

NATIONAL MISSION ON EDUCATION THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

Synopsis

Introduction

The National Mission on Education through Information and Communication Technology (ICT) has been envisaged as a Centrally Sponsored Scheme to leverage the potential of ICT, in teaching and learning process for the benefit of all the learners in Higher Education Institutions in any time any where mode. This is expected to be a major intervention in enhancing the Gross Enrolment Ratio (GER) in Higher Education by 5 percentage points during the XI Five Year Plan period.

Objectives

The objectives of the National Mission on Education through ICT shall include:

- (a) building connectivity and knowledge network among and within institutions of higher learning in the country with a view of achieving critical mass of researchers in any given field;
- (b) spreading digital literacy for teacher empowerment;
- (c) development of knowledge modules having the right content to take care of the aspirations of academic community and to address to the personalized needs of the learners;
- (d) standardization and quality assurance of e-contents to make them world class;
- (e) research in the field of pedagogy for development of efficient learning modules for disparate groups of learners;
- (f) making available of e-knowledge contents, free of cost to Indians;

- (g) experimentation and field trial in the area of performance optimization of low cost access devices for use of ICT in education;
- (h) providing support for the creation of Virtual Technological University;
- (i) identification and nurturing of talent;
- (j) certification of competencies of the human resources acquired either through formal or non-formal means and the evolution of a legal framework for it; and
- (k) developing and maintaining the database with the profiles of our human resources.

Components

The Mission has two major components:

- (a) providing connectivity, along with provision for access devices, to institutions and learners;
- (b) content generation.

It aims to extend computer infrastructure and connectivity to over 18000 colleges in the country including each of the departments of nearly 400 universities/deemed universities and institutions of national importance as a part of its motto to provide connectivity upto last mile. Therefore, the Mission, in addition to utilize the connectivity network of BSNL/MTNL and other providers, shall explore the possibility to provide connectivity utilizing Very Small Aperture Terminal (VSAT), Very Personal Network (VPN) and EduSat channels.

It seeks to bridge the digital divide, i.e., the gap in the skills to use computing devices for the purpose of teaching and learning among urban and

rural teachers/learners in Higher Education domain and empower those, who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy so that they can make best use of ICT for teaching and learning.

The Mission would create high quality e-content for the target groups. National Programme of Technology enhanced Learning (NPTEL) Phase II and III will be part of the content generation activity. The peer group assisted content development would utilise the wikipedia type of collaborative platform under the supervision of a content advisory committee responsible for vetting the content. Interactivity and problem solving approach would be addressed through "Talk to a Teacher" component, where the availability of teachers to take the questions of learners shall be ensured appropriately.

Mission also envisage, on line, for promoting research with the objective to develop new and innovative ICT tools for further facilitation of teaching and learning process. It plans to focus on appropriate pedagogy for e-learning, providing facility of performing experiments through virtual laboratories, on-line testing and certification, 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.

Central Government would bear 75% of the connectivity charges for 5 years even for institutions not belonging to it.

Renowned institutions would anchor various activities in their areas of excellence. The Mission would seek to enhance the standards of education, in Government as well as in private colleges. Enlistment of support and cooperation of States/Union Territories, Institutions and individual experts would be an integral part of the Mission.

One of the mandate of the Mission is to generate a data base of the human resources in different fields/disciplines and also to predict the availability and demand of the human resources in different disciplines. It shall also develop certain testing modules to test and certify the skills of the human resources acquired through various formal and non-formal means.

The Mission also seeks to give further impetus to NPTEL (being implemented by IITs and IISc. It would also promote open source culture and provide platform for sharing of ideas, techniques and pooling of knowledge resources. While about 100 premier institutions are being provided 1 Gbps connectivity under National Knowledge Network initially and the number is slated to go up in future, under this Mission, without any duplication, 20000 other institutions of higher learning and nearly 10000 University Departments will be provided connectivity as per their requirement, beginning with a minimum of 5 Mbps for each one of them, through satellites and terrestrial means. Vocational education would be strengthened through ICT and class room teaching would be supplemented under the Mission. Under the Mission, quality enhancement of teaching through digital empowerment of teachers would bridge the digital divide and there would be on-line availability of experts and teachers to remove doubts of students.

Allocation

An amount of Rs.4612 crore has been allocated by the Planning Commission during the 11th Five Year Plan for the National Mission on Education through ICT. There is a budget provision of Rs.502 crore during the current financial year 2008-09.

Administrative structure and functioning

The Mission have a three tier committee system to monitor and guide its functioning. The National Apex Committee of the Mission is chaired by

Hon'ble Minister of Human Resource Development, and decides on all policy issues and prescribes guidelines for the functioning of the two sets of Committees namely 'Empowered Committee of Experts (also known as 'Project Approval Board') and 'Core Committees of Domain Experts'. It has a 'Mission Director', who heads the Mission Secretariat and also acts as the Secretary to the National Apex Committee and Project Approval Board.

The proposals submitted to the Mission by various agencies/individuals/institutions undertake activities which come under the domain of the Mission are scrutinized by the concerned Core Committee of Domain Experts. This Committee makes its recommendations to Project Approval Board for consideration and decision on sanctioning the projects. The monitoring of the overall progress of the approved project activities is to be done through various peer reviews and concurrent evaluation.

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