Minutes of the Standing Committee of NMEICT, held on 19 Sept. 2013

Participants:

Mission Director: Mr. Praveen Prakash

SC Members:

- 1. Prof. Kannan Moudgalya
- 2. Prof. Pradeep Varma
- 3. Prof. Y. N. Singh
- 4. Prof. Jayashree Shinde
- 5. Prof. C. G. Mahajan
- 6. Prof. Karmeshu
- 7. Prof. Mangala Sunder
- 8. Prof. Zahid H. Khan
- 9. Shri. Pradeep Kaul
- 10. Prof. Uma Kanjilal

Others present:

- 1. Prof. Kamal Bijlani
- 2. Ms. Aurobhi Das
- 3. Dr. C. S. Arora

and the PIs and the staff members of the projects presented.

1. Creating accessible study material for print impaired students PI: Prof. P. P. Chakrabarti, Prof. Anupam Basu, Prof. Shamit Patra Inst: IIT Kharagpur, DAISY Forum of India, Centre for Internet and Society

Control No.: Ne-21070910198

For vision impaired students. Completed in March 2013. To create 200 books (50 in English and 150 in Indian languages) in DAISY format. Pilot funding was Rs. 53 lakh. 183 books, with 115 with audio were selected. Partners were CIS, Daisy Forum of India.

250 books conversion was budgeted at Rs. 11,000 (English) and Rs. 11,500 (Hindi) - these two were easier than other language books.

Selection of books and getting permission from publishers was difficult. But as per a new Law, no permission is required for creating books for print disabled persons.

Any book available in unicode can easily be converted into DAISY format. Automated DAISY tagging is recommended by the PRSG.

Rs. 53 lakhs have been sanctioned and disbursed to PI. About Rs. 52 lakhs have been spent. Out of 200 books to be converted, 183 have been done. The current proposal is to create 5,000 books. Amount sought is 11.077 crore. The work to be done is content creation, selection of books and popularisation.

OF the total proposed budget, Rs. 6.37 crore is for conversion.

Balance for technology development, including simulation of science experiments through audio and ductile screens.

The PI said that it would reduce their conversion work if the books are given in unicode format. In this case, the conversion cost would be lower.

A soft copy of this proposal is available at http://proposal.sakshat.ac.in/sakshatproposal/CV/13014/Proposal%20for%20Main%20Phase.pdf

The Standing Committee members will go through this proposal. Depending on the feedback obtained from the SC members, the project may be recommended to the PAB. If there are objections, the PI will be asked to make a presentation to the SC once again.

Subsequent to the circulation of the Draft Minutes, the PIs, in a revised version of their project proposal, have provided a lower cost of conversion, when soft copies of the source book are available. This addresses a question raised by the SC members.

2. Benchmarking on information and communication technology modules in Physics and Chemistry ${\bf r}$

PI: Prof. Thareja, Prof. Gurunath

Inst: IIT Kanpur

Control No.: PG23220099863

17 in Physics and 14 in Chemistry. Sanctioned amount Rs. 2.16 cr. Received Rs. 1.01 cr. Amount requested now is the balance amount of Rs. 1.15 cr. They also want an extension until 31 March 2014.

Wiki approach is used in their work. PPTs, simulations, questions at the end of the lecture. Four quadrant method is implemented. Content providers are from IIT and also from other institutions. Same for reviewers. They have held two PRSG meetings. The PRSG has recommended the release of balance funds. The SC also appreciated this work in previous presentations.

Prof. Mangala Sunder, the PI of the NPTEL project, has confirmed that that the courses created in this project are not covered by NPTEL and that there is no duplication between these two activities.

The SC recommends the balance funds be released. The SC also recommends that this project be extended till 31 March 2014.

3. MeLT
Prof. Vinod Kumar
IIT Roorkee
Control No.

12 vans and buses and a large number of laptops were bought with the funds. The project got completed successfully. Two vans were given to the Mission Secretariat.

The Mission has already invested more than Rs. 3 crore on this project and all the vehicles and the laptops are lying idle. These should be put to use. Quite a bit of publicity can be given to the Mission if

the vehicles and the laptops are put to use. If the vehicles and the laptops are lying idle without use, there could be audit objections.

The PI has asked for Rs. 11.5 lakh per vehicle per year to resume the activity.

The PI asked for 10x11.5x2 = Rs. 230 lakh for a period of two years. The SC recommends this proposal. The SC also wants the PI to take up the two vans and the laptops given to the Mission Secretariat also to be put to use. Therefore, The SC recommends that a total of 12x11.5x2 = Rs. 276 lakh be sanctioned to the PI for this project.

The main idea is to ensure that the investment already made is not wasted and that the assets created under this project are put to use for awareness building and dissemination activities.

4. Library automation and resource sharing network

PI: Prof. Uma Kanjilal

Institution: IGNOU

Control no.: VE 05031010571

The project has two objectives: (1) Setting up a central data base. (2) Establishing the use of Koha. Koha has been integrated with Drupal. Server helps download catalog for individual institutions.

Total budget sanctioned is 1.82 crore. Initial funds were received by IGNOU in March 2011. However, the PI claimed that the work could be started only in November 2011, after a delay of 9 months, because of some internal problems within IGNOU.

The quality of data collected is also not up to the mark. Quite a bit of effort has to be put in to clean the data. PI had not anticipated this problem when making the proposal.

The PI also said it is not possible to do the workshops effectively until a critical amount of data are collected. The PI has now asked for extension until 31 December 2014.

So far, out of 30 proposed workshops, only 9 have been done, training 300 librarians. In all, only 15 libraries have been migrated from commercial software to Koha. All the required open source software is given in the form of live CD, which can be used to install the required software in a library.

As of date, 4.75 lakh items of bibliographic data have been collected. However, this data has yet to be validated. This work is in progress.

The issue of library module of the ERP software being different from the Koha modules being implemented under this project was discussed in detail Prof. YN Singh, the PI of the ERP project confirmed that AMU, the partner institution of the ERP project dealing with the Library module, would from now on use Koha in the ERP project.

The SC recommends that this project be extended until 31 December 2014 with no additional funding. The SC also asks the PI to work within the budget already approved by the PAB.

5. e-Yantra

PI: Prof. Kavi Arya Inst.: IIT Bombay

Control no.: KR132009887

The targets of Phase I of this project have been achieved. 16 labs were set up in Mumbai university colleges, as a part of the first phase.

The PI asked the balance funds of Phase I (Rs. 20.61 lakh) to be released. The Nodal Officer of NMEICT mentioned that 90% amount is given and that the balance 10% amount will be released only after the completion of the project, on approval from the PAB. The Nodal Officer agreed to put up a request for the transfer of this amount to the PAB. The SC recommends the release of Rs. 20.61 lakh.

The target is to reach 500 labs in the second phase. In each college, the e-Yantra project will provide a robot worth Rs. 22,000 as their contribution The colleges in turn will invest Rs. 5 lakh, about a half of which will go into buying additional robots by the college.

In the second phase, the PIs proposed to do the following: 60,000 students will undergo e-Yantra robotics competition; 20,000 students will undergo e-Yantra ideas competition. 12,000 teachers will be trained, with 10,000 being trained through the 10,000 teacher training programme.

The cost per student trained works out to less than Rs. 200 per student. The cost per teacher comes to about Rs. 6,000 per teacher. This does not include the amount of Rs. 25 crore invested by the 500 colleges (not by NMEICT), on the basis of Rs. 5 lakh per college.

A soft copy of this Phase II Proposal is available at http://proposal.sakshat.ac.in/sakshatproposal/CV/13011/2013_09_20_e-Yantra Phase2 proposal.pdf.

The Standing Committee members will go through this Phase II proposal. Depending on the feedback obtained from the SC members, the project may be recommended to the PAB. If there are objections, the PI will be asked to make a presentation to the SC once again.

6. Virtual Labs

PI: Prof. Ranjan Bose

Inst.: IIT Delhi and partner institutions

Control no:

This project, coordinated by IIT Delhi has seven IITs and a few other educational institutions as collaborators.

In the first phase of virtual labs, as opposed to 80 labs, more than 100 have been completed. The PRSG has recommended the continuation of this project.

100 colleges are using virtual labs, the limit imposed by the PIs. Scale-up requires Phase II funds.

Maintenance and outreach are some objectives. Development of further labs and the integration of the labs developed on disparate platforms

is another requirement. The overall budget for the Phase II of this project is Rs. 11186.03 lakh.

To a question whether the coordinating institute, IIT Delhi, had received the source code developed in the virtual labs project from all partner institutes, the PI replied that all institutions except Amrita University had given the source code. Prof. Kamal Bijlani of Amrita University confirmed that Amrita University would also release the source code.

A soft copy of this proposal is available at http://proposal.sakshat.ac.in/sakshatproposal/CV/12859/DPR%20Virtual%20Lab%20Phase%20II-revised-Sept.2013.pdf

The Standing Committee members will go through this Phase II Proposal. Depending on the feedback obtained from the SC members, the project may be recommended to the PAB. If there are objections, the PI will be asked to make a presentation to the SC once again.

7. FOSSEE: Adoption of Free and Open Source Software in Education PI: Profs. Prabhu Ramachandran, Jayendran Venkateswaran, Ashutosh Mahajan, Kannan Moudgalya, Shiva Gopalakrishnan, Madhu Belur, Mani Bhushan and Supratik Chakraborty

Inst: IIT Bombay

Control No.: me-20021010551

As Prof. Kannan Moudgalya is a Co-PI of this project, he recused himself from the deliberations. Prof. Mangala Sunder wrote the Minutes of this part.

The FOSSEE team presented the progress in Phase I, for the release of the remaining funds and the proposal for Phase II.

The progress report for Phase I was presented by the PI, Jayendran Venkateswaran. The deliverables of the project have far exceeded those proposed. For example, 55 workshops were proposed but 117 were conducted. 100 textbook companions were proposed for Scilab code, but 200 textbook companions have already been completed.

The last SC meeting held on 16 March 2013 recommended the release of the balance sum of Rs. 173.5 lakh in Phase I of this project. Out of this, the PI was informed by the Mission Office that a sum of Rs. 110 lakh was sanctioned, but yet to be released. The PI has already spent/committed Rs. 107 lakh. So, the PI requests the remaining funds of Rs. (173.5-110) = 63.5 lakhs to be released to complete Phase I.

The SC recommends that a sum of Rs. 63.5 lake be released as well as the already sanctioned amount of Rs. 110 lake released at the earliest.

The SC appreciates the extension proposed by the PI in the Phase II and recommends that as many open software and hardware designs on educational tools be popularised.

A soft copy of the proposal for Phase II is available at http://proposal.sakshat.ac.in/sakshatproposal/CV/10551/FOSSEE2013-p2.pdf

The Standing Committee members will go through this Phase II Proposal. Depending on the feedback obtained from the SC members, the project may be recommended to the PAB. If there are objections, the PI will be asked to make a presentation to the SC once again.

8. Establishing e-training environment for training

PI: Dr. V. P. Sivakumar and G. Kulanthaivel

Inst: NITTR, Chennai

Control No.: Se-0609091277

The SC was informed that one of the PIs, V. P. Sivakumar, has retired from service. The other PI, Dr. Kulanthaivel made a presentation.

They were given Rs. 28 lakh to create the following four courses in pilot phase: 1. Environmental engineering laboratory. 2. Data communication. 3. Computer graphics and multimedia. 4. Instructional objectives and planning.

The PI wanted an extension. He also wanted to submit a proposal to create 750 courses for polytechnic colleges.

The SC is happy with the progress made on this project. The SC encourages all NITTERs to write a joint proposal to create courses for the main phase. 750 courses are too many for one NITTER. Moreover, actual users should be a part of the creation process. In view of this, the SC recommends to co-opt good polytechnic college teachers in the course creation.

The SC recommends an extension until 31 March 2014 - this extension will be used by the PI to complete the current project and to come up with a proposal for the main phase of this project, i.e., creation of 750 courses, as mentioned above.

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

PI: Prof. Jayashree Shinde Inst.: SNDT University Control No. Je-05031010572

To identify topics for e-content in educational technology. To create 9 courses. A total of Rs. 93 lakhs were approved by the 16th PAB meeting, held on 1 Sept. 2010.

The PI was given Rs. 10.33 lakh in May 2011 to conduct a pilot phase with a total of about 50 hours. The PI has completed this course creation. The PI seeks the release of balance funds. The PI also wants an extension until 31 Dec. 2014. The PRSG has recommended the continuation of this project.

The SC is satisfied with the progress in this project. The SC recommends the release of the remaining sum in this project. The SC recommends an extension until 31 Dec. 2014.

10. e-content development under NMEICT

PI: Sunil Mehru

Inst.: CEC

PI has received on 15 July 2009 Rs. 50 lakh under pilot phase. Till August 2013 has created 5,586 hours of e-content. Many other courses are under various stages of development. The PI wanted the balance funds be released and also proposed the next phase, costing Rs. 49.86

crore.

The SC was not clear about the financial details of the proposal. It is not clear whether what is sought for the ongoing phase is in line with the PAB's sanction. In view of this, the PI is asked to re-present their proposal.

11. Circulation of DPRs before SC meeting

It was pointed out that SC members were being asked to review proposals without full details being furnished by EdCIL/Mission Secretariat. It was therefore decided that in future, agenda will be circulated well in advance. Along with the agenda, EdCIL/Mission Secretariat will also circulate the DPRs of the projects in the agenda.

12. Make a presentation based on the 10 point agenda.

The Mission Director recommended that the presentation format be aligned with the ten point due diligence appraisal format required by the PAB. EdCIL/Mission Secretariat is therefore requested to circulate this format to all PIs and ask them to come prepared with a presentation in this format for consideration of the SC.

ATTENDANCE OF THE STANDING COMMITTEE UNDER NATIONAL MISSION ON EDUCATION THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY.

Date/Time : 19th September, 2013 at 11.00 A.M.

Venue : Civil Services Officers' Institute, Vinay Marg, Chanakyapuri,

New Delhi.

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