

**Technical Education Quality Improvement Programme  
of  
Government of India**

**PROJECT IMPLEMENTATION PLAN**

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**Prepared for**

**GOVERNMENT OF INDIA  
DEPARTMENT OF SECONDARY EDUCATION & HIGHER EDUCATION,  
MINISTRY OF HUMAN RESOURCE DEVELOPMENT,  
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## LIST OF ABBREVIATIONS USED

AEC	ATOMIC ENERGY COMMISSION
AICTE	ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
ASSOCHAM	ASSOCIATED CHAMBERS OF COMMERCE
BARC	BHABHA ATOMIC RESEARCH CENTRE
BOG	BOARD OF GOVERNORS
BTE	BUREAU OF TECHNICAL EDUCATION
CAPART	COUNCIL FOR ADVANCEMENT OF PEOPLE'S ACTION & RURAL TECHNOLOGY
CII	CONFEDERATION OF INDIAN INDUSTRIES
CPA	CENTRAL PROJECT ADVISOR
CSIR	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH
DGS&D	DIRECTORATE GENERAL OF SUPPLIES & DISPOSALS
DRDO	DEFENCE RESEARCH DEVELOPMENT ORGANISATION
DST	DEPARTMENT OF SCIENCE AND TECHNOLOGY
EFC	EXPENDITURE FINANCE COMMITTEE
EMIS	EDUCATIONAL MANAGEMENT INFORMATION SYSTEM
FICII	FEDERATION OF INDIAN CHAMBER OF COMMERCE & INDUSTRY
GDP	GROSS DOMESTIC PRODUCT
GOI	GOVERNMENT OF INDIA
ICAR	INDIAN COUNCIL FOR AGRICULTURAL RESEARCH
ICR	IMPLEMENTATION COMPLETION REPORT
ICB	INTERNATIONAL COMPETITIVE BIDDING
IDA	INTERNATIONAL DEVELOPMENT ASSOCIATION
IIM	INDIAN INSTITUTE OF MANAGEMENT
IIT	INDIAN INSTITUTE OF TECHNOLOGY
ISRO	INDIAN SPACE RESEARCH ORGANIZATION
IT	INFORMATION TECHNOLOGY
LIPMU	LEAD INSTITUTION PROJECT MANAGEMENT UNIT
LRs	LEARNING RESOURCES
MHRD	MINISTRY OF HUMAN RESOURCE DEVELOPMENT
MOU	MEMORANDUM OF UNDERSTANDING
NASSCOM	NATIONAL ASSOCIATION OF SOFTWARE & SERVICES COMPANIES
NBA	NATIONAL BOARD FOR ACCREDITATION
NCB	NATIONAL COMPETITIVE BIDDING
NEP	NATIONAL EDUCATION POLICY
NGO	NON GOVERNMENT ORGANIZATION
NIPMU	NETWORK INSTITUTION PROJECT MANAGEMENT UNIT
NOC	NO OBJECTION CERTIFICATE
NPD	NATIONAL PROJECT DIRECTOR
NPIU	NATIONAL PROJECT IMPLEMENTATION UNIT
NSC	NATIONAL STEERING COMMITTEE
NTMIS	NATIONAL TECHNICAL MANPOWER INFORMATION SYSTEM
PCD	PROJECT CONCEPT DOCUMENT
PG	POSTGRADUATE
R&D	RESEARCH & DEVELOPMENT
REC	REGIONAL ENGINEERING COLLEGE
SPFU	STATE PROJECT FACILITATION UNIT
SOE	STATEMENT OF EXPENDITURE
TEQIP	TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME
TIFAC	TECHNOLOGY INFORMATION FORECASTING AND ASSESSMENT COUNCIL
TTTI	TECHNICAL TEACHERS TRAINING INSTITUTE
UG	UNDERGRADUATE
UGC	UNIVERSITY GRANTS COMMISSION
UT	UNION TERRITORY

## **SECTION I - BACKGROUND**

### **1.0 PRESENT SYSTEM OF TECHNICAL EDUCATION**

- 1.1 Since Independence in 1947, the Technical Education System has grown into a fairly large-sized system, offering opportunities for education and training in a wide variety of trades and disciplines at certificate, diploma, degree, postgraduate degree and doctoral levels in institutions located throughout the country. Even though the system boasts of institutions comparable to the best in the world, quality of education offered in majority of institutions leaves much to be desired.
- 1.2 In the year 1947-48, the country had 38-degree level institutions with intake capacity of 2500 and 53 diploma level institutions with intake capacity of 3670. The intake for postgraduates was 70.
- 1.3 There was rapid expansion of the system in the next 20 years. By 1967-68, the number of degree level institutions had increased to 137 with intake capacity of 25,000; and for diploma to 284 institutions with intake capacity of 47,000.
- 1.4 In the next 10 years (in 1977), the system capacity increased only marginally to admit 30,000 students for degree courses, 60,000 for diploma courses and 6,000 for postgraduate courses.
- 1.5 The system capacity increased very rapidly in the next 20 years, with the major role being played by the private sector. The system by 1997 had 547-degree institutions with admission capacity of about 131,000 and 1100 diploma institutions with admission capacity of about 184,000. Admission capacity for postgraduate courses had been increased to 16,900. Out turn of PhDs were about 370 annually.
- 1.6 In the year 2000, the total size of the system had increased to 4146 institutions with approved intake capacity of 544,660. These include 838 engineering degree institutions with admission capacity of 232,000 students; and 1224 engineering diploma institutions with admission capacity of 188,000.
- 1.7 Approximately, two-thirds of these institutions were in the private sector. Postgraduate education was being offered in 246 institutions with admission capacity of 21,460.

### **2.0 INSTITUTIONS OF IMPORTANCE**

- 2.1 The Central Government, States and Union Territories have played an important role in the development of Technical Education System by establishing a large number of fully funded and aided technical institutions and by providing adequate policy support.
- 2.2 At the apex of the Technical Education System in India are the seven Indian Institutes of Technology (IITs) located at Mumbai, Delhi, Kanpur, Kharagpur, Chennai, Guwahati and Roorkee, established with the objective of imparting world-class education. The IISc Bangalore was established to offer postgraduate education and to conduct research in various areas of basic sciences, engineering and technology. It is yet another world-class institution.
- 2.3 The Indian Institutes of Management (IIMs) located in six cities (Ahmedabad, Bangalore, Calicut, Kolkata, Indore and Lucknow) are institutions of excellence established with the objective of imparting high quality management education and training, conducting research and providing consultancy services in the field of management to various sectors of the Indian economy.
- 2.4 In the second tier are the 17 Regional Engineering Colleges (RECs). These have been established, one each in the major States, to meet the growing requirement of trained

technical manpower for various developmental projects. On the basis of the recommendations of a High Powered Review Committee, GOI has renamed 10 RECs (Allahabad, Bhopal, Calicut, Hamirpur, Jaipur, Kurukshetra, Nagpur, Rourkela Suratkal and Silchar) as National Institutes of Technology (NIT) and declared them as deemed universities for ensuring high standards of education and research in these colleges on the pattern of IITs. The NIT would be administered by a professional body, enjoy complete academic autonomy and interact closely with the industry to conduct joint research, update curricula, and conduct short term courses for working engineers.

- 2.5 Over the years, several other institutes for imparting quality education and conducting research in specialized areas have been established. These include the Indian Institute of Information Technology (IIIT) at Allahabad; Indian Institute of Information Technology & Management (IIITM) at Gwalior; National Institute for Training in Industrial Engineering (NITIE) at Mumbai; National Institute of Foundry & Forge Technology (NIFFT) at Ranchi; Indian School of Mines at Dhanbad; Sant Longowal Institute of Engineering & Technology (SLIET) at Longowal; North-Eastern Institute of Science & Technology (NERIST) at Itanagar; School of Planning & Architecture (SPA) at New Delhi; and 4 Technical Teachers' Training Institutes (TTTIs) at Kolkata, Chennai, Bhopal and Chandigarh.
- 2.6 In addition to the above, there are a number of universities and deemed universities that have earned a name for themselves. These include Anna University in Chennai; Jadavpur University in Kolkata; Bengal Engineering College at Sibpur; Birla Institute of Technology & Science at Pilani; Birla Institute of Technology at Ranchi; Thapar Institute of Engineering & Technology, Patiala; Institute of Technology of BHU at Varanasi; Punjab Engineering College at Chandigarh; and Pune Engineering College at Pune.

### **3.0 MAJOR ISSUES IN TECHNICAL EDUCATION**

- 3.1 Despite the efforts of the MHRD in implementing the National Policy on Education-1986 (revised 1992) and of the AICTE in regulating the Technical Education System and ensuring quality, several weaknesses have occurred in the system. Some of these are:
- a) Multiple control mechanisms and controlling regulations have stifled innovative initiatives in recruitment of faculty, admission of students, curricula revision and up gradation, and financial management in most institutions
  - b) Resource constraints, low efficiency of utilization of existing resources and lack of mechanism for sharing physical and human resources of sister institutions have led to large scale obsolescence of physical resources, deterioration of quality of teaching/learning processes and lowering of competence of teachers
  - c) Low internal efficiency of most institutions due to large drop outs and failure rates
  - d) Rapid obsolescence of curricula and course contents due to infrequent revision and much delayed response to technological advances and consequent market demands
  - e) Failure to attract and retain high quality faculty due to archaic recruitment and promotion procedures, absence of incentives for quality performance, and non-existent staff development policies in most institutions
- 3.2 The informal sector forms an important component of Indian economy. Selected polytechnics are being provided with central assistance by the BTE to develop trained manpower in the informal sector of the economy and the local community. However, the ongoing efforts are not adequate to meet the requirements of the informal sector and the community.
- 3.3 During 1980s, Government of India (GOI) and the State Governments had felt an urgent need for revamping the Technician Education System in the country to make it demand-

driven, with relevant courses in new and emerging technologies, with adequate infrastructure resources, competent faculty and effective teaching-learning processes. The GOI supported the State Governments through two Technician Education Projects financed by World Bank, which helped to upgrade the system and benefited 531 polytechnics in 18 States and the UT of Pondicherry.

- 3.4 A Third Technician Education Project financed by World Bank is currently under execution in the States/UT that had not been included in the earlier two Projects.
- 3.5 The success of these Projects has encouraged the GOI and the State Governments to seek similar financial assistance from the World Bank for systemic transformation of the Technical Education System as a whole with primary focus on engineering education.
- 3.6 The quality of education and training being imparted in the technical education institutions varies from excellent to poor, with some institutions comparing favourably with the best in the world and others suffering from different degrees of faculty shortages; infrastructure deficiencies; curricula obsolescence; lack of autonomy in academic, financial, administrative, and managerial matters; poor involvement in knowledge creation and dissemination, and poor interaction with community and economy.
- 3.7 Recognizing that skilled manpower of high quality can play a major role in economic development and in export of technology and services, and observing the growing demand for Indian professionals particularly in the area of software engineering in all parts of the globe including the highly developed countries, the GOI has decided to give very high priority to human resource development in engineering and technology.

## **SECTION II - THE PROGRAMME**

### **1.0 PROGRAMME GOAL**

The Technical Education Quality Improvement Programme of Government of India (TEQIP), has been conceived in pursuance of the NPE-1986 (as revised in 1992). The Programme aims to upscale and support ongoing efforts of GOI to improve quality of technical education and enhance existing capacities of the institutions to become dynamic, demand-driven, quality conscious, efficient and forward looking, responsive to rapid economic and technological developments occurring both at national and international levels.

### **2.0 PROGRAMME OBJECTIVES**

The broad objectives of the Programme as given below have been derived from the National Policy on Education (NPE-1986 as revised in 1992):

- a) To create an environment in which engineering institutions selected under the Programme can achieve their own set targets for excellence and sustain the same with autonomy and accountability.
- b) To support development plans including synergistic networking and services to community and economy of competitively selected institutions for achieving higher standards.
- c) To improve efficiency and effectiveness of the technical education management system in the States and institutions selected under the Programme.

### **3.0 PROGRAMME STRATEGY**

- 3.1 The strategy for transformation of selected institutions in the Technical Education System is to promote, with appropriate policy support and modern management systems at various levels, nodes of excellence in already well performing, competitively selected Lead Institutions in a phased manner and infusion of their special qualities throughout the system through bi-directional sharing of resources with competitively selected Network Institutions.
- 3.2 The Programme is to be implemented as a centrally coordinated, multi-state, long-term Programme of 10 years. Initially, the World Bank financial assistance would be sought only for the First Phase of 5 years. Based on an in-depth assessment during the course of implementation and the experience gained, assistance for a Second Phase, overlapping with the First Phase is to be negotiated. Similarly, a Third Phase could commence before the end of the Second Phase. Each successive Phase would be built on the experience gained in earlier Phase. Each Phase will have 2-3 selection cycles for selection of institutions.
- 3.3 Through this Programme well performing institutions will be developed into excellent institutions comparable to the best in the world as Lead Institutions and through networking with these institutions, performance of additional institutions in the network will be enhanced. It is expected that sub networks will evolve around the Programme institutions over a period of time, thereby diffusing the transformation effect on large part of technical education system.
- 3.4 The Programme also aims to enable some of the well performing polytechnics to offer, in addition to diploma programmes, Technician Degree Programmes in highly selected skill based areas in new and emerging technologies; specifically those areas not covered by engineering degree granting institutions.
- 3.5 Through this Programme the process of change is being introduced. The resultant of the change needs extensive exercise to manage the effect of the change within the parameters of the objectives of the Programme. The effort would provide a flexible platform to well performing institutions to acquire excellence in specialised areas and emerge as world-class institutions.
- 3.6 The change management requires standardisation of various academic and non-academic processes. Under the Programme various committees may be constituted to undertake the task of developing standard procedures for various reforms. Through an information portal created in NPIU/one of the Lead Institutions, standard procedures for various reforms will be disseminated to all institutions in the country.

### **4.0 PROGRAMME SCOPE FOR FIRST PHASE**

- a) Scope of this document is limited to the First Phase of the Programme. In the first cycle of the First Phase of the Programme six States namely, Haryana, Himachal Pradesh, Kerala, Maharashtra, Madhya Pradesh, and Uttar Pradesh have been assessed to be eligible and have been selected based on their preparedness and commitment to implement academic and non-academic reforms. More States/UTs that have expressed their 'in principle agreement' may participate in the subsequent cycles of the First Phase when they are fully prepared to implement academic and non-academic reforms. During the First Phase it is estimated that 17 to 20 Lead, 50 to 60 Network Institutions and about 15 well performing polytechnics will be included. These will be competitively selected in 2 to 3 cycles and would be supported under competitive funding. During First Phase of the Programme, in the Central sector it is anticipated that 6 Lead and 2 Network Institutions will be funded. In the State sector 12 Lead, 51 Network and 15 polytechnics will be funded. No polytechnic is proposed to be funded under Central Sector.



- b) The Programme management structures at the national and State levels will be supported under non-competitive funding.
  - c) Central Institutions and the Institutions located in the selected States wishing to participate in the Programme, as Lead or Network Institution will be required to meet the prescribed criteria, form clusters, and develop composite proposals for entering into a national competition amongst the centrally funded institutions and institutions from the selected States.
  - d) Systems would be developed, studies undertaken and specialised training carried out to enhance the overall capability of the Technical Education Management System.
  - e) Structures for management and monitoring of the Programme are being established in each of the selected State and at the National level.
- 4.1 Selection of institutions for financial assistance will be made in 2-3 cycles during each Phase and will be carried out through a transparent competitive process. The provision of selections in several cycles has been made keeping in view that all potential States/UTs and institutions may not be ready as soon as the Programme starts.
- 4.2 In subsequent cycle, more States/UTs can participate after assessment of their commitment and preparedness. In any one cycle, the selection process will be a two-step process. The first step will involve short listing of: (a) potential and eligible Lead Institutions and (b) potential and eligible Network Institutions based on their Eligibility Applications. The second step will involve final selection of clusters of institutions based on Composite Proposals developed by each competing cluster.
- 4.3 Institutions that could not apply and those that could not establish their eligibility in a cycle would be free to apply/re-apply for their eligibility in a subsequent cycle.
- 4.4 Financial requirements of institutions could vary depending upon their pursuit of excellence. Also, institutions may require expenditure over differing periods.
- 4.5 Institutions that have participated in any Phase of the Programme and propose to advance further in their strive for excellence would be free to seek grants through competition in any subsequent Phase.
- 4.6 Institutions already participating in a Programme could, with the consent of the sponsoring agencies (State Government) and the NPD, upgrade their proposals for achieving higher targets and better outcomes and also for expanding coverage of their activities, and seek additional funding. Such institutions would have already demonstrated highly satisfactory performance in their Programme implementation.
- 4.7 Depending upon their capacity, Lead Institutions already participating in a Programme could, with the consent of the sponsoring agencies and the NPD, include in their network additional institutions from the panel of eligible Network Institutions.
- 4.8 The following types of educational institutions are eligible for participation in the Programme:
- a) Government funded, government aided and private institutions engaged in conducting degree, postgraduate and doctoral programmes in engineering disciplines. The term institution here includes stand-alone colleges, deemed universities (Technological), universities (Technological), and constituent colleges, departments and faculties of universities.

- b) Government funded, government aided and private polytechnics (hereafter polytechnics will also be referred as institutions) engaged in conducting diploma, and post/advanced diploma programmes in engineering disciplines. Polytechnics could be stand-alone institutions or be constituents of universities/deemed universities.

4.9 Following types of educational institutions/activities will not be eligible for funding in the Programme:

- a) Creation of new institutions
- b) Institutions offering degree, post graduate and doctoral programmes in non engineering disciplines
- c) Institutions offering diploma, post/advance diploma programmes in non-engineering disciplines
- d) Starting of new courses in traditional disciplines without innovativeness
- e) Large scale civil works
- f) Education Management Information System (EMIS),
- g) National Board of Accreditation (NBA)
- h) Resource institutions

## 5.0 PROGRAMME DESCRIPTION

5.1 The Programme funding would be through two distinct modes under two Programme Components. All activities under sub-components namely, Promotion of Academic Excellence; Networking of Institutions for Quality Enhancement and Resource Sharing; Enhancing Quality and Reach of Services to Industry and Economy; and Institutional Level System Management Capacity Improvement are covered in **Programme Component-I: Institutional Development** and would be funded on competitive basis.

All activities under **Programme Component-II: System Management Capacity Improvement** (at the Central and State levels) would be funded on the investment proposals.

### 5.2 Tribal Development Plan (TDP)

A separate document containing Tribal Development Plan has been prepared by NPIU, which contains schedule of activities supporting the policies of the Central and State Governments regarding SC/ST/OBC. These activities are mandatory for each selected institution to be carried out during the course of Programme implementation. The monitoring of TDP is planned at institutional and State levels. All participating States have indicated their willingness to implement the provisions of the TDP and each participating institution will undertake activities that are in line with those listed in TDP. The institutional proposals will have an elaborated description of activities planned under TDP.

5.3 Some of the activities and their details under each Programme Component and their respective sub-components are given below. However, the list of activities is only indicative. The participating institutions based on their vision and strategy may choose some of these activities or may have a set of entirely different activities conceived to fulfil their own Programme goals and objectives in their pursuit of excellence.

5.4 Monitoring and Evaluation Benchmark with evaluation questions and indicators is appended at Annex XIII

## 5.5 PROGRAMME COMPONENTS

Programme Component	Programme Sub Component	Suggested Activity	Details
<b>I. Institutional Development</b>	a) Promotion of Academic Excellence - Excellence to focus at whole institution/ department/ programme	Faculty Development  Technical and Support Staff Development	<ul style="list-style-type: none"> <li>• Development of capacity for planning curricula to suit current and anticipated labor market requirements for both existing courses and new ones that might be introduced,</li> <li>• Up gradation of competence in knowledge and skills in specified area(s) for better teaching at UG/PG levels.</li> <li>• Use of innovative instructional methods and approaches,</li> <li>• Designing and developing learning resources,</li> <li>• Managing systemic reforms like institutional autonomy, programme flexibility, interaction with industry and community, developing appropriate cost recovery systems, improving utilization of institutional resources, and the management of institutions,</li> <li>• Managing corporate schools, production centers and entrepreneurship,</li> <li>• Employment generation and transfer of technology,</li> <li>• Undertaking research for creation of new knowledge and new technologies and undertaking consultancy projects for industry and community,</li> <li>• Undertaking research studies for determining institutional outcomes and impact from various academic and development services provided and also for the design of remedial strategies in educational processes,</li> <li>• Industrial exposure,</li> <li>• Qualification enhancement of teachers,</li> <li>• Attitudinal change, and</li> <li>• Programme management.</li> </ul> <p>The training of staff may cover areas like:</p> <ul style="list-style-type: none"> <li>• Exposure to industrial technology and processes,</li> <li>• Laboratory and workshop instruction,</li> <li>• Maintenance of laboratory and workshop equipment and computing facilities,</li> <li>• Upkeep of institutional services,</li> </ul>

Programme Component	Programme Sub Component	Suggested Activity	Details
			<ul style="list-style-type: none"> <li>• Computer usage, and</li> <li>• Office automation.</li> </ul>
		Equipment and Facility Improvement	<ul style="list-style-type: none"> <li>• Modernization and upgradation of laboratories</li> <li>• Creation/improvement of instructional facilities</li> <li>• Creation of Labs and Workshops for new courses in emerging technology</li> <li>• Creation and improvement of computing facilities</li> <li>• Creation of R&amp;D Facilities</li> </ul>
		Curriculum Improvement	<ul style="list-style-type: none"> <li>• Need based periodic updating and improvement of curricula</li> <li>• Labor market orientated course offering</li> <li>• Innovations in curriculum development such as competency based curricula, self-learning, problem solving – projects for community and industry, training in industry, sandwich programmes, learning by research, course flexibility etc.</li> <li>• Incorporation of problem solving skills, design skills, communication skills, entrepreneurial skills, information processing, creative and innovative thinking, leadership skills, work ethos etc</li> </ul>
		Curriculum Implementation	<ul style="list-style-type: none"> <li>• Introduction of variety in learning process</li> <li>• Training of teachers in use of variety of instructional methods and material</li> <li>• Planned student visit and training in industry</li> <li>• Expert lectures from industry</li> <li>• Problem solving projects</li> <li>• Student self learning</li> <li>• Introduction of system of continuous assessment</li> <li>• Peer review and feedback from students</li> <li>• Projects and services to be extended to community</li> <li>• Establishment of Counselling Cells to assist students with learning difficulties in selecting optional streams of specialization – specially for SC/ST/OBCs</li> <li>• Challenging assignments</li> <li>• Remedial courses for weak students</li> </ul>
		Course Flexibility	<ul style="list-style-type: none"> <li>• Multi-level entry for student and credit acquisition</li> </ul>

Programme Component	Programme Sub Component	Suggested Activity	Details
			<ul style="list-style-type: none"> <li>• Credit exemptions for continuing education and part time pass outs</li> <li>• System of Learning at their own pace through accumulation of credits, and student interests in specific subjects and topics</li> </ul>
		Student Evaluation	<ul style="list-style-type: none"> <li>• A well defined system of comprehensive regular and continuous assessment to be developed to include regular tests, laboratory work, assignments, student self-learning, student training in industry, student problem solving projects and other forms of student practices</li> <li>• Innovative assessment designs for competency development, and adherence to good practices in the field of service to industry and community, research activity, use of safety practices, environmental concerns and leadership and group work</li> <li>• Reduction of emphasis on terminal assessment in both regular and continuing education programmes.</li> </ul>
		Learning Resources	<ul style="list-style-type: none"> <li>• Establishment of Learning Resource Development Centres or Education Technology Cells</li> <li>• Establishment of Learning Resource Utilization Centres – facility for one to one usage of LRs</li> <li>• Development/procurement of learning resources such as video films, multimedia and CAI packages</li> <li>• Other learning resources such as laboratory manuals, learning packages and packages specific for the development of competencies.</li> <li>• Training of teachers in development of learning resources</li> <li>• Creation of LRs storage facility for ready access to teachers and students and acquisition and installation of appropriate hardware for class room projection and self learning from audio-visual resources</li> <li>• Provision of Internet, campus networking and networking between institutions for enhancing access to and sharing of LRs available in a cluster</li> <li>• Establishment of Digital libraries in the institutions</li> </ul>

Programme Component	Programme Sub Component	Suggested Activity	Details
			<ul style="list-style-type: none"> <li>• Modernization and computerization of libraries</li> <li>• Strengthening libraries to meet requirements of research and consultancy works, services to community and industry</li> </ul>
		Interaction with Industry	<ul style="list-style-type: none"> <li>• Identification of employment opportunities for graduates through interaction with apex industry organizations</li> <li>• Conduct tracer studies</li> <li>• Contribution to curriculum development and delivery</li> <li>• Contribution to internal revenue generation</li> <li>• Contribution in governance of the institution</li> </ul> <p>Suggested Contributions from industries to institutions:</p> <ul style="list-style-type: none"> <li>• Participating in curriculum design, curriculum implementation, student assessment, training of students, exposing students to new technologies, and providing experts for certain instructional sessions,</li> <li>• Providing opportunities for student groups to undertake problem-solving projects.</li> <li>• Participating in such bodies as the Board of Governors, Academic Council, Boards of Studies, Faculty Recruitment Committees, etc,</li> <li>• Assisting institutions in establishing new laboratories, providing literature on new technologies, and offering their shop floors as substitutes for laboratories,</li> <li>• Training teachers and staff in new technologies and processes,</li> <li>• Providing industrial training to students,</li> <li>• Collaborating in sandwich programme offerings,</li> <li>• Investing in creation of Interface Training Centers (ITC) or finishing schools,</li> <li>• Involving institutions on sole or collaborative basis in R&amp;D activities, and</li> <li>• Utilizing institutional resources (manpower and physical) for industrial manpower training.</li> <li>• Development of Post Graduate Education in areas of current</li> </ul>

Programme Component	Programme Sub Component	Suggested Activity	Details
			and potential high demand <ul style="list-style-type: none"> <li>• Assistance for improving employability including entrepreneurial training, specialized skill training, and training in softer skills required by industry.</li> <li>• Provide support from industry for training</li> </ul>
		Research	<ul style="list-style-type: none"> <li>• Creation of research and consultancy culture</li> <li>• Building up infrastructure and resources for research</li> </ul>
		Distance Education	<ul style="list-style-type: none"> <li>• Building of capacity in selected institutions in specialized areas</li> <li>• Extending the benefit to continuing education students</li> <li>• Extend the benefit to network institutions</li> </ul>
	b) Networking of Institutions for Quality Enhancement and Resource Sharing  -Formal network (to be funded) and Non Formal Network (not to be funded)  -Bilateral resources and expertise sharing  - Creation of physical networking through electronic media such as internet etc	Academic Sharing	<ul style="list-style-type: none"> <li>• Curricular innovations and improvements</li> <li>• Information exchange on curricular issues</li> <li>• Information exchange on new technological and educational innovations world wide</li> <li>• Electronic bulletin boards for problem solving,</li> <li>• Book reviews</li> <li>• Interaction of students with faculty through internet</li> <li>• Promoting design competitions/project competitions/technical essay competition/technical debates and paper presentations among students of the network.</li> </ul>
		Credit Transfer and carry over	<ul style="list-style-type: none"> <li>• Establishing rules for credit transfer and carryover</li> <li>• Creation of facilities for students to attend classes in different institutions</li> </ul>

Programme Component	Programme Sub Component	Suggested Activity	Details
		Staff Development	<ul style="list-style-type: none"> <li>• Creation of faculty and staff development facilities at one location in the cluster</li> <li>• Outsourcing training of faculty and staff</li> </ul>
		Human Resources Sharing	<ul style="list-style-type: none"> <li>• Exchange of faculty and support staff</li> <li>• Joint projects and researches</li> </ul>
		Learning Resources and Library Facilities Sharing	<ul style="list-style-type: none"> <li>• Sharing learning resources</li> <li>• Sharing library facilities</li> <li>• Subscribe different journals and books and share among the institutions in the cluster</li> <li>• Subscribe to e-books and journals</li> <li>• One of the institutions in a cluster to be developed as Center for developing Learning Resources</li> </ul>
		Physical Resource Sharing	<ul style="list-style-type: none"> <li>• Sharing use of hostels by students for industrial training</li> <li>• Sharing facilities like laboratories, expensive equipment, computer center etc.</li> </ul>
		Expertise Sharing	<ul style="list-style-type: none"> <li>• Sharing managerial and professional expertise among institutions</li> <li>• Sharing managerial and professional expertise with industry</li> </ul>
		Joint Ventures	<ul style="list-style-type: none"> <li>• Projects</li> <li>• Researches</li> <li>• Consultancies</li> <li>• Publications</li> <li>• Patents</li> </ul>
	c) Enhancing Quality and Reach of Services to Community and Economy	Community	<ul style="list-style-type: none"> <li>• Undertaking social assessment and community profiling studies for the community around the institutions.</li> <li>• Getting a validation from the community for the identified needs, which can be fulfilled by the institution within the ambit of technology and expertise available within the institution.</li> <li>• Periodic monitoring and assessment of services provided to community.</li> <li>• Continuing education for community/ informal sector that may lead to wage-employment/self-employment and income generation.</li> </ul>



Programme Component	Programme Sub Component	Suggested Activity	Details
		Services to Industry – Formal Sector of Economy	<ul style="list-style-type: none"> <li>• Development of management capacity in the informal sector.</li> <li>• Infusion of useful technologies to enhance productivity of informal sector/ community, and for a better quality of life.</li> <li>• Providing technical support services, advice and guidance to the community as and when required.</li> </ul> <p>Services from institutions to industry:</p> <ul style="list-style-type: none"> <li>• Continuing education for industry personnel.</li> <li>• Problem solving projects and consultancies on industrial products, services and processes.</li> <li>• Testing and calibration services.</li> <li>• Designing training software for industry.</li> <li>• Training customers of industry.</li> <li>• Designing or substituting training centers of industry.</li> <li>• Production center for outsourced components.</li> </ul>
		Service to non-formal Sector of Economy	<ul style="list-style-type: none"> <li>• Technology infusion,</li> <li>• Developing management capacity in non-formal sector, and knowledge and skills up gradation of persons working in non-formal sector</li> </ul>
	System Management Capacity Improvement	Institutional Level	<ul style="list-style-type: none"> <li>• Training of Managers and Administrators of various Departments and other technical staff</li> <li>• Conducting educational research studies</li> </ul>
<b>II. System Management Capacity Improvement</b>		<b>National Level</b>	<ul style="list-style-type: none"> <li>• Training of Policy Planners, Managers and Administrators from controlling Ministry, NPIU and other bodies and institutions concerned with Technical Education at national level.</li> <li>• Conducting educational research studies</li> </ul>
		<b>State Level</b>	<ul style="list-style-type: none"> <li>• Training of Policy Planners, Managers and Administrators from controlling Departments, SPFU and other bodies and institutions concerned with Technical Education at State level.</li> <li>• Conducting educational research studies</li> </ul>

## 5.6 QUALITY ASSURANCE MECHANISMS

Quality assurance is being planned to be extended to technical education system through this Programme at Institutional, State and National level.

5.6.1 At the Institutional level a Cell will be created whose responsibility would be to watch on the following:

- a) Regularity of academic sessions and conduct of programmes,
- b) Attendance during lecture, tutorial, and laboratory classes,
- c) Class tests and assignments on schedule,
- d) Fair and transparent student evaluation mechanisms,
- e) Curricula being properly planned and implemented,
- f) Students' involvement in research and, innovative and creative activities,
- g) Opportunities for taking part in regional/national design competitions,
- h) Training in problem solving, information collection and processing, environmental impact analysis, and in acquiring communication skills (both oral and written) and, entrepreneurial ability,
- i) Harmonious interaction between students and faculty, faculty and management, and students and management,
- j) Grievance redressing and academic/personal counselling mechanisms.

5.6.2 At the State level the quality assurance actions required are:

- a) External monitoring of educational processes in all the technical education institutions in the State,
- b) Coordinating teacher development programme for all institutions,
- c) Planned upgrading of infrastructure facilities,
- d) Offering incentives to institutions for their quality initiatives,
- e) Analyzing impact of States' technical education system on society,
- f) Setting up external review missions to assess quality of education and training being imparted in individual institutions,
- g) Taking corrective actions on the basis of review reports, and
- h) Independent quality grading of institutions at the State level for encouraging competition among them and for public knowledge.

5.6.3 At the National level the quality assurance mechanism would include:

- a) Setting benchmarks for output quality parameters at all levels,
- b) Specifying output characteristics including knowledge, skills, and attitudes,
- c) Accrediting institutions and courses of study,
- d) National grading of institutions for competition among them and for public knowledge,
- e) Setting up mechanisms for periodic review of all institutions,
- f) Monitoring international norms for accreditation and adopting those that are relevant, and
- g) Adapting to technological advances worldwide.

## 6.0 ACADEMIC AND NON-ACADEMIC REFORMS

The proposed Programme is in line with the National Policy on Education (NPE 1986 modified in 1992), which supports major reforms at all levels of technical education. It focuses on quality and relevance, excellence, resource mobilization, greater institutional autonomy with accountability, networking, research, and equity.

(a) **Academic Reforms.**

- Empowerment of institutions through academic, financial, managerial and administrative autonomy
- Making postgraduate education more attractive from which faculty will be drawn and thereby support quality enhancement objective of the Programme
- Creating a culture of introducing innovations in teaching-learning process, post graduate and research programmes in cutting edge technologies/ short term training of high quality to attract bright students into teaching profession
- Participating institutions to develop strong mechanisms for quality assurance to make curricula more relevant and comparable to any world-class institution.
- Accreditation of institutions and courses through National Accreditation Board.
- Strengthening/removal of obsolescence of laboratories, and workshop equipment, programme offering, staffing and administrative support in institutions.
- Networking among institutions to enhance capacity, improve quality and promote excellence
- Create established mechanism for faculty and staff development.
- Promote self-sustenance in participating institutions and decrease dependence on government funds.
- Development of consultancy based generation of income in institutions so that students can perceive teaching as a competitive option in terms of income profile
- Supplement institutes' own resources by part time faculty from industry
- Improve interface with industry
- Total participation of the institutions (staff and students) in offering services to community and economy.

(b) **Non-academic Reforms**

- Both public and private institution will be able to compete to participate in the Programme on the basis of their quality enhancement Programmes as well as achievements already to their credit. States to provide funds to private institutions in accordance with agreed mechanism for loan repayment by such institutions.
- To minimize wastage and attenuate further fragmentation of resources; participating institutions will be encouraged to form networks to share their resources and expertise, and work closely with industry and local community
- Engineering institutions to seek funds on competitive basis based on their vision and pursuit of excellence
- GOI and State Governments propose to change their financing patterns to participating institution and introduce incentives for revenue generation to make public institutions more efficient and self-reliant. Instead of the current method of 'same for all' investment funding for predetermined activities, the competitive funding under the Programme would be based on institutions' performance, and their potential, needs, vision and action plan.
- Changing pattern of non-plan fund releases to Block Grant basis
- Provide positive incentives to participating institutions to mobilize financial resources other than collection of fee from students and to permit institutions to increase recovery of cost of education from students
- Permit participating institutions to generate, retain and utilize the generated revenue
- Permit selected institutions to establish and manage Corpus Funds, Staff Development Funds, Depreciation/Renewal Funds and Maintenance Funds.
- Establishing a mechanism for institutions to fill all teaching and staff vacancies.
- To improve system efficiency, system managers will be trained in planning implementation, and monitoring.

## 7.0 KEY PERFORMANCE INDICATORS:

The following broad key performance indicators have been agreed to be used for monitoring Programme performance. These indicators, to be derived from several measurable sub-indicators, may be further elaborated and redefined based on implementation experience.

Programme Goal and Objectives	Key Performance Indicators
	Outcome / Impact Indicators
<p>To upscale and support ongoing efforts of GOI to improve quality of technical education and enhance existing capacities of the institutions to become dynamic, demand-driven, quality conscious, efficient and forward looking, responsive to rapid economic and technological developments occurring both at national and international levels.</p> <p>The Programme Objectives are:</p> <p>i) To create an environment in which engineering institutions selected under the Programme can achieve their own set targets for excellence and sustain the same with autonomy and accountability.</p> <p>ii) To support development plans including synergistic networking and services to community and economy of competitively selected institutions for achieving higher standards.</p> <p>iii) To improve efficiency and effectiveness of the technical education management system in the States and institutions selected under the Programme.</p> <p>These objectives will lead to:</p> <p>Support production of high quality technical professionals through reforms in Technical Education System in order to raise productivity and competitiveness of the Indian economy.</p>	<ul style="list-style-type: none"> <li>- Improved employment rate and earnings of graduates from participating institutions.</li> <li>- Increased cooperation and resource sharing between institutions.</li> <li>- Improved internal efficiency of the Technical Education System.</li> <li>- Increased involvement of institutions with community.</li> <li>- Improved planning and management of Technical Education System to make it demand driven and forward looking.</li> </ul>
Output from each Component	Output Indicators
<p><b>Component 1: Institutional Development</b></p> <p>A. Promotion of Academic Excellence in Institutions</p>	<ul style="list-style-type: none"> <li>- Increased number of high quality graduates in relevant and cutting-edge technologies</li> <li>- Increased number of postgraduates/research scholars in engineering</li> </ul>

<p>B. Networking of Institutions for Quality Enhancement and Resource Sharing</p> <p>C. Enhancing Quality and Reach of Services to Community and Economy</p>	<ul style="list-style-type: none"> <li>- Increased professional outputs (publications, products, designs, patents, etc) from participating institutions</li> <li>- Number of joint research, design and development projects, consultancies, training programmes, etc., conducted by participating institutions</li> <li>- Increased revenue generation from outreach programmes and services (as percentage of annual recurring expenditure)</li> <li>- Increased access to technical training for socially disadvantaged groups and unemployed youth</li> </ul>
<p><b>Component 2: System Management Capacity Improvement</b></p>	
<p>Establishment/strengthening of programme management structures</p>	<p>Cost and time efficient implementation of competitive funding process</p>
<p>Research and training in education planning and management</p>	<p>Increased availability of well trained system/institution managers</p>

## 8.0 ELIGIBILITY OF SPONSORING AGENCIES

The criteria based on which the 6 States have been selected under the Programme are as below:

- a) To sponsor Government funded and aided, and private engineering institutions that meet the prescribed eligibility criteria for participation in the Programme through open competition.
- b) To accept results of open competition for selection of Lead and Network Institutions by a National Selection Committee.
- c) To provide the agreed required financial support to the selected institutions and seek reimbursement as per norms
- d) To provide funds to private institutions in accordance with an agreed mechanism for loan repayment by institutions.
- e) To support both academic and non-academic reforms to be carried out in the selected institutions.
- f) To accord and sustain very significant academic autonomy and full financial, managerial and administrative autonomy to the selected Lead Institutions
- g) To accord and sustain full financial, managerial and administrative autonomy and substantial academic autonomy to selected Network Institutions.

- h) To change pattern of fund releases to block grant basis.
- i) To permit selected institutions to establish Corpus Fund, Staff Development Fund, Depreciation/Renewal Fund (for equipment replacement) and Maintenance Fund (for maintenance of equipment and buildings) and issue guidelines for proper management of these funds.
- j) To permit the selected institutions to increase recovery of the cost of education from students.
- k) To permit the selected institutions to generate, retain and utilize the generated revenue.
- l) To formulate a policy for enabling institutions to fill all teaching and staff vacancies.
- m) To permit total participation of the institutions (all staff and students) in community and industry service.
- n) To continue supporting needy students as per current Government policy and practice.
- o) To agree to implementation of the provisions of Tribal Development Plan as envisaged under the Programme.

#### 9.0 SELECTION OF INSTITUTIONS:

- (a) **Eligibility Criteria for Lead/Network Engineering Institutions** (other than polytechnics)

S. No.	Eligibility Criteria
1.	The Institution has accredited programmes with NBA or has applied for the same
2.	The Institution has accepted academic autonomy with accountability
3.	The Institution has accepted financial autonomy with accountability
4.	The Institution has accepted managerial autonomy with accountability
5.	The Institution has accepted administrative autonomy with accountability
6.	The Institution agrees to participate in all three sub-components of Institutional Development Component, namely, Promotion of Academic Excellence, Networking, Service to community and economy.
7.	The Institution agrees to increase recovery of cost of education from students
8.	The Institution agrees to accept funding on block grant basis ( <i>not applicable to private institutions</i> )
9.	The Institution agrees to establish distinct Corpus Fund, Staff Development Fund, Depreciation / Renewal Fund and Maintenance Fund from the revenue generated and savings and to accept Central/State guidelines for utilization of these funds
10.	The Institution agrees to accept the results of the enunciated process for award of competitive grants
11.	The Institution agrees to secure participation of faculty and students in providing service to community and economy
12.	The Institution agrees to implement the Tribal Development Plan as envisaged under the Programme.

In addition to fulfilment of eligibility criteria, eligibility would also be determined based on the performance of the institution in respect of the following parameters. The

benchmark value of each parameter is given in the Eligibility Application format attached at Annex II.

S.No.	Academic Attainment Parameters
1	No. of UG programme in Engineering
2	No. of PG programme in Engineering
3	Staff student ratio
4	Percentage of faculty members with Ph.D. degrees in Engineering
5	Regular professors amongst the faculty
6	Regular Asst. Professors amongst the faculty
7	No. of research publications in Engineering in the last 3 years
8	No. of titles in the Library
9	No. of Indian journals in Engineering
10	No. of International journals in Engineering
11	No. of computers
12	No. of PhDs produced in the institution
13	No. of sponsored research projects completed in the last three years
14	Total No. of designs/fabrications in the last three years
15	No. of consultancy assignments completed in the last three years
16	No. of continuing education programs
17	No. of faculty members who are referees of International journals
18	No. of faculty members who have served on national committees

*Note:* The exceptional cases of certain institutions offering only a few specialized courses, or of a University Department running only a few courses in only one or two disciplines are exceptional, and will be treated separately based on the merits of the case.

(b) **Eligibility Criteria for Lead/Network Engineering Polytechnics**

S. No.	Eligibility Criteria
1.	The Institution has accredited programmes with NBA or has applied for the same
2.	The Institution has accepted academic autonomy with accountability
3.	The Institution has accepted financial autonomy with accountability
4.	The Institution has accepted managerial autonomy with accountability
5.	The Institution has accepted administrative autonomy with accountability
6.	The Institution agrees to participate in all three sub-components of Institutional Development Component, namely, Promotion of Academic Excellence, Networking, Service to community and economy.
7.	The Institution agrees to increase recovery of cost of education from students
8.	The Institution agrees to accept funding on block grant basis ( <i>not applicable to private institutions</i> )
9.	The Institution agrees to establish distinct Corpus Fund, Staff Development Fund, Depreciation / Renewal Fund and Maintenance Fund from the revenue generated and savings and to accept Central/State guidelines for utilization of these funds
10.	The Institution agrees to accept the results of the enunciated process for award of competitive grants
11.	The Institution agrees to secure participation of faculty and students in providing service to community and economy
12.	The Institution agrees to implement the Tribal Development Plan as envisaged under the Programme.

In addition to fulfilment of eligibility criteria, eligibility would also be determined based on the performance of the institution in respect of the following parameters. The

benchmark value of each parameter is given in the Eligibility Application format attached at Annex III.

S.No	Academic Attainment Parameters
1	No. of diploma programme in Engineering
2	No. of post/advanced programme in Engineering
3	Staff student ratio (based on faculty members in position)
4	Number of titles in the library
5	Number of Indian journals/technical periodicals in Engineering
6	No. of computers (Pentium III or better)
7	Total designs/fabrications (non-routine, precision accessories, etc.) in the last 3 years (Identify them)
8	Number of tailor-made courses for industries in the last 3 years
9	No. of consultancy assignments completed in the last 3 years
10	No. of continuing education programs (of 3-day duration or longer)
11	Internal revenue generated in the last 3 years
12	No. of faculty members who have served on national/ state committees

*Note:* The exceptional cases of certain polytechnics offering only a few specialized courses will to be treated separately based on the merits of the case.

(c) **Composite Proposal Evaluation**

A Composite Proposal format for use of institutions has been prepared along with: (a) Guidelines for Proposal Preparation, (b) formats that will be used for Programme monitoring and evaluation at institutional and State levels and (c) methodology that would be used for evaluation and scoring of Programme proposals. The document containing all the 4 elements is currently under revision and refinement.



## 10.0 SELECTION PROCESS AND SCHEDULE

Steps	Actions	Responsibility of	Schedule
STEP-I Selection Of the Sponsoring Agencies	1. Seek in principle agreement of the Sponsoring agencies to participate in the Programme - For States	- State Secretary	By April 2002 (29 States and UTs agreed in principle to participate in the Programme)
	2. State/UTs Reports	State/UT Secretary	By April 2002 (Reports from 13 States/UTs namely, Andhra Pradesh, Chandigarh, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Uttar Pradesh, Uttaranchal, Tamil Nadu, Jharkhand were received)
	3. Review of State Reports based on: <ul style="list-style-type: none"> <li>• Eligibility Criteria for sponsoring agencies</li> <li>• Commitment to implement academic and non-academic reforms</li> <li>• Preparedness of the sponsoring agencies to implement the Programme</li> <li>• Budgetary allocation in the annual plan 2002-2003</li> </ul>	NPIU	May 2002
	4. Final selection of States for first cycle of the First Phase of the Programme	NPD	Fourth week of June 2002 (for the First Phase of the Programme 6 States namely, Haryana, Himachal Pradesh, Kerala, Madhya Pradesh, Maharashtra and Uttar Pradesh were selected)
	5. Inclusion of more States/UTs in subsequent cycles	NPD	2 more selection cycles at six months interval will be announced during which additional States/UTs may be included based on parameters listed under (3) above.

Steps	Actions	Responsibility of	Schedule
<b>STEP-II</b>  Strengthening of NPIU and Setting up SPFUs	NPIU to be functional	NPD	<ul style="list-style-type: none"> <li>The existing NPIU set-up for Tech Ed III will be strengthened within one month of negotiation of the Programme.</li> </ul>
	SPFUs to be functional	State Secretaries	<ul style="list-style-type: none"> <li>Skeleton SPFUs in selected States are at present functional to support preparatory activities of the Programme. However, full SPFUs would become functional within one month of negotiations of the Programme.</li> </ul>
<b>Step-III</b>  Programme Negotiation	Negotiation of the Programme with World Bank at Washington	NPD and State Secretaries	September 2002
<b>Step-IV</b>  Selection of Lead and Network Institutions	1. Announcement of commencement of the First Phase and first cycle of the Programme to selected States	NPD	October 2002

Steps	Actions	Responsibility of	Schedule
	<p>2. <a href="#">Advertisement</a> to invite Eligibility Applications</p> <ul style="list-style-type: none"> <li>• Central Institutions</li> <li>• State Institutions</li> <li>• Availability of Eligibility Application on Website</li> </ul> <p>As a parallel action following Screening Committees are constituted:</p> <p>(a) Screening Committee for screening Eligibility Applications of Central Institutions</p> <p>(b) Screening Committee for screening Eligibility Applications of State level Institutions and</p> <p>(c) National Screening Committee for screening Eligibility Applications of all Central and State level institutions</p> <p>The composition of above three Screening Committees is given at Annex I.</p>	<p>NPD State Secretaries NPIU</p> <p>NPD</p> <p>State Secretary</p> <p>NPD</p>	<p><a href="#">October 2002</a></p> <p><a href="#">October 2002</a></p> <p><a href="#">October 2002</a></p> <p><a href="#">October 2002</a></p>
	<p>3. Receiving Eligibility Applications</p> <ul style="list-style-type: none"> <li>• Central Institutions</li> <li>• State Institutions</li> </ul> <p>Eligibility Application format for Lead/Network Engineering Institutions (other than polytechnics) is given at Annex II</p> <p>Eligibility Application for Lead/Network Polytechnics is given at Annex III.</p>	<p>NPIU SPFU</p>	<p><a href="#">October 2002</a></p>

Steps	Actions	Responsibility of	Schedule
	<p>4. Scrutiny and evaluation of the Eligibility Applications of:</p> <ul style="list-style-type: none"> <li>• Central sponsored Institutions</li>   <li>• State sponsored Institutions</li> </ul> <p>Preparation of three lists by each committee:</p> <p>(a) List of Eligible Lead Institutions  (b) List of Eligible Network Institutions  (c) List of ineligible Institutions</p>	<p>Screening Committee for Centrally sponsored Institutions  Screening Committee for State sponsored Institutions</p>	<p>November 2002</p>
	<p>5. Forwarding of all three lists along with Eligibility Applications to NPD</p>	<p>NPIU (for Central Institutions) and State Secretary for State Institutions</p>	<p>November 2002</p>
	<p>6. Screening of all Eligibility Applications</p> <p>Status of the Eligibility Applications will be displayed on the website of NPIU such as eligible/ineligible status, scores obtained, date of referral to National Screening Committee etc.</p>	<p>National Screening Committee for all Institutions  NPIU</p>	<p>November 2002    November 2002</p>
	<p>7. Declaration of list of eligible Lead and Network Institution to respective States</p> <ul style="list-style-type: none"> <li>• Short advertisement in National Newspapers declaring list of eligible Lead and Network Institutions</li> <li>• Availability of the lists on the website of NPIU</li> </ul>	<p>NPD    NPIU</p>	<p>November 2002</p>

Steps	Actions	Responsibility of	Schedule
	<p>8. Information about shortcomings to ineligible institutions so that the Institutions are able to improve and participate in the next cycle</p> <ul style="list-style-type: none"> <li>• Central Institutions</li> <li>• State Institutions</li> </ul> <p>Simultaneously, following Committees will be formed:</p> <p>a) Evaluation Committee and its sub-committees (based on the number of proposals received). The composition of Evaluation Committee and its sub-committees and their broad functions are given at Annex IV.</p> <p>b) National Selection Committee for final selection of Lead and Network Institutions (clusters). The composition and broad functions of the National Selection Committee is appended at Annex V</p>	<p>NPIU</p> <p>SPFU</p> <p>NPD</p> <p>NPD</p>	<p>November 2002</p> <p>November 2002</p> <p>November 2002</p> <p>November 2002</p>
<p><b>Step-V</b></p> <p>Formation of Clusters</p>	<p>1. Organizing meetings of the eligible Lead and Network Institutions for identifying partner institutions to form clusters.</p> <ul style="list-style-type: none"> <li>• As eligible Central Institutions would form clusters with State level institutions, they will also be invited to these meetings</li> <li>• The clusters may be formed with institutions located in the 6 selected States</li> </ul>	<p>SPFU</p>	<p>November 2002</p>



Steps	Actions	Responsibility of	Schedule
<b>Step-VIII</b>  Selection of Institutions and Clusters	1. The evaluated Composite Proposals with their scoring and evaluation reports will be placed before the National Selection Committee. The National Committee will prepare a final ranked list of the Composite Proposals based on their judgment of how best the Proposals fit into Programme objectives and help the country in its' drive towards global competitiveness.	<i>National Selection Committee</i>	<a href="#">January 2003</a>
	2. Based on ranked list of Proposals and available funds in the first cycle of the First Phase of the Programme, NPD will: <ul style="list-style-type: none"> <li>• Inform the States and through the States the institutions about their selection in the Programme along with details of amounts allocated to each institution</li> <li>• Request sponsoring agencies for release of allocated funds</li> <li>• Participating state may sign a Memorandum of Understanding (MOU) with its sponsored institutions. The suggested contents of the MOU between the state and State sponsored institutions are given in Annex XI. The suggested contents of MOU between MHRD and Centrally sponsored institutions are given in Annex XII.</li> </ul>	<i>NPD</i>	<a href="#">January 2003</a>
<b>Step-IX</b>  Subsequent Cycles	For second and third cycles steps I, and IV to VIII will be followed.	<i>NPD</i>	June 2003

## 11.0 MECHANISM OF WEEDING OUT NON-PERFORMING INSTITUTIONS

- 11.1 Weeding out non-performing institutions is a complex process as it involves critical decision making on part of Programme authorities. The process of selection of the States and institutions is competitive in nature. Only those States with high degree of commitment and preparedness have been selected to participate in the Programme. In these States already well performing institutions are to be selected who have to undergo a rigorous exercise of competitive selection. The Programme design encourages each State and Institution to attain its self defined vision and goals. Therefore, it is unlikely that an institution will perform poorly and will need to be weeded out of the Programme. The Programme design is such that the release of funds is linked to performance thereby giving timely signals of non-performing institutions.
- 11.2 However, the effort of the Programme authorities will be to make all efforts to remedy situations, which may lead to non-performance of the States and institutions. Remedial actions will be taken in such a manner so as to bring back the defaulting State or institution on track. If required, the defaulting State/institutions would be offered guidance and support from NPIU, experts and resource institutions.
- 11.3 If a situation does not improve and the problem persists for a long time affecting Programme objectives, the State would be advised to withdraw from the Programme or institution would be withdrawn in such a manner that the loss to other institutions in the cluster is minimal.

## 12.0 DESCRIPTION OF MAIN RISKS

- 12.1 The Programme is competitive in nature and is aiming at systemic transformation of the entire Technical Education System through introduction of academic and non-academic reforms envisioned in the National Policy on Education, 1986 and revised in 1992. Since the magnitude of the Programme is large and the reforms it envisions are major, the Programme is high risk and high benefit oriented. Adequate care has been taken at all stages of the development of the Programme by all stakeholders, State and Central Government, experts, etc to minimize the risk of failure of the Programme. In the implementation plan of the Programme, involvement of State Governments and other management structures has been considered with this in view. At each planning and preparation stage, various documents were prepared for each activity envisaged in the Programme after due discussions and deliberations with a large number of probable institutions and other stakeholders. Pre-testing of various formats has been conducted. The institutions were also involved in preparing dummy project proposals to understand the intricacies of the Programme. However, the main risks perceived and the ways to mitigate these risks to ascertain success of the Programme are given below:

S.No.	Main Risk	Mitigation Measures
a.	<i>Support for academic and non-academic reforms may not continue with change in political leadership.</i>	The reforms envisioned are not new but an extension of what has already been envisioned in NPE, 1986. The whole country is committed to implementing these reforms. Therefore, it is unlikely that change in leadership may affect adversely implementation of the Programme. Secondly, the implementation of the academic and non-academic reforms is an essential pre-condition for participation in the Programme to be fulfilled by the States and institutions wishing to participate in the Programme. The change of leadership at the State or



S.No.	Main Risk	Mitigation Measures
		the institutional levels will not affect the implementation of the Programme.
b.	<i>Beneficiaries and stakeholders may oppose institutional reforms, specially those related to increased cost recovery and tougher quality standards</i>	Institutions proposing to participate in the Programme will be required to develop their proposals in close consultation with beneficiaries and stakeholders – students, faculty, industry and community. Cost recovery from students has been conceived under the Programme as one of the reforms along with enhancement of quality of education and achieving academic excellence. The stakeholders and beneficiaries will be educated of the systemic transformation envisioned in the Programme and the long-term benefits it will bring to the beneficiaries and the country as a whole.
c.	<i>Existing regulatory mechanisms may inhibit institutions to respond quickly to changing economic and technological needs.</i>	The Programme design and its implementation strategy has been extensively discussed/evaluated by various decision making government bodies. Their perceptions and consensus have been obtained. It has been found that the regulatory mechanisms are ready to initiate change to match the changing needs of the economy and the technology. There is a wide acceptance to granting autonomy to engineering institutions. Several technological universities have been created in the country and premier technical institutions are being given deemed university status. 10 RECs have been converted into National Institutes of Technology (NIT). At the State level, institutions wishing to participate in the Programme will be given autonomy as an agreed condition of the Programme.
d.	<i>Participating institutions located in smaller towns may not be able to attract and retain good faculty and students</i>	The Programme envisages participation of already well performing institutions and to improve their standards to world class. The Programme also envisages provisions of regular staff development plans, upgrading skills for faculty and sustenance of training in India and abroad, and other incentives such as consultancies, research facilities etc. to attract and retain good faculty. The Programme would offer incentives to teachers including recognition of merit and contributions. Further, a system of regular training of faculty through creation of Staff Development funds within and beyond the Programme period will encourage competent faculty to opt for teaching in these institutions. The Programme will be well publicised and will attract good students and faculty even in institutions located in small towns. Further, measures to promote excellence in all participating institutions will encourage students' especially due to institutions offering high quality education in high demand areas. The students and faculty would therefore feel attracted to join these institutions.
e.	<i>Needs and areas of possible growth in short and long term are not well identified</i>	Need and areas of growth would be identified by each institution based on the SWOT analysis, which the institutions would necessarily carry out for developing their Project Proposals. Needs and areas of growth

S.No.	Main Risk	Mitigation Measures
	<i>and reflected in the programme offered by institutions</i>	<p>would thus always get reflected in the programmes offered by the institutions.</p> <p>The Programme approach will provide sufficient flexibility. Each institution applying for funding will need to have extensive consultations before making its proposals for funding under the Programme.</p> <p>Institutions may opt for taking up systemic reforms in few departments and may choose to enhance the scope of Programme after achieving certain amount of success for which they could participate in other Phases of the Programme. Each Phase of the Programme will built upon lessons learnt from the previous Phases.</p>
f.	<i>State Governments may not be able to provide adequate funds to the institutions under the Programme.</i>	<p>Meticulous planning by the State Government in consultation with their Finance Departments by making provisions in the annual budgets and seeking regular reimbursement will ensure smooth implementation of the Programme. Each State wishing to participate in the Programme has already made adequate budget provision in their annual plan and 10<sup>th</sup> Plan for the Programme. The budget provisions will accommodate financing of the institutions by necessary adjustment in BE/RE. The Programme has already received “in principle” approval of Planning Commission.</p> <p>In order to prevent any adverse effect on Programme implementation by the States due to fund constraints, a system of advance release of Additional Central Assistance (ACA) is available to the States. This provision is applicable for all externally assisted projects.</p>
g.	<i>State Governments and institutions not supported by the Programme may oppose systemic reforms in engineering education</i>	<p>The reforms envisioned to be implemented under the Programme have been conceived in the NPE 1986 and are very well known to the State Governments and the institutions. Ministry of HRD and the State Governments are popularising the reforms among the engineering institutions and through a formal mechanism, granting permission to institutions to implement the reforms especially to those institutions that get selected under the Programme. All States and all engineering institutions in the country will get equal opportunity to compete and participate in the Programme through different Phases and cycles.</p>
h.	<i>Process and criteria of selection of the institutions may not be adequately publicized and thus open to external influence.</i>	<p>A Working Document for States and Institutions has been developed with involvement of probable institutions and experts. The document defines the selection criteria and the selection procedure in detail. Various steps involved in selection of the institutions have been standardized. The document has been widely circulated and is also available on website of NPIU</p>
i.	<i>Existing regulations and infrastructure may inhibit</i>	<p>Networking of institutions in a cluster is a mandatory condition for participation in the Programme. Further, if the institutions in a cluster feel the need for signing of</p>

S.No.	Main Risk	Mitigation Measures
	<i>institutions to cooperate and share resources.</i>	any Memorandum of Understanding (MOU) on account of sharing of various resources, the same would be prepared and signed. The contents of the MOUs between <b>Lead and Network Institutions</b> may differ from institution to institution as per their need of sharing. The procedure for selection of the institutions is based on the fact that eligible Lead and Network Institutions will, with full understanding and State support prepare the Composite Proposal and indicate proposed sharing of resources. Each institution in a cluster will create a network cell headed by a network facilitator.
j.	<i>Sponsoring Agencies (Governments) may not provide incentives to institutions to generate revenue and utilize the same for institutional development.</i>	Generation of revenue and retaining the same for the purpose of institutional development has been envisaged as one of the non- academic reforms for the benefit of the institutions under the Programme. The institutions have been suggested to introduce non-academic reforms by implementing block grant scheme. The Sponsoring Agencies have in their report indicated that the institutions selected under the Programme would be allowed to generate revenue and to retain and utilize the same for the development of institution. The institutional proposals would indicate the details of various methods of generation and utilisation of revenue.
k.	<i>Engineering institutions may not be willing to undergo formal accreditation.</i>	Under the Programme the institutions will be selected on the basis of the fact that they have applied for Accreditation of various courses. At the same time, the National Board of Accreditation under AICTE has agreed to accredit the courses in fast track mode. The accreditation process for institutions selected under the Programme will be completed within a period of three months. The necessary formats for fast track mechanism of accreditation has been prepared and circulated to six selected States and institutions in these States have been asked to apply for accreditation to NBA immediately.
l.	<i>Institutions selected under the Programme may not be willing to collect and share data and make accessible to public.</i>	Each institution selected under the Programme will mandatorily participate in developing the management development capacity. The information of the institution will be available on the website of the institution and could be accessed by any one.

### 13.0 DETAILED FINANCING PLAN

- 13.1 The Programme will be mainly implemented in the State sector; however, Central sector funding will be limited to centrally funded institutions and NPIU (including research studies and services of resource institutions).
- 13.2 There will be two types of funding available under the Programme -- competitive grants and investment grants. Competitive grants will be available to competitively selected cluster of institutions for the Programme component of Institutional Development.

- 13.3 The investment grant will be given to Programme management structures at the Central and State levels (NPIU and SPFU). The funds will be used for Management Capacity Improvement at the Central and State levels and conducting research studies and services by resource institutions.
- 13.4 The institutional level management structures (LIPMUs and NIPMUs) will form part of the institutional proposal, and will thus be funded out of competitive grants under the component Institutional Development. The institutional proposal will include details of Management Capacity Development at institutional level. The Lead and Network Institutions under the Programme will indicate their fund requirements in their respective proposals in relation to their pursuit of excellence. However, there are no fixed limits for it.
- 13.5 The estimated funding for various institutions and structures during the First Phase of the Programme is as below:

(Rs. In Million)

(a)	Lead Engineering Institutions	9000
(b)	Network Engineering Institutions	5450
(c)	Polytechnics (Lead and Network Institutions)	750
(d)	SPFUs	150
(e)	NPIU, Research Studies, Services of Resource Institutions	150
	Total	15500

13.6 The detailed financing plan for the First Phase is reflected in the tables below:

<b>Cost Table (Project Yearwise)</b>							
Rs. in Million							
<b>Component/ Category</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Total</b>	
<b>Programme Component - 1 : Institutional Development (Competitive Funding)</b>							
1	Promotion of Academic Excellence	920.488	2,964.187	3,557.025	3,229.375	1,185.675	<b>11,856.750</b>
2	Networking of Institutions	137.925	444.125	532.950	483.850	177.650	<b>1,776.500</b>
3	Services to Community & Economy	121.587	391.688	470.025	426.775	156.675	<b>1,566.750</b>
<b>TOTAL (A)</b>		<b>1,180.000</b>	<b>3,800.000</b>	<b>4,560.000</b>	<b>4,140.000</b>	<b>1,520.000</b>	<b>15,200.000</b>
<b>Programme Component - 2 : System Management Capacity Improvement ( Non-Competitive Funding)</b>							
I	Goods	3.250	8.125	8.125	6.500	6.500	<b>32.500</b>
II	Books & LRs	0.550	1.375	1.375	1.100	1.100	<b>5.500</b>
III	Consultancies	3.200	8.000	8.000	6.400	6.400	<b>32.000</b>
IV	Trainings, fellowships & workshops	5.000	12.500	12.500	10.000	10.000	<b>50.000</b>
V	Salary	7.700	15.400	15.400	19.250	19.250	<b>77.000</b>
VI	Operation & Maintenance	10.300	20.600	20.600	25.750	25.750	<b>103.000</b>
<b>TOTAL (B)</b>		<b>30.000</b>	<b>66.000</b>	<b>66.000</b>	<b>69.000</b>	<b>69.000</b>	<b>300.000</b>
<b>GRAND TOTAL (A+B)</b>		<b>1,210.000</b>	<b>3,866.000</b>	<b>4,626.000</b>	<b>4,209.000</b>	<b>1,589.000</b>	<b>15,500.000</b>

**Cost Tables - Central Institutions & NPIU, Research Studies & Resource Institutions**

							Rs. in Million
Component/ Category		Year 1	Year 2	Year 3	Year 4	Year 5	Total
<b>Programme Component - 1 : Institutional Development (Competitive Funding) - Central Institutions</b>							
1	Promotion of Academic Excellence	191.138	659.437	791.325	732.075	263.775	<b>2,637.750</b>
2	Networking of Institutions	30.100	103.250	123.900	114.450	41.300	<b>413.000</b>
3	Services to Community & Economy	21.262	74.813	89.775	83.475	29.925	<b>299.250</b>
<b>TOTAL (A)</b>		<b>242.500</b>	<b>837.500</b>	<b>1,005.000</b>	<b>930.000</b>	<b>335.000</b>	<b>3,350.000</b>
<b>Programme Component - 2 : System Management Capacity Improvement (Non-Competitive Funding) - NPIU, Research Studies &amp; Resource Institutions</b>							
I	Goods	0.800	2.000	2.000	1.600	1.600	<b>8.000</b>
II	Books & LR's	0.200	0.500	0.500	0.400	0.400	<b>2.000</b>
III	Consultancies	2.500	6.250	6.250	5.000	5.000	<b>25.000</b>
IV	Trainings, fellowships and workshops	1.500	3.750	3.750	3.000	3.000	<b>15.000</b>
V	Salary	3.500	7.000	7.000	8.750	8.750	<b>35.000</b>
VI	Operation & Maintenance	6.500	13.000	13.000	16.250	16.250	<b>65.000</b>
<b>TOTAL (B)</b>		<b>15.000</b>	<b>32.500</b>	<b>32.500</b>	<b>35.000</b>	<b>35.000</b>	<b>150.000</b>

**Cost Tables - State Level Institutions & SPFUs**

Rs. in Million

Component/ Category		Year 1	Year 2	Year 3	Year 4	Year 5	Total
<b>Programme Component - 1 : Institutional Development (Competitive Funding) - State Level Institutions</b>							
1	Promotion of Academic Excellence	729.350	2,304.750	2,765.700	2,497.300	921.900	<b>9,219.000</b>
2	Networking of Institutions	107.825	340.875	409.050	369.400	136.350	<b>1,363.500</b>
3	Services to Community & Economy	100.325	316.875	380.250	343.300	126.750	<b>1,267.500</b>
<b>TOTAL (A)</b>		<b>937.500</b>	<b>2,962.500</b>	<b>3,555.000</b>	<b>3,210.000</b>	<b>1,185.000</b>	<b>11,850.000</b>
<b>Programme Component - 2 : System Management Capacity Improvement ( Non-Competitive Funding) – SPFUs</b>							
I	Goods	2.450	6.125	6.125	4.900	4.900	<b>24.500</b>
II	Books & LRs	0.350	0.875	0.875	0.700	0.700	<b>3.500</b>
III	Consultancies	0.700	1.750	1.750	1.400	1.400	<b>7.000</b>
IV	Training, fellowships and workshops	3.500	8.750	8.750	7.000	7.000	<b>35.000</b>
V	Salary of Key Staff	4.200	8.400	8.400	10.500	10.500	<b>42.000</b>
VI	Operation & Maintenance	3.800	7.600	7.600	9.500	9.500	<b>38.000</b>
<b>TOTAL (B)</b>		<b>15.000</b>	<b>33.500</b>	<b>33.500</b>	<b>34.000</b>	<b>34.000</b>	<b>150.000</b>

### SECTION III

#### 1.0 PROGRAMME MANAGEMENT

1.1 Looking at the design and size of the Programme, a three-tier Programme management structure has been developed. The broad functions of the management structures are Policy issues, selection of institutions, facilitation and coordination, implementation, monitoring and control and quality assurance. The management structures are supported by National and State level Committees to offer guidance and direction to Programme management structures for effective implementation of the Programme. The details of each Programme management structure at National, State and Institution level is given below:

#### 2.0 NATIONAL LEVEL PROGRAMME MANAGEMENT STRUCTURES

2.1 There will be 2 structures at the National level namely, National Steering Committee and National Project Implementation Unit (NPIU). The National Project Director (NPD) will be

the overall controller of the Programme who will be supported by the NPIU. The functions and structure of National Steering Committee are described below:

## 2.2 National Steering Committee

### (a) Composition

The Committee is to have combined experience and wisdom in various fields, and knowledge of national and global development needs. Accordingly, the following composition is suggested:

- a) Union Minister of Human Resource Development\* - Chairperson
- b) Secretary, Department of Secondary Education & Higher Education, MHRD
- c) Chairman/Vice-Chairman of the University Grants Commission (UGC)
- d) Chairman/Vice-Chairman (AICTE)
- e) Principal Advisor Education, Planning Commission
- f) Director General, Council for Scientific & Industrial Research (CSIR)
- g) One from Chiefs of DST/ISRO/AEC (by rotation\*\*)
- h) One Chairman CII/FICII/ASSOCHAM (by rotation\*\*)
- i) Chairman, NASSCOM
- j) One Director of an IIT, (by rotation\*\*)
- k) One Director of an IIM (by rotation\*\*)
- l) Two State Secretaries from participating State (by rotation\*\*)
- m) Director-General, CAPART
- n) Secretary, Department of Biotechnology
- o) Joint Secretary & FA (MHRD)
- p) Two Eminent Technical Education Experts
- q) National Project Director Member Secretary

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\* The Minister may decide to nominate a Chairperson to represent him/her

\*\* Rotation every two years

### (b) Meetings

The Committee will meet at least twice a year.

### (c) Functions

The broad functions of Steering Committee would among others include to amend/modify/change/replace/add any provisions reflected in this document within the overall Programme Agreement for the benefit of the Programme at any time during the implementation of the Programme, provide guidance and direction, suggest strategies for maximising achievement of Programme goal of systemic transformation and weeding out of non-performing States and Institutions etc. If the directions of the Steering Committee require amendment in any part of Programme Agreement, the same will be informed to the World Bank for making suitable modifications.

### (d) Schedule

The notification for constitution of the Committee will be issued by NPD after declaration of effectiveness of the Programme.

## 2.3 National Project Implementation Unit (NPIU)

2.3.1 The NPIU will work under the guidance of the NPD duly appointed by the Ministry of Human Resource Development of the rank of Joint Secretary. The broad functions of NPD



will be to take policy and critical decision, including decisions related to selection of States and Institution, Programme fund management, liaison with funding agency, monitoring, review and evaluation of Programme implementation.

### 2.3.2 The existing structure of NPIU will be strengthened within one month of Programme negotiation with IDA.

(a) **Objective**

The NPIU is facilitating, implementing, coordinating and monitoring body created by MHRD at National level.

(b) **Location**

NPIU will be located at an appropriate location in Delhi or around.

(c) **Structure**

The NPIU will be headed by a Central Project Advisor (CPA). The structure of the NPIU will comprise of certain functional Cells to undertake various activities including a Procurement Cell supported by Procurement Consultants. Each Cell of NPIU will be headed by a Specialist supported by required staff and consultants.

(d) **Functions**

Broadly the NPIU will assist NPD in:

- i) Ensuring successful and timely implementation of the Programme
- ii) Designing, planning and developing the Programme, prepare the required documentation and create awareness among States and Institutions
- iii) Negotiation with the World Bank, preparation of State Reports and institutional Composite Proposals and selection process in all cycles of the First Phase of the Programme.
- iv) Setting up Committee for Screening of Eligibility Application for Central level Institutions and National Screening Committee for all Institutions and organizing their meetings.
- v) Organizing meetings of Evaluation and Sub Evaluation Committees for evaluation of Composite Proposals.
- vi) Facilitating/organising management development programmes, foreign study tours and foreign fellowships programmes and training of officials in Programme Implementation including Financial Management, Procurement etc.
- vii) Liaisoning with the Central Government Ministries/Departments, States and the funding agency
- viii) Organising educational research studies.

- ix) Monitoring Programme activities and review progress regularly through Joint bi-annual and Mid-term Reviews.
- x) Assuring Quality of Technical Education through Programme implementation for the entire Programme.
- xi) Facilitate and ensure implementation of policy reforms
- xii) Create awareness amongst institutions about the Programme
- xiii) Ensure adequate and timely fund flow to the institutions.
- xiv) Facilitate institutions in their interaction with industry and community, and provide guidance for enhancing services to community and economy.
- xv) Train procurement related officials of SPFU and Institutions and carryout procurement of large value equipment during the first year of the Programme and monitor procurement of goods during the Programme period.
- xvi) Receive and compile audit reports of each centrally sponsored institution and prepare reimbursement claims based on inputs from the institutions and conduct efficiency, quality and reforms related audits.
- xvii) Check, verify and forward all reimbursement claims to CAA&A.
- xviii) Monitor the implementation of TDP in all Programme Institutions

### **3.0 STATE LEVEL PROGRAMME MANAGEMENT STRUCTURE**

#### **3.1 State Level Steering Committee**

##### **(a) Composition**

The Committee is to have combined experience and wisdom in various fields, and knowledge of State, national and global development needs. Accordingly, the following composition is suggested:

- a) Minister dealing with Technical/Engineering Education - Chairperson
- b) Secretary dealing with Technical Education
- c) Chairman /Vice-Chairman of the State Council dealing with Technical/Engineering Education
- d) One Vice Chancellor of the Technical/Affiliating Universities in the State
- e) One Chairman of the State Chapter of CII/FICII/ASSOCHAM by rotation
- f) Secretary State Dept. of Finance
- g) Two Eminent Technical Education Experts
- h) Head of SPFU Member Secretary

##### **(b) Meetings**

The Committee will meet at least twice a year.

##### **(c) Functions**

The broad functions of State Level Steering Committee would among others include providing guidance and direction, suggest strategies for maximising achievement of Programme goal of systemic transformation.

### 3.2 State Project Facilitation Unit

3.2.1 The six selected States under the first cycle of the First Phase of the Programme have created basic infrastructure needed to carry out preparatory activities for the Programme for which Government Orders have also been released. The States are in the process of creating a full-fledged State Level Programme Management Structures called State Project Facilitation Unit (SPFU). Such structure will be in place within one month of Programme negotiation with IDA.

3.2.2 The SPFUs are the counterpart Programme Management Structure of NPIU. The SPFU is directly under the control and supervision of Secretary In-charge of Technical Education in the State.

#### (a) Objective

The SPFU will provide support to the Secretary in-charge of technical education in facilitating, implementing, coordinating and monitoring the Programme in the State.

#### (b) Location

The SPFUs are located at State Capitals except Himachal Pradesh, which is located at Sunder Nagar.

#### (c) Structure

The SPFU will be headed by a State Project Advisor (SPA). The structure of the SPFU will comprise of 4 functional Cells to undertake various Programme activities. Each Cell of SPFU will be headed by a senior officer and the cells will be provided with adequate support staff. The functions of each cell are broadly defined below:

- (i) Programme Cell will be responsible for eligibility determination of institutions, facilitating formation of network clusters and getting Composite Proposals developed by Lead and Network Institutions, and successful operation of networks. It will monitor compliance by institutions with policy reforms, and take necessary actions for ensuring compliance. This cell will periodically monitor implementation of individual institutional projects, and achievement of physical targets. The cell will also ensure that all Government Policies and Provisions for the disadvantaged groups are implemented.
- (ii) Quality Assurance Cell will specifically monitor action plans in respect of academic excellence sub-component, conduct external quality audits, and encourage institutions to seek and obtain accreditation. This cell will liaise with the NBA.
- (iii) Finance Cell will be concerned with fund management, issues related to fund flow, statutory audits and reimbursement claims.
- (iv) Procurement Cell will carryout procurement of large value equipment if required by the institutions during the first year of the Programme and regularly monitor procurement of goods through agreed procedures.

#### (d) Broad Functions of SPFU

- a) Ensure adequate and timely fund flow.
- b) Create awareness among all institutions about the Programme
- c) Assist State Secretary in formation of various Committees, such as State Level Steering Committee, Screening Committee and facilitate their work
- d) Facilitate formation of Lead and Network Institutional clusters among eligible institutions and preparation and development of Composite Proposals
- e) Facilitate and ensure implementation of policy reforms
- f) Organise State level Steering Committee meetings and take its guidance in smooth implementation of the Programme
- g) Facilitate institutions in their interaction with industry and community, and provide guidance for enhancing services to community and economy.
- h) Monitor and review progress at State level regularly and through Joint bi-annual and Mid-term Reviews.
- i) Receive and compile State-wise audit reports, and prepare reimbursement claims based on inputs from institutions and conduct efficiency, quality and reforms related audits.
- j) Implement agreed mechanism of funding and repayment of loan to private institutions.
- k) Carry out procurement of large value equipment during the first year of the Programme and monitor procurement of goods during the Programme period.
- l) Assure Quality of Technical Education through Programme implementation
- m) Ensure implementation of TDP among Programme Institutions

#### **4.0 MANAGEMENT STRUCTURE AT INSTITUTIONAL LEVEL**

4.1 Each Lead and Network Institution will have 2 management structures: the Board of Governors (or Governing Council or Managing Committee) and Project Management Unit (for Lead Institutions, Lead Institution Project Management Unit (LIPMU); and for Network Institutions, Network Institution Project Management Unit (NIPMU). The details of structures, functions etc of these units will be given in the proposals of the institutions.

#### **4.2 Board of Governors (BOG)**

##### **(a) Composition**

For implementing managerial autonomy, each institution will establish its own BOG. Each BOG would be headed by an eminent Industrialist/Educationist with adequate representation from other stakeholders.

##### **(b) Meetings**

The BOG will preferably meet once every 3 months.

(c) **Functions**

The major functions of the BOG would, among others include:

- i) Taking all policy decisions and overall management of Institutions
- ii) Form, supervise, guide and approve proposals of various committees such as Academic Committee, Finance Committee, Building and Works Committee and Purchase Committee etc.
- iii) Reviewing project implementation progress and giving guidance for achieving project goals and targets
- iv) Developing strategies for creating the ambience for excellence
- v) Suggesting measures for enhancing reach and effectiveness of services to community and industry
- vi) Ensuring institutional accountability and compliance with policy reforms.
- vii) To oversee proper utilization of fund and submission of regular reimbursement claims
- viii) Ensure implementation of TDP in the institution

4.3 **Institutional Project Management Units**

Each Lead and Network Institution will create a Project Management Unit in its own premises.

(a) **Composition**

Lead Institution Project Management Unit/Network Institution Project Management Unit (LIPMU/NIPMU) will be headed by the Principal/Head of the institution. The exact composition will vary from institution to institution and will depend upon the institutional project design. However, each Unit will solely comprise of institute faculty and staff.

(b) **Functions**

The overall responsibility for implementation of Institutional project will be that of the LIPMU/NIPMU, which will be assisted by various cells assigned with work related to: (a) major groups of institutional development activities (academic excellence, networking services to community and economy, tribal development plan etc.) (b) procurement of goods, civil works and services, (c) financial management, (d) project implementation monitoring (e) conduct of quality and efficiency audit of educational processes and institute functioning; and evaluating institute's performance in the exercise of autonomy with accountability, and in complying with policy reforms.

5.0 **PARTICIPATION APPROACH**

5.1 The entire Programme at all stages from its conceptualisation to design has been based on participatory approach. At each stage, stakeholders have been consulted and their participation ensured as is evident from the details provided below.

(a) **Participation at Policy level**

The Programme has been designed on the basis of the provisions of NPE 1986 (revised in 1992), which has been widely accepted by all State/UT Governments. Many of the provisions of NPE have already been implemented by States/UTs. The Programme design ensures implementation of the key reforms as pre-qualification to participate in the Programme. During design of the Programme, extensive communication exchange and discussions were held to gauge preparedness and commitment of all stakeholders in implementation of the reforms.

(b) **Participation during Programme Design**

A consolidated document was prepared in October 1999 to seek World Bank funding to establish Centres for Excellence in the country. Reconnaissance Mission took place in October - November 1999 based on a document prepared by NPIU. Senior officials from Government of India, several States, Principals and senior faculty of Engineering Colleges and Polytechnics, Principals of TTTIs, representatives of industry and professional bodies and officials of National Technical Manpower Information System (NTMIS) participated in the meetings.

In a meeting of State Secretaries of Technical Education, a brief presentation on the Programme concepts was made by Joint Secretary (T) in October 2000. The State Secretaries of Technical Education agreed 'in principle' to participate in the Programme.

Based on the recommendations of Reconnaissance Mission (October – November 1999) a project document was prepared. Based on this document Concept Review Mission (January 2001) took place in which Senior officers from Government of India, Senior Professors from IITs, State Secretaries, Directors of Technical Education of several major States, Senior officials of the BTE, MHRD, Principals of Regional Engineering Colleges, Principals of Government and Aided Engineering Colleges/Polytechnics, officials of TTTIs, students of Regional Engineering College and some senior industrialists and entrepreneurs participated. A series of meeting with stakeholders took place at Calicut and Chandigarh.

The Concept Review Mission made specific recommendations to develop Programme documents. Based on these recommendations two documents were prepared by NPIU namely:

- 1) Technical Education Quality Improvement Programme of Government of India – Programme Description and Guidelines (Document – 1) and
- 2) Creating an Enabling Environment for Promoting Excellence – Administrative and Procedural Reforms (Document – 2)

An Expert Committee constituted by Government of India in March 2001 vetted these documents. The modifications suggested by the Expert Committee were carried out and the same were sent to all States/UT Secretaries of Technical Education for obtaining reconfirmation of their 'in principle' agreement to participate in the Programme in May 2001.

As per the responses received from the States/UT, 29 Secretaries of Technical Education of major States/UT have 'in principle' agreed to participate in the Programme.

The above two documents (1 and 2) were discussed with State Secretaries of Technical Education and probable institutions in December 2001. Based on the recommendations of the State Secretaries and the institutions, a full length operational document defining various aspects of the Programme including visioning, eligibility conditions for sponsoring agencies and institutions, selection procedures, Programme management structures, various committees for selection of institution and Programme Governance, Programme management and monitoring, funding and accounting, Programme arrangements for procurement, etc. was prepared. The document is termed as Working Document for States and Institutions (Document – 3).

The Working Document for States and Institutions was discussed with State Secretaries of Technical Education and the probable institutions in March 2002. In the Workshop, mock exercises for institutional self-assessment through eligibility application and preparation of composite proposal were carried out. The Eligibility Application Format was also tested.

The involvement of the States in the selection process has been ensured specially in deciding Network Institutions for a specific Lead Institution, providing required documentation to support the composite proposal and evaluating the Eligibility Application.

GOI has constituted a committee to suggest various models of funding and recovery of funds from private institutions. Based on the recommendations of the Committee the suggested mechanism of funding private institutions is appended at Annex-VI

The concept of Lead and Network institution as key design of the Programme and formation of clusters there of, ensures participatory approach and spread effect of the Programme. The success and failure of each institution, Lead or Network, will affect the performance of other institutions in the cluster; thereby ensure co-operation and rigorous participation of each institution in the cluster.

Since the selection of States and Institution is on competition basis, the spirit of competition will encourage the respective State and the cluster therein to compete and show success, which in turn is tied to mutual help and cooperation.

The concept of weeding out the non-performing Institutions will also ensure equal participation and stake of States and institutions.

**(c) Programme Implementation**

Management Structures will be created at each stage i.e. National, State and Institution levels to facilitate smooth implementation of the Programme to ensure the participatory approach.

At the national level the National Steering Committee comprises of all possible stakeholders to provide required directives to Programme implementation. Similarly, at the State level, State Level Steering Committee will provide required directives to Programme implementation. At the institutional level the composition of the Board of Governance will have membership from industry and community.

**(d) Programme Evaluation**

In the periodic evaluation of performance of the institution during the Programme period, the entire management structures at the National, State and Institutional Level will be involved. The methodology of monitoring and evaluation is described in Section V of this document.

## **6.0 ROLE OF GOVERNMENT OF INDIA**

6.1 The role of GOI (MHRD) will be to:

- a) Provide overall policy directives to the Programme to achieve the set goals and objectives including timely implementation of academic and non-academic reforms.
- b) Announce the First Phase of the Programme and its' various cycles and encourage Institutions in the six selected States to actively participate in the Programme.
- c) Coordinate and direct all activities related to the Programme including selection of States and Institutions, implementation, monitoring and evaluation for which NPIU will play the supportive role.
- d) Form various committees as envisaged under the Programme for smooth and timely implementation of the Programme.
- e) Coordinate with other Ministries/Departments such as Ministry of Finance, Planning Commission, Ministry of External Affairs, State Governments, World Bank, and other related institutions, AICTE etc for smooth functioning of the Programme. To coordinate these activities NPIU will play the supportive role.

6.2 AICTE has agreed in principle to support the Programme and would provide expeditious approvals to various proposals of the institutions, conceived as part of vision of institutions selected under the Programme.

6.3 Large numbers of new high technology courses are proposed to be introduced in the institutions selected under the Programme. AICTE will provide expeditious approvals for starting such courses at various levels.

6.4 For the First Phase of the Programme, it has been decided that institutions that have applied for accreditation of programmes would be considered eligible. For providing expeditious accreditation, NBA has created a fast track accreditation process for the institutions selected under the Programme. The accreditation will now be granted to institutions within three months of submission of applications.

6.5 NBA has designed a fast track questionnaire in consultation with NPIU and the same has been sent to Secretaries of Technical Education of the six selected States so that it may be circulated among probable institutions. It is expected that before announcement of the Programme, the institutions would have submitted their applications for accreditation. NBA has agreed to closely monitor process of accreditation to selected institutions.

## **7.0 ROLE OF THE WORLD BANK DURING PROGRAMME IMPLEMENTATION**

7.1 The Bank will provide funds for the Programme as per the agreement reached with GOI and State Governments.

7.2 The World Bank staff and consultants with previous experience in implementation of similar Programmes would participate in Joint Bi-annual Review Missions conducted by GOI from time to time. The Bank would also participate in Joint Mid Term Review and the ICR Mission of First Phase of the Programme.



- 7.3 The Bank would share with NPIU its experience gained from other projects being implemented all over the World.

## SECTION- IV IMPLEMENTATION PLAN

### 1.0 PROGRAMME SCHEDULE

The Programme schedule details for the First Phase of the Programme indicating implementation plan for each component is given in Section II. However, a brief Schedule for the first and the second cycle of selection of institutions during the First Phase of the Programme is given below. The first cycle of selection of institutions also earmarks the starting of the Programme as well.

#### First Cycle (First Phase)

i	Programme Appraisal	April 2002
ii	Programme Negotiation	September 2002
iii	Announcement of the first cycle (Release of advertisement)	October 2002
iv	Creation and operationalization of SPFUs and NPIU	October 2002
v	Declaration of list of eligible Lead & Network Institutions	November 2002
vi	Formation of clusters	November 2002
vii	Composite Proposal preparation Workshop by NPIU	November 2002
viii	Submission of Composite Proposals	December 2002
ix	Evaluation of Composite Proposals	January 2003
x	Announcement of Selected Institutions	January 2003

#### Second Cycle

i	Announcement of the second cycle	June 2003
ii	Announcement of Lead & Network Institutions	July 2003
iii	Formation of clusters	August 2003
iv	Composite Proposal preparation Workshop by NPIU	September 2003
v	Submission of Composite Proposals	October 2003
vi	Evaluation of Composite Proposals	October 2003

- 1.1      The schedule of the Third Cycle will be worked out based on the selection of institutions in the first two cycles.
- 1.2      The plans for the two Programme components (Institutional Development and System Management Capacity Improvement) and sub-components (Promotion of Academic Excellence; Networking of Institutions for Quality Enhancement and Resource Sharing; Enhancing Quality and Reach of Services to Industry and Economy) including training of faculty and staff of the institutions will be reflected in their respective proposals. Since the institutions will have to be selected on competitive basis the technical plan in details with schedule can be prepared only after receiving the institutional proposals as per the schedule given above. Each institution will include in their proposal monitorable benchmarks.

## **2.0      SCHEDULE OF PROCUREMENT**

- 2.1      The procurement of civil works, goods and services will occur at the institutional level under the Programme Component-I (Institutional Development). The details of requirement including the cost of civil works, goods and services for each institution will be reflected in the Proposals of the institutions and will vary from proposal to proposal as per their individual needs in pursuit of excellence.
- 2.2      The participating institutions will, among others, form four working committees namely, Academic Committee, Building and Works Committee, Finance Committee and the [Procurement](#) Committee. These Committees will function under the supervision of the BOG of the institution and these Committees will seek approvals on all institutional project related procurements and activities from the BOG.
- 2.3      [The procurement of civil works and goods shall be carried out as per the "Guidelines for Procurement under IBRD Loans and IDA Credits published by the World Bank in January 1999" with modifications as agreed to with GOI and for services "Guidelines for Selection and Employment of Consultants by World Bank Borrowers published by the World Bank in May 2002". The limits of procurement of various goods, civil works and consultant services shall be applicable as per the details contained in the legal agreements.](#)
- 2.4      **Civil Works**
  - 2.4.1      The Programme does not envisage large scale civil works but has provision to meet essential requirements of developmental plans of institutions for acquiring excellence.
  - 2.4.2      Three types of activities under civil works are envisaged: (a) construction of buildings as extensions, b) refurbishing of the existing infrastructure and c) improvement of facilities.
  - 2.4.3      Each institution will be required to create a special Cell in their institution to undertake the responsibility of civil works comprising of faculty from Civil Engineering Department or hire a consultant for undertaking the civil works in consultation with the SPFU.
  - 2.4.4      Majority of civil works (construction of buildings) are expected to be below Rs. 15 Million and the same could be undertaken following the recommendations of the Building and Works Committee duly approved by the BOG of the institution.

### **First Cycle**

The tentative schedule for major civil works (buildings) for the institutions selected in the first cycle of the First Phase of the Programme is as below:

Preliminary drawings	-	March 2003
Working drawings	-	April 2003
Bidding documents Approval	-	May 2003
Commencement of Construction	-	June 2003

### **Second Cycle**

The tentative schedule for the institutions selected in the second cycle of the First Phase of the Programme is as below:

Preliminary drawings	-	November 2003
Working drawings	-	December 2003
Bidding documents Approval	-	January 2004
Commencement of Construction	-	March 2004

## **2.5 Procurement of Goods:**

2.5.1 The institutions under the Programme have large-scale procurement of goods for:

- a) Modernization of existing facilities like library, multi media, learning resources, hardware and software for computer centers, e-library, book bank for SC/ST etc;
- b) Modernization of existing laboratories and workshops
- c) Setting up new labs and workshops for introduction of courses in high and emerging technology areas for graduate, post-graduate and doctoral programmes;
- d) Research and development for industry and community, faculty research and national and international collaborative works;
- e) Educational technology items such as books, learning resources of various kinds, national and international journals and periodicals, software, simulation exercises, special learning packages, video conferencing set ups;
- f) Networking;
- g) Communication with other organizations including internet facility etc; and
- h) Reprography and documentation, office equipment
- i) Student amenities and facilities etc.

### **(a) Equipment**

All institutions selected under the Programme will be responsible for procurement of equipment for their projects.

Since the selection of institutions is competitive in nature, the exact requirements of equipment and its value cannot be determined at this stage. The procurement of equipment will be made on the recommendations of the institutional Purchase Committee duly approved by the BOG. NPIU will have a special Procurement Cell

supported by Specialists / Consultants whose responsibility will be to advise the selected institutions on procurement related issues. The participating States have experience of procurement through agreed procedures and their capabilities have been recognised and appreciated in the ICR of Tech Ed I and II. The NPIU has the experience of guiding procurement in Tech Ed I, II, and III. These capabilities of NPIU and SPFUs will be utilised in carrying out large size procurement if the need arises during the first year of the Program.

Intensive efforts will be made by NPIU and through other procurement training agencies in the country to train the Program officials at the SPFU and institutional levels to undertake large size procurements.

After one year of implementation of the Programme, the situation would be reviewed to determine the procurement capacities of the institutions and the need for hiring a Procurement Agency at the National level. The National Steering Committee in this regard will take appropriate decisions.

(b) **Furniture**

All institutions, SPFU and NPIU will purchase furniture from local sources and would follow prescribed Procedures. The value per contract will not exceed Rs 2.5 Million.

(c) **Vehicle**

All institutions, SPFU and NPIU will purchase vehicle through prescribed procedure and DGS&D Rate Contract where applicable. The value per contract will not exceed Rs 2.5 Million.

(d) **Books and LRs**

Books, journals, books for the book bank for SC/ST students, Learning Resources, Multimedia packages, E-libraries journals and books, software, simulation software etc. will be purchased through prescribed procedure. The value per contract will not exceed Rs 2.5 Million.

(e) **Training**

The officials dealing with procurement in the Programme institutions and SPFU will be given training on basic procurement procedures by Procurement Cell of NPIU to undertake procurement for immediate requirement of the Programme. Further detailed training programmes for the officials of the institutions, SPFU, and NPIU will be organized through nationally reputed institutions/ organizations.

2.5.2 Suggested action plan for Procurement of Goods is as below:

**First Cycle**

The procurement of goods through other methods is likely to begin immediately after the commencement of the Programme. Tentative schedule for procurement of equipment for the institutions selected in the first cycle is as below:

Preparation of specifications	March 2003
Preparation of tender documents	April 2003
Floating of tender inquiries	April 2003
Opening of tenders	May 2003
Finalisation of bids	June 2003

Signing of contract  
Supply of goods

July 2003  
October 2003

## Second Cycle

Tentative schedule for procurement of major equipment for the institutions selected in the second cycle is as below:

Preparation of specifications	November 2003
Preparation of tender documents	December 2003
Floating of tender inquiries	December 2003
Opening of tenders	January 2004
Finalisation of bids	February 2004
Signing of contract	March 2004
Supply of goods	June 2004

## 2.6 Services

2.6.1 The Programme is of a special nature wherein support and services of a variety of consultants would be needed in order to achieve the goals of the Programme and the excellence, which the institutions would acquire.

2.6.2 Several activities under the Programme would be carried out with the help of resource institutions. These would include, training and fellowship programmes, conducting research studies and implementation of several academic activities.

2.6.3 The Programme envisages appointment of Local and Foreign Consultants (individuals) for the above purposes. The cost of services to be hired by the institutions under Programme Component-I cannot be reflected here. However, the total cost of services for Programme Component-II is estimated at Rs. 57 Million. Both firms if required, and individuals (experts) for various services will be hired on competitive basis.

### 2.6.4 SCHEDULE OF DISBURSEMENT

Programme Component/Expenditure Category		Programme Cost (Rs. in Million)	Bank Financing Percentage
I	Institutional Development	15200	80%
	System Management Capacity Improvement		
II	Goods	32.5	100% of foreign expenditure, 100% of local expenditure (ex-factory cost) and 80% of local expenditures for other items procured locally
III	Books & LR's	5.5	100%
IV	Consultancies	32	80%
V	Trainings, fellowships and workshops	50	100%
VI	Incremental Operating Costs	180	80% until December 31, 2004, 65% until December 31, 2006 and 25% thereafter
	<b>Total Programme Cost</b>	<b>15500</b>	

### **3.0 PROGRAMME FINANCIAL MANAGEMENT SYSTEM**

- 3.1 For the centrally supported institutions and the NPIU, funds will be budgeted under identifiable budget line item in the Ministry of Human Resource Development (MHRD). On approval of the budget by the Parliament, MHRD will release annual fund requirements in three to four instalments to the institutions as grant. The transfer of funds will be through cheque/draft. The institutions will maintain a separate bank account (PLA account) for the Programme funds. For NPIU, MHRD will release funds in three to four instalments.
- 3.2 For State supported institutions and SPFUs, funds will be allocated in the budgets of the concerned Departments of the respective State Governments. On approval of the budget by the legislature, the State Governments will allocate and release funds in three to four instalments as grant to the institutions and SPFU. The transfer of funds will be through cheque/draft. The SPFU and institutions will maintain a separate bank account for the Programme funds. The funds to private institutions will be on lend by the respective State Governments as loan. [A Report of the Committee on Suggested Mechanism of Funding Private Institutions is appended at Annex VI. The States may adopt/fine tune the suggested mechanism or evolve an alternative mechanism that is viable, workable and mutually acceptable between the States and the Private Institutions.](#)

#### **3.3 Flow of Funds**

The Programme funds to the institutions will be released in three to four installments each year on the basis of a Memorandum of Understanding (MOU) between the States and the institutions, which will contain the terms and conditions of the grants/loan. The first installment will not be more than 20% of the grant/loan amount and will be based on the committed expenditure as per the annual plan. Further installments will be released on the receipt of utilization status. Each subsequent installment will be released on utilization of 70% of the amount of the previous installments. This would ensure smooth flow of funds to the institutions and will avoid accumulation of funds at the institution level.

#### **3.4 Programme Funding**

- 3.4.1 Funding pattern of institutions under the Programme has been conceived as one of the reforms to be introduced in the Technical Education System. Each of the institutions selected under the Programme will be funded for its non-plan expenditures through Block Grant scheme (An Extract of the Report of the Expert Committee on Review of Funding Pattern of IITs – April 2002 (MHRD) is appended as Annex VII. The Programme States may consider the recommendations of the Committee and develop the mechanism of the Block Grant Funding for the non-plan funds for the institutions under the Programme). Whereas the normal plan funds will be continued as per their existing norms & procedures. The Programme funds will be released as additionality over normal plan funds.
- 3.4.2 For the central institutions and NPIU the BTE has already made a provision of Rs. 9000 Million in the Tenth Plan and for Rs. 450 Million in the annual plan 2002-2003.
- 3.4.3 All 6 States selected to participate in the Programme have made adequate provision in their Tenth Plan as well as a token provision in their annual plan 2002-2003 since the number of institution, which may get selected as Lead, and Network Institutions is not known. However upon selection of the institutions and their proposed fund requirements,

the State will allocate funds by making appropriate provision in BE or RE in the year of selection of the institutions.

### **3.5 Programme Accounting**

3.5.1 To ensure a transparent and accurate accounting system, the following actions are required:

- a) Separate books of accounts and record of fund flow for the Programme funds will be maintained by each management structure at institutional, State and National levels i.e. by LIPMU, NIPMU, SPFU, and NPIU. Each of these management structures will maintain standard Books of Account (Cash Book, Bank Book, Journal, Ledgers, etc.).
- b) The institutions will follow the applicable statutory procedures for maintaining accounts. However, records of expenditure incurred under the Programme will be kept separately for claiming reimbursement.
- c) There are well-defined components and expenditure categories for the purpose of claiming reimbursement under the Programme. Proper linkages will have to be established between the accounting head and the components/categories of expenditure.
- d) To ensure transparency in the system, accurate records will be kept at LIPMU, NIPMU, SPFU, and NPIU. These records will have to be supported by documents/vouchers, etc. in order to establish accuracy and authenticity of expenditures.
- e) Financial reports generated from the above accounting system will be comparable to Programme allocations, yearly budgets, forecasting and utilization of funds relating to physical and academic achievement as targeted under the Programme.

### **3.6 Internal Checks And Controls**

3.6.1 All the institutions to be funded under the Programme would be well performing institutions. Annual report containing audited accounts and audit report of all centrally funded institutions under the Programme will be laid on the table of both Houses of Parliament within a specified time frame of nine months from the date of closing of the financial year. Similarly, all State funded institutions will lay their accounts on the table of their respective Legislative Assembly.

3.6.2 The process of laying of audited annual accounts is very rigorous. The administrative Ministry/Department is required to review the reports and prepare a Review Statement and Delay Statement (explaining the reasons of delay, if any). These are required to be approved by the Minister In-charge and laid along with the Audited Accounts Reports. A Parliamentary Committee on Papers Laid on the Table conducts a detailed examination of these documents. It ensures the sound internal control mechanism at the institution level.

3.6.3 In addition, internal control mechanism at institutional, State and National levels i.e. by LIPMU, NIPMU, SPFU, and NPIU would include the following:

- a) Establishment of appropriate budgeting systems
- b) Regular monitoring of actual financial performance with budgets and targets

- c) Monitoring of physical and financial progress
- d) Establishment of procedures and systems for ensuring standard internal control such as checking of expenditures, appropriate documentation, levels of authorization, periodic bank reconciliation and physical verification

3.6.4 For the purpose of proper checks and control at the institutional level, the institutions will ensure the following:

- a) Maintain basic day-to-day transactions on a regular basis in separate registers and ledgers.
- b) Generation of Trial balance, reconciliation statements, receipts and payment, income and expenditure statements.
- c) Comparison of Statement of expenditure with the annual budgetary allocations, Programme components and categories of disbursement.
- d) Periodic checks on delay of payments on the pending bills and an immediate corrective action to be taken by LIPMU/NIPMU/SPFU and NPIU
- e) A finance committee at the institution level for yearly physical verification of assets independently.

### 3.7 Financial Reporting

3.7.1 The Quarterly Financial Management Report (FMR) will include

- a. Comparison of budgeted and actual expenditure and analysis of major variances.
- b. In case the disbursement is converted to FMR based, additional FMRs on (a) Withdrawals (b) Cash Forecast (c) Procurement Management for major contracts (d) Physical progress would have to be generated.

3.7.2 The formats are attached at Annex VIII. Project Financial Statements and FMRs will be generated manually.

3.7.3 In addition to the above, monthly statements of expenditure as per expenditure category/Components showing the allocations, current and cumulative expenditures at institutional, State and National levels i.e. by LIPMU, NIPMU, SPFU, and NPIU will be prepared.

### 3.8 Review And Analysis

- a) The Financial Reports will be reviewed by LIPMU/ NIPMU/BOG/ SPFU/NPIU/State Government/BTE. Each review will focus on physical and academic progress in the Programme, and make recommendations for future course of action to be taken by the institution.
- b) The LIPMU/NIPMU will ensure the correctness and reliability of financial data by comparing with the previous reports. The discrepancies found at the NPIU level will be referred to SPFU for reconciliation.
- c) Wherever delays occur in the reimbursement claims or the error/mistakes are noted, the same will be communicated to the concerned SPFU to take corrective measures by the NPIU.



In addition a quarterly review of the financial controls of the institutions and SPFUs will be conducted by NPIU.

### **3.9 Staffing and Training**

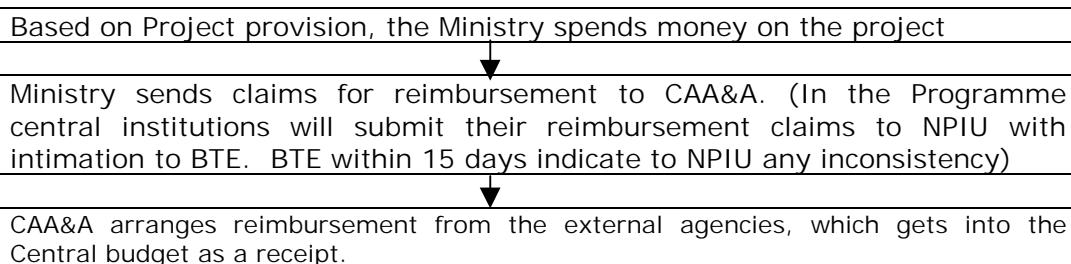
- 3.9.1 Finance cell of NPIU will be headed by a qualified finance professional as Financial Management Specialist. The specialist will be assisted by a qualified accountant designated as Accounts Manager. The Financial Management Specialist will be responsible for establishment of the agreed financial management arrangements, providing timely financial reports, facilitating smooth and timely flow of funds and providing overall guidance in respect of financial management issues including monitoring of expenditures, audit and internal control to SPFUs and the participating institutions.
- 3.9.2 At SPFUs, a Finance Coordinator who will be assisted with adequate support staff will head the finance function. He will be responsible for providing timely consolidated financial reports to the State authorities and the NPIU, monitoring of expenditures, providing overall guidance to the institutions, facilitating smooth flow of funds to all institutions and conduct of timely audit and ensuring consolidation of reimbursement claims.
- 3.9.3 At the institutional level a senior staff will be designated as in charge of the accounts function for the Programme funds. He will be responsible for complying with the disbursement procedures, financial reporting requirements, monitoring of Programme expenditures and audit. Accounts personnel to work exclusively on the Programme will be identified.
- 3.9.4 Entire financial staff under the Programme at institutional, State and National levels would be given training on financial management, and reimbursement procedures, etc.

### **3.10 External Assistance and Reimbursement Procedure**

- 3.10.1 The Programme is an externally assisted project and attracts the provisions of GOI policies in respect of externally assisted projects. Relevant extract from the External Assistance Manual of Ministry of Finance, GOI is given below:
- a) Under externally assisted projects, the external assistance received from various multilateral and bilateral agencies is passed on by GOI to the States as Additional Central Assistance (ACA) on the same terms and conditions as Central Assistance for State Plans. These are different from the conditions at which external assistance is received from various multilateral/bilateral agencies. For States not falling under the special category status, assistance is given in 30:70 mix of grant and loans. With effect from 1<sup>st</sup> April 2001 a loan with 20years maturity period will carry a rate of interest of 12%. Further, half of it carries a grace period of 5 years.
  - b) All external-aid disbursed by external agencies to GOI is first received by the Central Government in the Ministry of Finance (MOF), Department of Economic Affairs (DEA), office of Comptroller of Aid Accounts and Audit (CAA&A). The fund flow process in case of Central and State Sector Project is as below:

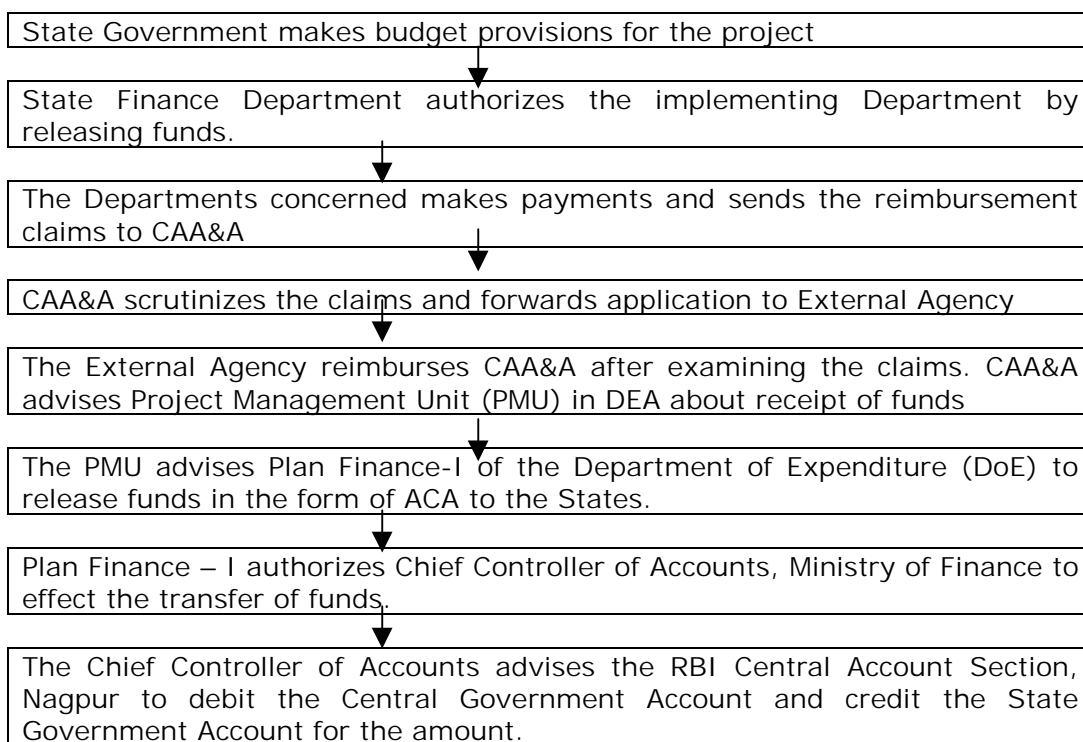
## Central Sector Projects

In case of Central Ministry/Department implemented projects, the external aid takes the following route:



## State Sector Projects

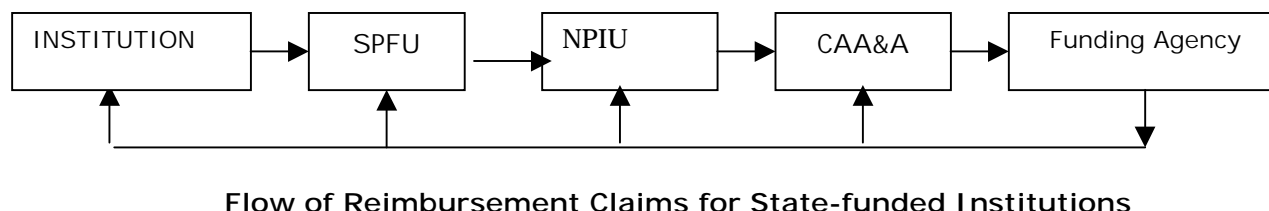
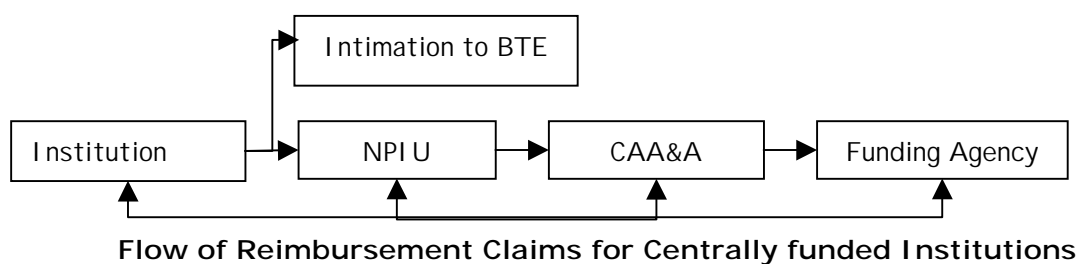
For the projects implemented by the State Govt. departments, the external assistance follows the route given below:



- c) The States initially incur expenditure on externally aided projects and thereafter claim reimbursement from GOI. In order to prevent any adverse effect on Project implementation by the States due to fund constraints and for expeditious utilization of external aid, a system of advance release of ACA is available up to 25% of the budgetary provision which is released by the Department of Expenditure on advice from the Department of Economic Affairs in the first month of a financial year. The States subsequently adjusts this against the reimbursement claim during the last 3 to 4 months of the financial year.

- d) The disbursement will be made in the traditional system (reimbursement with full documentation and against statement of expenditures). Under the traditional system of claiming disbursement, the Programme implementing agencies initially incurs the expenditure and then reimbursement is claimed by way of reimbursement claims. The reimbursement claims constitutes three parts:

1. Withdrawal Application
2. Summary Sheets
3. Documents such as invoices, bills, payment receipts, etc.



3.10.2 All State level institutions will send their claims to the SPFU and the Central institutions will send their claims to NPIU. SPFU after the scrutiny will send the claims to the NPIU, which will forward the same after necessary checks and verification to CAA&A for claiming disbursement every quarter. The Financial Coordinator at SPFU and Finance In-charge at the institutional level will be responsible for preparing quarterly claims and the Head of the Institution will ensure timely submission of these claims for the purpose of disbursement. CAA&A will examine these claims and take appropriate action for claiming disbursement from the World Bank. CAA&A will provide information on periodic disbursement status to NPIU, and the States.

### 3.11 Audit Arrangements under the Programme

- 3.11.1 All accounts maintained by the institutions in respect of funds released under the Programme would be audited as per existing agreed audit procedure(s).
- 3.11.2 A firm of Chartered Accountants empanelled with or acceptable to the Comptroller & Auditor General of India / State AG will audit accounts of NPIU and SPFUs. The Terms of Reference (TOR) for such audit are attached at Annex IX.
- 3.11.3 The audit at SPFU level will include audit of Statement of Expenditure (SOE), and the Programme accounts. The SPFU will be required to maintain the records of SOE and the Programme accounts separately to enable the auditor to carry out necessary checks and verification effectively. Further if the auditor feels necessary, they can audit the Programme accounts of the institutions.

- 3.11.4 The SPFU will be required to submit to the NPIU a consolidated audit certificate within four to five months of the closure of financial year i.e. by July/August every year and the same will be forwarded to the World Bank. For this purpose the institutions are required to furnish all documents / records to the auditors to facilitate timely audit.
- 3.11.5 A firm of Chartered Accountants will audit the Centrally funded institutions. The Terms of reference for such an audit are attached at Annex IX. Central institutions will submit their audit report to NPIU within four to five months of closure of financial year i.e. July/August every year. For this purpose the institutions are required to furnish all documents / records to the auditors to facilitate timely audit.
- 3.11.6 NPIU will consolidate the audit reports received from the Central institutions. This consolidation will focus on checking the arithmetical accuracy of the reports.
- 3.11.7 The World Bank will receive only eight audit reports (audit report of NPIU, 6 reports from SPFUs, and a consolidated audit report of the centrally funded institutions) through the NPIU within six months after close of financial year i.e. by September every year.
- 3.11.8 The Audit Reports will be unqualified and in the proforma prescribed. A sample proforma is given at Annex X.

### **3.12 Operation Manual**

An Operations Manual to enable the participating institutions, SPFUs, and NPIU to properly manage finances and report the same is under preparation. It will contain guidelines for accounting, procurement, financial reporting, audit, reimbursement, etc. The manual will essentially be on the same lines as the operation manuals prepared earlier by NPIU for Technician Education Projects.

It is not possible to finalize the manual at this stage as the disbursement categories and percentages, procurement of Civil Works, Goods and Services thresholds limits and procedures, etc. would be decided and frozen during the negotiations. The same will be finalized by December 2002.

## **SECTION-V**

### **1.0 PROGRAMME MONITORING AND EVALUATION**

- 1.1 The primary responsibility for monitoring lies with the Institutions themselves. The management structures at the Institutional level i.e. the BOG will monitor the progress of institutional projects on regular basis and issue directives to improve the performance. The monitoring of the Institutional Projects will also be undertaken by SPFUs every 3 months and reports will be sent to NPIU. The GOI and World Bank will conduct Bi-annual Joint Reviews of the Programme with assistance from the NPIU. The monitoring will be based on the action plans prepared by each institution and achievements made on a set of key performance indicators. These key indicators will be defined in the Project proposals of the institutions.
- 1.2 Focus of monitoring will be on the following five aspects:
- a) Implementation of reforms by institutions
  - b) Achievements in Programme Components and Sub-components

- c) Procurement of resources and services
- d) Utilization of financial allocations
- e) Achievement in Staff Development and Management Development activities

The above five aspects of Programme monitoring would require a holistic view of achievement of Programme goals and would not focus on mere completion of the Process.

1.3 The tools for evaluation of performance would be through the following:

- a) Institutional progress reports and internal quality and efficiency audit reports,
- b) Visits by SPFUs and NPIU,
- c) State Programme progress reports,
- d) Research studies and external quality and efficiency audit reports, and
- e) Interactions with stakeholders such as students, industry, teachers, employers and community representatives.

#### **1.4 Implementation of Reforms derived from National Policy on Education (NPE-1986 as revised in 1992) by Institutions**

1.4.1 Consequent to administrative and procedural reforms effected by States, Programme institutions are expected to carry out several reforms in academic practices, in the way institutions are administered and managed, and in the management of finances. Action plans for carrying out the reforms will be a part of project proposals. The reforms to be carried out may, among others, include:

- a) Introduce flexibility in all programme offerings,
- b) Introduce reforms in student performance evaluation,
- c) Establish the practices of student-evaluation of teachers' performance and teacher counselling,
- d) Provide incentives to teachers for participating in continuing education programmes, consulting services, services to community and economy, and for securing sponsored research & development projects,
- e) Establish a system for recognizing merit and outstanding performance of teachers,
- f) Offer service packages that would attract and retain good quality teachers,
- g) Establish a system for maintaining record of graduates and conducting regular tracer studies,
- h) Establish decentralized management and administrative systems with participation of all stake holders,

- i) Establish a Corpus Fund for development activities; a Staff Development Fund for supporting critical staff development activities; a Depreciation Fund for modernization of teaching and training facilities; and a Maintenance Fund for upkeep of equipment and physical infrastructure; and to frame rules for utilization of these funds;
- j) Institute measures for increasing recovery of cost of education;
- k) Institute practices for maximizing utilization of resources and reducing wastage; and
- l) Institute practices for regular audit of academic quality and financial efficiency, and implementation of improvement measures.

1.4.2 The reforms listed above would be monitored through quarterly institutional reports submitted to SPFUs, and verification of the same by SPFUs through external reforms-assessment audits. The auditors may evaluate progress/achievement on each of the above items on a 3 or 5-point scale.

1.4.3 Progress in implementation of the above reforms in institutions supported by the State would constitute an important component of State reports to be submitted for bi-annual Joint Reviews. The NPIU will, based on these State reports, present a State-wise performance report with analysis and suggest remedial actions required, if any, and present the same during Joint Reviews.

## 1.5 Achievements in Programme Components

1.5.1 All Programme institutions would be involved in implementation according to action plans developed to meet their individually identified goals for excellence/improved performance. The monitorable parameters related to Academic Excellence, Networking and Services to Community & Economy are not expected to be identical between institutions; the targets to be achieved within each parameter are also expected to vary substantially between institutions.

## 1.6 Procurement of Resources and Services

1.6.1 Implementation of Programme components will involve procurement of physical resources (civil works, equipment, vehicles, furniture and learning resources), appointment of key additional staff and use of consultant services in quantities determined in accordance with institutional action plans. Year-wise targets for each physical resource, additional staffing and consultant service would be set by institutions in their development plans and costed. Monitoring of the targets would be carried out at institutional, SPFU and NPIU levels.

## 1.7 Utilization of Financial Allocations

1.7.1 Financial monitoring will relate to expenditures under various pre-defined Programme components and expenditure categories and corresponding annual targets.

## **2.0 PROCEDURES FOR MONITORING**

- 2.1 LIPMU and NIPMU will monitor the Programme activities on day-to-day basis in their respective institutions, and present progress reports to their respective Board of Governors highlighting areas requiring guidance. The focus of monitoring at institutional level will be both on reforms and targets.
- 2.2 SPFU will consolidate the progress made at the State level quarterly and feed information to Secretary (Technical Education) in the State and to the NPIU. SPFU will also facilitate resolution of issues requiring State level attention.
- 2.3 NPIU will consolidate the progress made in all Programme institutions bi-annually, identify crucial areas including policy issues that are holding up progress of implementation and feed the information to the NPD.
- 2.4 The NPIU under the chairmanship of NPD will hold periodical review meetings with the officials of the SPFU and selected institutional heads.
- 2.5 The GOI and the World Bank will undertake Joint Bi-annual Reviews in which all Programme States would participate. These reviews will provide opportunity for participating institutions for interacting with all the stakeholders, and would help identify problem areas needing remedial actions at different levels.
- 2.6 A Joint Mid-term Review will also be undertaken by GOI and World Bank to assess progress of the Programme in the Programme states and to consider revised institutional development plans with new targets along with monetary allocations. The review would also take decisions regarding institutions that have not shown satisfactory performance.

### **Composition and Broad Functions of Screening Committees**

**(a) For screening Eligibility Applications of State sponsored institution**

- Secretary in-charge of Engineering Education      Chairperson
- One eminent educationist with background in Engineering education
- One eminent industrialist
- Director in-charge of Engineering Education      Member Secretary

**Broad Functions**

- Screening eligibility applications from the point of view of the claims made
- Verifying correctness of the data and information
- Scoring the application based on the criteria
- Preparing a rank order of Lead and Network Institutions on the basis of scores
- Identifying ineligible institutions and record their short comings

**(b) For screening Eligibility Applications of Centrally sponsored institutions**

- Joint Secretary In-charge of Engineering Education      Chairperson
- One ex-Director of IIT
- One eminent industrialist
- Divisional Head BTE      Member Secretary

**Broad Functions**

- Screening eligibility applications from the point of view of the claims made
- Verifying correctness of the data and information
- Scoring the application based on the criteria
- Preparing a rank order of Lead and Network Institutions on the basis of scores
- Identifying ineligible institutions and record their short comings

**(c) National Screening Committee for screening Eligibility Applications of all institutions**

- National Project Director      Chairperson
- One Director of IIT
- One eminent educationist
- One eminent industrialist
- CPA – NPIU      Member Secretary

**Broad Functions**

- Checking the scoring of applications
- Preparing a rank order of Lead and Network Institutions on the basis of scores of all eligible applications from selected institutions
- Identifying ineligible institutions and record their short comings



**Eligibility Application for Lead/Network Institutions  
(Engineering Institutions other than polytechnics)**

- |           |                      |                      |
|-----------|----------------------|----------------------|
| <b>1.</b> | <b>Status Sought</b> | <b>Lead/ Network</b> |
|-----------|----------------------|----------------------|
- 2. Institutional Identity**
- a) Name of the Institution
  - b) Year of Establishment
  - c) Name of the Head of the Institution
  - d) Postal Address
  - e) E-mail address (es)
  - f) Office Telephone Numbers with STD Code
  - g) Residential Telephone of Head of the Institution with STD Code
  - h) Fax Number with STD Code

**Part A: Willingness Declaration**

**1. Accreditation**

- (a) For inclusion in the Programme, institutions should either have accredited programmes or should have applied for accreditation to the NBA of the AICTE.

Please give following details:

- (i) Date of application submission: -----
- (ii) Name of courses for which accreditation applied for:
 

1-----
2-----
3-----
4-----
5-----
- (iii) Status of accreditation process: -----  
-----  
-----

**Note:** Institutions that have not applied for accreditation will not be allowed to participate in the Programme.

- (a) The Institution declares its willingness to comply with the eligibility criteria as below: (Please write Yes or No as appropriate. A blank will be taken as No)

S. No.	Eligibility Criteria	Response Yes/No
1	To accept academic autonomy with accountability as granted	
2	To accept full financial autonomy with accountability	
3	To accept full managerial autonomy with accountability	
4	To accept full administrative autonomy with accountability	

S. No.	Eligibility Criteria	Response Yes/No
5	To participate in all 3 sub-components of the Institutional Development component, namely Promoting Academic Excellence, Networking, Service to community and economy.	
6	To increase recovery of cost of education from students	
7	To accept non-plan funding on block grant basis ( <i>not applicable to unaided institutions</i> )	
8	To establish distinct Corpus Fund, Staff Development Fund, Depreciation / Renewal Fund and Maintenance Fund from the revenue generated and savings and to accept Central/State guidelines for utilization of these funds	
9	To accept the results of the enunciated process for award of competitive grants	
10	To institute positive measures for securing participation of faculty and students in providing service to community and economy	
11	To implement the Tribal Development Plan as envisaged under the Programme	

Note: Institutions intending to be a Lead Institution will be required to have autonomies as stated above by the time they get selected under the Programme

### Part B: Academic Attainment

1. The table below lists parameters for judging academic attainment of applicant institutions. The given benchmark values for each parameter indicate the minimum expected level of attainment. Applicant institutions are expected to meet or even exceed these values.
2. Level of attainment for each parameter would be evaluated as below:
  - a) Zero marks for attainment less than the benchmark value
  - b) Two marks for attainment equalling the benchmark value
  - c) Three marks for exceeding the benchmark value
  - d) Zero marks for a NO answer
  - e) Two marks for a YES answer
3. The theoretical maximum possible score is 68.
4. Applicant institutions may fall short of some benchmarks, meet some and exceed some.
5. To be eligible for the status of a Lead Institution, an applicant institution must score 51 or more marks.
6. To be eligible for the status of a Network Institution, an applicant institution must score at least 34 marks.
7. Applicant institutions scoring less than 34 marks will be considered ineligible for the current selection cycle. Such institutions may after improvements re-apply for eligibility in a subsequent cycle.
8. Institutions are strongly advised to make a self-assessment of their eligibility before submission of Eligibility Application.

S.No	Academic Attainment Parameters	Benchmark Value	Institutional Response	Marks Scored
1	No. of UG programs in Engineering	6		
2	No. of PG programs in Engineering	4		
3	Staff student ratio (based on faculty members in position)	1:15		
4	Percentage of faculty members with Ph.D. degrees in Engineering	20%		
5	Regular professors amongst the faculty (as % of total faculty strength)	10%		
6	Regular Asst. Professors amongst the faculty (as % of total faculty strength)	20%		
7	No. of research publications in Engineering in the last 3 years	0.1 x N *		
8	No. of titles in the Library	15000		
9	No. of Indian journals in Engineering	5 per each programme (UG and PG)**		
10	No. of International journals in Engineering	5 per each PG programme **		
11	No. of computers (Pentium III or better)	1 for every 50 students		
12	No. of PhDs produced in the institution	10		
13	No. of sponsored research projects completed in the last three years	10		
14	Total designs/fabrications (non-routine, precision accessories, etc.) in the last three years (Identify them)	5		
15	No. of consultancy assignments completed in the last three years	10		
16	No. of continuing education programs (of 3-day of duration or longer)	25		
17	No. of faculty members who are referees of International journals?	2		
18	No. of faculty members who have served on national committees	4		

\* N= Number of faculty in position.

\*\* It refers to total number of journals, for example, if an institution has 8 UG programmes and 7 PG programmes, benchmark for Indian journals (Criterion no. 9) will be  $(8+7) \times 5 = 75$  Journals. Similarly, benchmark for International Journals (Criterion no. 10) will be  $7 \times 5 = 35$  Journals.

S.No.	Parameter	Institutional Response (Yes/No)	Marks Scored
1	Are any of the conducted programs accredited?		
2	Does the institution have academic autonomy?		
3	Does the institution have managerial and administrative de-centralization?		
4	Is there a scheme of "sabbatical leave" for faculty members?		
5	Is there a regular teacher evaluation by students?		
6	Are the faculty members given study leave (with full salary and allowances)?		

S.N o.	Parameter	Institutional Response (Yes/No)	Marks Scored
7	Are the faculty members sponsored to attend national and/or international seminars and conferences?		

### Exceptional Cases

The cases of certain institutions offering only a few specialized courses, or of a University Department running only a few courses in only one or two disciplines are exceptional, and have to be treated separately based on the merits of the case.

## Eligibility Application for Lead/Network Polytechnics

**1. Status Sought** **Lead/ Network**

**2. Institutional Identity**

- a) Name of the Polytechnic
- b) Year of Establishment
- c) Name of the Head of the Polytechnic
- d) Postal Address
- e) E-mail address (es)
- f) Office Telephone Numbers with STD Code
- g) Residential Telephone of Head of the Polytechnic with STD Code
- h) Fax Number with STD Code

### Part A: Willingness Declaration

**1. Accreditation**

- (a) For inclusion in the Programme, institutions should either have accredited programmes or should have applied for accreditation to the NBA of the AICTE.

Please give following details:

(i) Date of application submission: -----

(ii) Name of courses for which accreditation applied for :

1-----

2-----

3-----

4-----

5-----

(iii) Status of accreditation process:-----  
-----  
-----  
-----

- (b) The polytechnic declares its willingness to comply with the eligibility criteria as below: (Please write Yes or No as appropriate. A blank will be taken as No)

S. No.	Eligibility Criteria	Response Yes/No
1	To accept very significant academic autonomy with accountability	
2	To accept full financial autonomy with accountability	
3	To accept full managerial autonomy with accountability	
4	To accept full administrative autonomy with accountability	
5	To participate in all 3 sub-components of Institutional Development component, namely Promoting Academic Excellence, Networking, Service to community and economy.	
6	To increase recovery of cost of education from students	
7	To accept non-plan funding on block grant basis ( <i>not applicable to unaided institutions</i> )	
8	To establish distinct Corpus Fund, Staff Development Fund, Depreciation / Renewal Fund and Maintenance Fund from the revenue generated and savings and to accept Central/State guidelines for utilization of these funds	
9	To accept the results of the enunciated process for award of competitive grants	
10	To institute positive measures for securing participation of faculty and students in providing service to community and economy	
11	To implement the Tribal Development Plan as envisaged under the Programme	

### Part B: Academic Attainment

1. The table below lists parameters for judging academic attainment of applicant polytechnics. The given benchmark values for each parameter indicate the minimum expected level of attainment. Applicant polytechnics are expected to meet or even exceed these values.
2. Level of attainment for each parameter would be evaluated as below:
  - a) Zero marks for attainment less than the benchmark value
  - b) Two marks for attainment equalling the benchmark value
  - c) Three marks for exceeding the benchmark value
  - d) Zero marks for a NO answer
  - e) Two marks for a YES answer
3. The theoretical maximum possible score is 52.
4. Applicant polytechnics may fall short of some benchmarks, meet some and exceed some.
5. To be eligible for the status of a Lead Polytechnic, an applicant polytechnic must score 39 or more marks.
6. To be eligible for the status of a Network Polytechnic, an applicant polytechnic must score at least 26 marks.

7. Applicant polytechnics scoring less than 26 marks will be considered ineligible for the current selection cycle. Such polytechnics may after improvements re-apply for eligibility in a subsequent cycle.
8. Polytechnics are strongly advised to make a self-assessment of their eligibility before submission of Eligibility Application.

S. No.	Academic Attainment Parameters	Benchmark value	Institutional Response	Marks Scored
1	No. of diploma programs in Engineering	6		
2	No. of post/advanced diploma programs in Engineering	2		
3	Staff student ratio (based on faculty members in position)	1:18		
4	Number of titles in the library	7000		
5	Number of Indian journals/technical periodicals in Engineering	25		
6	No. of computers (Pentium III or better)	1 for every 50 students		
7	Total designs/fabrications (non-routine, precision accessories, etc.) in the last 3 years (Identify them)	15		
8	Number of tailor-made courses for industries in the last 3 years	12		
9	No. of consultancy assignments completed in the last 3 years	10		
10	No. of continuing education programs (of 3-day of duration or longer)	50		
11	Internal revenue generated in the last 3 years	Rs. 1.5 Million		
12	No. of faculty members who have served on national/ state committees	4		

S.No	Parameter	Institutional Response (Yes/No)	Marks Scored
1	Are any of the conducted programs accredited?		
2	Does the institution have academic autonomy?		
3	Does the institution have managerial and administrative de-centralization?		
4	Is there a Production Center in the polytechnic?		
5	Is there a regular teacher evaluation by students?		
6	Are the faculty members given study leave (with full salary and allowances)?		
7	Are the faculty members sponsored to attend national seminars and conferences?		
8	Is there a Community Polytechnic Center/Cell?		

#### Exceptional Cases

The cases of certain polytechnics offering only a few specialized courses have to be treated separately based on the merits of the case.

### **Composition and Broad Functions of Evaluation Committee (For Evaluation of Composite Proposals)**

The Evaluation Committee will have certain members common from the National Selection Committee in order to maintain continuity.

- |    |  |                  |
|----|--|------------------|
| 1. | National Project Director  | Chairperson      |
| 2. | One ex or present Director of IIT  |                  |
| 3. | One eminent expert from different professional Organizations (such as ex or present/director of CSIR, DST, BARC, DRDO, AEC, ICAR, etc) |                  |
| 4. | One industrialist  |                  |
| 5. | One Institutional Financial Management expert  |                  |
| 6. | Engineering Education experts (relevant to the proposals – numbers to be decided by the NPD)   |                  |
| 7. | Central Project Advisor– NPIU  | Member Secretary |

#### **Broad Functions**

- Evaluating Composite Proposals of the selected institutions from the point of the claims made
- Evaluating the Composite Proposal based on the evaluation criteria and guidelines
- Verifying and check the information provided in the Proposals
- Visiting institutions to verify the facts stated in the Proposals
- Preparing a rank order of the clusters to be funded under the Programme
- Providing information to the National Selection Committee

The composition of the Sub Evaluation Committees will be as below:

- |    |   |                  |
|----|---|------------------|
| 1. | Institutional Management Expert               | Chairperson      |
| 2. | One Engineering Education Expert              |                  |
| 3. | One Institutional Financial Management Expert |                  |
| 4. | One industrialist                             |                  |
| 5. | Senior NPIU Officer                           | Member Secretary |



## Composition and Broad Functions of National Selection Committee (NSC)

The Union Minister of Human Resource Development will constitute a National Committee for selecting Composite Proposals for funding. It would be composed as below:

1. Secretary, Department of Secondary Education and Higher Education, MHRD Chairperson
2. One ex or present Director of IIT
3. Three eminent experts from different professional Organizations (such as ex or present/director of CSIR, DST, BARC, DRDO, AEC, ICAR, etc)
4. Two industrialists
5. National Project Director Member Secretary

### Broad Functions

- The NSC will consider the scores, evaluation reports and ranking carried out by Evaluation Committee
- Select the Institutional Clusters based on judgment of its members of how best the proposals fit into Programme objectives and help India in its drive towards global competitiveness.
- The NSC would prepare a final ranked list of Composite Proposals.

## Report of the Committee on Suggested Mechanism of Funding Private Institutions

The NPD constituted a Committee comprising of the following members to recommend a mechanism of funding Private Institutions under the Programme.

a)	Principal Secretary (Technical Education), Uttar Pradesh	Chairman
b)	Secretary Technical Education, Madhya Pradesh	Member
c)	Commissioner and Director Technical Education, Andhra Pradesh	Member
d)	Director (Technical Education), Maharashtra	Member
e)	Director (Technical Education), Haryana	Member
f)	Representative of Private Institution	Member
g)	Administrative Officer NPIU	Member Secretary

The Committee recommended the following:

- i) Reimbursement Procedure: Initially, the institutions may put their own money for incurring expenditure on the project components and claim reimbursement from the State. The State would ensure reimbursement to the institutions within one month. The concerned State Government may offer the loan and the modalities of reimbursement claim may be worked out mutually between the State and the institution. Separate records may be maintained at the State level for the private institutions.
- ii) The loan may be recovered from the tuition fee collected from the students by the State Government.
- iii) The assets acquired from loan would be mortgage to the State Government till the loan and interest is recovered. In addition to this, if the State Government feels that additional security is required for the amount provided for other activities under the project, the State may seek the same depending upon the loan amount disbursed from time to time. The modalities for seeking such securities may be mutually agreed between the State Government and the Private Institution.
- iv) The period of moratorium may be 3 years after the final disbursement of loan. The entire loan would be recovered within 7 years after the moratorium period
- v) The State may consider providing the interest rate on such loans attractive to encourage private institutions to participate in the Programme
- vi) The State may also consider making provision for advance of the first instalment of the approved allocation for the first year of the project as reflected in the proposals of private institutions, if the institution so requests. The terms and conditions of such an advance may be agreed between the State and the Institution.

The above are only recommendations. The States may adopt/fine tune the above mechanism or evolve an alternative mechanism that is viable, workable and mutually acceptable between the States and the Private Institutions.

## **An Extract of the Report of the Expert Committee on Review of Funding Pattern of IITs – April 2002 (MHRD)**

(The Programme States may consider the recommendations of the Committee and develop the mechanism of the Block Grant Funding for the non-plan funds for the institutions under the Programme)

### **Introduction**

Central Government provides Non-Plan and Plan grants to the IITs. Non-Plan grants are provided to meet expenses on account of pay and allowances, pension, departmental operating expenses, minor equipment, library, estate maintenance, electricity and water charges, student amenities, hospital and transport, scholarship, subsidies and contingencies.

**Plan grants are provided to IITs for infrastructure renewal for existing programs and activities or for infrastructure creation for starting new programmes and increase student numbers.**

As a part of overall Government strategy to reduce public expenditure, Government has been insisting on zero-based budgeting and early implementation of the Recommendations of the Expenditure Reforms Commission (ERC).

There is rich international experience on shift from incremental funding to formula based funding for academic activities in higher education institutions all over the world. Formula based funding is essentially an extension of zero based budgeting that the Government is committed to implement. Internationally, most research funds are distributed selectively to higher education institutions on competitive basis. Student numbers have been increased in many higher education systems at marginal costs much less than the average cost. In UK, Government statisticians have computed marginal cost per student at 30% of the average cost. By using lever of reducing marginal costs, UK has increased its higher education enrolments very substantially in recent years.

### **Non-Plan Funding**

A Block Grant System for Non-plan funding for IITs (also IIMs and IISc, Bangalore) was introduced from the year 1993-94 onwards. This was aimed at addressing problems with net deficit funding (gap-filling approach) that had disincentives for internal resource generation and to reduce expenditure. Its objectives were:

- (1) To infuse economy in operations, achieve higher level of efficiency and reduce administrative expenditure.
- (2) To bring an *end to steady increase in non-plan grants* on annual basis.
- (3) To promote Internal resource generation.
- (4) To provide greater financial autonomy - by allowing interest income from corpus to be utilized to advance Institute's interests and to meet crucial gaps.
- (5) To provide greater autonomy in internal administration.
- (6) To facilitate higher level of activity consistent with country's integration with the global economy.

Its main components were:

- Base level (with base level at RE of 92-93 plus ten percent)
- Allow Endowment fund for creation of corpus (Expectation were that IITs would have a corpus of Rs.200-250 Million or even higher level)
- Transfer of non-plan savings and all revenue receipts to corpus.
- Matching grants - For Savings, revenue receipts and donations.

- Force Majeure for steep increase in DA and unforeseen expenses.
- Greater autonomy in internal administration with only constraints on pay scales and number of Group A posts.

However, there were some aberrations in the existing system. In view of the aberrations and taking into consideration the new policy environment, need for greater clarity in funding of IITs is strongly felt. Keeping these in view, following recommendations are made:

- (1) From a uniform level of funding with little variation for historical rather than academic reasons, non-plan funding for IITs should be *formula based with outcome focus*. Broad principle should be that *similar activities are funded at similar rates and any variations should be based on sound and justifiable reasons*.
- (2) The portion of the *corpus created from Non-Plan savings and interest thereon should be utilised for further development* of the IIT system. Within the broad framework provided by the Council and the Government, the IITs should be at liberty to use these funds according to their own perspective plan. This could be for renewal of existing infrastructure or creation of new one or even for new campus development. New campuses should be at a manageable distance from the existing campuses and within the vicinity of the industrial clusters as far as possible. Science & Technology Entrepreneurship Parks (STEPS) could also be planned.
- (3) The Government should make unambiguous commitment in explicit and clear terms that the financial support to the IITs at levels required would continue to be available for all time to come. IITs should not suffer from a sense of insecurity.
- (4) There is need for greater thrust on generation of income from other sources. *Matching grants* have fulfilled their initial objective of encouraging internal resource generation. These need not be continued now.
- (5) Under the formula based funding, IITs could continue to have corpus fund. The Institutes would however be encouraged to use interest income from the corpus to meet crucial gaps and enjoy greater financial autonomy within the broad parameters laid down for the purpose.
- (6) *Tuition fees* for core programs should not be seen as a source of income. Tuition fees should be revised periodically keeping both the capacity to pay and cost of education in view. Increases in tuition fees should be accompanied with suitable schemes of *scholarships and free-ships* for weaker sections of society to promote equity. There should be more scholarship schemes including high value scholarships for truly outstanding students in PG / Research programs. Greater flexibility should be provided to the IIT system both for determining tuition fees and instituting scholarships within the above broad parameters for promoting equity through cross-subsidization and for providing special thrust to PG Education and Research.
- (7) IITs should be provided greater autonomy in their internal administration within overall formula based block grants subject to the following constraints:
  - The Pay scales in the Institutes will be as approved by the IIT Council from time to time.
  - The number of Group A post in the Institutes will not be changed without the prior approval of the Government.
  - The pay scales of the Heads of the Institutes (e.g. Directors) and one level below will not be changed without Government approval.

It is felt that formula for Non-Plan funding should be primarily based on the volume of activity in these Institutes, which in turn would be in direct proportion to the student numbers in core programs. Accordingly, 90 % of the non-plan grants could be based on student numbers. Post-graduate student numbers and doctoral student numbers are counted at a rate of 1.5 and 2.5 respectively in view of greater activity generated by the PG and research programs and to

provide thrust to PG education and research in the IIT system. Part-time students may be counted at the rate of 0.5 Full-Time Equivalent (FTE) per student.

Research activities in the IITs are generated either as a result of sponsored research or research work as a part of doctoral and post-graduate thesis and project work or generic research conducted by the faculty on their own initiatives. Since the funding for sponsored research is on competitive basis either through Ministry of HRD, Ministry of Science & Technology or other agencies, therefore, non-Plan grants to support sponsored research are not proposed. However, funds for infrastructure development to support sponsored research are recommended. Further, the Expert Committee recommends that the faculty salaries in proportion to time spent by faculty on sponsored projects should come from the organization sponsoring research. This would provide the IITs a cushion to further development of research activities. Research outcomes from doctoral and post-graduate programmes are already factored in by counting their numbers @ 1.5 and 2.5 respectively. To meet recurring expenditure on generic research, five percent non-Plan grant is proposed on generic research outcome based on number of patents and publications (other than outcome of sponsored research). Though, this works out to be substantial (Rs.30 – 40 Million per annum), however, some members felt that higher priority be given to research. It was therefore decided that this could suitably adjusted based on present and the desirable level of recurring expenditure on research activities (other than sponsored research). The Expert Committee noted that consultancy has to be self-sustaining activity and need not be provided recurring grant, however it should be factored in while providing performance-based plan grants. It noted that consultancy should be taken up without comprising on their core functions of teaching research and academic administration.

In addition to the core programs (undergraduate, post-graduate, integrated and doctoral programs), Institutes also run full-time or part-time mainly short-duration programs for working professionals. These are mainly on self-sustaining basis. Therefore they need not be provided non-plan grants. This should however be a parameter for performance for allocation of plan funds.

Finally, a 5% non-plan grant is proposed on institutional factors such as huge campus size, its location, infrastructure bottlenecks, large number of departments and faculties etc.

Ideally, optimum unit cost should be computed and student numbers (in FTEs) be multiplied with this for the purpose of giving grants. Punnaya Committee and Pyalee Committee have given suggestions for activity based unit cost calculations in the higher education system in the country. As per these suggestions, process of computing optimum unit cost may be initiated. The unit cost should be revised every two years. Meanwhile, we may take actual Non-Plan expenditure (other than transferred to corpus) during 2001-2002 and divide it by student numbers (in FTEs) to reach a average cost figure for fixing grants during the initial years. Pension liabilities should not be included in the formula based non-plan grant and should be met by the Government as per actual.

#### • **Non-Plan Funding Formula**

- Based on Student Numbers: 90 % (In terms of Full-Time Undergraduate Equivalents - FTE with multiple of 1.5 for Postgraduate students, 2.5 for Doctoral students and 0.5 for part-time student)
- Based on Generic Research Output: 5%\* (Based on patents / publications other than outcome of sponsored research)
- Based on Other Considerations: 5% (Campus size, its location and infrastructure bottlenecks, large number of departments / faculties.
- 

\* To be adjusted in course of time consistent with higher thrust for research.

In course of transition from present ad hoc system of funding to formula based funding, we may see that in some IITs, formula based non-plan grants is substantially lower than the actual grant during the last year. In such cases, a programme of migration of such institutions to bring them within tolerance band may be chalked out either by reducing their grant or increasing student numbers over a period of time.

### Funding Procedure

Each IIT should prepare its long-term perspective plan with annual milestones. Each year IIT may submit details of their achievement over the previous year and plans and projections for the next year. With the parameters above and taking into consideration their capacity to use funds, the Central Government within the overall allocation for the IIT system may fix the IIT-wise non-plan and plan grants. Release of funds should be made in three installments in forty percent in the April, forty percent in the month of October and balance twenty percent in the month of January each year as provided in the block grant scheme.

Within the budget allocated, the Institute should be totally free to allocate the budget internally in accordance with the perceived needs / priorities of the IIT in that year. It is however desirable that even IITs have objective criterion with outcome focus for devolution of funds to its different units to *promote internal efficiency*. All this would require a major change in mindset to improve the size and quality of deliverable output for a given input resource giving flexibility in its allocation to various currently perceived priorities in the Institute.

Based on the parameters for formula based funding, a Memorandum of Understanding (MOU) should be drawn up each year as conceived by the Expenditure Reforms Commission (ERC). This agreement should be constructed in broad terms. This would bring in greater accountability and would result in overall systemic efficiency. This would encourage Institutes to curtail non-essential expenditure, reduce non-academic work force, recruit only when it is absolutely essential without taking their freedom to create and fill-up new positions if absolutely required. In short, this would facilitate in implementation of the recommendations of the ERC.

The Committee recommends adoption of this approach for inter-se allocation of Plan and non-Plan grants between the IITs from the current year (2002-2003) itself. It expects that this would bring in healthy competition between the IITs enabling the Government to enable the system to achieve nationally desirably goals.

### Financial Management Report (FMR)

#### Technical Education Quality Improvement Programme of Government of India Use of Funds by Component/Expenditure Category for the Quarter Ending

Rs. In Million

Component/Category	Actual		Planned		Variance		
	Current Quarter	Cumulative	Current Quarter	Cumulative	Current Quarter	Cumulative	
<b>Programme Component - 1 : Institutional Development (Competitive Funding)</b>							
1	Civil Works						
2	Goods*						
3	Books & LRs						
4	Consultancies						
5	Trainings, fellowships and workshops						
6	Incremental Operating Expenses						
<b>Total</b>							
<b>Programme Component - 2 : System Management Capacity Improvement ( Non-Competitive Funding)</b>							
I	Goods*						
II	Books & LRs						
III	Consultancies						
IV	Trainings, fellowships and workshops						
V	Incremental Operating Expenses						
<b>Total</b>							

\* Goods includes Equipment, Furniture & Vehicles

Technical Education Quality Improvement Programme of Government of India

Cash Forecast for Quarter ending .....

Rs. In Million

Disbursement Category		Cash requirement for the next first Quarter ending	Cash requirement for the next second Quarter ending	Total Cash requirement for six months ending	100% Govt. Financed Expenditures	Government & World Bank financed expenditures	World Bank eligible %	World Bank Eligible Cash requirement for the six months ending
Sl. No.	Particulars	1	2	3 = 1+2	4	5	6	7 = 5 X 6
<b>Programme Component - 1 : Institutional Development (Competitive Funding)</b>								
1	Civil Works							
2	Goods*							
3	Books & LRs							
4	Consultancies							
5	Trainings, fellowships and workshops							
6	Incremental Operating Expenses							
<b>Total</b>								
<b>Programme Component - 2 : System Management Capacity Improvement ( Non-Competitive Funding)</b>								
I	Goods*							
II	Books & LRs							
III	Consultancies							
IV	Trainings, fellowships and workshops							
V	Incremental Operating Expenses							
<b>Total</b>								

\* Goods includes Equipment, Furniture & Vehicles



Technical Education Quality Improvement Programme of Government of India							
Withdrawal for Quarter ending .....							
In Million							
Disbursement Category	Eligible % age	Expenditure incurred during the Quarter (Rs.)	Eligible Expenditure for reimbursement during Quarter (Rs.)	Expenditure incurred during the Quarter (USD)	Eligible Expenditure for reimbursement during Quarter (USD)	Total Bank Disbursement To-date	Bank Credit
<b>Programme Component - 1 : Institutional Development (Competitive Funding)</b>							
1	Civil Works						
2	Goods*						
3	Books & LRs						
4	Consultancies						
5	Trainings, fellowships and workshops						
6	Incremental Operating Expenses						
<b>Total</b>							
<b>Programme Component - 2 : System Management Capacity Improvement ( Non-Competitive Funding)</b>							
I	Goods*						
II	Books & LRs						
III	Consultancies						
IV	Trainings, fellowships and workshops						
V	Incremental Operating Expenses						
<b>Total</b>							

\* Goods includes Equipment, Furniture & Vehicles





## SAMPLE TERMS OF REFERENCE FOR THE AUDIT OF PROJECT FINANCIAL STATEMENTS (and Accompanying SOE and SA Where Applicable)

### Objective

The objective of the audit of the Project Financial Statement (PFS) is to enable the auditor to express a professional opinion on the financial position of [\_\_\_\_\_] project at the end of each fiscal year and of the funds received and expenditures for the accounting period ended mm/dd/yy, as reported by the PFS, [as well as an opinion on the Statement of Expenditures].

The project accounts (books of account) provide the basis for preparation of the PFS and are established to reflect the financial transactions in respect of the project, as maintained by the project-implementing agency [\_\_\_\_\_].

### Scope

The audit will be carried out in accordance with International Standards of Auditing, and will include such tests and controls, as the auditor considers necessary under the circumstances. In conducting the audit, special attention should be paid to the following:

- (a) All external funds have been used in accordance with the conditions of the relevant financing agreements, with due attention to economy and efficiency, and only for the purposes for which the financing was provided. Relevant financing agreements are (-----  
---name of loan agreement);
- (b) Counterpart funds have been provided and used in accordance with the relevant financing agreements, with due attention to economy and efficiency, and only for the purposes for which they were provided;
- (c) Goods and services financed have been procured in accordance with the relevant financing agreement;
- (d) All necessary supporting documents, records, and accounts have been kept in respect of all project ventures [including expenditures reported via SOEs or SAs]. Clear linkages should exist between the books of account and reports presented to the Bank.
- (e) Where Special Accounts have been used, they have been maintained in accordance with the provisions of the relevant financing agreement.
- (f) The project accounts have been prepared in accordance with consistently applied International Accounting Standards and give a true and fair view of the financial situation of the project mm/dd/yy and of resources and expenditures for the year ended on that date.

### Project Financial Statements

The Project Financial Statements should include

- (a) A Summary of Funds received, showing the World Bank, project funds from other donors, and counterpart funds separately;
- (b) A Summary of Expenditures shown under the main project headings and by main categories of expenditures, both for the current fiscal year and accumulated to date; and
- (c) A Balance Sheet showing Accumulated Funds of the Project, bank balances, other assets of the project, and liabilities, if any.

As an annex to the Project Financial Statements, the auditor should prepare a reconciliation between the amounts shown as "received by the project from the World Bank" and that shown as being disbursed by the Bank. As part of that reconciliation, the auditor should indicate the mechanism for the disbursement, i.e. Special Accounts, Statements of Expenditures, or direct reimbursement,

## Statements of Expenditures

In addition to the audit of the PFS, the auditor is required to audit all SOEs used as the basis for the submission of withdrawal applications. The auditor should apply such tests and controls, as the auditor considers necessary under the circumstances. These expenditures should be carefully compared for project eligibility with the relevant financing agreements, and with reference to the Staff Appraisal Report for guidance when considered necessary. Where ineligible expenditures are identified as having been included in withdrawal applications and reimbursed against, these should be separately noted by the auditor. Annexed to the Project Financial Statements should be a schedule listing individual SOE withdrawal applications by specific reference number and amount. The total withdrawals under the SOE procedure should be part of the overall reconciliation of Bank disbursements described above.

## Special Accounts

In conjunction with the audit of the Project Financial Statements, the auditor is also required to audit the activities of the Special Accounts associated with the Project. The Special Accounts usually comprise

- Deposits and replenishments received from the Bank
- Payments substantiated by withdrawal applications
- Interest that may be earned from the balances and which belong to the borrower; and
- The remaining balances at the end of each fiscal year.

The auditor must form an opinion as to the degree of compliance with the Bank's procedures and the balance of the Special Account at year-end. The audit should examine the eligibility and correctness of financial transaction during the period under REVIEW and fund balances at the end of such a period, the operation and use of the SA in accordance with the financing agreement, and the adequacy of internal controls for this type of disbursement mechanism.

For this project, the Special Accounts are referred to in [cite references] of the relevant financing agreements. Special Accounts statements and the auditor's report should with the Project Financial Statements.

## Audit Opinion

Besides a primary opinion on the Project Financial Statements, the annual audit report of the Project Accounts should include a separate paragraph commenting on the accuracy and propriety of expenditures withdrawn under SOE procedures and the extent to which the Bank can rely on SOEs as a basis for loan disbursement. The financial statements, including the audit report, should be received by the Bank no later than [three to six] months after the end of the accounting period to which the audit refers. The auditor should submit the report to the borrower's designated agent rather than to any staff member of the project entity. The agent should then promptly forward two copies of the audited accounts and report to the Bank.

## Management Letter

In addition to the audit reports, the auditor will prepare a "management letter," in which the auditor will:

- (a) Give comments and observations on the accounting records, systems, and controls that were examined during the course of the audit;
- (b) Identify specific deficiencies and areas of weakness in systems and controls and make recommendation for their improvement;
- (c) Report on the degree of compliance of each of the financial covenants on the financing agreement and give comments, if any, on internal and external matters affecting such compliance;

- (d) Communicate matters that have come to attention during the audit which might have a significant impact on the implementation of the project; and
- (e) Bring to the borrower's attention any other matters that the auditors considers pertinent.

**General**

The auditor should be given access to all legal documents, correspondence, and any other information associated with the project and deemed necessary by the auditor. Confirmation should also be obtained of amounts disbursed and outstanding at the Bank [and of amounts disbursed under [specify other donor, loan or grant, if any]]. Bank Task Managers can assist in obtaining these confirmations.

It is highly desirable that the auditor becomes familiar with a copy of the Bank's Guidelines on Financial Reporting and Auditing of Projects Financed by the World Bank, which summarizes the Bank's financial reporting and auditing requirements. The auditor should also be familiar with the Bank's Disbursement Manual. Both documents will be provided by the Task Manager.

**MODEL AUDIT REPORT**  
**Unqualified Opinion**  
**(for Project Financial Statement Including SOE)**

Addressee \*

### **Introductory Paragraph**

We have audited the accompanying financial statements of the [\_\_\_\_\_] Project [financed under World Bank Loan No. \_\_\_\_\_/IDA as of December 31, 20XX [indicate any other additional years necessary] for the year(s) then ended. Our responsibility is to express an opinion on these financial statements based on our audit.

### **Scope Paragraph**

We conducted our audit in accordance with International Standards on Auditing [or relevant national standards or practices, and/or World Bank guidelines]. Those Standards and/or World Bank guidelines require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

### **A Opinion Paragraph**

In our opinion, the financial statements give a true and fair view of the Sources and Application of Funds\*\* of \_\_\_\_\_ Project for the year ended December 31, 20XX, in accordance with [indicate International Accounting Standards or relevant national standards. Add "financial position" at December 31, 20XX where a balance sheet is required]

In addition, (a) with respect to SOEs, adequate supporting documentation has been maintained to support claims to the World Bank for reimbursements of expenditures incurred; and (b) which expenditures are eligible for financing under the Loan/Credit Agreement [Ln/Cr. \_\_\_\_\_].

[Name and Address of Audit Firm]

[date – Completion Date of Audit]

\* The auditor's report should be appropriately addressed as required by the circumstances of the engagement and local regulations.

\*\* A "Source and Application of Funds" statement is always required for each project. A balance sheet is also required where the project has assets and liabilities.

**SUGGESTED CONTENTS OF MEMORANDUM OF UNDERSTANDING**  
**BETWEEN**  
**PROGRAMME STATE AND INSTITUTION**

The Memorandum of Understanding is made on the \_\_\_\_\_ Day of the month of \_\_\_\_\_ between the State of \_\_\_\_\_ acting through the Department of Technical Education and \_\_\_\_\_(name of institution)\_\_\_\_\_.

Where as

- (a) The Government of India has secured an IDA **Credit** from the World Bank an amount equivalent to US \$ \_\_\_\_\_ Million for purpose of financing expenditure under the Technical Education Quality Improvement Programme.
- (b) In pursuance of NPE 1986 as revised in 1992 both State\_\_\_\_\_ and the Institution\_\_\_\_\_ agree to implement all academic and non- academic reforms as committed under the Programme;
- (c) The State of \_\_\_\_\_ has agreed to carry out its part of the Programme and cause the \_\_\_\_\_(name of institution) to carry out such part of the Programme with due diligence and efficiency in conformity with appropriate administrative, financial and educational practices and provide or cause to be provided, promptly as needed, the funds, facilities, services and other resources and required for the Programme;
- (d) State Project Facilitation Unit has been duly constituted within Department of Technical Education to facilitate implementation of the Programme activities;

NOW THEREFORE the State of \_\_\_\_\_ (hereinafter referred to as the first party) and the \_\_\_\_\_(name of institution) (hereinafter referred to as the second party) hereby agree as follows:

**1. PROCEDURE FOR SANCTIONING GRANT:**

- (a) Funds towards the approved project cost of the second party for each year will be provided by the first party from out of its own budget.
- (b) The first party shall release funds to the second party in three/four installments during each year of the Programme in a timely manner for the anticipated expenditures of the second party for implementation of eligible activities;
- (c) The funds will be released by cheque/draft in 3 to 4 installments between the first and fifth day of the months \_\_\_\_\_every year for the duration of the Programme period
- (d) **The first installment will not be more than 20% of the grant/loan amount and will be based on the committed expenditure as per the annual plan. Further installments will be released on the receipt of utilization status. Each subsequent installment will be released on utilization of 70% of the amount of the previous installments.**
- (e) The State allows the institution to retain the interest accrued if any out of the Programme funds and use the same for institutional development activity.

**2. OBLIGATION OF THE SECOND PARTY**

The Second party shall:



- (a) Comply with the terms and conditions governing the release of funds by the first party;
- (b) Follow TEQIP guidelines and procedures prescribed by Government of India for implementation of the Programme in the \_\_\_\_\_ State in pursuance of obligations set forth or referred to in the Programme Agreements;
- (c) Follow procedures for procurement of civil works, goods and equipments and consultancy services required for implementation of the Programme as set forth in the Programme Agreement;
- (d) Institute satisfactory arrangement for opening and operation of bank accounts for flow of funds from the State to \_\_\_\_\_ (name of the institution)
- (e) Establish financial management system as mentioned in the Operations Manual such as providing details of procurement of civil works, goods and equipments and consultancy services and other items as mentioned in the institutional project proposals.

### **3. OBLIGATIONS OF THE FIRST PARTY**

The first party shall;

- (a) Render or arrange to render such technical assistance and guidance as may be needed by the Second party for an effective and efficient implementation of the Programme.

### **4. ACCOUNTING, FINANCING AND AUDIT ARRANGEMENTS**

- (a) The second party shall maintain a separate account and record of the Programme funds received from the first party and render annual accounts and utilization certificate for the funds released as per the mechanism indicated above;
- (b) The second party shall also furnish to the first party at regular intervals reimbursement claims in the prescribed form for seeking reimbursement towards eligible expenditures, in accordance with the procedures as mentioned in the Operations Manual;
- (c) The accounts of the \_\_\_\_\_ (institution) shall be audited as indicated in the Operations Manual. The audited accounts along with a copy of the audit report shall be furnished to the first party every year as per the schedule indicated in the Operations Manual; and

### **5. REPORTING OBLIGATIONS**

The second party shall submit to first party all reports and documents relating to progress of the Project, Accounts, Audit, Procurement, Disbursement and Annual Work Plan, as specified in the Operations Manual and at such frequency as may be required by the First Party.

### **6. INTERPRETATION**

The Decision of Secretary (Education), Department of Technical Education, Government of \_\_\_\_\_, in regard to interpretation of any clause in this MOU will be final and binding on both the parties.

**7. SETTLEMENT OF DISPUTES**

The two parties to this MOU agree to act in good faith and in a spirit of mutual understanding and accommodation to facilitate the achievement of goals set under the Programme.

In WITNESS WHERE OF the Parties hereto have caused this MOU to be signed in their respective names as of the day and year first above written.

Principal,

FOR AND BEHALF OF \_\_\_\_\_  
(Name of the Institution \_\_\_\_\_)

For and on Behalf of  
Department Of Technical  
Education, Government of \_\_\_\_\_

Witness 1 \_\_\_\_\_

Witness 2 \_\_\_\_\_

## SUGGESTED CONTENTS OF MEMORANDUM OF UNDERSTANDING

### BETWEEN

### MINISTRY OF HUMAN RESOURCE DEVELOPMENT (MHRD) AND CENTRALLY SPONSORED INSTITUTION

The Memorandum of Understanding is made on the \_\_\_\_\_ Day of the month of \_\_\_\_\_ between the MHRD and \_\_\_\_\_ (name of institution) \_\_\_\_\_.

Where as

- (a) The Government of India has secured an IDA **Credit** from the World Bank an amount equivalent to US \$ \_\_\_\_\_ Million for purpose of financing expenditure under the Technical Education Quality Improvement Programme.
- (b) In pursuance of NPE 1986 as revised in 1992 both MHRD and the Institution \_\_\_\_\_ agree to implement all academic and non- academic reforms as committed under the Programme;
- (c) The MHRD has agreed to carry out its part of the Programme and cause the \_\_\_\_\_ (name of institution) to carry out such part of the Programme with due diligence and efficiency in conformity with appropriate administrative, financial and educational practices and provide or cause to be provided, promptly as needed, the funds, facilities, services and other resources and required for the Programme;
- (d) The National Project Implementation Unit has been duly constituted by MHRD to facilitate implementation of the Programme activities;

NOW THEREFORE the MHRD (hereinafter referred to as the first party) and the \_\_\_\_\_ (name of institution) (hereinafter referred to as the second party) hereby agree as follows:

#### 1. PROCEDURE FOR SANCTIONING GRANT:

- (a) The first party from out of its own budget will provide funds towards the approved project cost of the second party for each year.
- (b) The funds will be released by cheque/draft in 3 to 4 installments between the first and fifth day of the months \_\_\_\_\_ every year for the duration of the Programme period
- (f) **The first installment will not be more than 20% of the grant/loan amount and will be based on the committed expenditure as per the annual plan. Further installments will be released on the receipt of utilization status. Each subsequent installment will be released on utilization of 70% of the amount of the previous installments.**
- (c) The **MHRD** allows the institution to retain the interest accrued if any out of the Programme funds and use the same for institutional development activity.

#### 2. OBLIGATION OF THE SECOND PARTY

The Second party shall:

- (a) Comply with the terms and conditions governing the release of funds by the first party;

- (b) Follow TEQIP guidelines and procedures prescribed by Government of India for implementation of the Programme in pursuance of obligations set forth or referred to in the Programme Agreements;
- (c) Follow procedures for procurement of civil works, goods and equipments and consultancy services required for implementation of the Programme as set forth in the Programme Agreement;
- (d) Institute satisfactory arrangement for opening and operation of bank accounts for flow of funds from the MHRD to \_\_\_\_\_ (name of the institution)
- (e) Establish financial management system as mentioned in the Operations Manual such as providing details of procurement of civil works, goods and equipments and consultancy services and other items as mentioned in the institutional project proposals.

### **3. OBLIGATIONS OF THE FIRST PARTY**

The first party shall;

- (a) Make available to the second party requisite funds in a prompt and timely manner to enable the second party to undertake the activities; and
- (b) Render or arrange to render such technical assistance and guidance as may be needed by the Second party for an effective and efficient implementation of the Programme.

### **4. ACCOUNTING, FINANCING AND AUDIT ARRANGEMENTS**

- (a) The second party shall maintain a separate account and record of the Programme funds received from the first party and render annual accounts and utilization certificate for the funds released as per the mechanism indicated above;
- (b) The second party shall also furnish to the first party at regular intervals reimbursement claims in the prescribed form for seeking reimbursement towards eligible expenditures, in accordance with the procedures as mentioned in the Operations Manual;
- (c) The accounts of the \_\_\_\_\_ (institution) shall be audited as indicated in the Operations Manual. The audited accounts along with a copy of the audit report shall be furnished to the first party every year as per the schedule indicated in the Operations Manual; and

### **5. REPORTING OBLIGATIONS**

The second party shall submit to first party all reports and documents relating to progress of the Project, Accounts, Audit, Procurement, Disbursement and Annual Work Plan, as specified in the Operations Manual and at such frequency as may be required by the First Party.

### **6. INTERPRETATION**

The Decision of Secretary (Education), Department of Secondary Education and Higher Education, MHRD in regard to interpretation of any clause in this MOU will be final and binding on both the parties.

**7. SETTLEMENT OF DISPUTES**

The two parties to this MOU agree to act in good faith and in a spirit of mutual understanding and accommodation to facilitate the achievement of goals set under the Programme.

In WITNESS WHERE OF the Parties hereto have caused this MOU to be signed in their respective names as of the day and year first above written.

Principal,

FOR AND BEHALF OF \_\_\_\_\_  
(Name of the Institution \_\_\_\_\_)

For and on Behalf of

Department of Secondary Education and  
Higher Education, MHRD

Witness 1 \_\_\_\_\_

Witness 2 \_\_\_\_\_

## TRIBAL DEVELOPMENT PLAN - Monitoring and Evaluation Benchmarks

### A. Reporting Mechanism

- a) All States and the institutions **selected under the Programme, will continue to extend privileges available as per the** statutory provisions through various schemes related to SC/STs and monitor **the same at the State and institutional levels.**
- b) The States **selected under the Programme will** sponsor Research Studies in the areas of Social Policy, Social Development and Social Welfare. The finding of such studies would be used for evolving further interventions at implementation level.
- c) The SC/ST Cells in the Programme institutions **will** regularly report its activities to the BOG of the institution and an Annual Report of their activities **will be** submitted to the State Governments **and NPIU.**
- d) The SPFUs and NPIU **will** also compile an Annual Report indicating progress of various schemes for SC/ST under the Programme.

### B. Suggested Evaluation Questions

1. Intake: Is the SC/ST quota **for students and faculty and staff** being filled?
2. Is the number of dropouts **in an institution / programme** decreasing?
3. Number of students **graduating/** passing **out the** course (to assess quality improvement of students).
4. Number of years taken to complete **the course.**
5. Placement of students: Follow up on career track of SC/ST graduates to ascertain if students are being able to market themselves without further use of reservations etc.

### C. Monitoring and Evaluation Indicators

Monitoring	Indicators	Data/ <b>service</b> to be maintained by
<ul style="list-style-type: none"> <li>▪ SC/ST intake by category and gender</li> <li>▪ Intake of SC/ST faculty</li> </ul>	Intake data for each year	Institution
Performance	Final grades on completion of programme	Institution
Completion	<b>No. of years taken by dropout to complete a course</b>	Institution
Employment	<ul style="list-style-type: none"> <li>- Placement record of SC/STs – at end of degree/diploma programme.</li> <li>- Public /Private /Not <b>employed</b> (Part of Tracer study)</li> </ul>	Training and Placement Cell of the Institutions
Social Integration	<ul style="list-style-type: none"> <li>▪ Student Orientation</li> <li>▪ Counseling provision</li> <li>▪ Functioning of SC/ST cell</li> </ul>	<ul style="list-style-type: none"> <li>▪ Institution to organize</li> <li>▪ Monitoring by SPFU and NPIU,</li> </ul>
Financial Aid	No. of students receiving financial aid	Institution

## Financial Management Evaluation Criteria

In addition to Technical Evaluation, the institutions will be evaluated on the basis of the following Financial Management Criteria

1. System for fund flow including the project fund.
2. Overall staffing in the financial management system of the institution and the specific staffing for overall management of project funds.
3. Accounting policy and procedures.
4. Budgeting system proposed to be adopted for institutional funds including the project funds.
5. System of keeping cash and the type of payments to be made in cash, cash security and system for preventing its misuse.
6. System for safeguarding institutional assets.
7. System to be used /adopted for carrying out audits and reporting the results.
8. System for periodic monitoring and fund utilization and reporting the results.