivity as per commitments given. In reply to BSNL, Department of Higher Education, vide its D.O. letter No.16-28/2009-DL dated 2.8.2010, stated that since at a large number of places the NKN PoPs are not ready for immediate connection, the issue of delay taking place in providing connectivity to 419 universities was discussed with Secretary, Department of Telecommunications (DOT) and, as agreed, BSNL may connect those universities to the BSNL PoPs temporarily. However, in order not to waste the bandwidth, the bandwidth provision should be in tune with the actual utilization and projected demands of the universities. This should be accomplished within the already agreed commercial terms and conditions by adjusting the proportionate bandwidth charges. This decision taken by the Department of Higher Education also provides scope for going ahead till NKN takes over. It may be mentioned that Department of Higher Education is committed to payment of 75% (90% in the case of NER) of the charges for connectivity to Universities. With Rs.2.00 crore, the BSNL-MTNL combine have agreed to provide free connectivity for 10 years. It is, therefore, apparent that when 75% portion of this is paid by the Central Government, 7½ years connectivity (9 years in the case of NER) can be provided by BSNL-MTNL straightaway. Meanwhile, position has been checked with Planning Commission. Adequate funds are being provided by Planning Commission to State Governments for providing connectivity under NMEICT in their State Plans. In view of this, it is very clear that 25% (10% in the case of NER) share to be deposited by the Universities, especially the State Government Universities would materialize over the period. As such, ultimately, 10
years connectivity will be ensured through BSNL-MTNL combine. Private Universities are to be provided connectivity upon deposit of their share i.e. 25% or 10% of the investment as the case may be. The NMEICT was to provide connectivity through copper wire. Later on by shifting to Optical Fibre Cable LAN was also provided to make the connectivity operational. Package assignment to provide OFC and LAN, has been given to BSNL/MTNL, for 419 universities. Decision in respect of the following is, therefore, to be taken:

(a) Pursue the connectivity being provided by BSNL-MTNL combine vigorously and provide funds to them as per Centrally Sponsored Scheme (CSS) norms; and

(b) Provide funds to BSNL-MTNL as per norms of CSS for providing LAN to Universities.

BSNL has also been given a deadline of 30.9.2010 to provide to connectivity to 419 universities.

It is also mentioned here that a discussion was held with Prof. S.V. Raghavan, Scientific Secretary to Principal Scientific Adviser to Government of India on 20.8.2010 in which issues concerning NKN and NMEICT were discussed. Under NMEICT, the Department of Higher Education is not visualizing any charges from the Universities and Institutes which are to be treated as equivalent to Universities like IITs, IIMs, IISER etc. for maintenance upto 10 years. In the approved MOU with BSNL-MTNL combine, the network is to be maintained by BSNL-MTNL combine for 10 years without any charge. In the case of NKN, a Special Purpose Vehicle (SPV) is envisaged, which may comprise major stakeholders which should not have Government ownership. This may be the precise reason for the proposed levy of maintenance/subscription charges of Universities/Colleges participating in NKN after two years as the structure built under SPV will have to be financed.

**Proposal for connectivity to colleges on OFC**

On reimbursement of the funds by NKN @ Rs. 2 crore per university to BSNL/MTNL for providing connectivity to 419 universities, funds would be available which may be used for providing connectivity to colleges on OFC. For this purpose, action is to be initiated by setting up Technical Committee for designing suitable architecture and techniques for connecting colleges on OFC.
Report has to be submitted to CCEA for utilizing these funds, which would become available on reimbursement by NKN, for connectivity to colleges on OFC.

National Apex Committee may kindly consider the issues indicated above and give instructions/approvals in this matter for moving forward in this regard. It is also proposed that MOU (Copy enclosed at Appendix-VI Page No.____) with BSNL and MTNL may be signed by Department of Higher Education, Ministry of Human Resource Development after 01.09.2010.
Agenda Item No.6

CONNECTIVITY TO GOVERNMENT POLYTECHNICS

There are about 2000 Government polytechnics in the country. As per guidelines issued by the Mission Secretariat of National Mission on Education through Information and Communication Technology (NMEICT), for ensuring that each college gets a Virtual Private Network (VPN) of 10 Mbps (20 Nodes of 512 Kbps each or lesser Nodes of proportionately higher Kbps) from BSNL at an annual cost of Rs.5000/- per Node (i.e. Rs.1.00 lakh for 20 Nodes) out of which 25% payment, i.e., Rs.25,000/- per year (10% , i.e., Rs.10,000/- in the case of North Eastern Region) for a college will have to be made to BSNL directly, as the other 75% (90% in the case of North Eastern Region) is being centrally provided by the Central Government.

Treating the Government polytechnics as “Colleges” where 10 Nodes, on an average, be provided, the estimated total expenditure on the part of the Central Government per annum is to the tune of Rs.6.5 crore. If 20 Nodes are to be provided to each Government Polytechnic, then this estimated expenditure per annum is to the tune of Rs.13.00 crore.

It is also stated that development of Vocational Educational Modules and use of haptic devices for education and training is one of the objectives of the NMEICT scheme and it is specifically budgeted (Rs.100 crore – overall ceiling) in the CCEA-approved Mission Document.

Project Approval Board of NMEICT, in its first meeting held on 3.3.2009, had, inter alia, decided to provide connectivity to 2000 Govt. polytechnics also.

A doubt has risen whether or not the Government Polytechnics are covered in the Scheme of National Mission on Education through Information and Communication Technology and it has been opined by the Integrated Finance Division of Department of Higher Education, Ministry of Human Resource Development that specific approval of Cabinet Committee on Economic Affairs will be required for including Polytechnics as a part of the National Mission on Education through Information and Communication Technology.

It is also stated that it is necessary to provide connectivity to Government polytechnics so that the e-contents being developed under the NMEICT could be accessed and made use of.

It is proposed to provide connectivity, as per details given above, to Government Polytechnics under a Project of NMEICT, within the overall budget of Rs.100 crore available under the Scheme.

National Apex Committee may consider and give appropriate instructions/approval in this regard.
Agenda Item No.7
Approval for Setting up a Committee on DTH

The National Mission on Education through Information and Communication Technology (ICT) is a Centrally Sponsored Plan Scheme to leverage the potential of ICT, in providing high quality personalized and interactive knowledge modules over the internet/intranet for all the learners in Higher Education Institutions in any time any where mode.

The Mission has two major components viz., (a) content generation and (b) connectivity along with provision for access cum computing device for institutions and learners. It plans to focus on appropriate pedagogy for e-learning, providing facility of performing experiments through virtual laboratories, on-line testing and certification, on-line availability of teachers to guide and mentor learners, utilization of available education Satellite (EduSAT) and Direct to Home (DTH) platforms, training and empowerment of teachers to effectively use the new method of teaching learning etc.

It is proposed to set up a Committee to formulate strategy on using DTH platforms under NMEICT Scheme, with the following composition:

1. Dr. A. Bhaskaranarayana, Scientific Secretary & Director, Indian Space Research Organization, Deptt. of Space, Antariksh Bhawan, New B.E.L. Road, Bangalore - 580231
   Member

2. Sh. E.P. Balasubramanian, Group Director, Space Application Centre, Jodhpur Tekra, Ambawadi Vistar, P.O. Ahmedabad- 380 015
   Member

3. Sh. K. Ravi Kanth, Director, EMPC, IGNOU, New Delhi
   Member

4. Mr. V.S. Palsule, Group Director, (ADCTG), Space Application Centre, Jodhpur Tekra, Ambawadi Vistar, P.O. Ahmedabad- 380 015
   Member

5. Mr. Ravi Saksena, head (DCTD/SSPG/TAA, Space Application Centre, Jodhpur Tekra, Ambawadi Vistar, P.O. Ahmedabad- 380 015
   Member

6. Dr. K.S. Dass Gupta, Dy. Director, Space Application Centre, Jodhpur Tekra, Ambawadi Vistar, P.O. Ahmedabad- 380 015
   Member

7. Mr. Pradeep Kaul, Jt. Director(HW), Consortium of Educational Communication, UGC, IUAC Campus, Aruna Asaf Ali Marg, New Delhi- 110067
   Convener

National Apex Committee may consider approving setting up the Committee with the above mentioned composition and also indicate the methodology of work and Terms and Reference of the Committee.
Agenda Item No.8
Awareness Building and Publicity Strategy Formulation

A sum of Rs.61.00 lakh was released by the Department of Higher Education, Ministry of Human Resource Development under the Centrally Sponsored Plan Scheme, namely, National Mission on Education through Information and Communication Technology (NMEICT) to Indian Institute of Management (IIM), Ahmedabad, as approved by the Project Approval Board of the National Mission on Education through Information and Communication Technology, in its meeting held on 03.02.2010, for the pilot project entitled, “Awareness Building and Publicity Strategy Formulation”.


It is proposed that Indian Institute of Management, Ahmedabad may be requested to refund the funds (Rs.61.00 lakh) with interest as prescribed in the General Financial Rules immediately. It is also proposed that the said pilot project may now be awarded to Mission Secretariat of the National Mission on Education through Information and Communication Technology for execution. It is further proposed that Dr. Rajanish Dass from IIM, Ahmedabd and Dr. Pradeep Verma who presented the proposal before the Standing Committee of NMEICT may also be associated by the Mission Secretariat in execution of the project, if they give their written consent to be associated with the said pilot project for execution.

National Apex Committee of NMEICT is requested to consider the abovementioned proposal and take a decision.
Agenda Item No.9

We have received letter No.IITD/D dated 20.5.2010 from IIT Delhi mentioning that MHRD vide letter dated 27th April, 2010 extended the Pilot project for Virtual Labs upto 30.6.2010 and they have recently received the second installment of the pilot project of the Virtual Labs currently underway at IIT Delhi. IIT Delhi has requested for extension of Pilot Project upto March 31, 2011 since the time left for spending the 2nd installment judiciously is very little as during the period of extension they wish to carry out work related to productionization and rolling out some of the labs developed during the pilot. This will also help them to retain and employ manpower.

It may also be mentioned that there are other important ongoing pilot projects which were to be completed upto 31st March, 2010. It is for kind consideration of PAB to give extension upto 31st March, 2011 for all these pilot projects.
Agenda Item No.10

The following Projects recommended by Standing Committee in their various meetings are put up for kind consideration:

1. **e- CONTENT DEVELOPMENT**

   Control No.: 23011010521
   
   Name of the Institute(s): CSK HP Krishi Vishwavidyalaya, Palampur, HP
   
   Name of PI(s): Dr. SP SHARMA
   
   Amount Recommended: Rs. 7 lakh per one course
   
   The detailed Appraisal and Recommendation by Standing Committee is at Appendix-VII (Page No.______)

2. **E-Books on Introduction to High Energy Physics, Introduction to Astroparticle Physics and Instrumentation methods in Astroparticle Physics.**

   Control No. se-16120910469
   
   Name of the Institute(s): Dayalbagh Educational Institute, Agra
   
   Name of PI(s): Dr. Sonali Bhatnagar
   
   Amount Recommended: Rs. 7 lakh per course x 2 = Rs.14 lakhs.
   
   The detailed Appraisal and Recommendation by Standing Committee is at Appendix-VIII (Page No.______)

3. **Library Automation and Resource Sharing Network**

   Control No.Ue-05031010571
   
   Name of the Institute(s): Indira Gandhi National Open University, New Delhi
   
   Name of PI(s):
   
   1. Prof. Uma Kanjilal, School of Social Sciences, IGNOU, New Delhi
   2. Prof. K. S. Raghavan, Professor, DRTC, Indian Statistical Institute, 8th Mile, Mysore Road, Bangalore 560 059
3. Dr. Parthasarathi Mukhopadhyay, Assistant Professor, Department of Library and Information Science, University of Burdwan, West Bengal.

   Amount Recommended: Rs.1,82,00,000/-

   The detailed Appraisal and Recommendation by Standing Committee is at Appendix-IX (Page No.______)

4. Development of e-content for professional skill development in teacher-training

   Control No.: Je-05031010572
   Name of the Institute(s): Department of Educational Technology, SNDT Women’s University, Mumbai

   Name of PI(s): Dr. Jayashree Shinde

   Amount Recommended: Rs.93 lakhs

   The detailed Appraisal and Recommendation by Standing Committee is at Appendix-X (Page No.______)

5. Development of E-Content in the Areas of

   1. Insurance & Risk Management
   2. MBA (Agri-Business)

   Control No.: Se – 13021010543

   Name of the Institute: Faculty of Management Studies, Banaras Hindu University

   Name of PI: Prof. S.K. Singh

   Amount Recommended: Funds may be sanctioned in terms of courses, i.e. Rs.14 lakhs for Phase-I. For Phase 2 Rs.70 lakhs for each slot of 10 courses after successful completion of Phase-I.

   The detailed Appraisal and Recommendation by Standing Committee is at Appendix-XI (Page No.______)

6. Development of e-Content of Physical Education for Undergraduate & Postgraduate Courses

Control No. Se-12011010504

Principal Investigator: Syed Tariq Murtaza (Ph.D.), Department of Physical Health and Sports Education, Faculty of Social Sciences, Aligarh Muslim University, Aligarh-202002.

Amount Recommended: Rs.7 lakhs x 2 = 14 lakhs

The detailed Appraisal and Recommendation by Standing Committee is at Appendix-XII (Page No.______)

7. Development of E-content for Slope Engineering

Control No.: Re-10031010581

Name of the Institute(s): Institute of Technology, Banaras Hindu University

Name of PI(s): Dr. Rajesh Rai and Dr. GSPSingh

Amount Recommended: Rs.7 lakhs

The detailed Appraisal and Recommendation by Standing Committee is at Appendix-XIII (Page No.______)

8. Sakshat One Stop Education Portal

Control No.: Ue-22031010754

Name of the Institute(s): Indira Gandhi National Open University (IGNOU), New Delhi

Name of PI(s): Prof. Uma Kanjilal

Amount Recommended: Rs.93,93,000/-

The detailed Appraisal and Recommendation by Standing Committee is at Appendix-XIV (Page No.______)
9. **Introduction to Programming and its Mathematical Foundations**

Control No.: Je-16031010655

Name of the Institute(s):
- Keshav Memorial Institute of Technology, Hyderabad (KMIT), and
- Department of Computer Science, University of Mumbai (UDCS)

Name of PI(s):
1. Dr Jayant Kirtane (KMIT)
2. Dr Ambuja Salgaonkar (UDCS)

Amount Recommended: Rs.7 lakhs

The detailed Appraisal and Recommendation by Standing Committee is at Appendix-XV (Page No.______)

10. **Creation of content for ISTQB (International Software Testing Qualifications Board) foundation certification** (Project Name proposed by PI)

    Project Name recommended by Standing Committee while finalizing the Appraisal.

    **Content creation for foundation course for Software Testing Qualification.**

    **Chief Investigator:** Mr. Neil Gogte, Director, Keshav Memorial Institute of Technology, Hyderabad, A.P

    Amount Recommended: Rs.7 lakhs

    The detailed Appraisal and Recommendation by Standing Committee is at Appendix-XVI (Page No.______)

11. **Software Defined Radio (SDR)- Architecture, Systems for 3G**

Control No.: SE-10051010858

Name of the Institute: Keshav Memorial Institute of Technology, Hyderabad

Name of PI(s): Prof. S.P. Venu Madhava Rao

Amount Recommended: Rs.7 lakhs

The detailed Appraisal and Recommendation by Standing Committee is at Appendix-XVII (Page No.______)

12. **e-Content Generation and e-skill test in Specialized Areas of Information Technology**

Control No. : Ve-25110910429

Name of the Institute(s) : Centre For Development of Advanced Computing, CDAC, Noida

Name of PI(s) : V.K.Sharma, Sr.Project Manager, CDAC, Noida

Amount Recommended: Rs.7 lakhs per course for 26 courses  
(Rs.7 lakhs x 26 courses = Rs.182 lakhs)

The detailed Appraisal and Recommendation by Standing Committee is at [Appendix-XVIII](#)  
(Page No.______)

13. **GNUKhata**

Control No. KE-29041010840

Name of the Institute(s): Master Dinanath Mangeshkar College of Arts and commers.

Name of PI(s): Manik Shingare, Krishnakant Mane

Amount Recommended: Rs.23.00 lakhs

The detailed Appraisal and Recommendation by Standing Committee is at [Appendix-XIX](#)  
(Page No.______)

14. **DEVELOPING E-CONTENT FOR LAW SUBJECTS**

Name of the Institute(s):  
NALSAR UNIVERSITY OF LAW, Hyderabad, NATIONAL ACADEMY OF LEGAL STUDIES AND RESEARCH UNIVERSITY, Justice City, Shameerpet, R.R.District, Hyderabad-500078, A.P., (India)

Name of PI(s): Prof. M. Sridhar Acharyulu, Faculty, NALSAR, Hyderabad  
Prof (Dr) B.V. Somasekhar  
Prof. G.S.Srivatsa

Amount Recommended: Rs.7 Lakhs for one course may be sanctioned at the initial stage.

The detailed Appraisal and Recommendation by Standing Committee is at [Appendix-XX](#)  
(Page No.______)

15. **E-course Development.**

Control Number: Te-08061010897
Name of the Institute(s) : ANNAMALAI UNIVERSITY, TAMILNADU
Name of Principal Investigator : Dr. T. SUDHA
Co- Investigators: Dr. N. MALATHI and Dr. T. S. KALYANI

Amount Recommended: Rs.7 lakhs

The detailed Appraisal and Recommendation by Standing Committee is at Appendix-XXI (Page No._____)