



**TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME
(TEQIP) [PHASE-III]**

DRAFT

PROJECT IMPLEMENTATION PLAN (PIP)

June 2017



**GOVERNMENT OF INDIA
DEPARTMENT OF HIGHER EDUCATION
MINISTRY OF HUMAN RESOURCE DEVELOPMENT
NEW DELHI**

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SECTION – I

INTRODUCTION

1.1. Present System of Engineering Education in India

Engineering Education in India has grown rapidly in recent years. It is among the key enablers of growth for transforming India's economy. India's growth is expected to be driven by engineering-intensive sectors, such as Information & Communication Technologies, chemicals, transportation, capital goods, manufacturing and construction & infrastructure. The quality of teaching and research in this sphere will play a critical role in the emergence of India as a global knowledge leader and it will also provide vital inputs for enhancing productivity across these sectors. In the past three decades, we have seen many folds increase in the number of institutions imparting engineering education at the undergraduate level. The exponential growth in engineering education seems to have not significantly resulted in the quality of technical skills of engineering graduates as expected by industry. Always, there is a wide gap between the imparted engineering education and engineering industry market demand.

Engineering education in India comes under the Ministry of Human Resources Development (MHRD) at the national level and Departments of Technical Education/ counterparts at the state level. The All India Council of Technical Education (AICTE) is the statutory national body mandated to promote the quality of technical education in India through planned and coordinated development, and regulation and maintenance of norms and standards. Quality assurance is done through accreditation by two autonomous bodies under MHRD, the National Board of Accreditation (NBA), which undertakes program-level accreditation, and the National Assessment and Accreditation Council (NAAC), which accredits institutions as a whole. The University Grants Commission (UGC) grants institutions autonomy.

At the State level, affiliating universities affiliate the majority of engineering institutions in India. The affiliating universities grant affiliation based upon inspections of engineering institutions to ensure they comply with regulatory guidelines and state government rules & norms. The affiliating universities serve a number of functions for all their affiliated institutions, including managing admissions and examinations, setting curricula, and granting degrees.

In terms of outcomes, there are three key areas of concern: employability, research and equity. The problem of un-employability and poor technical skills of the recent graduates is prominently because of following important issues in engineering education:

a) **Faculty shortage:**

The most serious challenge in engineering education is dearth of well qualified & experienced faculty. The massive expansion of institutions has resulted in an acute faculty shortage in the institutions. The institutions are not able to attract and retain good quality faculty due to archaic recruitment and promotion procedures, absence of

incentives for quality performance, and non-existent faculty development policies in most institutions. Also, shortage of training opportunities and attention to overall growth of faculty is adversely affecting impartation of quality knowledge and skills to students. The faculty also lack communication skills and pedagogical skills.

b) Industry-Academia collaboration:

In order to attain greater alignment of engineering education with employment opportunities, interaction with industry through expert lectures, seminars and workshops is must. At present, this collaboration is at a nascent stage. Industry-Academia collaboration involves two key aspects—inputs to curriculum development and internships for students. Industry needs to encourage continuing education programs for their employees by collaborating with educational institutions. Academia and industry should engage in joint research & development and innovation activities. Increasing Industry-Academia collaboration requires: (i) overcoming the distrust between the two partners; (ii) identification of win-win partnerships in terms of sharing technical knowledge; and (iii) provision of incentives to institutions and faculty for collaboration.

c) Obsolete learning infrastructure:

This prevents the development of hands-on skills in Industry-relevant technologies. Many institutions have not upgraded their equipment, laboratories, and learning resources for even more than a decade.

d) Curriculum Reforms:

The current curriculum should be revised from time to time to provide greater flexibility, inter-disciplinary perspective and choice of electives. The teaching-learning process should be emphasized more on integrating skills such as problem solving & logical reasoning, learning abilities, English communications, programming fundamentals. Industry participation should be ensured in curriculum revision. The laboratory courses must be designed to develop experimentation and research & development. The students should be encouraged to participate in all co-curricular activities.

For a country that aims to be a knowledge superpower, India's technical research output is small. Increasing high-tech research that caters to the emerging industry and societal demands for technological solutions results in directly and indirectly improving knowledge and quality of faculty, which in turn would benefit students. A growing number of Indian firms are keen to collaborate with academia to enhance their competitiveness in teaching and research. Active research programs in Engineering Education institutions would definitely make meaningful contribution for sustainable technological development in India. The universities must become research hubs to capture synergies between teaching & research.

There are significant inequalities in access to engineering education, particularly across caste, gender, income groups and region. Amongst all the enrolled students, students from SC/ST backgrounds and female students have lower transition rates from the first year to the second year, relative to other students, leading to higher

dropout rates from students in these categories. Also regional imbalance has emerged into availability of good engineering education.

A university is a place where new ideas germinate, strike roots and grow tall and sturdy. It is a unique space, which covers the entire universe of knowledge. It is a place where creative minds converge, interact with each other and construct visions of new realities. In order to happen this, universities have to be strengthened. Through research and teaching, they create, evaluate and bring about advances in knowledge and technology. Teaching and research have to be inseparable, because the task of the university is not only to impart knowledge but also to explore opportunities to create knowledge through prominent research & development and innovation.

e) **Student Learning Assessment**

The absence of systematic efforts to assess and benchmark the performance of institutes in terms of student learning limits feedback to the system and individual colleges on how and where they need to improve have been challenging. The problem is exacerbated by the lack of autonomy in decision-making on academic, managerial, financial and administrative matters. As a result, institutes have limited authority in determining the goals and priorities of their institutes, selecting leaders, faculty appointments, student admissions, the structure and content of programs, financial management, and ultimately, improving student learning.

Presently, rare case no information available on student learning that can be compared across institutions and / or over a time period.

1.2 Government of India Initiatives

National Policy on Education was framed in 1986 and modified in 1992. Since then several changes have taken place that calls for a revision of the Policy. The Government of India is willing to bring out a National Education Policy to meet the changing dynamics of the population's requirement with regards to quality education, innovation and research, aiming to make India a knowledge superpower by equipping its students with the necessary skills and knowledge and to eliminate the shortage of manpower in science, technology, academics and industry.

Government of India has undertaken an unprecedented collaborative, multi-stakeholder, multi-pronged consultation process for formulating new National Policy on Education addressing following vital issues in technical education.

1. Governance reforms for quality
2. Ranking of institutions and accreditations
3. Improving the quality of regulation
4. Pace setting roles of central institutions
5. Improving State public universities
6. Integrating skill development in technical education
7. Promoting online courses
8. Opportunities for technology enabled learning
9. Addressing regional disparity
10. Bridging gender and social gaps

11. Linking technical education to society
12. Developing the best teachers
13. Sustaining student support systems
14. Promote cultural integration through language
15. Meaningful partnership with the private sector
16. Financing Technical Education
17. Engagement with industry to link education to employability
18. Promoting research and innovation

The Government of India launched IMPRINT INDIA scheme on 5th November 2015. It is a Pan-Indian Institution of Technology and Indian Institution of Science joint initiative to develop a roadmap for research to solve major engineering and technology challenges in ten technology domains relevant to India. IMPRINT INDIA aims at direct research in the premier institutions into areas of social relevance. Under this, 10 domains have been identified which could substantially impact the living standards of the rural areas: (1) Health Care Technology, (2) Energy Security, (3) Rural Urban Housing Design, (4) Nano-Technology, (5) Water/River System, (6) Advanced Materials, (7) Computer Science And ICT, (8) Manufacturing Technology, (9) Advanced Security And (10) Environment/Climate Change. The research in each of these areas is being coordinated by one of the IITs.

Global Initiative for Academics Network (GIAN) is launched by the Government of India as an initiative to attract the best foreign academics to Indian Universities of Excellence. Under this (352) courses are being offered by foreign faculty from 38 Countries. These courses are being looked at as a starting point of long-term research collaboration between Indian Institutions and the other Global institutions.

Study Webs of Active-Learning for Young Aspiring Minds (SWAYAM), is a Web portal where nearly 2,000 Massive Open On-line Courses (MOOCs) will be available on all kinds of subjects. SWAYAM-MOOCs project is intended to address the needs of school level 9-12 to Under Graduate and Post Graduate students, covering all disciplines.

37 new start-up parks/research parks would be set up this year with the coordination of Department of Science and Technology (fund sharing on 50:50 basis) covering all the IITs, NITs and some IIITs/Central Universities. These would incubate the start-ups and handhold them till they reach the stage of commercialization, normally for a period of five years.

For promotion of innovation, All the IITs have been encouraged to work with the industry to identify areas where innovation is required and come up with solutions that could be brought up to the commercialization level. For this purpose, it is proposed to launch a scheme Uchtar Aavishkar Abhiyan by investing Rs. 250 crores every year on identified projects proposed by IITs and NITs. Participation of industry in part-funding the project would be mandatory.

An initiative as a part of the Pradhan Mantri Kaushalya Vikas Yojana is being launched to encourage all the 10,000 technical institutions (engineering and polytechnic) to provide engineering skills (through part-time courses of 6 to 8 months duration) to at least 100 unemployed youth using their infrastructure after institution-hours.

During 1980s, the Government of India and the State Governments had felt the 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 Government of India supported 25 State Governments and Union Territories of Andaman & Nicobar Islands and Puducherry through three Technician Education Projects during 1991-2007, financed by the World Bank, which helped to strengthen and upgrade the system and benefited 552 polytechnics.

The success of these projects encouraged the Government of India and the State Governments to seek more funding from the World Bank for systemic transformation of the Technical Education System with focus on Degree level Engineering Education. In 2002-03, the Government of India with financial assistance from the World Bank launched a Technical Education Quality Improvement Programme (TEQIP) as a long-term Programme, to be implemented in three phases for systemic transformation of the Technical Education System.

The first phase of TEQIP commenced in March 2003 and ended in March 2009, benefiting 127 institutions in 13 States. This project covered less than 10% of the institutions that existed then. The second phase of Technical Education Quality Improvement Programme (TEQIP-II) was commenced in 2009 and will last till March 2017. The program was designed **to meet following objectives:**

1. Strengthening Institutions to produce high quality Engineers for better Employability
2. Scaling-up Postgraduate Education and demand-driven Research & Development and Innovation
3. Establishing Centers of Excellence for focused thematic research
4. Training of Faculty for effective Teaching
5. Enhancing Institutional and System Management effectiveness
6. Capacity Building to Strengthen Management

A total competitively selected 191 engineering institutions are extremely benefited under TEQIP II also 30 Centres of Excellence have been established to cultivate thematic research in various emerging areas of engineering & technologies under TEQIP II.

To meet the various challenges, consistent; organized and converging efforts are still needed. Realizing the potential of socio-political and economic benefits from Higher Education in transforming India into a knowledge superpower, the Government of India has placed a much higher priority on Higher Education in the Twelfth Five Year Plan (2012 to 2017). The main target for the Twelfth Five-year Plan for Higher Education (Technical and General) is to increase gross enrolment ratio in Higher Education from 17.9% to 25.2%.

SECTION –2 THE PROJECT

2.1 Introduction

The Project, Third phase of Technical Education Quality Improvement Programme (referred to as TEQIP-III) is fully integrated with the Twelfth Five-year Plan objectives for Technical Education as a key component for improving the quality of Engineering Education in existing institutions with a special consideration for Low Income States and Special Category States and support to strengthen few affiliated technical universities to improve their policy, academic and management practices.

2.2 Project Objectives:

The Project will focus on the following objectives:

- (a) Improving quality and equity in engineering institutions in focus states viz. 7 Low Income States (LIS¹), eight states in the North-East of India, three Hill states viz. Himachal Pradesh, Jammu & Kashmir, Uttarakhand and Andaman and Nicobar Islands (a union territory (UT)),
- (b) System-level initiatives to strengthen sector governance and performance which include widening the scope of Affiliating Technical Universities (ATUs) to improve their policy, academic and management practices towards affiliated institutions, and
- (c) Twinning Arrangements to Build Capacity and Improve Performance of institutions and ATUs participating in focus states.

2.3 Project Scope:

Only the Government and Government aided AICTE approved Engineering institutions/Engineering faculty/Engineering Teaching Department/Constituent Institutions of Universities/Deemed to be Universities and new centrally funded institutions in SCS will be the part of the project.

An estimated 200 Government and Government funded Engineering institutions including Affiliating Technical Universities (ATUs) will be selected under different sub-components in one or two cycles.

2.4 Project Strategy:

The project will be implemented in alignment with the 12th Five Year Plan (2012-17), based on faster, sustainable, and inclusive growth. It emphasizes increasing the supply of highly-skilled workers to drive the economy, as well as helping low-income states catch up with their more advanced neighbours.

The Project will be implemented through the Ministry of Human Resource Development (MHRD) of the Government of India as a **Central Sector Scheme (CSS)**, wherein 100% funds will be provided as grants to the States, Institutions & ATUs.

¹ The LIS States are Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan & Uttar Pradesh.

The funding pattern details with respect to Government funded, Government aided institutions and ATUs are given in Section 6.

A set of Government orders for States and UTs is to be issued to achieve a high and sustained impact of the Project. These orders are to give the project institutions adequate decision making powers that will enable and encourage them to deliver quality education and undertake research in an efficient manner. The primary focus is to increase empowerment of institutions for self-governance and create incentives for achieving excellence in engineering education.

The project institutions will be required to implement academic and non-academic reforms within their self-conceived development programmes that focus on quality and relevance, excellence, resource mobilization, greater institutional autonomy with accountability, research and equity.

Professional development programmes for engineering-education policy planners, administrators and implementers at the Central, State and University levels will be organized. The Project will also support development of more efficient governance activities.

The Project will lay major emphasis on monitoring and evaluation. The prime responsibility of monitoring will lie with the institutions themselves. The management structure at the Institutional level i.e. the Board of Governors (BoG) along with Head of the institution will monitor the progress of Institutional projects on a regular basis and provide guidance for improving the performance of institution in project implementation. The information from project institutions will be collected through a scalable web-based Management Information System (MIS). State Governments will also regularly monitor and evaluate the progress of institutions. The Government of India and the World Bank will conduct bi-annual Joint Reviews of the Project with assistance from the National Project Implementation Unit (NPIU). The monitoring will be based on Institutional Development Proposals (IDPs) and Action Plans for ATUs prepared by each project institution and achievements will be measured through a set of performance indicators. The monitoring will focus on implementation of reforms by institutions, achievements in project activities under different sub-components, procurement of resources and services, utilization of financial allocations and achievements in faculty and staff development and management development activities.

In the project, the technical assistance to AICTE is planned which will include designing an assessment system to track student learning at different points of the undergraduate program. Surveys of students, faculty, non-teaching staff and administrators will deepen insight into how institutes address specific problems related to student learning. Assessments will be designed to provide feedback to institutes on how and where to improve, without putting undue pressure on students.

In this project, the fund will be linked to the Disbursement Linked Indicators (DLIs) and will be disbursed only after achieving and verification of some of the indicators.

2.5 Project Design:

TEQIP seeks to enhance quality and equity in participating engineering education institutions and improve the efficiency of the engineering education system in focus states.

The Project will support two components:

Component - 1: Improving quality and equity in engineering institutions in focus states

➤ **Sub-component 1.1 : Institutional Development for Participating Institutions**

An estimated 90 Engineering Education institutions meeting (progressively) the enabling mechanisms and based on meeting minimum standards in quality of Institutional Development Proposals (IDPs), will be selected.

Institutions are required to define the activities in their IDP that they want to carry out in the project. These activities should be under the scope of the project and are those that fulfil the objectives of the project. However, some of the suggested activities under the scope of the project are given below:

- Procurement of Goods (equipment, furniture, books LRs, software and minor items) and minor civil works.
- Improvement in Teaching, Learning and Research competence.
 - Improve student learning,
 - Student employability,
 - Increasing faculty productivity and motivation,
 - Establishing a twinning system,
 - Twinning arrangements with high performing institutions under Sub-component 1.3 to build capacity and improved performance
 - Recruitment and retention of high quality faculty (through better faculty appraisal systems and the faculty recruitment plan).
(Consultant services if required, can also be procured for the above said activities.)

➤ **Sub-component 1.2 : Widening Impact through ATUs in focus states**

All ATUs meeting the enabling mechanisms will be selected.

The various activities are to be supported by the Action Plans from the ATUs. Some of the suggested activities are:

- **Procurement of Goods (equipment, furniture, books LRs, software and minor items) and minor civil works**
 - Centralized Research hubs opened to all faculty of affiliated institutions
 - Establishing/improving ERP/management information system for student, staff and faculty data
 - Improving financial management and procurement
 - A modern HR system for efficient personnel management

▪ **Improvement in Teaching, Learning and Research Competence of affiliated institutions**

- Mentoring of affiliated institutions and promoting of applications to UGC/NBA
- Increasing faculty productivity and motivation
- Twinning arrangements with ATUs under Sub-component 1.3 to build capacity and improved performance
- Preparation of massive open online courses (also referred to as MOOCs), facilitating access of institutions to MOOCs
- Filling up of faculty vacancies
- Developing credit-based systems such that students in institutions could use select e-learning courses as part of their degree programs
- Greater access to digital resources
- Improving institutional governance
- Improve student learning
- Student employability

(Consultant services if required, can also be procured for the above said activities.)

➤ **Sub-component 1.3 : Twinning Arrangements to Build Capacity and Improve Performance of Participating Institutions and ATUs**

Institutions (already participated in TEQIP-I and/or II)/ATUs will be selected on a competitive basis through Challenge Method. Selection will proceed in 3 stages. At the first stage, Eligibility criteria will be used to shortlist the TEQIP-I/TEQIP-II institutes/ Universities followed by ranking on the basis of their performance assessment. Top rankers from stage-1 will be invited to submit Institution Development Proposals (IDPs) in stage-2. The institutions will proceed to stage 3 for final selection. The proposal should include establishing a mentoring system for twinning arrangements to build the capacity and improvement in performance of institution/ATUs participating under sub-component 1.1/1.2 respectively.

Institutions are required to define the activities in their IDP that they want to carry out in the project. These activities should be under the scope of the project and are those that fulfil the objectives of the project. However, some of the suggested activities under the scope of the project are given below:

- Procurement of Goods (equipment, furniture, books LRs, software and minor items) and minor civil works
- Improvement in Teaching, Learning and Research competence
 - Improve student learning
 - Student employability
 - Increasing faculty productivity and motivation
 - Establishing a twinning system
 - Twinning arrangements with institutions under Sub-component 1.1 to build capacity and improved performance
 - Individual Institutional mentors

(Consultant services if required, can also be procured for the above said activities.)

Component-2: System Level initiatives to strengthen sector governance and performance

This component will support MHRD and key apex bodies in engineering education, including AICTE and NBA, to strengthen the overall system of engineering education. The activities are:

- Provide technical assistance to AICTE and NBA,
- Professional development of Technical Education and TEQIP administrators in the project States and project institutions,
- Initiatives for Effective Governance System of institutions at the level of Board of Governors,
- Implementing Direct Benefit Transfer System to ensure fund transfer electronically to SPIUs and institutions, and
- Project monitoring & evaluation.
- All institutes and ATUs in the Project, as well as those government and government-aided institutes that participated in TEQIP I and/or II but are not participating in TEQIP III and ATUs not part of the Project, will be linked to the National Knowledge Network. Last mile connectivity will be provided by the Project.
- 24*7 broadband connectivity and Wi-Fi access in all academic and administrative buildings and hostels.
- Developing or establishing technology learning centers at all universities which affiliate engineering colleges

2.6 Sustainability of the Project institutions:

The overall project focus on institutional development has sustainability built in the design of the project. The project's emphasis on well-functioning government bodies, more delegated authority to manage their affairs, and capacity to generate own revenues, involve changing behaviour of key players at a fundamental level. TEQIP I and II required institutes to put aside specific funds for the ongoing maintenance and development of the institute once the project period ended; this will continue in TEQIP III.

- TEQIP III institutes will be required to deposit at least 8% of their revenue every year into a Sustainability Fund. In TEQIP II, this amount has been growing every year – we expect the same trend in TEQIP III.
- A key aspect of the Twinning Arrangements proposed in the project is to develop long-term relationships between colleges. This will help sustain reforms in teaching, learning, research and institutional governance envisaged under the project. Similarly, the IITs and IIMs have been working on strengthening internal systems for sustaining reforms.
- The Faculty Recruitment envisaged for each focus state will build a system for recruiting and retaining adequate numbers of high-quality faculty. This Plan will be expected to provide a long-term solution to the problem of faculty recruitment and retention (not just during the project period).
- The governance-related reforms under the Project, such as UGC autonomy, high-quality BoG and accreditation are expected to put colleges on a long-term path of excellence, which will include innovations in areas relating to internal revenue generation

SECTION – 3

DETAILED PROJECT DESCRIPTION

COMPONENT 1 : IMPROVE QUALITY AND EQUITY IN ENGINEERING INSTITUTIONS IN FOCUS STATES

Sub-component 1.1 : Institutional Development for Participating Institutions

1. Objective:

To focus on improving quality and equity in engineering education in all government and government-aided institutions and technical universities, including ATUs, in seven low-income states (LIS), three hill states, all states in the North-East of India, and Andaman & Nicobar Islands.

2. Scope:

Following types of educational institutions will be eligible for submission of IDPs and if selected, for funding under this Sub-component:

- Government and government aided affiliated institutions from seven Low Income States (LIS), 8 States in North-East of India, three Hill states (Himachal Pradesh, Jammu & Kashmir and Uttarakhand) and Andaman and Nicobar Islands (a union territory (UT)),
- Engineering Faculty/ Departments/ Constituent Institutions of Universities/Technical Universities or Deemed to be Universities, and
- 08²National Institutions of Technology (NITs) and 02³Indian Institute of Information Technology (IIITs) in North East of India.

These institutions (approximately ninety of them) would be eligible for submitting IDPs if the enabling mechanisms (as described in Section 4) are in place and if selected would receive project funds, for the improvement plans projected in their respective IDPs, in two cycles

Following types of educational institutions/departments **will not be** eligible for being funded directly under this Sub-component:

- Polytechnic institutions,
- Architecture, Management and Pharmacy institutions or departments,
- Master of Computer Application Departments/institutions, and
- Private unaided institutions.
- Other Centrally funded institutions/faculty/departments/constituent colleges not indicated above

3. Strategy:

The objective of this sub-component is to improve the learning outcomes and employability of graduates and the research pursued under post-graduate programs.

²The NITs in Tripura, Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland, Sikkim & Jammu & Kashmir (hill state).

³IIIT Guwahati and IIIT Manipur

Institutions which meet the enabling mechanisms will receive project funds in Cycle 1. These institutions will receive specialized support from NPIU, SPIU and mentors in framing their comprehensive and coherent Institutional Development Proposals (IDPs), which would define the key needs of the institutions, planned set of reforms and activities thereof, timeline for activities and measures of success. All IDPs will be based upon iterative consultations with a wide range of stakeholders, including faculty, institution administrators, students, parents and industry.

Cycle 2 institutions are those which do not have the enabling mechanisms in place. These institutes will benefit from “seed persons”, non-financial assistance and seed money of approx. Rs.50.00 Lac in respect of each institution from MHRD through SPIUs to motivate, facilitate and achieve the enabling mechanisms. Seed persons are expert mentors who can work with the state government and the institutions to identify a path to achieving the enabling mechanisms, and to help with the preparation of the IDPs. In addition, seed money shall be used for specific activities with the objective of motivating faculty and students to work toward improvement of their institutions and to provide some immediate support to students’ learning. These will be:

- training of staff in financial management and procurement processes
- campus Wi-Fi
- e-library
- campus environment plan and
- smart classrooms

The seed money will be available to institutions on a rolling basis that is, as soon as the institute(s) meet the enabling mechanisms and have comprehensive and coherent IDP October 2018, will receive project funds to be used in accordance with their IDPs. The activities to be funded under the IDPs will be the same as for Cycle 1 institutions.

Institutions which do not meet the enabling conditions by October 2018 will not receive any grant under the project.

Institutions participating in this Sub-component cannot apply for Sub-component 1.3.

4. Deliverables:

The institutions participating under this Sub-component will be responsible for the following set of deliverables:

- a. Increase in the average score of students participating in tests designed to measure technical and critical thinking skills
- b. Increase in percentage points of NBA accredited Undergraduate programs and Post-graduate programs
- c. Increase in Transition rate of undergraduate engineering students from the first year to second year
- d. Percentage of students from traditionally disadvantaged groups in total enrolment in participating institutions
 - i. SC/ST
 - ii. Women

- e. Direct project beneficiaries
 - i. Total number
 - ii. Female beneficiaries
- f. UGC autonomous status
- g. Increase in percentage of PhD students in total enrolment in engineering disciplines
- h. Percentage of sanctioned faculty positions in participating institutions filled by regular or contract faculty, contracted as per AICTE norms
- i. Number of Faculty Trained in either their subject domain, pedagogy or management
- j. Percentage of externally funded research and development projects and consultancies in total revenue
- k. Student, Staff and Faculty Satisfaction Survey
- l. Improved employer satisfaction with engineers recruited in the past year
- m. Board of Governors or Institution/ Department Management Committee meets at least 4 times every calendar and publicly discloses the minutes of all meetings
- n. Annual report in prescribed format

5. Evaluation and Selection:

Selection will be based on attaining the enabling mechanism and the Institutional Development Proposals (IDPs) prepared using the prescribed formats. The selection process is detailed in Section-4. Information given in the formats should be **verifiable**, concise and supported by documents.

6. Funding pattern:

Institutions having Autonomous status by UGC/Deemed to be Universities/ CFIs will receive INR 15 crores. Other Institutions under this Sub-component will receive INR 10 crores.

For planning of fund requirements under various groups of activities, refer Section-6. Further allocations may be made based on institutional performance against certain benchmarks, on a basis to be determined by MHRD in agreement with the World Bank from time to time. Allocation may also be reduced for non-fulfilment of benchmarks.

7. Possible activities under this Sub-component:

The institutions selected in this Sub-component should determine which activities they need to undertake in order to meet the objectives of this Sub-component; such activities should be set out in the Institutional Development Proposal and may be amended time to time as per Institutional requirement with due approval by the institution's Board of Governors. Possible activities that institutions may wish to consider include:

- Procurement of Goods (equipment, furniture, books LRs, software and minor items) and minor civil works for improvement in teaching, training and learning facilities
- Improvement in Teaching, Learning and Research Processes
 - Improve student learning

- faculty and staff training
- enhancement of Research & Development & Innovation
- improving transition rates of all categories of students and improving non-cognitive skills of students
- instituting academic and non-academic reforms including program flexibility
- Student employability
 - increasing interaction with industry
 - student career counselling and placement
- Increasing faculty productivity and motivation
 - sponsored research, consultancy and other revenue generating activities
- Establishing a twinning system
 - Twinning arrangements with high performing institutions under Sub-component 1.3 to build capacity and improved performance
- Recruitment and retention of high-quality faculty (through faculty reforms fund)

These activities are detailed out in Annex-I.

Sub-component 1.2: Widening Impact through ATUs focus States

1. Objective:

To support the Affiliated Technical Universities (ATUs) in seven LIS, eight states in the North-East of India, three Hill states and Andaman and Nicobar Islands (a union territory (UT)) to implement the reforms in the areas like academic, learning assessment and examination, student placement, personnel management and improving data management and administration.

2. Scope:

Under this sub-component financial support will be provided to all ATUs in focus States, based upon certain enabling mechanisms relevant to ATUs being in place.

The ATUs have to implement reforms in the following areas:

- Academic
- Learning Assessment and Examination
- Student Placement
- Improving Data Management and Administration, including personnel management

Project ATUs are expected to assist all affiliated institutions (Govt., Govt. aided, private unaided) through opportunities for accessing modern teaching and research facilities like access to IT-facilities, e-learning courses and laboratories.

3. Strategy:

ATUs will participate in the project based on non-competitive mode in sub-component 1.2; subject to meeting certain enabling mechanisms being in place (see Section-4). ATUs will prepare an IDP / Action Plan which will be evaluated by NEC. ATUs will sign MOUs which will set out annual (or semi-annual) performance benchmarks to be met, for funding to be released.

4. Deliverables

The ATUs selected under this sub-component will be responsible for following deliverables:

- *Declare final semester examination before the start of next academic year.*
Final semester examinations refer to examinations in all subjects offered to undergraduate students in engineering disciplines, in the 8th semester.

Results will be considered declared on the date when:

- (i) The results of final semester examination are available on the ATU website
- (ii) All requests for re-evaluation have been completed and re-evaluated results are available on the ATU website

- *ATU has MIS capable of producing annual reports against prescribed indicators*
- *Participation of affiliated institutions in newly designed Research-hub related activities*
- *Increasing student employability*
- *Improving student learning outcomes*
- *Increasing the number of affiliated colleges which have autonomous status from UGC*

5. Selection:

ATUs from focus states will participate in the project based upon certain enabling mechanisms being in place as given in Section-6. ATUs will prepare an IDP/action plan. This IDP/action plan submitted by ATU will be evaluated by National Evaluation Committee.

6. Funding Pattern:

The financial allocation to each affiliated technical university will be of Rs.20.00 crore in focus states.

7. Suggested Activities:

The various activities are to be defined in the Action Plans from the ATUs. ATUs may identify most relevant activities according to their development strategy. Some of the suggested activities are:

- **Procurement of Goods (equipment, furniture, books LRs, software and minor items) and minor civil works**
 - Centralized Research hubs opened to all faculty of affiliated institutions
 - Establishing/improving ERP/management information system for student, staff and faculty data
 - Improving financial management and procurement
 - A modern HR system for efficient personnel management
(The expenditure on minor civil works should not exceed 3% of the institutional project life allocation).
- **Improvement in Teaching, Learning and Research Competence of affiliated institutions**
 - Mentoring of affiliated institutions and promoting of applications to UGC/NBA
 - Mandatory accreditation: Mandatory for all engineering colleges to get 50% of their eligible courses accredited within 5 years (by 2022)
 - Increasing faculty productivity and motivation
 - Sponsored research, consultancy and other revenue generating activities
 - Joint publications
 - Faculty and Staff Training/Faculty development programmes

- Every Teacher shall undergo an annual refresher course delivered through Swayam portal, encapsulating all the major advances in the field of their study.
- Pedagogical training through Swayam platform
- Leadership training to the Principals once in two years through Swayam portal.
- Help institutions design/review curriculum and exams
 - Every ATU shall constitute subject wise industry consultation committee (ICC) with mandate of examining the existing curriculum and for making suitable periodic changes annually. The revision process is required to be completed by December every year for the programmes to be offered in the coming academic year.
 - Exams Reforms: Final Exam should test the understanding of the concepts and the skills – rather than the subject knowledge, so that innovative ideas would emerge that can be incubated in the start-up centres.
- Provision of opportunities for improvement in quality of education to faculties through higher studies at IITs/NITs
- Build strong leadership teams
- Short-term courses/diplomas
- Twinning arrangements with ATUs under Sub-component 1.3 to build capacity and improved performance
- Preparation of massive open online courses (also referred to as MOOCs), facilitating access of institutions to MOOCs
- Filling up of faculty vacancies
- Developing credit-based systems such that students in institutions could use select e-learning courses as part of their degree programs
- Greater access to digital resources
- Improving institutional governance
- Improve student learning
 - Provision of Induction Module to new students on admission through 3 to 5 weeks induction training programmes addressed by IIT / NIT Professors to reinforce fundamental concepts.
 - Every student who will be admitted in the private institutions must undergo a mandatory induction program of 6-8 weeks to reinforce the fundamental concepts and the required language skills. This programme should be rigorous with the study and not being constrained to 2-3 hours. The socially and economically disadvantage groups to be taken care of and supported
 - Provision of classes on PCM & languages to students to improve the quality of their learning outcomes
 - Promotion of Innovation and Start-ups: Rigorous efforts are required for promoting innovation and creativity in the students. Innovation drives like Hackathon should be promoted so that innovation ideas would emerge that can be incubated in the start up centres.

- Mandatory Internship: Every undergraduate student should complete 3 internships each spanning 4-8 weeks before completion of the UG Programme. As it is a mandatory for institutions, ATUs should support institutions to achieve this by finding suitable industry/organization for the internship.
- Student learning assessment (SLA) – compulsory
- Student employability
 - Industry readiness: All students passing out of UG courses shall be imparted technical and soft skills required for working in industry encompassing the following:
 1. Managerial skills
 2. Entrepreneurial skills
 3. Leadership skills
 4. Communication skills
 5. Technical skills
 6. Team working skills
 - Enhanced Industry Institute interaction through career counselling, placement and research
 - Entrepreneurship development

Sub-component 1.3 : Twinning Arrangements to Build Capacity and Improve Performance of Participating Institutions and ATUs

1. Objective

To support the priorities identified by Sub-component 1.1 and 1.2 institutions in their IDPs and Action Plans through twinning arrangements to build capacity and improve performance.

2. Scope

Following types of educational institutions will be eligible for submission of IDPs and if selected, for funding under this Sub-component:

- Autonomous TEQIP-I and/or TEQIP-II Government and Government aided affiliated institutions from States other than specified in Sub-component 1.1,
- TEQIP-I and/or TEQIP-II Non affiliating Technical Universities/Deemed to be Universities or their Engineering Faculty/ Departments/Constituent Institutions from States other than specified in Sub-component 1.1,
- CFIs already participated in TEQIP-I and / or TEQIP-II, and
- Affiliating Technical Universities (ATUs) for twinning with ATUs under Sub-component 1.2

The institutions and ATUs (about 3) totalling the same number of institutions and ATUs selected under Sub-component 1.1 will be short listed based on quality of their IDPs if

- Agreed for twinning arrangements with institutions or ATUs under sub-component 1.1 or 1.2
- fulfil the pre-defined eligibility criteria

The twinning between the institutions will be based on decision of a Committee constituted by MHRD considering the geographical location of the institutions, area of interest and expertise, merit of their proposals, their category etc. Although the institutions / ATUs under Sub-component 1.3 may continue to do their own development activities till the institution under Sub-component 1.1 or ATUs under Sub-component 1.2 meet the enabling mechanism pre-defined in the project.

The selection of the institutions is open till October 2018.

Following types of educational institutions/departments **will not be** eligible for being funded directly under this Sub-component:

- Institutions or ATUs eligible for participation under Sub-component 1.1 and 1.2
- Non autonomous institutions
- Polytechnic institutions,
- Architecture, Management and Pharmacy institutions or departments,
- Master of Computer Application Departments/institutions, and
- Private unaided institutions.

3. Strategy:

Sub-component 1.3 institutes – all of whom will have academic autonomy– will receive an initial allocation of INR 2 Cr. so that they have the incentive to participate effectively in twinning activities as well as continue their own institutional development, upon which such twinning depends. These institutes will be eligible for additional resources (totalling around INR 7 Cr.) depending upon how effectively they meet obligations identified in their Twinning Agreements.

Institutions participating in this Sub-component cannot apply for Sub-component 1.1 & 1.2.

4. Deliverables:

The institutions participating under this Sub-component will be responsible for the following set of deliverables:

- a. Increase in the average score of students participating in tests designed to measure technical and critical thinking skills
- b. Increase in percentage points of NBA accredited Undergraduate programs and Post-graduate programs
- c. Increase in Transition rate of undergraduate engineering students from the first year to second year
- d. Percentage of students from traditionally disadvantaged groups in total enrolment in participating institutions
 - i. SC/ST
 - ii. Women
- e. Direct project beneficiaries
 - i. Total number
 - ii. Female beneficiaries
- f. Increase in percentage of PhD students in total enrolment in engineering disciplines
- g. Percentage of sanctioned faculty positions in participating institutions filled by regular or contract faculty, contracted as per AICTE norms
- h. Number of Faculty Trained in either their subject domain, pedagogy or management
- i. Percentage of externally funded research and development projects and consultancies in total revenue
- j. Student, Staff and Faculty Satisfaction Survey
- k. Improved employer satisfaction with engineers recruited in the past year
- l. Board of Governors or Institution/ Department Management Committee meets at least 4 times every calendar and publicly discloses the minutes of all meetings

For ATUs refer Section-3 (1.2). Besides, each ATU in the Non-Focus State will mentor about 3 ATU's in the Focus States.

5. Evaluation and Selection:

Selection will be based on meeting the eligibility criteria, commitment for twinning arrangements with institutions and ATUs of Sub-component 1.1 and 1.2 respectively

and quality of the Institutional Development Proposals (IDPs) prepared using the prescribed formats. The selection process is detailed in Section-4. Information given in the formats should be **verifiable**, concise and supported by documents.

6. Funding pattern:

The Institutions and ATUs under this Sub-component will receive an initial allocation of INR 2 Cr. that can be increased to INR 7 Cr based on their performance.

For planning of fund requirements under various groups of activities for the institutions, refer Section-6 and for ATUs refer section-3 [1.2]

Further allocations may be made based on institutional performance against certain benchmarks, on a basis to be determined by MHRD in agreement with the World Bank from time to time. Allocation may also be reduced on non-fulfilment of benchmarks.

7. Possible activities under this Sub-component:

The activities for institutions are detailed out in Annex-I and for ATUs refer Section-3 (1.2).

COMPONENT– 2: SYSTEM-LEVEL INITIATIVES TO STRENGTHEN SECTOR GOVERNANCE AND PERFORMANCE

This component will support MHRD and key apex bodies in engineering education, including AICTE and NBA, to strengthen the overall system of engineering education. This Component will work closely with the proposed National Testing Agency, and will support the design and implementation of a low-stakes assessment system to track student learning at different points of the undergraduate program. The assessment system will track key academic skills in engineering, such as proficiency in mathematics, physics and computer science, as well as higher order thinking skills. In addition to this, students' non-cognitive and behavioural skills will also be tracked. Finally, surveys of students, faculty, non-teaching staff and administrators will deepen insight into how institutes address specific problems related to student learning. Assessments will be designed to provide feedback to institutes on how and where to improve, without putting undue pressure on students.

Technical assistance to MHRD will include designing an assessment system to track student learning at different points of the undergraduate program. This Component aims to build capacity of Technical Education Policy Planners, Administrators and Implementers at the Central, State level and Institutional levels to effectively implement the institutional reforms.

It also aims to provide timely, sufficient, precise, and reliable information to improve and assess performance of the project institutions through effective Project Management.

1. OBJECTIVE

To build the capacity of technical education policy planners, administrators and implementers at the central, state, and institutional levels. In particular, capacity building is intended to support the effective implementation of reforms, innovative management initiatives, and knowledge sharing workshops between TEQIP institutions and non-TEQIP institutions.

2. SCOPE

The initiatives to improve policies and management practices that contribute to promotion of quality in Engineering Education at Central (MHRD/NPIU)/States (SPIUs)/ATUs/and Institutions' levels.

3. STRATEGY

The Project at Central level will support:

- Provide technical assistance to AICTE to: undertake tasks to mentor institutions, especially in the North East; design MOOCs for faculty and students; create benchmarks for institutions; promote industry collaboration in research and placement; and streamline data management across all institutions.
- Technical assistance to NBA to help strengthen its analytical and institutional capacity, and thereby use planning, information and data to manage the organization in a more efficient way.
- Assessment of student learning.

- Professional development of Technical Education and TEQIP administrators in the project States and project institutions which included policy planners, administrators and implementers at the central, state, and institutional levels
- Initiatives for Effective Governance System of institutions at the level of Board of Governors,
- To ensure that the funds go to institutions' and SPIU's bank accounts electronically, minimising tiers involved in fund flow thereby reducing delay in payment, ensuring accurate targeting of the beneficiary and curbing pilferage and duplication.

4. DELIVERABLES

Improved performance at the State and Institutional levels through the activities/projects is expected under this component:

- Effective project implementation
- Implementation of academic and non-academic reforms in project institutions
- Enhanced knowledge and skills in System and institutional management
- Efficient achievement of institutional development goals

5. FUNDING PATTERN AND FUND RELEASE MECHANISM TO IIMS AND IITS

NPIU will bear the full cost for Professional development trainings (PDTs) and Pedagogical training (PT) provided by IIMs & IITs, however, the participants for attending the workshops will book their TA/DA and other expenses under faculty and staff development head of expenditure. For the participants from non-TEQIP institutions, ATUs shall bear such expenditure.

6. ACTIVITIES :

The following activities are to be undertaken:

i. Technical assistance to AICTE

AICTE shall undertake tasks to mentor institutions, especially in the North East; design MOOCs for faculty and students; create benchmarks for institutions; promote industry collaboration in research and placement; and streamline data management across all institutions. With benchmarks, AICTE can define what well-performing, high functioning institutions look like, and do it for different types of institutions such that institutions can make appropriate changes to improve. Regarding streamlining data management.

The e-governance cell at AICTE will lead an effort to harmonize data management by AICTE, the All India Survey of Higher Education (AISHE), NBA and TEQIP. Technical assistance will also be available to NBA to help strengthen its analytical and institutional capacity to use planning, information and data to manage the organization in a more efficient way.

The AICTE will closely work with National Authority on Testing and sign MoU with Stanford University to undertake the Student Learning Assessment. The details are given as under:

STUDENT LEARNING ASSESSMENT (SLA)

The assessment system will track key academic skills in engineering, such as proficiency in mathematics, physics and computer science, as well as higher order thinking skills. The skills to be tested could include the ability to (a) evaluate evidence and its use; (b) analyse and evaluate arguments; (c) understand implications and consequences; (d) develop sound and valid arguments; and (e) understand causation and explanation. Additionally, a national eligibility test for teachers, similar to that in general higher education, is proposed. Students' non-cognitive and behavioural skills will also be tracked. These assessments of students will be supplemented by surveys of students, faculty and administrators to gain deeper insight into how institutions address specific problems related to student learning. All assessments will be designed to provide feedback to institutions on how and where to improve, without putting undue pressure on students.

The test will be voluntary. Average scores of students from institutions from which at least 20 percent of students appeared for the tests will be considered for the purpose of this indicator. To the extent possible, the testing agency will use statistical techniques to take account of the different composition of students responding to successive rounds.

Important Activities under SLA

- To design structure of a single exam that tests the understanding, conceptual clarity, and innovative thinking of students.
- To test the students' technical skills in physics, mathematics and informatics; critical thinking and creativity; and quantitative literacy skills.
- To find means in the exam structure that would reduce the pressure on students and reduce dependence of students on the coaching centres, without diluting the quality of testing.
- To review and recommend reforms if any needed in the common counselling process for admissions in prestigious institutions

ii. Technical assistance to NBA

The NBA shall be helping in strengthening its analytical and institutional capacity, and thereby use planning, information and data to manage the organization in a more efficient way. Activities are expected to include developing a more user friendly and transparent database for the accredited engineering institutions.

iii. Establishing Professional Development Training Centres (PDTC) and Quality Circles for Pedagogy Training (PT) at IIMs and IITs respectively for training to Administrators/Faculty/Staff and at Central (MHRD/NPIU), States (SPIUs)/ATUs and Institutional level

PROFESSIONAL DEVELOPMENT TRAINING (PDT) AT IIMS

The collaboration with IIMs to stimulate capacity enhancement through Management Capacity Enhancement Programmes (MCEPs) to administrators of TEQIP Institutions was one of the interventions during TEQIP-II. Similarly, in TEQIP-III, IIMs shall play crucial role in providing professional development training in management, governance and leadership aspects to Administrators and Implementers at Central (MHRD/NPIU), States (SPIUs)/ATUs and Institutional level. IIMs shall establish Professional Development Training Centres (PDTC) for imparting Professional Development Training (PDT) with an aim to enhance interest, knowledge and skills in management and leadership areas resulting in quality enhanced knowledge and skills in institutional management, resulting in efficient achievement of institutional development goals.

The objective of the PDTs is to offer a pragmatic approach to the issues surrounding strategic planning in higher education, including an open recognition of some of the idiosyncrasies of the higher education. The PDTs will yield strategic thinking from groups and move TEQIP Institutions in an innovative direction.

The participants of TEQIP Institutions will be able to learn about the process of strategic planning and developing long term plans of their respective institution. The participants will also try to bench mark their institutions with the best in the World and craft strategies for the same. The Project shall also provide opportunity to non-TEQIP institutions to participate in the PDTs at IIMs to some extent and ATUs shall be accountable for overall facilitation to such training to non- TEQIP-institutions.

PROCESS DRIVEN APPROACH

- Establish a specific unit dedicated to Professional Development Training Centres (PDTC) to have a clear mandate, well-defined responsibilities and reporting arrangements, and the resources to carry them out Professional Development Training.
- Ensure that the PDTC has ecosystem flexibility so as to build upon, advocate and support the strategic objective of quality training and the effective percolation to the Project institution's teaching and learning framework.
- Involve different departments and disciplines in the PDTCs' work to incorporate diverse experience of teaching and learning and ground operational support on wide-ranging experience and understanding of discipline-specific considerations.
- Stimulate leadership quality and learning improvements as to bring academic excellence.
- Quantify the different elements affecting faculty workload (e.g., assessment of students, online teaching, face-to-face tutorials, students advising, project monitoring, administrative work, professional development, corporate partnership, work-placement supervision) of TEQIP Institutions and their contribution to effective teaching and learning.
- Explore the impact of the introduction of technology into teaching and learning practices (e.g., on management process, learning outcomes, assessment, inter-activity, etc.).

- Assess the added-value of the use of technology in teaching on learning outcomes and ensure this information is provided to the Project institution's ICT decision-makers.
- Involve IT service providers in discussions with academia and students of TEQIP Institutions so as to better match technical aspects with educational requirements.
- Support faculty to develop their IT skills and prompt them to update their knowledge and digital capability as well as informing them on the opportunities that IT can provide for enhancing teaching and learning.

PEDAGOGY TRAINING (PT) AT IITs

The pedagogical training will be provided through IITs in this component.

- (a) Collaboration with IITs to stimulate Quality Circles between IITs and Project Institutions was one of the interventions of the TEQIP-II.
- (b) The main focus of the project was on improvement in academic quality of the engineering institutions. The objective of the Quality Circles established at several IITs is to bring faculty and students of different engineering disciplines on a common platform on specific academic subjects.
- (c) The concept of the Quality Circles is to create a subject based interaction between IITs and TEQIP institutions mapped on a regional basis. All project institutions will be mapped to different IITs.
- (d) To facilitate such activities a dedicated Knowledge Incubation Cell may be setup. Knowledge Incubation Cell around an IIT will focus on following activities:
 - Innovation content development
 - Teaching work-shops in specific cluster of resources
 - Short-courses and workshops in niche areas
 - Seminars/Conference
 - Short-term visit of graduate students from TEQIP institutions
 - Sabbatical/long-leave stay to teachers and researchers from TEQIP institutions
 - Summer and winter internship/visiting researcher programs at IITK for undergraduate and graduate students and faculty.
 - The internship programs & effective follow-up through intra-mural funding for joint research with mentoring at IITs
 - Provision for competitive UG projects, with limited support, to promote UG research in the TEQIP institutions
 - Institution shall provide for credit transfer, collaborative PhD and Master's thesis (with the IIT), semester leave for its faculty for training at IIT
 - Enable funding for collaborative research with mentor from IITs.
 - Feedback loop (via appraisal linked funding) to keep IITs interested in providing the training

- Summer programs for students of state institutions, via the KIT and a set of chosen good sister institutions (e.g. NIT etc.), via several structured research problems (chosen and organized via the KIT) and MOOCs based specialized short summer courses offered to the summer interns
- Periodic lab. review by experts from KIT, and funding based on comprehensive review of facilities available and suggestions in consultation with the review team. Encourage faculty from quality circle institutions to get PhD from IITs.
- Creation of TEQIP scholarships for UG and M.Tech students from quality circle institutions, to do M.Tech and PhD at IIT. Creation of compendium of online course/lecture-series by subject experts, to aid specialized elective courses for graduate students.
- Mechanisms for crediting online courses have to be enabled (again via the MOU, changes in local statutes, and some work by Technical Universities, NBA and NAAC).

The Project shall also provide opportunity to non-TEQIP institutions to participate in the pedagogical/subject domain trainings at IITs in some extent and ATUs shall be accountable for overall facilitation to such training to non- TEQIP institutions.

EVALUATION OF THE TRAININGS AT IIMS AND IITS

The evaluation of the Professional Development Trainings and Pedagogical Trainings at IIMs and IITs respectively will be carried out through in-depth interviews with significant stakeholders, analysis of relevant documents, surveys and audits through a process of peer review. Institutions would be provided guidance on strengthening implementation of academic and non-academic reforms. The key areas would include enhancement in quality and relevance of teaching and research, effective use of resources, strengthening collaboration with industry and overall improvement in internal systems and processes towards fulfilling the expectations of TEQIP III.

iv. Project Monitoring & Evaluation:

(a) Project Monitoring :

(i) Academic Web based Management Information System :

A web-based Management Information System (MIS) will be used as a tool to meet the Monitoring & Evaluation requirement of the Project. MIS will track implementation of Key Project Inputs, Outputs, Outcomes and Impact corresponding to Project activities through Performance Indicators developed for the Project as well as other indicators deemed useful for the institution's own internal decision making and providing the unit level data required for computation of each indicator.

It will be a web-based application with Graphic User Interface (GUI), which will allow timely and transparent storage of data, processing and retrieval of data, flow of information, searching and sorting of specific information uniformly, accurately and quickly and generation of the required reports.

The MIS will be developed to adapt to the specific needs of each institution and ATU's. The MIS will also be designed to generate data required for AICTE approval and NBA Accreditation process.

The MIS developed for the Project will link all the project institutions, ATU's, the SPIUs and the NPIU. All respondent entities will access MIS through the internet. Access will be conditional to persons nominated by the respondent entities and with defined level of access and security measures.

A core database, linked to existing MIS system at institutions will be created and maintained, with server access provided by the MHRD. For institutions without an MIS in place, a supplementing database will be created and linked to the core database. This will enable the MIS system to provide policy-makers, at national, state and institutional levels, a summary analysis of the collected data through an interactive, web-based application capable of generating reports for all TEQIP III indicators and providing the unit level data required for the computation of each indicator. The system will incorporate a series of validity checks to avoid spurious data entry. An IT firm will be hired for the development, installation, training, and capacity building for the TEQIP III MIS and databases.

The MIS will also have a limited interface for access by the general public. The MIS will have links to the websites of the AICTE, NBA, NAAC, UGC & MHRD.

The MIS will be funded through Component 2. Training provided to M&E staff at the national, state and institutional levels will strengthen M&E capacity.

In addition, the project will also support the development of MIS at selected ATUs to promote more effective administration and decision-making for all its affiliated institutions. The development of the ATU MIS will be funded through Sub-component 1.2.

v. Activities under National Knowledge Network:

- All institutes and ATUs in the Project, as well as those government and government-aided institutes who participated in TEQIP I and II but are not participating in TEQIP III and ATUs not in focus states, will be linked to the National Knowledge Network. Last mile connectivity will be provided by the Project.
- 24*7 broadband connectivity and Wi-Fi access in all academic and administrative buildings and hostels.
- Developing or establishing technology learning centers at all universities which affiliate engineering colleges

The result Framework for monitoring the performance of the Institutions and ATUs is given below:

Results Framework - Performance Monitoring Indicators (including DLIs)

Project Development Objective Indicators							
Indicator Name	Baseline	Cumulative Target Values					
		YR1 TY2017 (July 2016–June 2017)	YR2 TY2018 (July 2017–June 2018)	YR3 TY2019 (July 2018– June 2019)	YR4 TY2020 (July 2019– June 2020)	YR5 TY2021 (July 2020– September 2020)	End Target (September 2020)
1. Average score of students participating in tests designed to measure technical and critical thinking skills ^c		[No target as the test will be designed and piloted during this period]	Test administered for first time and baseline established	Test administered for second time and 5 percent increase over baseline		Test administered for third time and 5 percent increase over previous cycle	
2. NBA-accredited programs in participating institutes (a) UG programs (DLI#1) (b) PG programs Indicator will track increase in percentage points	50%	(a) Focus States -Applied and accredited: 2 Other States -Accredited: 1 (b) Focus States - Applied and accredited: 2 Other States Accredited: 1	(a) Focus States -Applied and accredited: 5 Other States -Accredited: 4 (b) Focus States -Applied and accredited: 5 Other States Accredited: 15	(a) Focus States -Applied and accredited:18 Other States -Accredited: 8 (b) Focus States -Applied and accredited: 15 Other States Accredited: 8	(a) Focus States -Applied and accredited: 31 Other States -Accredited:15 (b) Focus States -Applied and accredited: 20 Other States Accredited: 15	(a) Focus States -Applied and accredited: 31 Other States -Accredited: 15 (b) Focus States -Applied and accredited: 20 Other States Accredited: 15	(a) Focus States -Applied and accredited: 31 Other States -Accredited: 15 (b) Focus States -Applied and accredited: 20 Other States Accredited: 15
3. Percentage of students in the final year of UG program from Participating Institutes in Focus States who achieved the qualifying score in the GATE exam (DLI#3)	Below 13% at National level		15%	20%	25%	25%	25%

^c. The project will pilot low-stakes testing to measure the progress of cohorts of students in project institutes. The test will be designed as part of the project and is expected to test the following areas: technical skills in physics, mathematics, and informatics; critical thinking and creativity; and quantitative literacy skills. The exact measure to be tracked and the improvement to be expected will be determined once the test is finalized. The indicator will be considered met if the average score increases by at least 5 percent from the previous test cycle.

Indicator Name	Baseline	Cumulative Target Values					
		YR1 TY2017 (July 2016–June 2017)	YR2 TY2018 (July 2017–June 2018)	YR3 TY2019 (July 2018– June 2019)	YR4 TY2020 (July 2019– June 2020)	YR5 TY2021 (July 2020– September 2020)	End Target (September 2020)
4. Transition rate of UG engineering students from the first year to second year in participating institutes. (Disaggregated by SC/ST groups and gender)	Focus States -All: 50 -SC/ST: 40 -Female: 45 Other States -All: 67 -SC/ST: 54 -Female: 64	Focus States -All: 51 -SC/ST: 41 -Female:46 Other States -All: 68 -SC/ST: 56 -Female: 66	Focus States -All: 53 -SC/ST: 43 -Female:48 Other States -All: 70 -SC/ST: 58 -Female:68	Focus States -All: 55 -SC/ST: 45 -Female: 50 Other States -All: 75 -SC/ST: 60 -Female:70	Focus States -All: 60 -SC/ST: 50 -Female:55 Other States -All: 77 -SC/ST: 65 -Female:75	Focus States -All: 60 -SC/ST: 50 -Female:55 Other States -All: 77 -SC/ST: 65 -Female:75	Focus States -All: 60 -SC/ST: 50 -Female:55 Other States -All: 77 -SC/ST: 65 -Female:75
5. Percentage of students from traditionally disadvantaged groups in total enrolment in participating institutes (a) SC/ST (b) Women	SC/ST: 15 Women: 26	SC/ST: 16 Women: 26.5	SC/ST: 17 Women: 27	SC/ST: 18 Women: 28	SC/ST: 20 Women: 30	SC/ST: 20 Women: 30	SC/ST: 20 Women: 30
Core sector indicators							
1. Direct project beneficiaries (Number) - (Core)	1,469,441	1,496,759	1,541,801	1,614,472	1,690,643	1,690,643	3,210,204 (cumulative)
2. Female beneficiaries (Percentage - Sub-Type: Supplemental) - (Core)	26	26.5	27	28	29	30	30
Quality indicators							
3. Percentage of participating institutes in focus states with UGC autonomy (DLI#2)	42.5	45	50	55	66	66	66

Indicator Name	Baseline	Cumulative Target Values					
		YR1 TY2017 (July 2016–June 2017)	YR2 TY2018 (July 2017–June 2018)	YR3 TY2019 (July 2018– June 2019)	YR4 TY2020 (July 2019– June 2020)	YR5 TY2021 (July 2020– September 2020)	End Target (September 2020)
4. Percentage of PhD students in total enrolment in engineering disciplines in participating institutes Indicator will track percent increase over baseline	Focus States: 1.6 Other States: 2.5	Focus States:10 Other States:10	Focus States:30 Other States:30	Focus States:70 Other States:70	Focus States:100 Other States:100	Focus States:100 Other States:100	Focus States:100 Other States:100
5. Percentage of sanctioned faculty positions in participating institutes filled by regular or contract faculty, contracted according to AICTE norms	Focus States: 40 Other States: 65	Focus States: 42 Other States: 66	Focus States: 50 Other States: 68	Focus States: 65 Other States: 70	Focus States: 85 Other States: 85	Focus States: 85 Other States: 85	Focus States: 85 Other States: 85
6. Number of faculty trained in either their subject domain, pedagogy, or management in participating institutes		Focus States:500 Other States: 1,000	Focus States: 1,000 Other States: 2,000	Focus States: 2,500 Other States: 3,000	Focus States: 5,000 Other States: 6,000	Focus States: 5,000 Other States: 6,000	Focus States: 5,000 Other States: 6,000
7. Percentage of externally funded R&D projects and consultancies in total revenue in participating institutes	Focus States: 2 Other States: 10	Focus States: 3 Other States: 11	Focus States: 4 Other States: 12	Focus States: 5 Other States: 13	Focus States: 7 Other States: 15	Focus States: 7 Other States: 15	Focus States: 7 Other States: 15
8. Participation of affiliated institutes in participating ATUs in newly designed research-hub related activities (number)	0	Focus States: 5 Other States: 20	Focus States: 10 Other States: 30	Focus States: 15 Other States: 60	Focus States: 30 Other States:150	Focus States: 30 Other States:150	Focus States: 30 Other States: 150

Indicator Name	Baseline	Cumulative Target Values					
		YR1 TY2017 (July 2016–June 2017)	YR2 TY2018 (July 2017–June 2018)	YR3 TY2019 (July 2018– June 2019)	YR4 TY2020 (July 2019– June 2020)	YR5 TY2021 (July 2020– September 2020)	End Target (September 2020)
9. Student, Staff, and Faculty Satisfaction Survey		Report on first round published and action plan prepared		15 percent increase in average satisfaction level over the previous round Report on second round published and action plan prepared		15 percent increase in average satisfaction level over the previous round Report on third round published and action plan prepared	
10. Employer satisfaction with engineers recruited in the past year		First round of employer satisfaction survey conducted Report on first round published and action plan prepared		10 percent increase in average satisfaction level over the previous round Report on second round published and action plan prepared		10 percent increase in average satisfaction level over the previous round Report on third round published and action plan prepared	

Indicator Name	Baseline	Cumulative Target Values					
		YR1 TY2017 (July 2016–June 2017)	YR2 TY2018 (July 2017–June 2018)	YR3 TY2019 (July 2018– June 2019)	YR4 TY2020 (July 2019– June 2020)	YR5 TY2021 (July 2020– September 2020)	End Target (September 2020)
11. Development and implementation of GATE as a mandatory exit examination for students of engineering colleges (DLI#4)			AICTE passes an order requiring all final year UG students in AICTE recognized engineering institutes to take GATE	At least 60% (52) of Participating Institutes assist at least 70% of their graduating students in preparing for the GATE	At least 90% (78) Participating Institutes assist at least 75% of their graduating students in preparing for the GATE	At least 90% (78) Participating Institutes assist at least 75% of their graduating students in preparing for the GATE	At least 90% (78) Participating Institutes assist at least 75% of their graduating students in preparing for the GATE
Equity							
12. Number of engineering education institutes in focus states that meet the enabling mechanisms for participation in the project	21	55	87				
System efficiency							
13. Percentage of eligible transactions, in the previous t six months, against which funds are released in full to participating institutes by the MHRD, within 10 calendar days of the date of the date on which the participating institute requests the payment	0		50	95	95	95	95

Indicator Name	Baseline	Cumulative Target Values					
		YR1 TY2017 (July 2016–June 2017)	YR2 TY2018 (July 2017–June 2018)	YR3 TY2019 (July 2018– June 2019)	YR4 TY2020 (July 2019– June 2020)	YR5 TY2021 (July 2020– September 2020)	End Target (September 2020)
14. Percentage of participating institutes with a BoG, Department Management Committee or equivalent that meets at least 4 times every calendar and which publicly discloses the minutes of all meetings	Focus States: 35 Other States: 60		Focus States: 60 Other States: 80	Focus States: 80 Other States: 95	Focus States: 95 Other States: 95	Focus States: 95 Other States: 95	Focus States: 95 Other States: 95
15. Number of participating ATUs with MIS capable of producing annual report against prescribed indicators	0	MIS designed: Focus States: At least 1 ATU Non-LIS: At least 1 ATU	MIS developed: Focus States: At least 3 ATUs Non-LIS: At least 2 ATUs	MIS functional: Focus States: At least 5 ATUs Non-LIS: At least 3 ATUs	MIS functional: Focus States: At least 5 ATUs Non-LIS: At least 3 ATUs	MIS functional: Focus States: At least 5 ATUs Non-LIS: At least 3 ATUs	MIS functional: Focus States: At least 5 ATUs Non-LIS: At least 3 ATUs
16. Percentage of participating institutes that produce and publish an annual report in the prescribed format in accordance with the requirements set out in the PIP	0	Focus States: 20 Other States: 20	Focus States: 60 Other States: 60	Focus States: 75 Other States: 75	Focus States: 85 Other States: 85	Focus States: 85 Other States: 85	Focus States: 85 Other States: 85
17. Number of participating ATUs in focus states that publicly declare final semester examination results before the start of the next academic year	0		1	3	6	6	6

ii) **Web Based Financial & Procurement Management Systems (Direct Benefit Transfer)**

The purpose of Direct Benefits Transfer is to ensure that benefits go to institutions' and SPIU's bank accounts electronically, minimizing tiers involved in fund flow thereby reducing delay in payment, ensuring accurate targeting of the beneficiary and curbing pilferage and duplication.

The details are given in Section-VI.

(b) **Project Evaluation:**

The following activities are suggested for Project Evaluation:

- a) **Assessment Surveys:** The Assessment Surveys, conducted by the NPIU, will measure changes in the quality of education in the project institutions through formative and summative assessments of performance. Assessment Surveys to be undertaken are:
 - *Student Satisfaction Surveys:* To measure the quality of education being provided by project institutions, Student Satisfaction Surveys will be conducted. The Surveys will measure students' satisfaction with methods and quality of teaching and learning, quality of faculty, adequacy and quality of infrastructure and facilities available for academic and other co-curricular activities, etc.
 - *Faculty Satisfaction Surveys:* Faculty Satisfaction Survey will also be conducted. The Surveys will measure faculty's satisfaction with the quality of students, opportunities available for career advancement, up-gradation of skills viz. educational qualification, modern pedagogical training, etc.
These surveys will be conducted yearly from 2nd years onwards of project implementation.
 - *Implementation Surveys:* The Implementation Survey will get feedback from officials of nodal implementing agencies [MHRD, NPIU, and SPIU] and personnel from Institutions involved in Project implementation about Project design, implementation, impact and performance. The feedback will be assessed by the NPIU and the World Bank and shared with all respondents so that the outcomes of the feedback can be utilized for corrective action at the National, State and Institutional levels. The Surveys will be web based. It will be conducted twice, firstly before the Mid-Term Review (after two years from the implementation of the Project) and secondly at the end of the Project.
 - *Employer Satisfaction Survey:* A two-yearly survey will be undertaken to request feedback from employers on the quality and employability of TEQIP graduates.
- b) **Institutional Audits:** Audits will be conducted to ascertain the validity and reliability of information and to also provide an assessment of Project's internal control. Auditors will assess progress made under the Project and processes

related to technical and fiduciary aspects of the Project. These audits will verify implementation in accordance with the agreed NPIU/MHRD-World Bank procedure and guidelines and will combine factual assessment with qualitative assessment.

- *Performance and Data Audits:* Performance and Data audits will be carried out annually to assess progress made by all project institutions to achieve set goals as per their plans given in IDPs like implementation of agreed reforms, accuracy, and validity of data, progress in faculty development, utilization of resources and achievement of targets set by the Institution to achieve academic excellence. The Performance Auditors will be senior academicians, appointed out of a pool of mentors created from persons suggested by the SPIUs and those identified by the NPIU. They will be appointed for all project institutions by the NPIU. The Performance Auditors will be assisted by skilled professionals for conducting the Data Audits. The Data Auditors will be appointed by the SPIUs for their institutions and the NPIU for CFIs. All expenses for Performance and Data audits will be met by the SPIUs and the NPIU as per norms approved by the NPD from time to time. The results of performance audits will be disclosed at NPIU website. *Kindly refer “Guidelines for Mentors and Performance Auditors”.*
 - *Fiduciary Reviews:* The Fiduciary Reviews, conducted by the World Bank, will cover Post-Procurement Reviews and Financial Management Reviews. The emphasis will be to verify that the institutions follow the fiduciary guidelines described in this PIP and in the procurement and financial management manuals.
- c) **Resources Utilization Study:** The objective of the Resources Utilization Study, to be conducted by the NPIU, is to assess the extent of availability and utilization with respect to equipment, books and learning resources and suggest strategies for their optimum utilization and sustenance. It will be conducted twice; (i) before the Mid Term Review and (ii) at the end of the Project.
- d) **Bibliometric Study:** It will quantitatively assess research output and National and International level publication performance in project Engineering Institutions. It will be conducted at the end of the Project for all project institutions.
- e) **Tracer Study:** The alumni survey will be undertaken to understand student employment status. It will undertake impact evaluations to understand the effectiveness of specific interventions, such as behavioural interventions to improve transition rates of students across different social categories and gender. In addition, once in two years, feedback from employers on quality and employability of graduates will be sought.
- f) **Impact Assessment Study:** The objective of the Impact Assessment Study will be to assess the impact that can be attributed to the Project in up-grading the quality of Engineering Education offered by project institutions and in producing better skilled and more employable graduates. The study conducted by the NPIU will

measure the extent to which Project objectives have been achieved. The Study will be undertaken towards the end of the Project and will be outsourced.

- g) **Reviews:** Two types of reviews will be organized by the NPIU to assess the qualitative improvements achieved by the individual Institutions and States.
- **Mid-Term Review Mission:** A Mid-Term Review under the Project will be conducted jointly by the MHRD and the World Bank to assess the achievements of project institutions and States against the set targets. Mid Term Review is basically designed to acknowledge the good performing Institutions and States and identify corrective measures for maximizing gains from the Project. The financial allocation of the Institutions for the remaining period of the Project will also be adjusted based on their needs and performance.
 - **Bi-annual Joint Review Missions (JRM):** Joint Review Missions will be conducted six-monthly by the MHRD and the World Bank to review the overall progress achieved under the Project.

SECTION-4

Eligibility and Selection Process

4.1 Selection of States:

The States will be selected on the basis of agreement and issuance of following 8 Government Orders:

1. Permitting institutions to obtain “autonomous institutions status” from UGC,
2. Permitting institutions to retain and utilize Internal Revenue Generated through a variety of resources,
3. Empowering the BoG to fill up faculty vacancies in select institutions,
4. Constitution of SPIU cell with prescribed composition,
5. Permitting institutions to Establish a sustainability fund i.e. Four Funds (TEQIP III institutes will be required to deposit at least 8% of their revenue every year into Sustainability Fund i.e. 2% in each fund), and
6. Permitting institutions to receive project funds directly from GoI.
7. Permitting BoG of the institutions to approve all activities including TEQIP activities.
8. Permitting TEQIP-II Institutions that are not part of TEQIP-III, to retain the power of approval for all activities.

Each State will have to enter into a Memorandum of Understanding (Annex-IV) with Centre and the respective institutions under different Sub-components as the case may be.

4.2 Selection of Institutions under Sub-component 1.1 (Institutional Development Grants to Government and Government-aided Institutions):

Enabling mechanism:

The institutions will be selected on fulfilment of enabling mechanism as given below:

1. The institute offers at least 3 AICTE approved programs in engineering disciplines.

Source The institute will submit a copy of the notification from the AICTE, approving at least 3 programs in engineering disciplines, to the NPIU.

2. The institute has constituted a BoG as per UGC norms if the institute is autonomous, or AICTE norms if not. However, where the BoG is constituted as per a State Govt. Order/legislation, the same is permitted to continue provided regular meetings of BoG should be ensured by the State.

Source Institutes’ websites. Institutes will declare the composition of their BoGs, with the professional background of BoG members on their websites, such that a search from the institute’s website using the term ‘Board of Governors’ yields a link/links to the minutes.

3. The institute principal is appointed on a permanent, full-time basis and does not hold additional charge of another college.

Source The state department of technical education will submit a letter, to the NPIU, with the names of the principals of all government and government-aided colleges in the state and the college to which they have been appointed. The letter will contain an undertaking stating that none of the listed college principals hold full-time additional charge of another college, and are appointed on a full-time basis to the participating institute.

4. The college will have at least 500 students enrolled. However, if the institute offers 500 or more seats and could not fill due to its geographical or other disadvantaged conditions, relaxation is given.

Source The college will submit a list of students along with their university enrolment numbers to the NPIU. MHRD will verify and forward the same to the World Bank.

5. At least one cohort of students from the institute has completed their undergraduate degrees. If other conditions are met, relaxation is given so that new and emerging institutes could also improve their teaching, learning and overall quality education. Also teaching skills of students likely to pass out from these institutes will be improved by participation of these institutes.

A cohort is defined as the set of all students who were admitted to the first year of any undergraduate engineering degree program offered by the institute, in the same academic year.

At least one cohort will be said to have passed out if 50 percent of all students in any one cohort, admitted at any point in the institute's history, pass all courses required for the completion of their undergraduate degree.

Source The institute will submit a copy of the results of the final semester university examinations, of the first cohort, to the NPIU.

6. The institute has signed an MOU with State which includes commitments to implement the prescribed academic and administrative reforms and the State Government has passed any required Government Orders necessary to set these reforms in place.

Source The institute will submit a copy of the signed MOU to the NPIU. The SPIUs will submit copies of all Government Orders to the NPIU.

The NPIU will prepare consolidated table, which provides information against each mechanism for all institutes, as reported by SPIUs to the NPIU. The list should include all institutes in each state, regardless of whether an institute has been deemed to have met all 6 mechanisms previously; institutes must continue to meet the mechanism at each date of reporting.

The institutions deficient in meeting above eligibility parameters will be allowed to participate in second round of selection subject to meeting the all aforesaid eligibility parameters latest by October 2018.

Selection Process:

The main steps for selection of institutions under this sub-component are:

1. Invitation by States to its institutions to participate in the project with written evidence of meeting the enabling mechanism. The respective states will prepare a list of those institutions which have applied and have met the enabling mechanism and publish it on its website.
2. Preparation of Institutional Development Proposals (IDPs) by eligible institutions, using a prescribed format. IDPs will need to be approved by an institution's Board of Governors and supported by the relevant State Government.
3. Institutions will be selected based on non-competitive mode but subject to meeting certain minimum standards in the IPD.
4. Agreement to comply with performance indicators by selected institutions and signing of MOUs.

4.3 Selection of Affiliating Technical Universities under Sub-component 1.2: (Widening Impact through ATUs)

The Project will support all Affiliating Technical Universities from the LIS, SCS and Hill States under sub-component 1.2.

Enabling mechanism:

ATUs in LIS/SCS/Hill States will participate in the project based upon following enabling mechanisms being in place:

1. Full-time permanent Vice-Chancellor, Registrar and Head of Examinations appointed, without dual responsibilities
2. Audit reports completed for past five years with observations responded to
3. Statutes permitting the ATU to grant autonomy following application by an institution to UGC (and administrative procedures in place)
4. Agreement to undertake reforms in the affiliated Institutions for areas envisaged under the Project.

Selection Process:

The steps for selection of ATUs are as follows:

1. ATU would be invited by State/UT Government to submit the ATU IDP/Action Plan proposal
2. Evaluation of ATU proposals by a National Evaluation Committee (NEC) in respect of enabling mechanism, IDP/Action plan
3. Institutions will be selected based on non-competitive mode but subject to meeting certain minimum standards in the IDP/Action Plan.
4. Announcement of selection of ATUs by NSC through the NPIU
5. Signing of MoUs between State Government and ATUs

4.4 Selection of institution and ATUs under sub-component 1.3 : (Twinning arrangements to improve performance of Participating Institutions [1.1] and ATU's [1.2])

Institutions (already participated in TEQIP-I and/or II)/ATUs will be selected on a competitive basis through Challenge Method. Selection will proceed in 3 stages. At the first stage, Eligibility criteria will be used to shortlist the TEQIP-I/TEQIP-II institutes/ Universities followed by ranking on the basis of their performance assessment. Top rankers from stage-1 will be invited to submit Institution Development Proposals (IDPs) in stage-2. The institutions will proceed to stage 3 for final selection.

Stage 1: Ranking of institutes:

A) Basic Eligibility Criteria: The institutes aiming to be a Mentor Institute shall have:

- Participated in TEQIP-I and or TEQIP-II
- At least four engineering programmes (Architecture, Computer Applications, and Design are excluded),
- Obtained academic autonomy from UGC
- NBA accreditation:
 - For TEQIP-II Institutes: At least 60% of eligible programmes are NBA-accredited or applied-for NBA accreditation
 - For TEQIP-I Institutes: At least 50% of eligible programmes are NBA-accredited or applied-for NBA accreditation

B) Ranking of the eligible institutes

- i. TEQIP-I institutes: Out of 127 TEQIP-I institutes, 27 Government/Government Aided institutes (that are not covered under TEQIP-II) will be awarded marks based on the performance as indicated in Impact Evaluation Study.
- ii. TEQIP-II institutes: Marking would be done as per the score card given below:

No.	Parameter	Max Marks	Base	Score
1	Percentage of Faculty with Ph.D in Engineering (Regular & Contract)	10	60% and above	10
			45 - 59% and above	8
			Below 45	5
2	Number of Ph.Ds produced in Engineering discipline (Aug 2010 - till date)	10	20 and above	10
			Between 15-19	8
			Below 15	5
3	Number of Publications in Engineering discipline in peer reviewed Journals (Aug 2010- till date)	10	100 and above	10
			80 – 99	8
			Below 80	5
4	Transition rate of students from the first year to the second year of under graduate study	10	65 and above	10
			60 – 65	8
			55 – 60	6
5	Indicators of 6th Joint Review Mission met by institute (assessed as on 31 st January, 2017)	10	Met 8 out of 8 indicators	10
			Met 7 out of 8 indicators	8
			Met 6 out of 8 indicators	6
	Total	50		

Stage 2: Plan preparation:

The top (100) institutes ranked in the above manner will be invited to:

- a) Identify any institute(s) from the list of institutes identified for implementation of the TEQIP-III project.
- b) Prepare Institution Development Proposals (IDPs) for twinning arrangements showing how they can help the TEQIP-III institute, keeping in view their own strengths and the requirements of the TEQIP-III institute.

Stage 3: Selection:

- a) The mentor institutes will present the IDP before a Committee constituted at the State level consisting of experts, State and Central Govts, and the TEQIP-III institute.
- b) If there is only one bid for a TEQIP-III institute, and it is found to be satisfactory, that institute would be selected as Mentor Institute (MI) for the TEQIP-III institute.
- c) If there is more than one mentor institute bidding for a TEQIP-III institute, the Committee will choose the best institute based on the IDP prepared and presented as the Mentor Institute.
- d) If there is no bid or if the submitted bids are not found suitable, the bid may be rejected, invitation will be given to the lower ranked institutes for preparing and presenting the IDP for the TEQIP-III institute. This process would continue till all the TEQIP-III Focus State institutes find their MI.

NPIU will present the Committee recommendation to the National Steering Committee (NSC) for concurrence. Institutions will sign a Memorandum of Understanding (MOU) with State Government following which a list of selected institutions is announced.

Eligibility criteria for participation of ATUs:

ATUs in states other than LIS/SCS/Hill States will participate in the project based upon following eligibility criteria being in place:

- a) Full-time permanent Vice-Chancellor, Registrar and Head of Examinations appointed, without dual full-time responsibilities,
- b) At least 60% faculty in-place (including qualified adjunct plus contract faculty) against sanctioned teaching positions
- c) Accreditation from NAAC with at least B grade,
- d) Audit reports completed for past five years with observations responded to,
- e) Statutes permitting the ATU to grant autonomy following application by an institution to UGC (and administrative procedures in place), and
- f) Agreement to comply with performance benchmarks and Twinning plans by selected ATU's.

Selection Process:

The steps for selection of ATUs are as follows:

1. ATU would be invited by State/UT Government to submit the ATU proposal
2. ATU proposal should include action plan for implementing the reforms
3. Receipt of ATU proposals by the NPIU
4. Evaluation of ATU proposals by a National Evaluation Committee (NEC) in respect of enabling mechanism, actions plan
5. Feedback of NEC observations to the ATUs for improvement in the proposal, if any required
6. Consideration of new and improved ATUs proposals
7. Ranking of ATUs in terms of scores/grades
8. Twinning of each ATUs of non-focus states with 2-3 ATUs of focus states
9. Concurrence of selection by the National Steering Committee (NSC)
10. Announcement of selection of ATUs by NSC through the NPIU
11. Signing of MoUs between State Government and ATUs

Note : Twinning Agreements - These Agreements will encompass knowledge transfer, exchange of experience, optimizing the use of resources and developing long-term strategic partnerships at levels of Board of governors (BoG); institution's management/leadership; faculty and students.

SECTION – 5

PROJECT IMPLEMENTATION

5.1 Implementation Arrangement at the National, State and Institutional Levels:

5.1.1 National Level Implementation Arrangements:

There will be three bodies, namely the National Steering Committee (NSC), the National Project Directorate (NPD) and the National Project Implementation Unit (NPIU) responsible at the Central level for overall guidance, policy decisions and project management, coordination and implementation. The composition and functions of the three bodies are described below:

5.1.1.1 National Steering Committee (NSC):

(i) Composition:

The Ministry of Human Resource Development (MHRD) will constitute an 18-member National Steering Committee (NSC), composed as below:

- Secretary of the Department of Higher Education in the Union Ministry of Human Resource Development, as the Chairperson,
- Secretary, NITI Aayog or his/ her nominee,
- Secretary, Department of Science & Technology or his/ her nominee,
- Financial Advisor to MHRD,
- Chairperson of the AICTE, UGC and the NBA, (3 members)
- Four Chairpersons of State Steering Committees (SSCs), nominated by the Chairperson in annual rotation, to include 2 from states in Sub-Component 1.1 and 2 from states in Sub-Component 1.3.
- Three members nominated by MHRD, who must be persons with recognized expertise and interest in Higher Technical Education,
- Three Industry representatives, nominated one each by the Confederation of Indian Industry (CII), NASSCOM and the Federation of Indian Chambers of Commerce & Industry (FICCI), and
- The National Project Director (NPD) in the MHRD, as the Member-Secretary.

(ii) Meetings:

The NSC will meet bi-annually or as often as may be required. It will be assisted in its functioning by the National Project Directorate. The Chairpersons of some SSCs not represented in the NSC may also be invited to the NSC Meeting. The operational costs of the NSC, including sitting fees for non-official Members, will be financed by the Project through the NPIU's budget.

(iii) Functions:

The NSC, will provide the overall guidance and directions to TEQIP-III for maximizing gains from the Project. It will

- Review progress of the project against the indicators in the Result Framework Document and make any necessary adjustments to the project design or implementation to ensure the project is on track to meet the indicators.
- Review and validate recommendations of the National Evaluation Committees (NECs) for selection of engineering education institutions for participation in the Project, States & UTs, their sponsored engineering education institutions and Centrally Funded Institutions (CFIs) for participation in the Project. It will ensure fairness and transparency in the selection process for Institutions.
- Recommend corrective actions with regard to the non-performing States, UTs and Institutions including CFIs.
- Review findings of and from policy reform, thematic and evaluation studies.
- Allocate funds to the NPIU and the SPIUs.

(iv) Disclosure:

The minutes of all NSC meetings will be regularly published on the NPIU's website for ensuring transparency in selections and other decisions.

5.1.1.2 National Evaluation Committees (NECs):

(a) Composition:

The National Project Directorate will constitute a National Evaluation Committee (NEC) consisting of academicians from India for the selection of Institutions.

NPD will approve a panel of experts to serve on the National Evaluation Committee. Specific Evaluation Committees will also be formed by the NPD from the approved panel for selection of Institutions and selection of Affiliated Technical Universities (ATU) under Sub-component 1.1, 1.2 & 1.3.

(ii) Meetings:

The National Evaluation Committees (NECs) will meet on need basis after receipt of Proposals of Institutions. It will be assisted in its functioning by the National Project Implementation Unit (NPIU).

(iii) Functions:

The National Evaluation Committees will carry out the following functions:

- Evaluation of Institutional Development Proposals based on State's recommendations under Sub-component 1.1 and 1.3 and
- Evaluation of proposals of ATUs' based on State's recommendations under Sub-component 1.2 and 1.3.
- Evaluation of Institutional Development Proposals from CFIs under Sub-component 1.1.

5.1.1.3 National Project Directorate:

The National Project Directorate will be located within the Department of Higher Education in the MHRD and will be headed by a National Project Director (NPD). The National Project Director (NPD) will be nominated by the MHRD in the rank of

Additional Secretary/Joint Secretary to the Government of India. The NPD will be assisted by:

- (i) Director in Department of Higher Education in MHRD and
- (ii) National Project Implementation Unit (NPIU) headed by a Central Project Advisor (CPA).

with adequate infrastructure, key and support staff including a Finance Specialist, a Project Management Specialist etc.

NPD will be responsible for:

- Constituting a National Steering Committee and organizing its meetings,
- Constituting separate National Evaluation Committees (with well-defined Terms of Reference) for selection of Institutions & ATUs in Sub-components 1.1, 1.2 and 1.3,
- Overall Project fund management including Central fund releases, and monitoring overall utilization of Project funds,
- Ensuring timely release of funds to States, UTs and CFIs and other recipients as per approved annual allocations,
- Coordinating with project States and UTs, concerned Ministries/Departments of GoI and the World Bank,
- Overseeing Project implementation at the National and State levels,
- Periodic review of the project,
- Facilitating organizing six-monthly Joint Review Missions (JRM)s, Mid-Term Review Mission, Implementation Support Missions and such other reviews as may be called for, and
- Facilitating smooth and efficient working of the NPIU and ensuring adequate staffing of the NPIU with appropriate expertise at all times during the Project Life.

National Project Implementation Unit (NPIU):

National Project Implementation Unit (NPIU) will be in charge of the day-to-day implementation of the project at the national level. It will be headed by Central Project Advisor (CPA).

The existing NPIU will be restructured to carry out its functions through 7 functional Units and will be headed by the Central Project Advisor (CPA):

1. Institutional Development Unit (1.1)
2. ATU Support Unit (1.2 & 1.3)
3. Institutional Excellence Unit (1.3)
4. Monitoring and Evaluation Unit
 - a. Functional Support Unit
 - b. IT Support Unit
5. Financial Management Unit
6. Procurement Management Unit
7. Administration Unit

These Units may be modified by the CPA from time to time. The Institutional Development, ATU Strengthening Unit and Institutional Excellence Units will be headed by senior academicians (in the rank of Professor/Associate Professor), and experienced professionals will

head the Procurement, Finance, IT Support, M&E and Administration Unit. Each Unit head will be assisted by adequate number of suitable support staff. The Project will finance the salary cost of the full-time key and support staff in the NPIU and MHRD, fee to Consultants, salaries of contractual support staff, expenditure on rent and refurbishment of hired offices, goods, minor works, assessment, surveys, institutional audits, studies, reviews, mentoring, study tours and fellowship programmes, various training workshops, travel, staff welfare and other operating costs of the NPIU and MHRD.

- (i) **Role of the Central Project Advisor:** The CPA will be suitably empowered, financially and administratively to perform the responsibilities listed below:
- Providing overall leadership and guidance to the NPIU team, such that they can implement the Project in an effective and timely manner.
 - Disseminating information to the States, Institutions, CFIs and ATUs' through NPIU website, information on the Project design, eligibility and selection criteria and associated processes for States, Institutions, CFIs and ATUs.
 - Preparing Annual Work Plans, including Annual Budgets and detailed semi-Annual Plans and Budget,
 - Carrying out orientation of the NECs to their Terms of References (ToRs) for their concerned evaluations,
 - Organizing receipt of proposals for selection from States, UTs, and ATUs' checking completeness of proposals, submitting results of scrutiny to the National Project Directorate for consideration by the National Steering Committee (NSC) and communicating the decisions of the NSC to the States along with recommendations for improvement of proposals, as may be required,
 - Organizing receipt of Institutional Development Proposals (IDPs) from Institutions for Sub-components 1.1, 1.2 and 1.3,
 - Arranging training for the NPIU staff,
 - Developing proposals for local technical assistance for activities undertaken at the National level and with approval from the NPD and facilitating/operationalizing the same,
 - Organizing meetings of Working Groups, NECs, Mentors, Performance Auditors, and such other Committees/Groups of Experts as are constituted from time to time,
 - Building capacity of the States, UTs, Institutions and ATUs' for implementation of Equity Assurance Plan (EAP), Environment Management Framework (EMF) and Disclosure Management Framework (DMF) requirements,
 - Liaising with the SPIUs to discuss Project implementation progress to identify and solve emerging problems,
 - Organizing Professional Development Programmes for Engineering Education policy planners, administrators and implementers (from the MHRD, the State Directorates, the NPIU, the SPIUs, etc.),
 - Organizing Joint Review Missions, Mid-term and Implementation Completion Missions and other Supervision and Implementation Support Missions, as required, and
 - Carrying out other related tasks as may be requested by the NPD and the National Project Directorate.

(ii) **Role of the NPIU's Functional Units:**

(a) **Institutional Development Unit**

- Organize training, workshops and technical assistance to the SPIUs of new States on preparation of IDPs, based on SWOT analysis, for seeking funds under Sub-component-1.1 and 1.2,
- Scrutinize Eligibility of the short listed proposals for this Sub-component as received from States and UTs for completeness, validation of State/UT recommendations, eligibility parameters, and prepare reports on the same for consideration of the NSC,
- Scrutinize and follow up with evaluation of Institutional Development Proposals for Sub-component 1.1 of all short listed Institutions (for those that have State sponsorship) through NEC, submit recommendations of NEC to the NSC for selections and communicate decisions of the NSC to the States, UTs and CFIs along with recommendations for improvement of proposals, as may be required,
- Review funding requirements from Institutions and monitor fund utilization for Sub-component 1.1 including seed money for institutions under Component 1.1,
- Review funding requirements from Institutions & ATUs and monitor fund utilization for Sub-component 1.1&1.2,
- Identify resource persons in consultation with the SPIUs,
- Develop guidelines for capacity building of BoGs and develop appropriate orientation programmes for Project Institutions,
- Identify a set of mentors for CFIs,
- Approve (based on their experience and capability) mentors for State sponsored institutions,
- Empanel performance and data auditors for all project institutions,
- Develop clear ToRs, guidelines and methodologies for mentors (persons and institutions) and, performance and data auditors,
- Promote organization of separate workshops by States and select Institutions for sharing the good academic and governance practices and innovations,
- Develop and oversee procedures for effective mentoring, performance audits and data audits of all project institutions, and
- Obtain reports from mentors and auditors; review these for satisfactory progress in implementation of the proposed activities and achievement of targets.
- Monitor the use of seed money for Cycle 2 institutions in 1.1

(b) **Affiliated Technical University (ATU) Support Unit:**

- Organize training, workshops and technical assistance for preparing Eligibility proposals and University Action Plans (similar to IDPs) from ATUs' under Sub-Component 1.2.
- Scrutinize Eligibility of the short listed proposals for this Sub-component as received from ATUs, for completeness, validation, eligibility parameters, and prepare reports on the same for consideration of the NSC,

- Scrutinize and follow up with evaluation of Action Plans for Sub-component 1.2 of all short listed ATUs through NEC, submit recommendations of NEC to the NSC for selections and communicate decisions of the NSC to the ATUs & respective States along with recommendations for improvement of Action Plans as may be required,
- Review funding requirements from selected ATUs and monitor fund utilization for Sub-component 1.2.
- Ensure networking across ATU's, exchange of best practices from 1.3 to 1.2 institutions.

(c) Institutional Excellence Unit:

- Scrutinize the short listed IDPs for Sub-component 1.3 as received from States and UTs for completeness and validation of State/UT recommendations, and prepare reports on the same for consideration of evaluation by NEC,
- Organize meetings of the NEC for in-depth review of the IDPs for this Sub-component,
- Submit NEC recommendations for selection and fund allocation to the NSC, and communicate the decision of the NSC to the States/UTs and the Institutions, and
- Monitor fund utilization and implementation progress for the Sub-comp 1.3.
- Ensure networking across institutions, exchange of best practices from 1.3 to 1.1 institutions.

(d) Monitoring and Evaluation (M&E) Unit: This Unit will have two sub-units

(i) Functional Support Unit:

- Develop, implement and maintain a Project Management Information System (MIS),
- Monitor and evaluate the internal operations of the Project,
- Guide the operations of M&E specialists in the SPIUs and the project institutions through providing advice and operating as a clearing house for issues (problems and solutions) raised by States, UTs and Institutions,
- Monitor status of monitoring indicators
- Incorporate data on the performance of Institutions into the MIS,
- Develop procedures for regular monitoring of performance of project institutions,
- Conduct/commission surveys, audits and studies envisaged under Sub-component
- Publish on its website results of all National level selections and such other information as required under Disclosure Management Framework.

(ii) IT Support Unit:

- Provide Technical Coordination for development, implementation and maintenance of the web based application software viz. MIS, PMSS, e-FMR of Project Management,
- Provide Technical coordination for web based surveys,

- Publish results of all National level selections and such other information as required under Disclosure Management Framework on NPIU website.
- Publish / Coordinate for updates and activities on NPIU / Good Governance website.
- Coordinate trainings for web based application software and Surveys etc.
- Network set up, maintenance, software installation, data backup, website updation etc.

(e) Procurement Management Unit:

- Ensure full knowledge and systematic application of the World Bank’s Procurement Guidelines and provide guidance on queries from States, UTs and institutions, regarding the World Bank’s Procurement Procedures and use of PMSS,
- Manage the procurement of “seed money” to Cycle 2 institutions under Component 1.1,
- Build capacity of procurement officers in the SPIUs and the project institutions to procure Goods and Works in accordance with the World Bank Procurement Guidelines by conducting the first round of training within three months of Project inception and thereafter repeating the workshops every six months,
- Guide the SPIUs and the CFIs in the preparation of good bid documents, integrating environmental concerns in bid documents for works, and in quality assurance,
- Review the procurement documents and certify technical specifications before forwarding the documents to the World Bank for prior review,
- Make aware all the concerned of the post-review procedure, documentation required for post-review and facilitate post-review, which may be conducted by the World Bank from time to time,
- Build capacity in the SPIUs for carrying out procurement audits at the State level, and
- Act as a support and reference person for all Project-related procurement tasks.

(f) Financial Management Unit:

- Ensure full knowledge and systematic application of the Project procedures and requirements for financial management,
- Provide guidelines for financial, accounting, reporting and audit aspects through facilitating preparation of Financial Management Manual,
- Guide/monitor and provide support on adherence to fiduciary guidelines and financial management arrangements by working in close coordination with the World Bank/MHRD/CAAA,
- Provide support to the Financial Management/accounting staff for issues related to Financial Management aspects of the Project,
- Prepare annual estimates and budget for the Project and play an important role in release of funds,

- Facilitate implementation of the Project and provide advisory services and support for financial management and other allied issues,
- Monitor/Consolidate and Review Quarterly/Six-Monthly/Annual Reports of the participating States and CFIs,
- Prepare consolidated Project Financial Monitoring Reports (FMRs) and ensure timely submission of FMRs to the World Bank/CAAA,
- Coordinate receipt of annual audit reports from the States/the UTs/the CFIs and other recipients and audit of the NPIU,
- Prepare and submit Consolidated Audit Report to the World Bank through National Project Directorate on a timely basis,
- Ensure timely compliance of audit observations by all the States, UTs, CFIs and other recipients; and coordinate timely response from all concerned on audit observations,
- Prepare and implement a plan for capacity building in financial management of the FM staff in the SPIUs and the project institutions and review the capacity building requirements of FM staff at all levels on a regular basis,
- Guide the Finance Officers in the SPIUs through advice and operate as a clearing house for issues (problems and solutions) raised by States/UTs,
- Act as a support and reference person for all project-related financial management tasks,
- Impart comprehensive and theme specific training to project staff at various levels on Financial Management and manage those training programmes through preparation of training plan, including schedule of trainings/workshops/ seminars/orientation and monitoring and implementation of the same,
- Participate in reviews and monitoring of States and CFIs,
- Monitor disclosure of FM information, and
- Carry out revision of Financial Management Manual as may be required.

5.1.2 State Level Project Implementation Arrangements:

The project States and the UTs through their respective State Steering Committees (SSC) and the State Project Implementation Units (SPIU) will be directly responsible for management, coordination, implementation and monitoring of the Project at the State/UT levels.

5.1.2.1 STATE STEERING COMMITTEE (SSC)

(i) Composition

The State/UT Department responsible for Engineering Education will constitute a 9-10 member State Steering Committee (SSC), composed as below:

- Principal Secretary/Secretary responsible for Engineering Education, as the Chairperson;
- Financial Controller of the State Department concerned with Engineering Education in the State/UT or his/her nominee;

- Director or equivalent, Department of Higher Education, MHRD or nominee;
- State Project Administrator as head of State Project Implementation Unit (SPIU);
- Two Industry members, nominated by major Industry Associations;
- Two members having recognized expertise and interest in Engineering Education, nominated by the State Government;
- One nominee of the State Private Sector Advisory Group (S-PSAG) optional; and
- Director for Engineering Education in the State, as the Member-Secretary.

(ii) Meetings:

The SSC will meet quarterly. Special meetings may also be convened by the Chairperson. It will be assisted in its functioning by the SPIU. The operational costs of the SSC, including sitting fees for non-official members, will be financed by the Project through the SPIU's budget.

(iii) Functions:

The SSC will be responsible for: (a) guiding the work of the SPIU and authorizing reports to the State Government and to the National Project Directorate/NPIU; (b) short listing Institutions eligible for participation in the Project; (c) assessing and recommending Institutional and the SPIU proposals for financing under the Project; (d) overseeing operational activities within the State; (e) reviewing and approving foreign training and foreign study tours; and (f) taking stock of the Project and facilitating Project implementation under all Components and Sub-components as per the proposals approved for funding by the NSC.

5.1.2.2 STATE PROJECT IMPLEMENTATION UNIT

The Department of the State Government responsible for managing Technical Education will establish a State Project Implementation Unit (SPIU) in each focus state/UT. SPIUs will be professionally competent and dedicated state-level implementation structures, with the objective of (i) enhancing program implementation capacity in participating institutes and (ii) strengthening the engineering education system in focus states. The SPIU will comprise a full-time high-calibre team, hired on market-competitive rates, for management support in key areas of project management, including: (1) Development of a comprehensive framework for supporting and monitoring the implementation of TEQIP III in the state; (2) Knowledge management, including implementation of Twinning Agreements with well-performing institutes from non-focus states; (3) Procurement support; (4) Financial management support; (5) MIS/ERP management, training, support and maintenance; and (6) All logistics related to project management in the state.

While working for MHRD/NPIU, SPIUs will work closely with the State Department of Technical Education, if required, in concerned/focus states, seeking guidance as necessary and providing regular updates to the concerned Authorities of Technical

Education in the Centre / State Government. Since TEQIP-III is a Central Sector Scheme, with full funding from the Central Government, each SPIU will be accountable to MHRD/NPIU against a pre-determined set of performance goals as informed time to time. Importantly, SPIU's payments, increments/remuneration contracts will be performance based.

The SPIUs will be located with the help of Department of the State Government, looking after Technical Education for the concerned states. The head of the SPIU will be designated as the State Project Administrator (on selection basis). The SPA will be recruited either through Deputation or Contract mode by the MHRD/EdCIL for full time project period only. The SPA will be reporting to Principal Secretary /Director (Technical Education) of the State as well as to MHRD/NPIU in TEQIP matters. The performance of the SPA will be annually reviewed by the MHRD/NPIU based on timely achievement of the set targets. Accordingly, extension of the deputation or contract period of the SPA will be renewed by the concerned State Govt. on the discretion/recommendation of the MHRD/NPIU only. SPA will be assisted by the Nodal Officers/staffs of the concerned units recruited & deployed at States by Centre for whole project period.

(i) Role of State Project Administrator (SPA): The SPA will perform the following functions:

- Work closely with the SSC/State Department of Technical Education, seeking guidance as necessary and providing regular updates to the concerned Authorities of Technical Education in the Centre / State Government,
- Disseminating to institutions, through its website, information on the Project design, eligibility and selection criteria for Institutions and the associated processes,
- Preparing Annual Budgets and detailed semi-Annual Plans and Budget for the SPIU,
- Organizing receipt of Institutional Development Proposals (IDPs) from Institutions/ATUs for components 1.1, 1.2 and 1.3.
- Developing proposals for local technical assistance to institutions,
- According final approval to the Institution's Procurement Plan on recommendations of SPC and Procurement unit of the SPIU,
- Organizing meetings of mentors and experts,
- Building capacity of Institutions for implementation of Equity Assurance Plan (EAP), Environment Management Framework (EMF) and Disclosure Management Framework (DMF) requirements,
- Liaising with the NPIU to discuss project implementation progress to identify and solve emerging problems,
- Facilitating Joint Review Missions, Mid-term and End-term Missions and other Supervision and Implementation Support Missions, as required, and
- Carrying out other related tasks as may be requested by the NPIU.

(ii) Role of functional Units :

The SPIU will have 5 Units, namely Institutional Development Unit, Monitoring and Evaluation (M&E) along with separate IT Unit, Procurement Unit, Financial Management Unit & Admin Support Unit. States with less than 5 project institutions may reduce the number of Units to 2, namely: (a) Institutional Development Unit and M&E Unit, and (b) Procurement and Financial Management Unit, merging their respective functions. Functions of each of the following five units are described below:

(a) **Institutional Development Unit:**

- Organize training workshops for Institutions as required from time to time, on preparation of IDPs, based on SWOT analysis, for seeking funds under Sub-component-1.1,1.2 and 1.3.
- Review funding requirements from Institutions & ATUs and monitor fund utilization,
- Review Eligibility Proposals from Institutions/ATUs, and prepare reports on the same for consideration of the SSC,
- Forward the recommendations of SSC on eligibility of Institutions to the NPIU along with all the original eligibility applications received by the SPIU,
- Forward all eligible proposals received to the NPIU with due recommendations from the SSC,
- Provide guidance and arrange technical assistance to Institutions for carrying out realistic and meaningful Training Needs Analysis (TNA) to achieve their Developmental Goals and to also provide avenues for professional development of individual faculty members,
- Monitor progress in faculty and staff development for each Institution and take corrective actions, as required, to ensure that Institutions achieve their targets as given in their Faculty and Staff Development Plans,
- Identify Mentors and Performance Auditors for the project institutions,
- Carry out orientation of BoGs at the respective Institutions and disseminate good governance practices,
- Organize workshops for sharing good academic practices and innovations with other SPIUs and project institutions, and
- Oversee mentoring, performance and technical audits of project institutions, obtain and review the reports and share these reports with the SSC and the NPIU.
- Organize Pedagogical Trainings
 - The SPIUs can facilitate Pedagogical Training in the State sponsored institutions. The SPIUs shall follow the following steps, if pedagogical trainings are arranged.
 - Compile a list of project institutions desirous of training on their campus in the First Year of the Project along with their location, number of participating faculty and the time slots convenient to them.
 - The SPIU would select training providers for individual or cluster of institutions by following the World Bank Consultant procurement procedure. It will appoint a senior faculty member as

the Training Coordinator who will facilitate and coordinate the training and carry out the follow-up activities.

- The training providers will be required to evaluate the effectiveness of the training given, and the results will be shared with the institution, the SPIU and the NPIU.
- The SPIU will monitor progress and effectiveness of training, review faculty feedback and end-of-course assessment reports for their institutions.

(b) (i) Monitoring and Evaluation (M&E) Unit:

- Facilitate MIS training of personnel from all project institutions,
- Ensure periodical updating of the MIS data at the Institutional and State levels,
- Monitor progress in implementation of various Project elements on a day-to-day basis,
- Assist the Monitoring and Evaluation Specialist in the NPIU,
- Implement and oversee procedures for the regular monitoring of performance of project institutions,
- Undertake regular field visits to Institutions and develop a simple monitoring checklist, and consolidate quarterly monitoring reports based on the monitoring checklists, and
- Propose corrective actions (if any) that need to be taken. These will be acted upon by the SPA/ State Government. The NPIU Monitoring and Evaluation Unit will be responsible for collating these monitoring reports, and preparing semi-annual monitoring reports
- Monitor and evaluate the internal operations of the Project at the state level,
- Guide the operations of M&E specialists in the institutions/ATUs through providing advice and operating as a clearing house for issues (problems and solutions) raised by Institutions,
- Monitor status of monitoring indicators
- Incorporate data on the performance of Institutions into the MIS,
- Develop procedures for regular monitoring of performance of project institutions,
- Conduct/commission surveys, audits and studies envisaged under Sub-component 1.1, 1.2 and 1.3,
- Publish on its website results of all state level selections and such other information as required under Disclosure Management Framework.
- Implement and maintain the web based application software viz. MIS, PMSS, e-FMR of Project Management,
- Coordinate web based surveys,
- Publish results of all State level selections and such other information as required under Disclosure Management Framework on SPIU website.
- Coordinate trainings for web based application software and Surveys etc.

(ii) IT Support Unit

- Provide Technical Coordination for development, implementation and maintenance of the web based application software viz. MIS, PMSS, e-FMR of Project Management,
- Provide Technical coordination for web based surveys,
- Publish results of all National level selections and such other information as required under Disclosure Management Framework on NPIU website.
- Publish / Coordinate for updates and activities on NPIU / Good Governance website.
- Coordinate trainings for web based application software and Surveys etc.
- Network set up, maintenance, software installation, data backup, website updation etc.

(c) Procurement Unit:

- Ensure full knowledge and systematic application of the World Bank Guidelines for Procurement of Works, Goods and Services and use of PMSS by all project institutions,
- Guide Institutions in preparation of their Procurement Plans, review these, and forward to the World Bank through the NPIU,
- Manage the procurement of works, goods and consultancies required for State level activities under the Project and manage the procurement of International Consultancies,
- Verify the justification of procurement of items and its link with objectives and the listed activities of the project,
- Recommend the procurement plan of each institution for final approval to the State Project Advisor (SPA) through the State Project Coordinator (SPC) after thorough scrutiny of the plan for ascertaining full compliance with the World Bank laid procedures of procurement and complete requirement of PMSS,
- Conduct post-procurement audits of Institutions for ensuring full compliance with the World Bank procedures,
- Ensure compliance with EMF requirements and quality guidelines (as given in the Civil Works Manual) for all civil works in Institutions,
- Act as a support and reference unit to Institutions for all Project-related procurement tasks, and
- Submit quarterly procurement progress reports to the SSC.

(d) Financial Management Unit:

- Provide guidance on financial, accounting and reporting aspects to the project institutions at the State level,
- Ensure full knowledge and systematic application of the Project procedures and requirements for financial Management,
- Prepare budget for project at State level and arrange timely flow of funds to institutions,
- Accept Quarterly Financial Monitoring Reports (FMRs) from the participating institutions and guide/monitor and provide support for adherence to the fiduciary guidelines, financial management issues,

- Consolidate FMRs for the project and submission to the NPIU, so as to facilitate disbursement of funds within the required timeframe,
- Hire Internal and External Auditors,
- Monitor quality of audit arrangements in all agencies in the State which will be funded under the project. Regularly monitor compliance of audit observations by institutions,
- submit promptly consolidated Audit Report of Project Institutions and the SPIU to the NPIU,
- Provide support to Financial Management/accounting staff of institutions for resolving various issues related with accounting/Financial Management aspects, reporting system etc. Facilitate implementation of the project and providing advisory services and support for financial management and other allied issues,
- Impart comprehensive and topic specific training to project staff at various levels on Financial Management and manage these training programmes through preparation of training plan, including schedule of trainings/workshops/seminars/orientation, and monitor implementation of the plan in close co-ordination with the NPIU, and
- Other project aspects related to financial management,

5.1.3 Institutional Level Implementation Arrangements:

The Project at the Institutional level will be managed by an Institutional TEQIP unit under the guidance of the Board of Governors (BoG) and Head of the institution.

5.1.3.1 Board of Governors (BoG):

(i) Composition:

- Each Institution will necessarily have its own BoG, (please see eligibility conditions) as per AICTE/UGC Guidelines or as per the NIT Act 2007, as the case may be, either appointed by the sponsoring Government or by itself through due procedure, and
- The BoG will, in all cases, be headed by an eminent Industrialist / Engineering Education expert with adequate representation from other stakeholders.
- The BoG will be empowered by the State Government to act on all the activities of the institute, not only those pertaining to the Project.

(ii) Meeting:

The BoG will meet at least quarterly or as often as required and the minutes of BoG meetings will be published on Institution's website as promptly as possible. It will perform the following functions in the context of this Project.

(ii) Functions:

- Take all policy decisions with regard to smooth, cost effective and timely implementation of the Institutional project,

- Form, supervise and guide various Committees required for project implementation and internal project monitoring,
- Ensure overall faculty development,
- Will set in motion the implementation of all academic and non-academic institutional reforms.
- Ensure proper utilization of Project fund and timely submission of Financial Management Reports (FMRs) and Utilization Certificates,
- Ensure compliance with the agreed procedures for procurement of Goods, Works and Services and Financial Management,
- Monitor progress in the carrying out of all the proposed activities, resolve bottlenecks, and enable the Institution to achieve targets for all key indicators,
- Ensure that the institution complies with the agreed procedures for procurement and financial management, and other fiduciary requirements under the Project.
- Ensure compliance with other fiduciary requirements under the Project such as Equity Assurance Plan (EAP), Environment Management Framework (EMF) and Disclosure Management Framework (DMF),
- Timely initiation and completion of external and internal audits; and
- Satisfactory compliance / resolution of external and internal auditors' observations.

5.1.3.2 INSTITUTIONAL DEVELOPMENT UNIT:

Each institution will form an Institutional TEQIP Unit led by the Head of the institution. The Unit, headed by the Head of the Institution called as Institutional Project Director (IPD), will be responsible for implementation of the Institutional project. He/she is to be assisted by a Senior Professor called as Institutional Project Co-ordinator (IPC) for coordinating the activities of the institutional project. The IPD and IPC shall work together with other senior management, faculty, staff and students for the successful implementation of the project.

The Institutional TEQIP Unit will operate through internal committees constituted as per the requirements viz. committee for procurement of Goods, Works and Services; financial management; implementation of faculty and staff development activities and programmes; monitoring project implementation, achievement of targets for all indicators as proposed and keeping MIS updated; ensuring compliance with EAP, EMF and DMF requirements; ensuring implementation of Institutional reforms; organizing efficient conduct of monitoring and performance audits, etc.

For Affiliating Technical Universities, each ATU will form an Institutional TEQIP Unit, which will have the final decision-making power over activities and be responsible for implementation. It is expected that the Unit will operate through relevant committees overseeing the particular activities that the ATU will undertake. The ATU's action plans similar to IDP will include a proposed implementation committee structure, though committees for procurement and financial management, and the composition of the various committees for all institutions.

Institutions under sub-component 1.1 will also receive mentoring support for implementation, from individual expert mentors assigned to them and by mentoring institutions from sub-component 1.3.

5.2 Role of Private Sector:

The Project will seek to maximize collaboration between local Industries and project institutions by providing the National Steering Committee and the State Steering Committees (through N-PSAG) with timely, precise, and concrete advice and summarized feedback on Academia-Industry partnerships to meet the National demand for graduates and postgraduates equipped with skills and knowledge relevant to the changing market requirements. The Advisory Group will be composed of one representative each from CII, FICCI, and NASSCOM, and 7 – 12 representatives nominated from pan-Industry (sector-wise and size-wise) by CII, FICCI, and NASSCOM across the project states. It will nominate one representative to the NSC, in addition to the nominees from CII and FICCI. It will report to the National Steering Committee.

The collaboration and coordination at the Central and State levels will enable establishment and effective functioning of Academia-Industry collaborations. The expected benefits, among others, will be:

- Improvement of the skills of future job seekers through inputs on curricula,
- Early access to highly educated talent,
- Relevant research and technology development demanded by the market,
- Access to new ideas and early research results through such means as offering problems for solution through consultancy,
- Technical assistance through interaction with researchers,
- Access to specialized R&D equipment and laboratories,
- Professional development of employed engineers and technicians, and
- Access to intellectual property.

5.2.1 State Private Sector Advisory Group (S-PSAG):

- a) State Governments are expected to establish State-level Private Sector Advisory Groups. The Advisory Groups at the State level will consist of representative of the private sector conducting business activities in the respective States with relevance and knowledge of TEQIP. The number of participants (maximum of 10) in the State-level advisory group will depend on the size of the State and the range of industrial activities taking place in the State. States with less than 3 Institutions may form a cluster of States and establish S-PSAG at one State. As with the national PSAG, the State-level Advisory Groups will equally be represented in the State Steering Committee.
- b) The S-PSAG will oversee the Academia-Industry partnerships within its respective State and actively interact with both the Institutions and the private sector to ensure effective functioning of the partnership.
- c) Each S-PSAG will set up a mechanism to identify issues and difficulties, at an early stage, that potentially obstruct/restrict promotion of the partnerships and slow down implementation of the related project activities.

- d) Taking into account the identified issues and difficulties, the S-PSAG will provide timely and practical advice to the SSC, the Institutions and the private sector.

5.2.2 Funding for the Advisory Groups:

In order to support the Private Sector Advisory Groups at the National and State levels, limited but reasonable funds can be made available through the NPIU and State Governments to support the private sector advisory groups at the national level and potentially at the State level. The funds could be used for:

- a) Member's travel to attend the meetings held by the Advisory Groups, in accordance with the Government rules,
- b) Recurrent costs for meetings, and
- c) Other relevant costs as agreed to by the NSC, based on the experiences of functioning of the advisory groups. But members' time in Advisory Groups will not be paid for.

5.3 Role of the World Bank during Project Implementation:

For effective Project implementation, the World Bank will have frequent interactions with the Central and State Governments, ATUs and Institutions. The World Bank will participate in Review Missions and also visit NPIU, States and Institutions to provide implementation support and Guidance to Project activities.

The success of TEQIP I and II has established the World Bank's role in supporting ambitious reform-driven projects in engineering education in India. The Bank's engagement in TEQIP I and TEQIP II has also helped it build key networks, within project institutes as well as top-ranking Indian engineering and management institutes, which have been leveraged to initiate a range of quality and governance improvement efforts within project institutes. These networks are expected to play an important role in both helping TEQIP III achieve its objectives, and sustaining the reforms undertaken in the TEQIP series. The Bank will continue to incorporate lessons from projects in other parts of the world.

SECTION-6

FINANCIAL MANAGEMENT

6.1 Financial Plan:

The total Project cost is Rs 3600 crore. However, the project will operate with an initial cost of Rs. 2660.00 crore. TEQIP-III is a Central Sector Scheme implying that it is 100% funded by Union Government. The World Bank will finance a credit of USD 200 Million Dollars. The remaining amount of Rs. 940 crore will be provided as additional funding in the project to be decided at later stage.

Funds will be made available to the selected institutions from the selected States and UTs under three components.

6.2 Fund Allocation:

Indicative funding by components, funding pattern and cost sharing details are indicated as given below:

Indicative Funding for Original Cost

Costing Parameters	No. of Institutions/ Entities (estimated)	Cost per Institution/ Entity (in Rs. Crores)	Original Cost (Amount in Rs. Crores)
<i>Component 1: Improving quality and equity in focus states (i.e. North-East, Hill & LIS States and in Andaman and Nicobar Islands - a Union Territory (UT))</i>			
Sub-component 1.1 : Institution Development Grant in focus States/UTs			
Autonomous Institutions by UGC	27	15	405.00
Non-Autonomous Institutions or University faculty/ department/ constituent institution	53	10	530.00
New NITs/IITs	10	15	150.00
Faculty Reforms	-	189	284.00
Sub-component 1.2 : ATUs in focus States/UTs	9	20	180.00
Sub-component 1.3 : Grants towards twinning arrangements	95	7	665.00
Sub-total (1)			2214.00
<i>Component 2: System-level initiatives to strengthen sector governance and performance</i>			
NPIU operating costs and studies	1	76	76.00
SPIU operating costs	12	15	180.00
MIS/DBT	1	10	10.00
AICTE	1	10	10.00
NBA	1	10	10.00
Student Learning assessment and examination reform	-		60.00
(a) IITs	-		30.00
(b) IIMs	-		30.00
National Knowledge Network	40	1	40.00
Sub-total (2)			446.00
Grand Total (1 + 2)			2660.00

Indicative Funding for Additional Financing

Costing Parameters	No. of Institutions/ Entities (estimate)	Cost per Institution/ Entity (in Rs. Crores)	Additional Financing (Amount in Rs. Crores)
Component 1: Improving quality and equity in focus states (i.e. North-East, Hill & LIS States and in Andaman and Nicobar Islands - a Union Territory (UT))			
Sub-component 1.1 : Institution Development Grant in focus States/UTs			
Well Performing Institutions	50	5	250.00
Well Performing New NITs/IITs	7	5.5	38.50
Faculty Reforms	-	110	110.00
Sub-component 1.2 : Well-performing ATUs in focus States/UTs			
Sub-component 1.3 : Well-performing institutions/ATUs under twinning arrangement	62	5	310.00
Sub-total (1)			736.00
Component 2: System-level initiatives to strengthen sector governance and performance			
NPIU operating costs and studies	1	30	30.00
SPIU operating costs	12	10	120.00
MIS/DBT	1	4	4.00
AICTE	1	2	2.00
NBA	1	2	2.00
Student Learning assessment (implementation)			
(a) IITs	-		10.00
(b) IIMs	-		10.00
National Knowledge Network	20	1	21.00
Sub-total (2)			204.00
Grand Total (1 + 2)			940.00

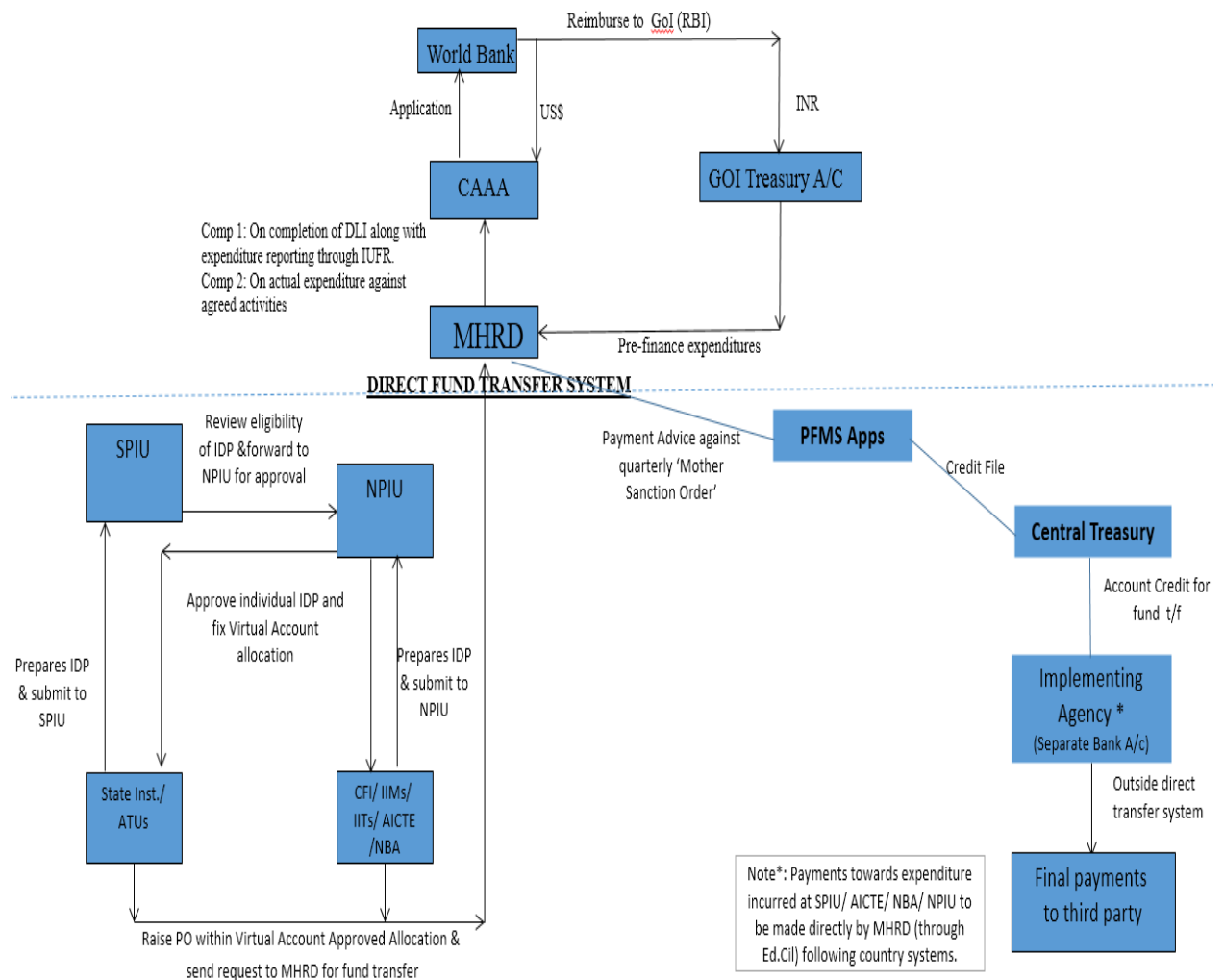
6.3 Budgeting:

The project will follow budgeting cycle of GoI i.e. April to March and the process will be completed when project's expenditure (IDA financing and counterpart financing) estimates are included in the Union government's budget presented and approved by Parliament. The project will be budgeted as a separate line on the expenditure side at the Union (Center) level, as externally aided project under an identifiable budget head item of the MHRD. Budgeting Process for project activities will be as under:

- National Level: MHRD will be responsible for preparation of the budget for all project activities i.e. Central expenditures including AICTE and NBA; SPIU level expenditures; and towards expenditures of eligible institutes including central institutions;
- State Level: Following direct system for fund transfers, SPIU level expenditures will also be provided for through NPIU. Hence, no budget provision is required to be provided at States

6.4 Fund Flow:

The diagram below reflects the anticipated authorization and flow of funds:



6.5 Disbursement Arrangements: The project will be pre-funded by budgetary allocations.⁴ The diagram above also depicts disbursement arrangement under the program. Component wise details are as under.

- i. **Component 1:** [Total: USD 318 million; IDA: USD 159 million]. Disbursements from Bank will be contingent on achievement of pre-agreed result (DLI) duly verified against execution of agreed Eligible Expenditure Programs (EEP's). **Eligible Expenditure Program (EEP):** is defined as expenditures on all activities under TEQIP-III project as incurred by GOI, eligible project States/ UTs and institutions.⁵ These EEP's will be subject to annual project audit. Disbursements by Bank under this component will be on achievement and verification of results indicated in agreed DLIs. The project will submit an IUFR evidencing cumulative expenditure incurred against identified EEP (refer para above). Bank will reimburse up to 50% of reported EEP calculated at each disbursement

⁴ IDA advance has not been requested under the project.

⁵ Salaries may be included in the EEP following finalization of Faculty Recruitment Plans and FM assessment of the related implementation arrangements. This is expected by March 31, 2018. As per the Teacher Recruitment Plan, for specific states, salaries may be funded by routing through the state treasury.

cycle (semi-annual) to GoI. In case, in particular disbursement cycle the EEP is more than the DLI based disbursement, the balance EEP will be rolled over to next cycle and will be part of subsequent EEP.

ii Component 2: [Total: USD 82 million; IDA: USD 41 million). Disbursement will be on the basis of actual expenditure against the agreed activities.

6.6 Accounting: It is envisaged that the computerized direct fund transfer system will also have a separate module for accounting under the project. Presently, most states/ institutions use an off-the-shelf accounting software for recording/ compilation of information. Books of accounts for the project will be maintained using double-entry book keeping principles. Standard books of accounts (cash and bank books, journals, ledgers, etc.) will be maintained at the state and institutes. A Chart of Accounts (standard activity list) will be used to enable data to be captured and classified by expenditure centre and type of expenditure. Release of funds to states/ institutes/ staff / suppliers will be accounted for as advances in the books of accounts and treated as expenditure only upon submission of expenditure information.

6.7 Internal Control Framework: The internal control framework for the Project will be based on GoIs Financial Rules. The FM Manual of the Project will set out the FM framework and procedures to be followed by all implementing agencies. Internal controls in the Project will at minimum include:

- a. Authorization and Approvals: For payments to be made, the financial and administrative authority as amended for the Project shall be exercised in accordance with the approved delegation of powers.
- b. Verifications: For each payment, the treasury shall review that the payment claim is appropriately supported by documents, is in compliance with approved policies and has been approved by competent authority.
- c. Segregation of Duties: FM function shall be independent of procurement and administration. There will be dual signatories for approval of expenditures at all level of implementation.
- d. Physical Controls: All spending units will maintain a fixed assets register for assets procured from credit proceeds. All assets will be tagged and periodically verified

6.8 Financial Reporting: Project expenditures will be reported by Institutes to SPIUs and by SPIUs to NPIU. NPIU will submit consolidated Interim Unaudited Financial Reports (IUFs)– to be submitted on semi-annual basis within 60 days from the close of the reporting period. The IUFs will include state-wise and activity-wise expenditure for the previous reporting period and year to date.

6.9 Disbursement Linked Indicators:

Disbursement-Linked Indicators	Disbursement-Linked Targets				
	Baseline*	Targets to be Achieved in TY2017 (Year 1) (July 2016-June 2017)	Targets to be Achieved in TY2018 (Year 2) (July 2017-June 2018)	Targets to be Achieved in TY2019 (Year 3) (July 2018-June 2019)	Targets to be Achieved in TY2020 (Year 4) (July 2019-June 2020)
DLI#1 Number of undergraduate (UG) programs offered in Participating Institutes in Focus States that are NBA accredited	243 programs in 34 institutes out of 703 programmes in 86 institutes are accredited	N/A	At least 250 UG programs accredited: US\$ 10 million US\$ 1 million for every additional 10 programs accredited, up to a maximum of 280 programs	At least 320 UG programs accredited: US\$ 15 million US\$ 1 million for every additional 18 programs accredited, up to a maximum of 374 programs	At least 464 UG programs accredited or for which accreditation has been applied for.
<i>DLI Values</i>		N/A	US\$13 million	US\$18 million	US\$23 million
DLI# 2 Percentage of Participating Institutes in Focus States with UGC autonomy	42.5% (37)	N/A	At least 48% (41)	At least 55% (48)	At least 66% (57)
<i>DLI Values</i>		N/A	US\$ 13 million	US\$17 million	US\$19 million
DLI #3 Percentage of students in the final year of UG program from Participating Institutes in Focus States who achieved the qualifying score in the GATE exam	Below 13% at National level	N/A	At least 15%	At least 20%	At least 25%
<i>DLI Values</i>		N/A	US\$7 million	US\$9 million	US\$11 million
DLI #4 Development and implementation of GATE as a mandatory exit examination for students of	---	N/A	AICTE passes an order requiring all final year UG students in AICTE-recognized engineering	At least 60% (52) of Participating Institutes assist at least 70% of their graduating students in preparing for the	At least 90% (78) Participating Institutes assist at least 75% of their graduating

Disbursement-Linked Indicators	Disbursement-Linked Targets				
	Baseline*	Targets to be Achieved in TY2017 (Year 1) (July 2016-June 2017)	Targets to be Achieved in TY2018 (Year 2) (July 2017-June 2018)	Targets to be Achieved in TY2019 (Year 3) (July 2018-June 2019)	Targets to be Achieved in TY2020 (Year 4) (July 2019-June 2020)
engineering colleges			institutes to take GATE	GATE	students in preparing for the GATE
<i>DLI Values</i>		N/A	US\$5 million	US\$10 million	US\$14 million

6.10 Disbursement-Linked Indicators – Verification Protocol:

DLI	Verification Protocol
<p>DLI #1 Number of undergraduate (UG) programs offered in Participating Institutes in Focus States that are NBA accredited</p>	<p>Applicable to all institutes under Subcomponent 1.1 which have signed an MOU with the MHRD or respective state government (as the case may be) for participation in the project.</p> <p>NBA accreditation of the program(s) offered by an institute is applied for if the institute offering the program has completed the following steps:</p> <ul style="list-style-type: none"> (a) Registration with the NBA (b) Completion of the online application form for NBA accreditation of the program(s) and payment of the accreditation fee (c) Submission of the eSAR for the program(s) to the NBA <p>A program is accredited if the NBA has accredited it for two or five years. A program will continue to be considered accredited for six months after the date on which its accreditation expires, conditional on it having applied for renewal.</p> <p>If the NBA has accredited a program at any time previously, for two or five years, it will be considered accredited only if it receives five-year accreditation in subsequent accreditation cycles.</p> <p>Year 4 target will include both programs accredited by NBA as well as programs that have applied for NBA accreditation. All else remains same.</p> <p>To avoid double-counting, no program that is accredited will be included in calculating the number of programs that have applied for accreditation.</p> <p>The percentage of programs accredited (and/or applied for) will be calculated out of the total number of AICTE approved eligible UG/PG programs offered by institutes as of the date of reporting.</p> <p><i>Source</i></p> <ul style="list-style-type: none"> (i) Project MIS. For the program(s) for which accreditation has been applied for, the institute uploads, to the MIS <ul style="list-style-type: none"> (a) a copy of the receipt for payment of accreditation fees to the NBA. (b) a copy of the eSAR submitted to the NBA.

DLI	Verification Protocol
	<p>For the program(s) that have been accredited: The institute will upload, to the MIS, a copy of the notification from the NBA on the accreditation status of the program(s).</p> <p>(ii) NBA website</p> <p>This DLI can be carried forward or met early.</p>
<p>DLI# 2 Percentage of Participating Institutes in Focus States with UGC Autonomy</p>	<p>Applicable to all institutes participating under Subcomponents 1.1, which have signed an MOU with the MHRD or respective state government (as the case may be) for participation in the project.</p> <p>UGC autonomy refers to the delegation of powers to an institute, by the UGC, according to the UGC Guidelines for Autonomous Institutes 2012–17. An institute is considered autonomous once it receives a formal notification from the UGC that it has been granted autonomy.</p> <p><i>Source:</i></p> <p>(i) Project MIS. Institutes will upload the notification of grant of autonomy by the UGC to the MIS.</p> <p>(ii) UGC website</p> <p>This DLI can be carried forward or met early.</p>
<p>DLI #3 Percentage of students in the final year of UG program from Participating Institutes in Focus States who achieved the qualifying score in the GATE exam</p>	<p>Applicable to all institutes under Subcomponent 1.1 which have signed an MOU with the MHRD or respective state government (as the case may be) for participation in the project.</p> <p>GATE refers to the Graduate Aptitude Test in Engineering conducted by the Indian Institute of Science and an IIT (a different IIT is selected each year).</p> <p>Qualifying score in the GATE refers to obtaining at least the ‘qualifying mark/score’ for the social category that student belongs to in the current year as declared by the IIT conducting that year’s GATE.</p> <p><i>Source:</i> Institute-wise data on the percentage of students that qualified the GATE out of those who appeared for the GATE will be provided by the IIT responsible for conducting the GATE in each year to the NPIU. The data will be uploaded to the project MIS.</p> <p>This DLI can be carried forward or met early.</p>

DLI	Verification Protocol
<p>DLI #4 Development and implementation of GATE as a mandatory exit examination for students of engineering colleges</p>	<p>Applicable to all institutes under Subcomponent 1.1 and Subcomponent 1.3 engineering colleges which have signed an MOU with the MHRD or respective state government (as the case may be) for participation in the project.</p> <p>GATE refers to the Graduate Aptitude Test in Engineering conducted by the Indian Institute of Science and an IIT (a different IIT is selected each year).</p> <p>AICTE order refers to regulation under AICTE Act passed by the AICTE Executive Council.</p> <p>Assistance includes the following:</p> <ol style="list-style-type: none"> (1) Providing focused coaching for GATE preparation through classroom teaching at no additional cost to the student (2) Providing focused learning material for GATE preparation at no additional cost to the student (3) Providing scholarships for GATE preparation if college is unable to provide appropriate assistance. <p><i>Source:</i> Institutes will provide NPIU a list of students who were provided assistance for GATE preparation, along with details of type of assistance and student contact details. The data will be uploaded to the project MIS.</p> <p>Third party verification required. This will include random checks with students on the veracity of information provided in institute lists.</p> <p>This DLI can be carried forward or met early.</p>

6.11 Auditing:

Statutory Audit at State Level:

The SPIU will appoint a firm of chartered accountants for audit of the SPIU and project institutions within the State.

Audit at the SPIU: The audit at the SPIU level will include audit of Financial Monitoring Report (FMRs), and project accounts. The SPIU will be required to maintain the records of FMRs and the project accounts separately to enable the auditor to carry out necessary checks and verification effectively.

Audit of Institutions: Further, the auditor will audit the project accounts of the institutions. For this purpose, the institutions are required to furnish all documents / records to the auditors to facilitate timely audit. Each institution will put up the audit report to Board of Governors within a reasonable period of completion of audit.

Consolidated Audit Report of State: The SPIU will be required to submit a consolidated audit report for the State to the NPIU by **31st July** of every project year.

Statutory Audit at CFIs:

Centrally Funded Institutions will appoint a firm of Chartered Accountant to audit the accounts and the audit will be completed by **31st July** of every financial year. For this purpose, the institutions are required to furnish all documents / records to the auditors to facilitate timely audit.

Statutory Audit at the NPIU:

Annual audit of the NPIU by a firm of chartered accountants will be completed by **31st July** of every financial year.

Consolidated Audit Report for Project:

The NPIU will consolidate the audit reports of the States, CFIs and the NPIU. There will be one single audit report for the entire project which will be submitted by the NPIU to the World Bank by **31st December** of every financial year.

6.12 Internal Audit:

Internal audit system is one of the important parts of financial management to examine and verify the adequacy and effectiveness of the inherent internal control system of an organisation/project. As there are multiple institutions in the project, financial management of the project can be strengthened by establishing a system of internal audit.

6.13 Additional Control Measures:

The following control measures can be adopted from time to time for effective and proper functioning of the project

- **Surprise check/audit:**
 - Surprise check of transactions, records and books of accounts of different accounting centres and institutions are to be carried out periodically.

6.14 Disclosure:

The project will disclose key information through its websites (NPIU/ SPIUs/ Institutions) and as part of the semi-annual JRM documentation. This information will include (a) Project FM guidelines including Financial Management Manual; (b) Annual Audited Financial Statements; (c) status of release of funds at various stages; and (d) specific information on key FM aspects like staffing, training, etc.

6.15 MoU :

The MoUs will be signed between institutions and States and by State to MHRD and CFIs to MHRD.

6.16 Financial Management Manual:

The “Financial Management Manual” (FMM) developed for the Project provides the essential information, to enable the SPIUs, the NPIU and project institutions to carry out effectively the financial operations in the Project. It is a guide to the implementing agencies for understanding the detailed Financial Management of the Project.

Indicative Category-wise Funding for Key Activities per Project Institution (Centrally Funded, Government Funded and Government Aided Institution) selected under Sub-component 1.1

S. No.	Key activities	Category of Expenditure (Head of expenditure)	Percentage (%)	Cost (Rs. in crore) for non-autonomous Institution or University faculty/ department/ constituent institution	Cost (Rs. in crore) for autonomous institution status by UGC/ CFIs
1	Procurement of Goods (equipment, furniture, books LRs, software and minor) and minor civil works for improvement in teaching, training and learning facilities	Procurement	Up to 60%	6.00	9.00
2	Improvement in Teaching, Learning and Research competence' <ul style="list-style-type: none"> ▪ Improve student learning ▪ Student employability ▪ Increasing faculty productivity and motivation ▪ Establishing a twinning system <ul style="list-style-type: none"> ○ Twinning arrangements with high performing institutions under Sub-component 1.3 to build capacity and improved performance 	Academic	At least 30%	3.00	4.50
3	Incremental Operating Cost	IOC	Up to 10%	1.00	1.50
TOTAL			100	10.00	15.00

Note:

- The expenditure on minor civil works should not exceed 5% of the institutional project life allocation.
- The Incremental Operating Cost means the costs of operation and maintenance of equipment, office expenses, hiring of vehicles, consumables, salaries and allowances of regular and contract faculty and staff against posts created under the Project. It will also include travel costs incurred for the Project Management activities i.e. visit to the NPIU, the SPIU, Universities, etc.
- Procurement of consultant services, if required, for the activities bulleted at Sr. No. 2 are permitted. The expenditure on procurement of consultant services is to be booked against the “Academic” head of expenditure. The services of consultant are to be procured by following the World Bank norms and procedures through the PMSS.
- Fund from Procurement and IOC Head of expenditure can also be re-appropriated to Head of expenditure for academic activities but not vice versa.

**Indicative Category-wise Funding for Key Activities per ATUs selected
under Sub-component 1.2 & 1.3**

S. No.	Key activities	Category of Expenditure (Head of expenditure)	Percentage (%)	Cost (Rs. in crore) for ATUs under Sub-component 1.2	Cost (Rs. in crore) for ATUs under Sub-component 1.3
1	Procurement of Goods (equipment, furniture, books LRs, software and minor items) and minor civil works <ul style="list-style-type: none"> • Centralized Research hubs opened to all faculty • Establishing/improving ERP/management information system for student, staff and faculty data • Improving financial management and procurement • A modern HR system for efficient personnel management 	Procurement	Up to 40%	8.00	2.80
2	Improvement in Teaching, Learning and Research Competence of affiliated institutions <ul style="list-style-type: none"> • Mentoring of affiliated institutions and promoting of applications to UGC/NBA • Increasing faculty productivity and motivation • Twinning arrangements with ATUs under Sub-component 1.3 to build capacity and improved performance • Preparation of massive open online courses (also referred to as MOOCs), facilitating access of institutions to MOOCs • Filling up of faculty vacancies • Developing credit-based systems such that students in institutions could use select e-learning courses as part of their degree programs • Greater access to digital resources • Improving institutional governance • Improve student learning • Student employability 	Academic	At least 50%	10.00	3.50
3	Incremental Operating Cost	IOC	Up to 10%	2.00	0.70
TOTAL			100	20.00	7.00

Note:

- The expenditure on minor civil works should not exceed 3% of the institutional project life allocation.
- The Incremental Operating Cost means the costs of operation and maintenance of equipment, office expenses, hiring of vehicles, consumables, salaries and allowances of regular and contract faculty and staff against posts created under the Project. It will also include travel costs incurred for the Project Management activities i.e. visit to the NPIU, the SPIU, Universities, etc.
- Procurement of consultant services, if required, for the activities bulleted at Sr. No. 2 are permitted. The expenditure on procurement of consultant services is to be booked against the "Academic" head of expenditure. The services of consultant are to be procured by following the World Bank norms and procedures through the PMSS.
- Fund from Procurement and IOC Head of expenditure can also be re-appropriated to Head of expenditure for academic activities but not vice versa.

Indicative Category-wise Funding for Key Activities per Project Institution (Centrally Funded, Government Funded and Government Aided Institution) selected under Sub-component 1.3

S. No.	Key activities	Category of Expenditure (Head of expenditure)	Percentage (%)	Cost (Rs. in crore)
1	Procurement of Goods (equipment, furniture, books LRs, software and minor items) and minor civil works for improvement in teaching, training and learning facilities	Procurement	Up to 50%	3.50
2	Improvement in Teaching, Learning and Research competence' <ul style="list-style-type: none"> ▪ Improve student learning ▪ Student employability ▪ Increasing faculty productivity and motivation ▪ Establishing a twinning system <ul style="list-style-type: none"> ○ Twinning arrangements with institutions under Sub-component 1.1 to build capacity and improved performance ○ Individual institutional mentors 	Academic	At least 40%	2.80
3	Incremental Operating Cost	IOC	Up to 10%	0.70
TOTAL			100	7.00

Note:

- The expenditure on minor civil works should not exceed 5% of the institutional project life allocation.
- The Incremental Operating Cost means the costs of operation and maintenance of equipment, office expenses, hiring of vehicles, consumables, salaries and allowances of regular and contract faculty and staff against posts created under the Project. It will also include travel costs incurred for the Project Management activities i.e. visit to the NPIU, the SPIU, Universities, etc.
- Procurement of consultant services, if required, for the activities bulleted at Sr. No. 2 are permitted. The expenditure on procurement of consultant services is to be booked against the “Academic” head of expenditure. The services of consultant are to be procured by following the World Bank norms and procedures through the PMSS.
- Fund from Procurement and IOC Head of expenditure can also be re-appropriated to Head of expenditure for academic activities but not vice versa.

Section-7

PROCUREMENT MANAGEMENT

7.1 Procurement Guidelines:

Procurement of all Goods and Works under the Project are to be carried out in accordance with the **World Bank's "Guidelines: Procurement Under IBRD Loans and IDA Credits & grants by World Bank borrowers" dated January 2011, as updated in July 2014 ("Procurement Guidelines") as per the Financial Agreement agreed between the Government of India and the World Bank.** The guidelines should be strictly followed to avoid penalties.

7.2 Procurement Arrangements:

Project institutions must form separate (i) Goods Procurement Committee and (ii) Building & Works Committee to manage all Institutional procurement activities for Goods and Works. The Committees will need to seek approval from, and will function under the supervision of the BoG. Institutions must also nominate a Coordinator for all procurement activities under the Project.

7.3 Procurement Management Support System (PMSS):

A web based Procurement Management Support System (PMSS) will be used in the project to capture end-to-end procurement process, generate standard bidding documents (SBDs), Bid Evaluation Report (BER), Purchase order (PO), identify contract milestones like warranty period, performance guarantee, delivery schedule etc. and meet documentation / report requirements of all project entities. PMSS will help the procurement activities by reducing time, standardizing the processes followed, ensuring transparency, improved monitoring, support decision-making and compliance with the Procurement guidelines.

The Centrally Funded, Government funded and Government aided Institutions are required to note that, "the procurement of goods is to be done strictly amongst the activities which are detailed-out in PIP as required and justified by institutions to fulfil the project objectives.

7.4 Procurement Manual:

The Procurement Manual developed for the Project provides the essential information and step-by-step procedures, about procurement of Goods, Works and Services to guide procurement under the Project.

The Procurement Manual is intended to guide the implementation agencies to understand the procedures to be followed for procurement and to also ensure compliance with the agreed procedures.

7.5 Institutional Procurement Plan:

A Procurement Plan needs to be prepared clearly laying down the budget required by the Institutions for procurement activities. It is an essential tool for proper monitoring and execution of the procurement activities. The Procurement Plan should cover Goods, Works, and Consultant Services required for the whole of the Project life.

Institutions are required to submit a Procurement Plan along with the Institutional Development Proposal in the prescribed formats

Revision / updation of Procurement Plan: Once the submitted Procurement Plan is reviewed by BoG of the Institution and given a “no objection”, subsequent changes / revision / modification can be done at institution level with the approval of respective BoGs. The Procurement Plan can be revised / updated as required to reflect the actual project implementation needs and improvements but within framework of the World Bank guidelines.

7.6 Procurement of Goods:

The Procurement of Goods by the Government and Government aided project institutions will be in four categories: equipment, furniture, books & learning resources and minor items.

7.7 Procurement of Works:

The Project does not envisage large scale civil works but makes provisions to meet the essential requirements for acquiring excellence. Civil works in project institutions include (i) repair works (ii) refurbishment works and (iii) extension of existing buildings.

The Civil Works Manual developed for the Project, describes the types of civil works to be undertaken in the Project, and provides guidance for understanding of the procedures to be followed for each type of works. The Manual also provides guidance on the various environmental aspects that need to be integrated into the design and construction of civil works.

7.8 Selection and Employment of Consultants/Services:

The project institutions, for specialised requirements, can avail support and services of Consultants to achieve Institution’s goal. Procurement of services under the Project will be carried out in accordance with the **World Bank** “Guidelines: Selection and Employment of Consultants Under IBRD Loans and IDA Credits & grants by World Bank borrowers” dated January 2011, as updated in July 2014 (“Consultant Guidelines”) as per the Financial Agreement agreed between the Government of India and the World Bank. The guidelines should be strictly followed to avoid penalties.

7.9 Procurement Audits:

The World Bank will appoint auditors to monitor the procurement activities periodically. Additionally, teams from the NPIU and the SPIUs will also visit Institutions to monitor the procurement activities undertaken.

Yearly self-audits are to be conducted at Institutional level by the SPIUs and Institutional officials for procurement activities, and reports on the findings are to be sent to the NPIU (in the reporting format given in Procurement Manual) along with remedial actions taken to make improvement for the deviations noticed.

Procurement Plan for Works and Goods*

Name of the Institution with location: -----

Package No.	S. No.	Activities	Description of Works/ Goods	Estimated Cost (Rs)	Method of Procurement	Design/ Investigation Completion/ Specification Finalization (Date)	Estimate Sanctioned (Date and Value)	Preparation of Bid Document (Date)	Date of Receipt of Bank's No Objection to Bidding Document **	Bids		Contract Award (Date/ Value)	Date of completion of Contract
										Invitation (Date)	Opening (Date)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

* Goods cover Equipment, Furniture and Books & Learning Resources

** Applicable in case of 'Prior Review' by the World Bank.

Note: For Column 6, state ICB/NCB/Direct Contracting/Shopping method as appropriate

Procurement Plan for Consultant Services

Name of the Institution with location: -----

SI No	Activities	Description of Services	Estimated Cost (Rs)	Methods of Selection @	ToR Finalization (Date)	Advertisement (Date)	◆ RFP Final Draft to be Forwarded to the Bank (Date)**	No Objection from the Bank for RFP (Date)**	RFP Issued (Date)	Proposals Received (Date)	Evaluation (Date)	No Objection by the Bank (Date)**	Contract Value & Date of Award	Contract Completion (Date)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(1)

@ State whether (i) Single firm or individual; or (ii) Competitive procedure. If Competitive, then state whether Quality & Cost Based Selection (QCBS) or Least Cost Selection procedure, etc.

◆ RFP (Request for Proposal): Same as 'Bid Document'

** Applicable in case of 'Prior Review' by the World Bank

SECTION-8
EQUITY ACTION PLAN
(INDIGENOUS PEOPLE'S POLICY FRAMEWORK)

8.1 Objective:

To ensure that all students and faculty in the project institutions have equal opportunity to avail the benefits of the Project with substantial improvement in the performance of students with special attention to the needy and ST and SC categories

8.2 Scope:

All project assisted institutions will be responsible for preparing and implementing the Equity Action Plan (EAP) as an integral part of project implementation for TEQIP-III.

8.3 Strategy:

Every institution faces a different challenge to improve academic performance. In addition to the caliber of students in an institution, its facilities, management, quality and efficiency of the teaching faculty, and measures to address students' felt needs including relating non-cognitive skills and behavioral issues have a bearing on student performance. The Project institutions are to make Equity Action Plans (EAP/IIPF) to improve learning outcomes for students and employability of graduates with special attention to the needy ones including those from the SC and ST categories. The project aims to ensure that all participating institutions improve the transition rate of First Year (enrolled) students to the Second Year (a key performance indicator of the project). Institutional targets are set for all students with special attention to socially and economically underprivileged groups including SC, ST, OBC and Women students. Achievement must be maintained during subsequent years so that high graduation rates are achieved by every institution. All Institutions should include Institutional EAP in their Institutional Development Proposals. The EAP should be a part of each Institution's MoU with the concerned project authorities.

The NPIU and the SPIUs will assess the efforts of project institutions in the implementation of the Equity Action Plan to ensure equity at all levels in the project institutions.

Measures for Improving Academic Performance of students: Institutions need to identify and support students who need extra support. Various criteria might be used to identify the students in need, including for example, those who fail more than 40 or 50 percent of their subjects in a given year, lose a year or more during their degree programme, or consistently get low marks. Some students may fail to secure employment at the end of their degree programme because of overall low performance or inadequate skills at the completion of the course. Some of the reasons for these weaknesses are: low entry level marks (i.e., inadequate preparedness for the rigorous engineering curriculum), irregular attendance of classes, low self-confidence, weak language skills in English, which is the medium of instruction or even in the main vernacular language. Generally it is observed that that weaker students do not communicate their difficulties and do not seek help due to factors including low self-esteem or even self-inflicted stigma. In addition, students may not do well because of a number of institutional factors, including vacancies in faculty and technical staff positions, deficiencies in faculty teaching skills, lack of library facilities or restricted opening times, poor academic support, inadequate student

support services, lack of effective monitoring of student performance, or regular feedback to students, inadequate hostel facilities, poor quality placement offices, etc.

Some possible interventions to improve the performance of students with special attention to the needy:

1. The participating institutions should strive to ensure that all students perform well academically and achieve their post-institution goals i.e. securing good jobs or entering post-graduate courses, according to their choice, suited to their capabilities, and in line with the education they have received. Institutions must also ensure that all the faculty be well trained in Pedagogy especially with regard to addressing the needs of weak students. Some possible interventions to improve the performance of weak students include the following.
2. ***Diagnosing Student Weaknesses and Continuous Tracking of Performance*** through academic screening on entry and steps to bridge the knowledge gaps in specific areas requiring attention. It is essential that such screening tests are professionally planned and executed, which could benefit from a number of commercially available test modules. In addition, institutions should ensure that tests are appropriate (some test assess academic achievement while others test learning skills and others yet test the psychological profile of students). Properly devised tests on entry and at the start of semesters can provide information about specific areas where a student needs help. Such tests can be particularly be helpful before ‘tough’ subjects begin each semester, and efforts can be made to strengthen classroom strategy and additional academic support by a student mentor, or faculty. The institutions will establish procedures and mechanisms to monitor the progress of students at various stages of the academic tenure. Reviewing student attendance in connection with performance and advising students to attend classes and make up missed classes will be emphasized.
3. ***Improving Performance in Academic Subjects***. Students can be helped with **remedial classes** during semester hours or during vacations can be helpful. Additional classes can be held during institution hours when no classes are held but **teachers** are available to help students address their weaknesses. Extra inputs could be provided in more innovative ways such as: **tutorial classes** where students interact with each other and also with a faculty / PG student. The institutions will prepare and offer “**Bridge Courses**” for the students in need during the first year which could include extra classes, notes and guidance where teachers are available to students formally and informally. Institutions should also remember that having the same faculty simply re-teaching the same classes to the same students – without variation in approach or teaching methodology – is unlikely to be successful.
4. ***Enhancing English and Communication and Presentation Skills***. One key factor affecting academic performance of students and employability of graduates is their inability to effectively communicate in the English language. The EAP/IPPF therefore emphasizes taking measures to help students improve their proficiency in English. The strategy could include English language labs, tutorials for technical and everyday English, opportunities to make presentations in the classroom, etc. Language and soft-skills development should be provided throughout the degree programme and not only in the final semesters in preparation for job interviews. Interactive and confidence-building programmes should also be implemented.

5. ***Building Students' Non-cognitive Skills.*** Non cognitive attributes refer to academically and occupationally relevant skills and traits which may not be purely intellectual or analytical in nature. Non cognitive skills are personality and motivational habits and attitudes that aid academic and professional performance of students. Non cognitive traits, skills, and characteristics include perseverance, motivation, self-control, and other aspects of conscientiousness. Non cognitive skills deficit may accumulate over time and affect overall success in life. Non cognitive skills development can help in reversing or limiting delays or deficiencies in cognitive development and academic performance. The EAP could include conducting non-cognitive labs to help students understand and deal with their habits and traits accounting for their learning deficiencies and poor academic performance.
6. ***Promoting Peer Learning Groups and Fostering School Spirit.*** Certain institutions have established peer learning groups during TEQIP-II, which has benefitted students. Peer learning groups help students share their experiences and address their academic difficulties. Students often like to study in groups, and forming groups of 10-12 good and weak mixed students can be effective. They can revise lessons and undertake group projects also. Good students can help weak ones – the act of tutoring also helps good students.
7. ***Student Mentors and Faculty Advisers for Students'*** peer-to-peer mentorship and tutoring worked well in some institutions during TEQIP-II, since students feel comfortable with other students. Faculty mentors played an integral role in observing and monitoring student progress and serve as guides throughout students' higher education experience. Therefore, TEQIP-III will emphasize 'vertical' integration with senior students mentoring juniors and facilitating student-faculty interactions with faculty acting as resource person to the student groups. Faculty Advisers (FA) can be appointed to support Student Mentors aiding a group of 6-8 students entering the first year. The process can help establish a close relationship with fresh students, orienting them regarding institution practices and monitoring their progress through semesters. Students in all four years may need this guidance as different problems develop at different times. The relationship can be more informal than formal, allowing students to ask for help when they need it and share their problems without fear. The FA could identify any non-academic reasons for a student's weak or declining performance, and accordingly advise her/him on appropriate remedial measures. The FA can also mediate between a student and other faculty, if necessary, or seek help from an HOD, Dean, Principal, etc., and get in touch with parents when necessary. Faculty may be given some professional training in mentoring and counseling to play this role.
8. ***Better Scheduling Remedial Courses and Repeat Exams.*** An important difference that emerged between institutions in the Equity study that partly explains why some institutions have a large backlog of students in the final year is the timing of the repeat exams that can be taken by students who fail in several subjects. In the better situation, make-up exams are held within a month or so of the original exams, while in the other institutions they are held a semester or a year later. This has two important negative fall-outs – the students have a heavy load as they must take exams simultaneously for both the new semester's subjects as well as for the subjects they fail; and they cannot attend classes in the subjects they have failed as either the syllabi or the institution do not allow this. Thus, they do not get any additional teaching in the subjects in which they are weak unless they resort to coaching classes or other private means. This may in turn result in cumulative failures, leading some students to take six, seven or even more years to complete the four-year engineering course! In the better situation, on the other hand, remedial classes are provided by the institution during the month before the repeat exams, which is usually during vacation, and the

combination of the additional teaching and exams immediately thereafter enables the students to go on to the next year without a burdensome backlog. A committee appointed by NPIU could help develop a Guidance Note on how to execute transition support plans.

9. ***Improving teacher effectiveness*** will require several measures including the following:

Updating Domain Knowledge to enable faculty members keep abreast of latest developments in domain knowledge. (ii) Training in Pedagogy will support teachers in select undergraduate institutions to undertake refresher training in pedagogy to enhance their effectiveness. (iii) Fostering Positive Teacher Behaviors will involve behavioral training to the teachers to enhance their self-understanding, improve their sensitivity, leadership and management skills. A third important area for improvement of teacher performance is their behavior toward students (especially weak ones). An important 'first resort' is to counsel teachers who show bad behaviors, help and guide them. Besides having a formal Counselor, Faculty Mentoring program could be introduced to help faculty members that are younger and may seek help. (iv) Faculty Appraisal can be undertaken with using self-assessment forms and under the oversight of the HOD, Deans, Faculty Committee, etc. It can usefully include student evaluations but also monitor content delivery in accordance with the course file (ref. Guidance brief).

10. ***Supporting Innovation and Knowledge Sharing***: TEQIP-III will support the institutions of excellence to bi-annually organize innovation and knowledge sharing forums for the benefit of students and young researchers from surrounding institutions. These events will promote competition amongst institutions to show case innovations and enable students to share their learning experiences, facilitate interaction with industries and private/public R&D institutions and thus expose them to break through technologies.
11. ***Implementation Arrangements***: Each participating institution will prepare and include the EAP/IPPF in the Institution Development Proposal submitted for funding. There shall be institution level student-faculty committees to approve and monitor the implementation of the EAPs. The Dean, Students' Welfare will be generally the nodal officer responsible for implementing the EAP. The institutional arrangements will integrate professional capacity and expertise to plan and implement actions in fulfilment of the EAP/IPPF. The NPIU, SPIUs and other project institutions will have a nodal officer responsible for monitoring and supporting the EAP implementation.
12. ***Monitoring and Evaluation***: The EAP/IPPF implementation shall be monitored as a part of the overall project monitoring. TEQIP II has built a strong web-based MIS, which has helped in project monitoring and evaluation, specifically in using performance information to provide incentives to institutions. In TEQIP III, a special effort will be made to build on existing MIS systems wherever possible, and ensure the MIS is adapted to each institution's specific needs, allowing it to report on TEQIP III indicators as well as other indicators deemed useful for the institution's own internal decision-making. The MIS system will also be designed to generate the data on the students' performance with special attention to the vulnerable categories. In addition, the project will work with the AICTE, the NBA and ATUs to harmonize their reporting requirements, to further simplify the reporting process for institutions. A core database, linked to existing MIS systems at institutions will be created and maintained, with server access provided by the MHRD. For institutions without an MIS in place, a supplementing database will be created and linked to the core database. This will enable the MIS system to provide policy-makers, at national, state

and institutional levels, a summary analysis of the collected data through an interactive, web-based application capable of generating reports for all TEQIP III indicators and providing the unit level data required for the computation of each indicator. The system will incorporate a series of validity checks to avoid spurious data entry. An IT firm will be hired for the development, installation, training, and capacity building for the TEQIP III MIS and databases. The MIS will be funded through Component 2. Training provided to M&E staff at the national, state and institutional levels will strengthen M&E capacity.

The Table below summarizes the EAP/IPPF Actions for the students and faculty.

Details of Equity Action Plan

S. No	Items	Actions	Implementation Agency	Frequency	Monitoring Indicators
(i)	To identify weaknesses in all students and take remedial steps	Institutions to plan and administer diagnostic tests at the beginning of each semester in order to identify the types of assistance required. Accordingly, institutions will execute bridge courses/remedial teaching (e.g. extra classes, tutorials to be conducted by other faculty) and other measures to bring all students to the required level of proficiency to cope with the main subjects	Project institutions	Diagnostic tests and plans completed at the beginning of each semester; remedial measures carried out continuously thereafter	Percent of students transiting from First to Second year with all first year courses passed
(ii)	To improve language competency, soft skills and confidence levels	The preparation of guidance tools for teachers to transact with students that are culturally or linguistically less exposed to professional technical education / by including English as part of the main syllabus	Project institution	Continuous	Better transition rates for first and second year students
(iii)	Institution to improve non-cognitive and soft skills including communication and presentation skills through their wide use in curricula / project based work, and where needed, to provide special skills training to students with priority to the weak students	To be decided by the institution. This could include special labs or workshops or sessions with external experts/consultants	Project institutions	Continuous	Improvement in job placement of students, especially among those with disadvantaged backgrounds

S. No	Items	Actions	Implementation Agency	Frequency	Monitoring Indicators
(iv)	Give under-qualified teachers priority in opportunities to upgrade their domain knowledge	Institutions to identify needs and indicate in their Faculty Development Plan how they would build equity to upgrade faculty qualifications and skills	Project institutions and SPIUs	Yearly	Increase in the percentage of teachers enrolled in M. Tech. and Ph. D. reported yearly
(v)	Training of teachers in subject matter and pedagogy, particularly to improve the performance of weak students	Training Needs Analysis (TNA) to be carried out for all teachers in all project institutions by appropriately qualified/trained experts, especially to teach weak students	Project institutions and SPIUs	TNA to be done before the preparation of Institutional Development Proposals; reporting every six months and remedial actions on a continuous basis	Percent of planned training completed as reported/ aggregated 6 monthly
		All institutions to prepare Faculty Development Plan for the Project period (using identified providers for Pedagogy or National Training Calendar for subject training), giving priority to the teachers with the most significant gaps in knowledge and skills as diagnosed by the TNA	Project institutions and SPIUs		
		All teachers are to be covered by training in pedagogy including teaching of weak students, helping students with special needs achieve their learning goals, and an understanding of equity and equality, students' rights and entitlements, i.e. non-discriminatory practices	Project institutions and SPIUs		
		Domain training is to be done on the basis of need/ link up with industry to keep abreast of cutting edge technology	Project institutions and SPIUs		
		Institutions to report to the SPIUs on progress in training plan every 6 months (by name, department, individual characteristics (including SC/ST/OBC, M/F, age, years of service, level, degree qualifications), type and duration of training received, etc., and the SPIUs to send aggregated reports to the NPIU	Project institutions		

S. No	Items	Actions	Implementation Agency	Frequency	Monitoring Indicators
		Training providers to furnish training evaluation results (which indicate the extent to which the gaps in a trainee's knowledge or skills including teaching of weak students have been addressed) to Institutions and the SPIUs	Project institutions and SPIUs		
		In addition the Project would carry out Satisfaction Surveys to assess training achievements	Project institutions and SPIUs		
(vi)	Make campuses physically and socially gender-friendly; especially provide adequate and suitable facilities to women students and faculty	Institutions to specify in their IDPs what actions they would take to ensure a gender—friendly campus—both 'soft' actions, and civil works where necessary	Project institutions	At the time of IDP and actions implemented as proposed	Institutions to provide descriptive reports of actions taken including number of beneficiaries
(viii)	Hold innovation and Knowledge Sharing Workshops yearly to improve knowledge sharing	The SPIUs and key Institutions to organize workshops with thematic focus	NPIU / SPIUs	Yearly	
(viii)	Sharing information and knowledge about engineering courses and institutions	By organising rural camps at the school level	SPIU / State Govt. Dept. dealing with secondary and technical education	Yearly	
(ix)	Provide appropriate infrastructure for physically challenged students	By providing ramps, lifts, toilets and hostel facilities	Project institutions	As required	
(x)	Special efforts for training/ internship/ placement of weak students	By greater networking with industry	Project institutions	Continuous	
(xi)	A two tier grievance redress mechanism (GRM)	Introduce, and publicise widely, a two tier GRM at the (i) institution; (ii) State level. In addition to a hotline (telephone), an email address would ensure anonymity.	Project Institutions and SPIUs	Continuous	
(xii)	Ensure that institutional mechanisms to protect and address the needs and concerns of women students are established.	Strengthen/ establish Gender Committees in each institution	Project Institutions/SPIUs	Continuous	

S. No	Items	Actions	Implementation Agency	Frequency	Monitoring Indicators
(xiii)	Develop a standard model for tracking of student progress *				
(xiv)	Peer Learning Groups of students	Develop Peer Learning Groups of students for joint study and joint projects (Senior student and faculty may be the resource person)	Project Institutions	Continuous	
(xv)	Appointing Student Mentors and Faculty Advisers for Students	Assigning Student mentors for 6-8 junior students and Appointing Faculty Advisers for 10-15 Students/student mentors. Faculty Advisors can guide the students and monitor their progress	Project Institutions	Continuous	

* Shall be developed by the experts (from IITs and NITs)

Section-9

ENVIRONMENT MANAGEMENT FRAMEWORK

9.1 Objective:

To ensure compliance with Environment Management Framework (EMF) in all project institutions.

9.2 Scope:

All project institutions will be responsible for ensuring adherence to the Environment Management Framework (EMF).

9.3 Strategy:

The NPIU and the SPIUs will frequently monitor compliance with the Environment Management Framework (EMF) in all project institutions and ensure implementation of corrective actions, as may be required.

9.4 Environment Management Framework:

The EMF seeks to reduce environmental degradation that may arise due to project activities and to also help in compliance with various related regulations and norms. It lays out various options/measures for enhancing environmental performance during the planning, designing, implementation and operation stage of the proposed civil works.

The EMF will ensure safer and environmental friendly designing of the infrastructure as per applicable norms for water supply arrangements, sanitation arrangements, waste water discharge arrangements, with adoption of relevant code/s applicable for earthquake, cyclone, flood, landslides and as per the recommendations of National Disaster Management Authority (NDMA), etc. It will also ensure other arrangements/facilities such as barrier free access for the physically challenged, signs inside and outside of the building, notice boards for display of information, fire and electrical safety arrangements, provision of alarms or hooters to alert building occupiers in case of emergency, clear demarcation of escape routes and assembly points for emergency situations, provision of parking, preservation of existing trees to the extent possible, etc.

In addition, EMF will also encourage project Institutions to adopt various environment augmentative measures like rain water harvesting, use of heat reflecting glass, promotion of energy efficient lighting, use of renewable energy, minimization of paved area, appropriate use of colours for buildings and walkways, use of locally available materials, etc. for all works undertaken in the Project. The expenditure for all such activities can be booked under the head of expenditure "Minor Civil Works" in the institution.

The EMF has been integrated and made a part of the Civil Works Manual prepared for the Project to ensure compliance with various environment management aspects.

The details of possible activities for institutions under the Sub-component 1.1 & 1.3 are :

(I) Improvement in Teaching, Training and Learning facilities

Procurement of Goods [equipment; furniture; books & LR, softwares; and minor items] and minor civil works that may be required under the Project for improvement in teaching, training and learning facilities. A maximum of 60% (Sub-component 1.1) & 50% (Sub-component 1.3) of total project allocation can be made for procurement by each project institution for this activity.

The various possible sub-activities may be as follows:

(a) **Modernization and strengthening of laboratories, establishment of new laboratories and R&D activities :**

- modernization and strengthening of laboratories for existing UG and PG programmes
- establishment of new laboratories for new and existing UG and PG programmes
- Equipment needed for research and consultancy projects

(b) **Modernization of Classrooms:** Classrooms could be modernized with Smart Boards and Computer linked LCD Projectors with screen, which would capture better attention of the students than mere oral lecturing. V-SAT, Video Conferencing and Audio-Conferencing facilities can also be considered for Guest lectures or class lectures depending upon need and feasibility. Classrooms need to be well-lit and ventilated.

(c) **Updation of Learning Resources:** Continuous updating of Learning Resources (books, e-books, e-journals, CDs and professional software) and procuring the same is part of the improvement to be brought about in the teaching learning process. Course specific software to improve teaching learning process may be procured, as required. The faculty needs to be encouraged and trained to use these time saving modern facilities.

(d) **Procurement of Furniture:** Furniture may be required for modernization of existing laboratories, establishment of new laboratories, libraries, Computer Centres and classrooms. Provision would need to be made for such procurement in the Institutional Development Proposal.

(e) **Establishment/Up gradation of Central and Departmental Computer Centres:** Institutions may need to focus on modernize/upgrade Computer Centres to meet curricular and research requirements. It is desirable that Computer Centres be kept open for extended periods beyond working hours and on non-working days. Proper connectivity with Campus-wide Networking is essential. Purchase of the required Computers at one go may be avoided; it may be phased to ensure that the latest systems are procured.

Institutions would need to enter into Annual Maintenance Contracts after the expiry of warranty period for the computers and associated hardware procured under the Project. Wherever possible, replacement of computers/components by the suppliers/manufacturers to ensure upgradation of the computers procured may be considered.

(f) **Modernization/Improvements of Supporting Departments¹:** Upgradation of teaching and training facilities in the supporting Departments may be considered and included in the IDP so that their contribution is enhanced.

¹ Physics, Chemistry, Mathematics and English/other languages

- (g) **Modernization and strengthening of libraries and increasing access to knowledge resources:** Libraries, which are part of every institution, promote self-learning and also support the teaching learning processes. There is a widespread need to keep the libraries open to the maximum extent. There are institutions where libraries are kept open for 24 hours a day throughout the week.

Modernization of libraries could include conversion to Digital Libraries, which would occupy lesser space and make space available for other activities. The institutions can also become member of Indian National Digital Library in Engineering Sciences and Technology Consortium (INDEST-AICTE Consortium). Purchase of books should be through CDs to the extent possible. Even old books, which are available on CDs, should be located and purchased. There needs to be a CD Bank with proper identification and accessibility. The library could be reorganized with adequate computers and connectivity to hostels and Departments through Campus-wide Networking. Subscription to the latest e-Journals could be made. The IDP should clearly indicate the actions that are proposed to be taken for Modernization of Libraries including the cost involved.

- (h) **Minor Civil Works:** The minor civil works to be undertaken by the institutions are to be prioritized as suggested below:
- Repair works: The works under this category could be repair of old structures and/or non-functional components of the existing building.
 - Refurbishment works: The works under this category could be related to changing the existing functions of a room to a new proposed function. For example: provision of electrical, water supply and/or waste disposal arrangements in an existing room which is proposed to be used as a laboratory.
 - Extension to Existing Buildings: Institutions can construct an additional area in continuation to an existing building within the campus. However, institutions will need to provide justification on the extension works proposed.

The expenditure on minor civil works should not exceed 5% of the institutional project life allocation.

Note : *The project institution should follow scrupulously the agreed rules and procedures as set out in the Financial Management and Procurement Manual.*

(II) **Improvement in Teaching, Learning and Research Competence**

The aim of the academic processes should be to improve the learning outcomes and employability of undergraduates and the research pursued under post-graduate programs. The activities will also address fundamental system-level challenges.

The various possible sub-activities are as follows:

(a) **Improve student learning**

- **Faculty and staff training**

This activity should be closely linked to the overall goals of the institution as also to fulfil individuals' justifiable professional aspirations.

1. **Faculty training** (Applicable for faculty of engineering discipline and supporting departments)

The suggested activities to be conducted are:

(i) **Qualification Upgradation :**

Institutions are expected to encourage faculty to upgrade their qualification from Bachelors to Masters and from Masters to Doctoral degree. If the facilities are available within the institution, the same need to be maximally utilized. Alternatively, the faculty could be deputed to other institutions (within India) for enhancement of qualification. Part-time or sandwich programmes may also be made use of where feasible and necessary.

(ii) **Enhancing knowledge and research competence:**

- **Subject upgradation and research competence :** Subject knowledge upgradation is to make the faculty aware of the advances in knowledge, technologies and research methodologies for improving his/her own performance and for the benefit of students. Short-term and long-term courses are available within India including Summer Schools arranged by Government organizations, institutions and professional Societies. Faculty should be on the lookout for appropriate opportunities.

Every Teacher shall undergo an annual refresher course delivered through Swayam portal, encapsulating all the major advances in the field of their study.

- **Continuing Education Programmes (CEPs) :** The CEPs at project institutions are to be targeted at the working professionals. The duration of the programmes must be at least one week (5 working days). The participants should preferably be representatives of industries, faculty from other AICTE recognized Engineering institutions and a few faculty of the host institution. The Continuing Education Programmes should be conducted preferably in cutting edge technologies.
- **Participation in Seminars, Conferences, Workshops, etc.:** Faculty is to be encouraged to participate in seminars, conferences and workshops, both National and International. Participation in these would give a good exposure on the developments taking place in different areas. The faculty participating in these should be encouraged to visit close-by institutions and laboratories of his/her interest. Besides, accrual of benefits to students and in their own researches, such participation is expected to bring about collaborations with academic institutions and R&D organizations within and outside the country. The institutions are required to establish such collaborations through MoUs.

(iii) **Pedagogical Training :** The need for Pedagogical Training at institution using the latest teaching methodologies is strongly felt for improving the teaching and training competence of faculty. The target is to cover maximum number of faculty from the project institutions. **Pedagogical training could also be conducted through Swayam platform**

(iv) **Management Capacity Development Programmes:** To improve the managerial and administrative abilities, mandatory Leadership training to the Principals/Deans/HoDs once in two years through Swayam portal should be conducted. It will support effective implementation of reforms, improve development, planning & implementation and monitoring. The expected outcomes are enhanced management capacity, helping the institutions to gain improve internal and external efficiencies.

2. **Staff training :**

The staff in an Engineering Education institution fall under two categories:

(i) **Technical Staff:** The Technical Staff in laboratories and workshops need to be trained in their functional areas including operation and routine maintenance of both the existing and new equipment. They also need training on workshop instructions, upkeep of institutional service facilities, etc. The technical staff also need to be motivated and encouraged to participate in training and to use the newly acquired expertise for the benefit of students and the institution. Institutions are expected to encourage staff to upgrade their qualification. If the facilities are available within the institution, the same need to be maximally utilized. Alternatively, the staff could be deputed to other institutions (within India) for enhancement of qualification. Part-time or sandwich programmes may also be made use of where feasible and necessary

(ii) **Administrative Staff:** The Administrative Staff also need training in respective functional areas, particularly in the use of modern office equipment, software, office automation, maintenance of records, procedures, etc. The training should also cover motivation for time and material efficiency, and friendliness towards faculty and students.

- **Enhancement of Research & Development & Innovation:**

- **Promotion of Innovation and Start-ups:** Rigorous efforts are required for promoting innovation and creativity in the students. Innovation drives like Hackathon should be promoted so that innovation ideas would emerge that can be incubated in the start up centres.

- **Increasing capacity for postgraduate education and establishing teaching and research**

Increased capacity of PG and PhD programmes is of crucial importance for meeting the large requirements of faculty and for meeting the needs of the Industry. It is also essential to encourage Graduates to join Masters programmes and also pursue Research programmes for being employed as faculty. Institutions receiving funds under the Project are encouraged to seek enhancement of Masters degree seats from AICTE so as to increase the enrolment in Masters programmes.

The institutions could also provide Research Assistantships through TEQIP funds to the meritorious Doctoral students that do not get scholarship through Govt of India or any other scheme. The Research Assistantships are to be provided by institutions as per the prevalent UGC/AICTE norms. The students receiving Research Assistantships will be required to devote 8-10 hours per week for teaching/research.

The assistantships can also be provided to the PhD students in supporting departments viz. Physics, Chemistry and Maths only.

- **Improving transition rates of all categories of students and improving non-cognitive skills of students**

Institutions need to identify those students who need extra support and the type of support needed to reduce their risk of dropping out of college. Some of the reasons for these students needing extra support include: low entry level marks (i.e., inadequate preparedness for the rigorous engineering curriculum), irregular attendance of classes, lack of self-confidence, low proficiency in the medium of instruction (English) or even in the main vernacular language.

Some possible interventions to improve the performance of weak students are given below:

- Diagnosing Student Weaknesses and Continuous Tracking of Performance
- Improving Performance in Academic Subjects
- Improving non-cognitive skills of students
- Peer Learning Groups
- Appointing Faculty Advisers for Students
- Timing of Remedial Courses and Repeat Exams.
- Improving teacher effectiveness
- Bridge courses

The activities are detailed out in the Equity Action Plan which should be a mandatory part of the IDP.

Every student, on admission, shall be put through a mandatory induction program to reinforce the fundamental concepts and the required language skills.

- **Instituting academic and non-academic reforms**

The eligibility criteria for selection of institutions envisage willingness for implementation of academic and non-academic reforms. For non-academic reforms, institutions are expected to utilize their own funds.

1. Academic Reforms:

- **Curricular Reforms:** The main purpose of revision of curricula and syllabi for Engineering Education disciplines at UG and PG levels is to effectively prepare students to meet the labour market requirements. Involvement of employers including core Industry in curricular reforms is an essential requirement.

Project institutions, which are affiliated to Universities, will need to get the revisions in the curricula approved by the Competent Authorities till they attain Autonomous Institution status.

Institutions, which are autonomous, can carry out the curricula development and revision themselves by establishing mechanism that would ensure that the curricula meet labour market requirements.

Every autonomous institution shall constitute subject wise industry consultation committee (ICC) for examining the existing curriculum and for making suitable periodic changes annually. The revision process is required to be completed by December every year for the programmes to be offered in the coming academic year.

All new and revised curricula, among others, need to imbibe the following:

- Innovations in teaching and student evaluation methodologies;
- Design skills, communication skills, entrepreneurial skills, information processing, creative and innovative thinking, leadership skills;
- Problem solving projects from Industry;
- Elective courses;
- Extensive use of media;
- Invited expert lectures from Industry and field;
- Visits to and training in Industry; and
- Multi-level and multi-background entry credit exemptions.

Exam Reforms: Final Exam should test the understanding of the concepts and the skills – rather than the subject knowledge, so that innovative ideas would emerge that can be incubated in the start-up centres

- **NBA Accreditation:** At least 50% of the eligible UG and PG programmes should be accredited by NBA before 2022.

- ***Improved Student Performance Evaluation:*** Evaluation of students has to be done on a continuous basis, in order to provide opportunities for improvement. Students should be encouraged to participate in tests designed by the National Testing Agency as described in Component 2. Publication of results in the shortest period and allowing the students to see the evaluated papers are some of the innovative measures that can be adopted. Students and faculty will benefit largely from this reformation of student evaluation process. The faculty may identify the academic weaknesses and then counsel the students as to how they may improve their performance. A brainstorming by faculty with students can help to identify various options for performance improvement. Transparency, fairness, consistency and accountability in grading must be ensured. The aggrieved student may be allowed to see the evaluation. Weak students should be given every opportunity to improve. This will develop a greater respect for the institution by the students. The details are given in the Equity Action Plan.
- ***Performance appraisal of faculty by students:*** Evaluation of faculty performance on a periodic basis should be implemented. The results of this should be used for taking remedial actions for improvement of teaching learning process. The main purpose is to help faculty member to improve his/her teaching/training skills. The assessment by students and the counselling which may follow such assessment needs to be aimed at helping faculty recognize weaknesses and remedy them to improve student learning. An exit assessment taken at the end of the course gives an insight into the total effectiveness of the course, learning achievements and shortcomings and may be useful for future delivery of the course by the faculty. Faculty must be taken into confidence during each assessment and the benefits to the faculty/student and the improvement in quality of education should be well explained. Faculty should be continuously motivated to improve performance. This will ensure a proper mix of proficiency and efficiency in the quality of instruction offered to students.
- ***Faculty incentive for Continuing Education (CE), Consultancy and R&D:*** The initiatives taken by faculty should be encouraged through proper incentives and clear guidelines. All faculty are to be encouraged to participate in organizing and/or attending CE programmes, to offer consultancy to Industry and to take part in R&D activities in the institution. Institution should prepare at the beginning of every semester, a faculty engagement chart which should indicate not only the faculty teaching commitments, but also his/her expected involvement in administration, Continuing Education, collaborative activities, research and development activities including curriculum and laboratory development, consultancy, etc. Faculty efforts for good achievements in this direction should be suitably recognized by the BoG. Institutional efforts for consulting to Industry and involvement in R&D should also be adequately encouraged.

2. Non Academic Reforms :

- (i) ***Exercise of autonomies-- Academic, Administrative, Managerial and Financial:*** For institutions selected under the Sub-component 1.1, obtaining Autonomous Institution status during the Project is mandatory. Institutions are also expected to obtain and exercise reasonable levels of Administrative, Financial and Managerial autonomies.
- ii) ***Establishment of Sustainability Fund (Corpus Fund, Faculty Development Fund, Equipment Replacement Fund and Maintenance Fund):*** Establishment of the four Funds is essential to ensure that the developmental activities continue beyond the Project period. It is, therefore, compulsory that all institutions establish the Four Funds and put 8% of revenue every year (i.e. 2% in each Fund), as per the prescribed mechanism from the institutions own funds but not from the project funds

- (iii) ***Generation, retention and utilization of revenue generated through variety of activities:*** In accordance with the eligibility criteria for States and Union Territories, all project institutions are to be permitted to generate, retain and utilize the entire revenue generated by them including income from tuition fee and other fees and charges from students. All project institutions are expected to increase revenue generation from a variety of activities such as conducting self-financing teaching and training programmes, testing services, consultancy and research, innovations, patents, commercialization of R&D outputs, sharing of high-tech equipment with Industries, public usage of infrastructure for academic activities, etc. (see Annex-I for details).

Institutions are to utilize the revenue for building up the four funds, development activities, offering incentives to faculty and staff, instituting awards and rewards for students, faculty and staff, etc. with approval from the BoG in accordance with rules developed in consonance with Government Guidelines, if any. These rules need to be in place in each institution within 2 years of joining the Project. Institutions are to periodically report increases in the IRG generated.

- (iv) ***Filling-up existing teaching and staff vacancies:*** Project institutions are to be authorized by States/UTs to fill-up all faculty vacancies on a regular basis (over and above the benchmark value). Till such time that these vacancies are filled-up on a regular basis, appointments on 11-month or longer contract need to be permitted by the States/UTs.

Where needed, the Board of Governors may recruit the desired faculty with incentives. The institutions should also make utmost efforts to fill staff vacancies.

- (v) ***Delegation of decision-making powers to senior institutional functionaries with accountability:*** Delegation of adequate powers to senior functionaries like Deans and HoDs with accountability is expected to help better implementation of institutional projects. The powers and responsibilities of the Director/Principal, Deans, HoDs, Professors and other senior faculty in the department, laboratory in-charges and other functionaries should be clearly spelt out in a decentralized administrative environment. Even junior faculty and staff should know their authority and responsibility for which they would be held accountable.

As a measure of financial reforms, adequate financial powers to the Director/Principal of the institution and other functionaries are to be delegated by the Board of Governors. All actions of the Director in connection with Continuing Education, consultancy, faculty development, seminars and conferences should be reported to Board of Governors.

(b) Student employability

- **increasing interaction with industry**

All students passing out of UG courses need to be imparted technical and soft skills required for working in industry encompassing the following:

- Managerial skills
- Entrepreneurial skills
- Leadership skills
- Communication skills
- Technical skills
- Team working skills

Mandatory Internship: Every undergraduate student should complete 3 internships each spanning 4-8 weeks before completion of the UG Programme. As it is a

mandatory for institutions, The institutions need to achieve this by finding suitable industry/organization for the internship for the students.

Industry-Institute-Interaction Cell (IIIC) can be formed in the institution to promote links to benefit students and faculty and to promote collaborative interdisciplinary research for offering solutions to real life problems.

(1) The key activity areas in which Industry can participate for the benefit of the institutions are:

- Participating in curriculum design, curriculum implementation, student assessment, training of students, exposing students to new technologies, and providing experts for certain instructional sessions;
- Providing opportunities for student groups to undertake problem-solving projects;
- Providing exposure to faculty on industrial practices and latest technologies;
- Participating in such bodies as the Board of Governors, Academic Council, Boards of Studies, faculty recruitment, etc.;
- Assisting institutions in establishing new laboratories, providing literature on new technologies, and offering their shop floors as substitutes for laboratories;
- Training students, faculty and technical staff in new technologies and processes;
- Collaborating in sandwich programme offerings;
- Participating in joint R&D activities;
- Delivering expert lectures;
- Industry senior personnel serving as adjunct faculty;
- Utilizing institutional resources (manpower and physical) for industrial manpower training;
- Developing Postgraduate Education in areas of current and potential high demand; and
- Providing assistance for improving employability including entrepreneurial training, specialized skill training, and training in softer skills required by Industry.
- Conducting short term training programmes in collaboration with institutions.
- Students' internship in Industry.

(2) The key areas in which academic institutions can benefit Industries:

- The existing expertise available with project institutions can be utilized by the Industries for technology assessment, up-gradation and absorption.
- Laboratories in the institutions, especially in select areas of excellence, can be shared with industries on agreed terms.
- Develop innovations, products and technologies which can be adopted by Industries.
- Faculty can be deputed to Industry for problem solving and for joint projects.

- **Student career counselling and placement**

The Career Counseling Cell of the institution shall provide placement assistance to the students in relevant industries/company and also help the students of the institutions in their career planning, preparation for selection tests, summer placement, internship and final placements.

The Career Counseling Cell shall be working on liaising with the senior executives of reputed industries/company for the development of the effective communication links with many prominent industrial and professional organizations.

The Career Counseling Cell shall be making all-out effort to match student's career aspirations with the requirements of the industries or organizations. Keeping in view the demand and preference of the various industries, the Cell shall also be looking for the development of the students. In this direction, various activities like Aptitude test, Group Discussion, Guest Lectures from corporate personalities shall be organized from time to time by the placement cell for the students.

- Program Implementation
- Consultation
- Classroom Instruction
- Assessment
- Career Information
- Counseling
- Placement
- Referral
- Outreach
- Follow-up
- Work Experience

c. increasing faculty productivity and motivation

- Sponsored research, consultancy and other revenue generating activities

The selected institutions are to promote increased participation of faculty in research, R&D projects and consultancy, for example through merit recognition and fiscal and career incentives. Institutions that already have Doctoral programmes should encourage Masters Students to join Doctoral programmes, as explained in the paragraph above. Institutions need to market their services to the industry. The industry should be encouraged to give live problems to the institution for solutions. The faculty who have expertise should be encouraged to take up consultancy assignments, which would directly and indirectly benefit the institution, faculty and students. Internal Revenue Generation (IRG) should receive a boost, and some of the income should be shared with faculty, staff and students as per the norms approved by the Institute's Board of Governors (BoG). Regular interactions through consultancy are likely to promote a healthy and useful relationship between industries and institutions. Care should be taken that consultancy services offered to Industry do not affect the teaching schedules and processes. Institutions need to develop a strategy for enabling faculty to secure consultancy assignments and to complete them timely and successfully. The strategy in this regard is to be detailed in the IDP.

The institution is also expected to encourage UG and Masters students to get associated with Industry oriented/sponsored research programmes under the guidance of senior faculty. This is expected to increase their interest in higher education and research.

Institutions are also expected to offer "Seed grant" for research to faculty members and / or students to venture into innovative research and to strengthen research culture in institutions.

d. Establishing Twinning System: The twinning system will be based upon

- **Twinning Arrangements to Build Capacity and Improve Performance:**

The institutions under Sub-component 1.1 will make twinning arrangements with high-performing state-government engineering institutions (earlier participated in TEQIP-I & or TEQIP-II) selected under Sub-component 1.3. The primary objective of the twinning arrangements will be to support the priorities identified by Sub-component 1.1 institutes in their IDPs and Action Plans respectively. Sub-component 1.3 institutes will provide training and guidance to build the capacity of participating institutes. Twinning arrangements will be formalized through Twinning Agreements between the two institutes. The focus of these Agreements will be knowledge transfer, exchange of experience, optimizing the use of resources and developing long-term strategic partnerships. The exact nature of twinning activity would be determined mutually between the two institutes, but could include interactions at four levels: board of governors (BoG); institute's management/leadership; faculty and students. For instance, activities could entail faculty and student exchange, joint conferences, and management coaching with close contacts between the members of the two BoGs, the two principals, and the deans.

- **Individual Institutional Mentors for Sub-component 1.3 institutions :**

Mentoring is a strengthening mechanism by the third party at the institutional level. Mentors provide the institutions with clear guidance on reforms, implementations plans, and remedial actions to improve performance of the institutions. Mentors will be assigned to all project institutions to provide continuous guidance for Project implementation 2 to 3 times in a year based on institutional requirements. All expenses for mentoring will be met by the mentored institution. The Mentors will also act as the Performance Auditors at different Institutions and assess the progress made by individual Institutions. Kindly refer "Handbook for Mentors and Performance Auditors".

e. Recruitment and retention of high quality faculty (through better faculty appraisal systems and the faculty recruitment plan) in focus States : The project will support states in filling sanctioned posts through hiring of contract faculty at the entry level as per AICTE norms on qualifications and pay, by funding the cost (upto 75%) of such faculty during the project period. Such funding will be based on an understanding with state governments that well-performing faculty hired using project funds will be retained post project, all else unchanged, and any of these faculty retained in the final year of the project will be paid exclusively from state funds.

Establishing a Teacher Enhancement Fund (TEF): This aims to provide additional compensatory funding to technical colleges in order to address the differential in salaries currently existing between regular and non-regular faculty members. In this regard, following points can be considered:

- Establishing a mechanism for which a lump-sum amount of money will be provided to participating institutions to hire faculty members.
- Establishing of a "trust fund" with shared contributions from TEQIP-III, the state government and technical institutions that gradually will build-up reserves to be used in the future to fund differential in salaries for non-regular faculty, at termination of TEQIP-III, in order to support the long-term sustainability of the aforementioned funding mechanism.

The fund utilized for this activity will be made available by MHRD separately under Faculty Reforms fund. This will be over and above the institutions' project allocation.

Note : The approving authority for these activities is BoG / Competent Authority of the institutions except few cases of procurement (including services) where World Bank's No objection is required. In addition, institution may also conduct other activities (not listed here) under the scope of the project and those fulfil the objectives of the project with the approval of BoG/Competent Authority of the institution.

Definitions and descriptions of monitoring indicators

Unless otherwise specified, participating institutes are those under Component 1. An institute is considered participating for the purposes of these indicators if a Memorandum of Understanding has been signed between the institute and the SPFU or MHRD/NPIU (as the case may be). All indicator values achieved at each date of reporting will be rounded down to the nearest whole number, including for the purpose of verifying whether a DLI has been achieved.

Monitoring indicators	
Indicator	Description
<p>1. Increase in the average score of students, in participating institutes, in tests designed to measure technical and critical thinking skills</p>	<p>Applicable to all institutes participating under Component 1, which have signed an MOU with MHRD for participation in the Project.</p> <p>The project will pilot low-stakes testing, at the undergraduate level, to measure the progress of cohorts of students in project institutes. The test will be designed as part of the project and is expected to test the following areas: technical skills in physics, mathematics and informatics; critical thinking and creativity; and quantitative literacy skills.</p> <p>The test will be voluntary. Average scores of students from institutes from which at least 20 percent of students, in the relevant year, appeared for the tests will be considered for the purpose of this indicator. The indicator will be considered met if the average score increases by at least 5 percent from the previous cycle.</p> <p><i>Source</i> Results submitted by the AICTE to the NPIU. Project MIS.</p>
<p>2. Increase in percentage points of NBA accredited programs in participating institutes</p> <p>(a) Undergraduate programs</p> <p>(b) Post-graduate programs</p>	<p>Applicable to all institutes participating under Component 1, which have signed an MOU with MHRD for participation in the Project..</p> <p>NBA accreditation of the program(s) offered by an institute is applied for if the institute offering the program has completed the following steps:</p> <ul style="list-style-type: none"> (i) Registration with the NBA (ii) Completion of the online application form for NBA accreditation of the program(s) and payment of the accreditation fee (iii) Submission of the e-self assessment report (eSAR) for the program(s) to the NBA <p>A program is accredited if the NBA has accredited it for two or five years. A program will continue to be considered accredited for 6 months after the date on which its accreditation expires, conditional on it having applied for renewal.</p>

	<p>If a program has been accredited by the NBA at any time previously, for two or five years, it will be considered accredited only if it receives five year accreditation in subsequent accreditation cycles.</p> <p>The percentage of programs accredited (and/or applied for) will be calculated out of the total number of AICTE approved undergraduate/postgraduate programs offered by an institute as of the date of reporting.</p> <p><i>Source</i> Project MIS. For the program(s) for which accreditation has been applied for, the institute upload, to the MIS:</p> <ul style="list-style-type: none"> (i) A copy of the receipt for payment of accreditation fees to the NBA (ii) A copy of the eSAR submitted to the NBA. <p>For the program(s) that have been accredited: The institute will upload, to the MIS, a copy of the notification from the NBA on the accreditation status of the program(s).</p>
<p>3. Percentage of students in the final year of UG program from Participating Institutes in Focus States who achieved the qualifying score in the GATE exam</p>	<p>GATE refers to the Graduate Aptitude Test in Engineering conducted by the Indian Institute of Science and an IIT (a different IIT is selected each year).</p> <p>Qualifying score in the GATE refers to obtaining at least the ‘qualifying mark/score’ for the social category that student belongs to in the current year as declared by the IIT conducting that year’s GATE.</p> <p><i>Source:</i> Institute-wise data on the percentage of students that qualified the GATE out of those who appeared for the GATE will be provided by the IIT responsible for conducting the GATE in each year to the NPIU. The data will be uploaded to the project MIS.</p> <p>This DLI can be carried forward or met early.</p>
<p>4. Transition rate of undergraduate engineering students from the first year to the second year in participating institutes</p>	<p>Applicable to all institutes participating under Component 1, which have signed an MOU with MHRD for participation in the Project.</p> <p>Defined as the percentage of undergraduate students registered in the fourth semester (in year t), out of those registered in the second semester (in year t-1). Students must have passed all their examinations; if a student does not sit an examination for any reason, they are considered to have not passed the examination for the purposes of this indicator.</p> <p>A student is registered in a semester if he/she paid the semester tuition fees to the institute by the end of the first month of the semester.</p> <p><i>Source</i> Project MIS</p>
<p>5. Percentage of students from traditionally disadvantaged groups in total enrolment in participating institutes</p>	<p>Applicable to all institutes participating under Component 1, which have signed an MOU with MHRD for participation in the Project.</p> <p>Categories of disadvantaged groups are defined as: (i) scheduled castes and scheduled tribes; and, (ii) females. These two categories will be</p>

<p>(i)SC/ST (ii)Women</p> <p>(Percentage)</p>	<p>monitored separately.</p> <p>Total enrolment is the number of postgraduate and undergraduate students who have paid the semester tuition fees to the institute by the end of the first month of the semester completed immediately before the time of reporting. Enrollment is of students in all years of their respective program, and includes those students who are still enrolled but have not completed their degree program on schedule.</p> <p><i>Source</i> Project MIS</p>
<p>Intermediate Results Indicators</p>	
<p>Indicator</p>	<p>Description</p>
<p>1. Direct project beneficiaries (Number) - (Core)</p>	<p>The number of undergraduate and postgraduate students enrolled, and teachers and administrators employed in participating institutes in component 1, which have signed an MOU with MHRD for participation in the Project. For the purposes of this indicator, the colleges (whether government, government aided or private unaided) affiliated to an ATU participating under sub-component 1.2 are also included.</p> <p>Enrolment is the number of postgraduate and undergraduate students who have paid the semester tuition fees to the institute by the end of the first month of the semester completed immediately before the time of reporting. Enrollment is of students in all years of their respective program, and includes those students who are still enrolled but have not completed their degree program on schedule.</p> <p><i>Source</i> Project MIS</p>
<p>2. Female beneficiaries (Percentage - Sub-Type: Supplemental) - (Core)</p>	<p>As a percentage of the number reported in Intermediate Results Indicator 1. Direct project beneficiaries.</p> <p><i>Source</i> Project MIS</p>
<p>3. Percentage of participating institutes in focus states with UGC autonomy</p>	<p>Applicable to all institutes participating under sub-components 1.1, which have signed an MOU with MHRD for participation in the Project.</p> <p>UGC autonomy refers to the delegation of academic powers to an institute, by the UGC, as per the UGC Guidelines for Autonomous Institutes 2012-17. An institute is considered autonomous once it receives a formal notification from UGC that it has been granted autonomy.</p> <p><i>Source</i> Project MIS. Institutes will upload the notification of grant of autonomy by the UGC to the MIS.</p>

<p>4. Increase in the percentage of PhD students in total enrolment in engineering disciplines in participating institutes</p>	<p>Applicable to all institutes participating under Component 1, which have signed an MOU with MHRD for participation in the Project.</p> <p>Total enrolment is the number of postgraduate and undergraduate students who have paid the semester tuition fees to the institute by the end of the first month of the semester completed immediately before the time of reporting. Enrollment is of students in all years of their respective program, and includes those students who are still enrolled but have not completed their degree program on schedule.</p> <p>Engineering disciplines are those under the category ‘Engineering & Technology’, as classified by the AICTE.</p> <p><i>Source</i> Project MIS</p>
<p>5. Percentage of sanctioned faculty positions, in participating institutes, filled by regular or contract faculty, contracted as per AICTE norms</p>	<p>Applicable to all institutes participating under Component 1, which have signed an MOU with MHRD for participation in the Project.</p> <p>AICTE norms refer to the pay scales, service conditions and qualifications of faculty as required by the AICTE regulations prevailing at the time of reporting.</p> <p><i>Source</i> Project MIS</p>
<p>6. Number of Faculty Trained in either their subject domain, pedagogy or management in participating institutes</p>	<p>Applicable to all institutes participating under Component 1, which have signed an MOU with MHRD for participation in the Project.</p> <p>Faculty will be considered to have received training if they have attended a total of at least 7 days of training across their subject domain, pedagogy or management in the last complete academic year.</p> <p><i>Source</i> Project MIS</p>
<p>7. Percentage of externally funded research and development projects and consultancies in total revenue in participating institutes</p>	<p>Applicable to all institutes participating under Component 1, which have signed an MOU with MHRD for participation in the Project.</p> <p>Externally funded research and development projects and consultancies refer to any research and consulting activity funded through a formal agreement entered into by the institute and the external agency commissioning the research/project/consultancy.</p> <p>Total revenue refers to revenue from all sources as declared in the institutes’ annual financial statements of the last complete financial year.</p> <p><i>Source</i> Project MIS. Institutes to upload copies of funding agreements and annual financial statements to the MIS.</p>

<p>8. Participation of affiliated colleges in participating ATUs in newly designed Research-hub related activities (number)</p>	<p>Research hub activities refer to all activities to promote collaborative research across the institutes affiliated to an ATU, as specified in the PIP.</p> <p>Applicable to all affiliated colleges of ATUs participating under component 1, which have signed an MOU with MHRD for participation in the Project.</p> <p>Participation refers to at least one faculty member from an affiliated institute conducting research using the facilities of the research hub.</p> <p><i>Source</i> Project MIS. ATUs to upload a list of collaborative research activities, participating institutes, and faculty members.</p>
<p>9. Student, Staff and Faculty Satisfaction Survey</p>	<p>Satisfaction levels will be assessed based on surveys, representative across project beneficiaries as defined in Intermediate Results Indicator 1. Survey commissioned by the NPIU. Results will be reported separately by each stakeholder group, i.e., students, faculty and non-teaching staff.</p> <p><i>Source</i> Survey data.</p>
<p>10. Improved employer satisfaction with engineers recruited in the past year</p>	<p>Satisfaction levels will be assessed based on sample surveys of employers (with at least 10 percent of new recruits being TEQIP III graduates), representative across industrial sectors and regions, commissioned by the NPIU.</p> <p><i>Source</i> Survey data.</p>
<p>11. Development and implementation of GATE as a mandatory exit examination for students of engineering colleges</p>	<p>Applicable to all institutes under Subcomponent 1.1 and Subcomponent 1.3 engineering colleges which have signed an MOU with the MHRD or respective state government (as the case may be) for participation in the project.</p> <p>GATE refers to the Graduate Aptitude Test in Engineering conducted by the Indian Institute of Science and an IIT (a different IIT is selected each year).</p> <p>AICTE order refers to regulation under AICTE Act passed by the AICTE Executive Council.</p> <p>Assistance includes the following:</p> <ol style="list-style-type: none"> (1) Providing focused coaching for GATE preparation through classroom teaching at no additional cost to the student (2) Providing focused learning material for GATE preparation at no additional cost to the student (3) Providing scholarships for GATE preparation if college is unable to provide appropriate assistance. <p><i>Source:</i> Institutes will provide NPIU a list of students who were</p>

	<p>provided assistance for GATE preparation, along with details of type of assistance and student contact details. The data will be uploaded to the project MIS.</p> <p>Third party verification required. This will include random checks with students on the veracity of information provided in institute lists.</p> <p>This DLI can be carried forward or met early.</p>
<p>12. Number of engineering institutes in focus states that meet the enabling mechanisms for participation in the project</p>	<p>Applies to all AICTE-approved government and government aided engineering degree colleges in focus states. An institute must have in place all 6 mechanisms to count towards achievement of the target.</p> <p>The enabling mechanisms for institutes to participate in the project are:</p> <ol style="list-style-type: none"> 1. The institute offers at least 3 AICTE approved programs in engineering disciplines. <p style="margin-left: 40px;"><i>Source</i> The institute will submit a copy of the notification from the AICTE, approving at least 3 programs in engineering disciplines, to the NPIU.</p> 2. The institute has constituted a BoG as per UGC norms if the institute is autonomous, or AICTE norms if not. However, where the BoG is constituted as per a State Govt. Order/ legislation, the same may be permitted to continue provided regular meetings of BoG should be ensured by the State. <p style="margin-left: 40px;"><i>Source</i> Institutes’ websites. Institutes will declare the composition of their BoGs, with the professional background of BoG members on their websites, such that a search from the institute’s website using the term ‘Board of Governors’ yields a link/links to the minutes.</p> 3. The institute principal is appointed on a permanent, full-time basis and does not hold additional charge of another college. <p style="margin-left: 40px;"><i>Source</i> The state department of technical education will submit a letter, to the NPIU, with the names of the principals of all government and government-aided colleges in the state and the college to which they have been appointed. The letter will contain an undertaking stating that none of the listed college principals hold full-time additional charge of another college, and are appointed on a full-time basis to the participating institute.</p> 4. The college will have at least 500 students enrolled. However, if the institute offers 500 or more seats and could not fill due to its geographical or other disadvantaged conditions, relaxation may be given. <p style="margin-left: 40px;"><i>Source</i> The college will submit a list of students along with</p>

	<p>their university enrolment numbers to the NPIU. MHRD will verify and forward the same to the World Bank.</p> <p>5. At least one cohort of students from the institute has completed their undergraduate degrees. If other conditions are met, relaxation may be given so that new and emerging institutes could also improve their teaching, learning and overall quality education. Also teaching skills of students likely to pass out from these institutes will be improved by participation of these institutes.</p> <p>A cohort is defined as the set of all students who were admitted to the first year of any undergraduate engineering degree program offered by the institute, in the same academic year.</p> <p>At least one cohort will be said to have passed out if 50 percent of all students in any one cohort, admitted at any point in the institute’s history, pass all courses required for the completion of their undergraduate degree.</p> <p><i>Source</i> The institute will submit a copy of the results of the final semester university examinations, of the first cohort, to the NPIU.</p> <p>6. The institute has signed an MOU with State which includes commitments to implement the prescribed academic and administrative reforms and the State Government has passed any required Government Orders necessary to set these reforms in place.</p> <p><i>Source</i> The institute will submit a copy of the signed MOU to the NPIU. The SPIUs will submit copies of all Government Orders to the NPIU.</p> <p>The NPIU will prepare consolidated table, which provides information against each mechanism for all institutes, as reported by SPIUs to the NPIU. The list should include all institutes in each state, regardless of whether an institute has been deemed to have met all 8 mechanisms previously; institutes must continue to meet the mechanism at each date of reporting.</p>
<p>13. Percentage of eligible transactions, in the last six months, against which funds are released to participating institutes by the MHRD, in full, within 10 calendar days of the date on which the institute requests the payment</p>	<p>Applicable to all institutes under Component 1, which have signed an MOU with MHRD for participation in the Project</p> <p><i>Definition</i> The MHRD will release funds to institutes, against eligible transactions as defined in the PIP, through a direct fund transfer system. Institutes will request funds from the MHRD through an online payment request entered in to the direct fund transfer system. The MHRD will examine each payment request and issue an order for the release of funds.</p> <p>Only transactions entered into by institutes that meet the performance</p>

	<p>benchmarks, defined in the PIP/declared by the NPIU, and are eligible for continued funding will be considered for the purpose of this indicator.</p> <p><i>Source</i> The NPIU will submit to the World Bank a list of payments against eligible transactions, indicating for each payment: (i) the institute to which it was released, (ii) the date the payment request was entered by the institute, (iii) the date funds were released by the MHRD against the payment request (iv) the number of calendar days between (ii) and (iii). Copies of the sanctions for release will be attached.</p>
<p>14. Percentage of participating institutes with a Board of Governors or College/Department Management Committee that meets at least 4 times every calendar year and which publicly discloses the minutes of all meetings</p>	<p>Applicable to institutes under Component 1 which have signed an MOU with MHRD for participation in the Project.</p> <p>Participating affiliated colleges and constituent colleges which have autonomous status from UGC will be required to constitute a Board of governors (BoG). BoG refers to a body with overall responsibility for the strategic direction and accountability of the college, constituted as per the norms of the University Grants Commission, contained in the UGC Approval of Colleges Offering Technical Education by Universities Regulation, 2013, Appendix 16 of Annexure C. Participating affiliating universities and constituent colleges which do not have autonomous status from UGC will be required to constitute a BoG as per the norms of the AICTE.</p> <p>In the participating departments/faculties/non-autonomous constituent colleges of universities, a suitably empowered Department/College Management Committee will be constituted. The Department/College Management Committee will be responsible for the overall strategic direction of the department/faculty/non-autonomous constituent college. The composition and powers of the Department/College Management Committee are set out in the PIP.</p> <p>All participating institutes will declare the composition of their BoGs or Department/College Management Committee, with the professional background of BoG/ Department/College Management Committee members on their websites. Minutes of all BoG/ Department/College Management Committee meetings will be published on institutes' websites within two months of the date of the meeting, such that a search from the institute's website using the term 'Board of Governors' yields a link/links to the minutes. Each state's SPIU will send a consolidated list of the links to NPIU at the time of reporting.</p> <p><i>Source</i> Institutes' websites and a consolidated report prepared by NPIU.</p>
<p>15. Number of participating ATUs with MIS capable of producing annual reports against prescribed indicators</p>	<p>Applicable to all ATUs under Component 1, which have signed an MOU with MHRD for participation in the Project.</p> <p>MIS refers to a computer-based data management system.</p> <p>Prescribed indicators against which ATUs must report data annually</p>

	<p>will be specified in the PIP. The data must be published in the ATU's annual report.</p> <p><i>Source</i> Annual reports of ATUs.</p>
<p>16. Percentage of participating institutes which produce an annual report in the prescribed format and publish the same</p>	<p>Applicable to institutes under Component 1, which have signed an MOU with MHRD for participation in the Project.</p> <p>The annual report format will be developed by the NPIU and declared in the PIP, and will include data on a set of prescribed indicators. Publication means placed on the website of the institute and where a search for 'annual report' generates a link to the report. The annual report must be published by October 31 of each year.</p> <p>Source: Institutes' website. The NPIU will compile a list of institutes that have published a report in the required format, including data on all prescribed indicators, in the last 12 months.</p>
<p>17. Number of participating ATUs that publicly declare final semester examination results before the start of the next academic year</p>	<p>Applicable to all ATUs participating under component 1.2, which have signed an MOU with MHRD for participation in the Project.</p> <p>Final semester examinations refer to examinations in all subjects offered to undergraduate students, in engineering disciplines, in the 8th semester.</p> <p>Results will be considered declared on the date when:</p> <ul style="list-style-type: none"> (i) The results of final semester examinations are available on the ATU website (ii) All requests for re-evaluation have been completed and re-evaluated results are available on the ATU website. <p><i>Source</i> ATU website. NPIU will send the World Bank a list of the ATUs with a link to the results on the respective websites. Third-party verification report.</p>

**UNIVERSITY GRANTS COMMISSION (UGC) GUIDELINES
FOR SCHEME OF AUTONOMOUS INSTITUTIONS**

(reproduced from the UGC Guidelines - XII Plan)

1. Objective:

The National Policy on Education (1986-92) formulated the following objectives for Autonomous Institutions. An Autonomous Institution will have the freedom to:

- Determine and prescribe its own courses of study and syllabi, and restructure and redesign the courses to suit local needs;
- Prescribe rules for admission in consonance with the Reservation Policy of the State Government;
- Evolve methods of assessment of students' performance, the conduct of examinations and notifications of results; and
- Use modern tools of educational technology to achieve higher standards and greater creativity; and promote healthy practices such as community service, extension activities, project for the benefit of the society at large, neighbourhood programmes, etc.

2. Relationship with the parent University, the State Government and other educational institutions:

Autonomous Institutions are free to make use of the expertise of University departments and other institutions to frame their curricula, devise methods of teaching, examination and evaluation. They can recruit their faculty according to the existing procedures.

The parent University will accept the methodologies of teaching, examination, evaluation and the course curriculum of its autonomous institutions. It will also help the institutions to develop their academic programmes, improve the faculty and to provide necessary guidance by participating in the deliberations of the different bodies of the institutions.

The role of the parent University will be:

- To bring more Autonomous Institutions under its fold;
- To promote academic freedom in Autonomous Institutions by encouraging introduction of innovative academic programmes;
- To facilitate new courses of study, subject to the required minimum number of hours, instruction content and standards;
- To permit them to issue their own provisional, migration and other certificates;
- To do everything possible to foster the spirit of autonomy;
- To ensure that Degrees/Diplomas/Certificates issued indicate the name of the institution;
- To depute various nominees of the University to serve in various committees of the autonomous institutions and get the feedback on their functioning; and
- To create separate wings wherever necessary to facilitate the smooth working of the Autonomous Institutions.

The State Government will assist the Autonomous Institutions by:

- Avoiding, as far as possible, transfer of faculty, especially in institutions where academic innovation and reforms are in progress, except for need based transfers;

- Conveying its concurrence for the extension of autonomy of any institution to the Commission within the stipulated time of 90 days after receipt of the Review Committee Report, failing which it will be construed that the State Government has no objection to the institution continuing to be autonomous; and
- Deputing nominees on time to the Governing Body and other bodies wherever their nominees are to be included.

3. Requirement:

All Colleges under Section 2(f), aided, unaided, partially aided and self-financing which are or are not covered under 12(B) of the UGC Act are eligible to apply for autonomous status. This includes Engineering Colleges also.

CRITERIA FOR IDENTIFICATION OF INSTITUTIONS FOR GRANT OF AUTONOMY

- Academic reputation and previous performance in university examinations and its academic/co-curricular/extension activities in the past.
- Academic/extension achievements of the faculty.
- Quality and merit in the selection of students and teachers, subject to statutory requirements in this regard.
- Adequacy of infrastructure, for example, library, equipment, accommodation for academic activities, etc.
- Quality of institutional management.
- Financial resources provided by the management/state government for the development of the institution.
- Responsiveness of administrative structure. (h) Motivation and involvement of faculty in the promotion of innovative reforms.
- Self – Financing colleges can also apply for autonomy after they have completed minimum 10 years of existence. However, conferment of autonomy will not entitle them to receive autonomy grant. They will have to follow the same procedure as applicable to other colleges.
- Unaided/aided colleges: Minimum 10 years of existence and accreditation by NAAC/NBA. Henceforth non-accredited colleges would not be eligible for autonomy and the existing colleges be asked to undertake accreditation within one year.
 - The NAAC accredited colleges should have a minimum of B Grade accreditation. The Commission further decided that in respect of Engineering/Technical/ Management Colleges, NBA accreditation should be insisted for at least three courses while considering them for fresh/extension of autonomy tenure. However, for single faculty institutions accreditation for only one course should be insisted upon while considering them for fresh/extension of autonomy tenure.
 - While NAAC/NBA is compulsory, those institutions which have been evaluated by NBA should apply for NAAC accreditation within two years.
 - All those colleges which were earlier accredited and their accreditation status has now expired, but have applied for NBA/NAAC accreditation, should be granted fresh autonomous status /extension.
 - The constituent colleges may be asked to undergo a separate accreditation by NAAC for the purpose of granting autonomy to it unless the NAAC report specifically mentions the names of the constituent colleges that have been covered along with the accreditation of the parent university i.

- j. Colleges that provide professional courses in Education, Engineering Technology Management and Physical Education, etc. will also be eligible to receive grants from the Commission. The sanction of such grants will depend on the size and stage of development of these colleges after attaining autonomous status

4. Procedure for Approval by the UGC:

An Expert Committee may be constituted for all fresh cases with representation of university and State Government nominees. The existing procedure of Screening Committee may be scrapped and the Chairman shall constitute Expert Committee for on the spot inspection for consideration of each proposal". The Chairman, UGC may constitute a Standing Committee of 3-4 members to look into the Expert Committee reports for conferment of fresh autonomous status and extension of autonomy to colleges before the recommendations are placed before the Commission. Any inconsistencies in the reports may also be informed to the Commission. Once the autonomy is granted by UGC with the concurrence of representatives of University and the State Govt. concerned, the University will issue a notification to the effect within a period of not more than three (3) months. Autonomy will be conferred initially for a period of six years.

5. UGC guidelines for composition and functions of Board of Governing Body:

- i) Constitution of Governing Body of Government Funded/Aided Autonomous Institution

Number	Category	Nature
3 Members, one of them to be Chairperson	Educationist, Industrialist, Professional	Nominated by the State Government. Persons of proven academic interest with at least PG level qualification
2 Members	Faculty of the institution	Nominated by the Principal, based on seniority
1 Member	Educationist or Industrialist	Nominated by the Principal, for two years
1 Member	UGC nominee	Nominated by the UGC
1 Member	State Government nominee	Nominated by the State Government
1 Member	University nominee	Nominated by the University
1 Member	Principal of institution	Ex-officio

- ii) Constitution of Governing Body of Private Unaided Autonomous Institution

Number	Category	Nature
5 Members	Management	Trust or management as per the constitution or byelaws, with the Chairman or President / Director as the Chairperson.
2 Members	Faculty of the institution	Nominated by the Principal, based on seniority
1 Member	Educationist or Industrialist	Nominated by the Management
1 Member	UGC nominee	Nominated by the UGC
1 Member	State Government nominee	Academician not below the rank of Professor or State Government official of Directorate of Higher Education/ State Council of Higher Education
1 Member	University nominee	Nominated by the University
1 Member	Principal of institution	Ex-officio

iii) Constitution of Governing Body of University Constituent Autonomous Institution

Number	Category	Nature
3 Members, one of them to be Chairperson	Educationist, Industrialist, Professional	Nominated by the University, persons of proven academic interest with at least PG level qualification
2 Members	Faculty of the institution	Nominated by the Principal, based on seniority
1 Member	State Government nominee	Nominated by the State Government
1 Member	University nominee	Nominated by the University
1 Member	UGC nominee	Nominated by the UGC
1 member	Principal of institution	Ex-officio

Term: Two years, except for the UGC nominee whose term will be a full six years.

Note : The institutions are required to constitute BoG as per UGC after obtaining autonomous institution status from UGC.

6. Functions:

Subject to the existing provision in the bye-laws of respective institution and rules laid down by the State Government, the Governing Body* of the above institutions shall have powers to:

- Fix the fees and other charges payable by the students of the institution on the recommendations of the Finance Committee.
- Approve institution of scholarships, fellowships, studentships, medals, prizes and certificates on the recommendations of the Academic Council.
- Approve institution of new programmes of study leading to Degrees and/or Diplomas.
- Perform such other functions and institute such committees, as may be necessary and deemed fit for the proper development, and fulfill the objectives for which the institution has been declared as autonomous.

*Governing Body/Governing Board/Board of Management/Executive Committee/Management Committee, as may be named.

Deemed-to-be-Universities:

The Deemed-to-be-Universities have to comply with the BoG structure as per UGC Regulation-2010.

- The highest governing body of the deemed to be university shall be a Board of Management to be headed by the **Vice Chancellor or a distinguished academic**. This body shall consist of a minimum of ten members and a maximum of twelve members.
- The number of representative(s)/ nominee(s) of the trust(or) society on the Board of Management shall be limited to a maximum of two.
- The Departments dealing with allied subjects could be grouped into faculties. Each faculty may be headed by a Dean.

- Board of Management consisting of the following:
 - i) Vice-Chancellor.....Chairperson
 - ii) Pro Vice-Chancellor (wherever applicable)
 - iii) Deans of Faculties not exceeding two (by rotation based on seniority)
 - iv) Three eminent academics as nominated by the Chancellor
 - v) One eminent academic to be nominated by the Central Government in consultation with UGC
 - vi) Two teachers (from Professors, Associate Professors) by rotation based on seniority
 - vii) One nominee of the sponsoring Society
 - viii) The Registrar, who shall be the Secretary

**MEMORANDUM OF UNDERSTANDING
BETWEEN
MINISTRY OF HUMAN RESOURCE DEVELOPMENT
GOVERNMENT OF INDIA
AND
STATE/UNION TERRITORY OF _____
FOR IMPLEMENTATION OF
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME
PHASE III**

PARTIES

This Memorandum of Understanding (hereinafter referred to as ‘MOU’) is made and entered into on this ___ day of _____ 2017 between the State/Union Territory of _____ through _____, Principal Secretary, Department of Technical/Higher Education (hereinafter referred to as the ‘STATE/UT’) and the Ministry of Human Resource Development–Government of India through Additional Secretary, Technical Education (hereinafter referred to as the ‘MHRD’). (Place of signing).

PURPOSE

WHEREAS the objective of the TECHNICAL EDUCATION QUALITY IMPROVEMENT PROJECT III (hereinafter referred to as the ‘PROJECT’) is to improve quality and equity in selected engineering education institutes and improve the efficiency of the engineering education system.

AND WHEREAS the Government of India and the World Bank have signed a Financing Agreement dated 1st February 2017, under which the World Bank shares financing to support the PROJECT.

AND WHEREAS the comprehensive description, implementation and operating conditions for the Project are contained in the document entitled the Project Implementation Plan of TEQIP-III (hereinafter referred to as the ‘PIP’), as may be revised from time to time.

AND WHEREAS at least one institute in the STATE/UT has been selected for participation in the PROJECT.

AND WHEREAS the MHRD will establish the National Project Implementation Unit in the form of Central Project Team (hereinafter referred to as the ‘NPIU’), which will be in charge of the day-to-day project implementation at the national level.

NOW THEREFORE the parties agree as follows.

SECTION I

The STATE/UT agrees to:

- a) Support and maintain a State Project Implementation Unit (hereinafter referred to as the ‘SPIU’) in the form of State Project Unit in the Department of the State Government responsible for Technical Education/State Directorate of Technical Education, headed by State Project Administrator (TEQIP). The SPIU will carry out the overall supervision and facilitation of PROJECT implementation in participating institutes in the STATE/UT. The structure, functions and responsibilities of the SPIU are set out in the PIP.
- b) Constitute a State Steering Committee (hereinafter referred to as the ‘SSC’) chaired by the Principal Secretary responsible for Technical Education in the STATE/UT. The State Steering Committee will primarily be responsible for guiding and overseeing the work of the SPIU. The composition of the SSC is set out in the PIP.
- c) Follow the PROJECT guidelines and procedures prescribed in the PIP and as may be prescribed from time to time by the Government of India for implementation of the PROJECT.
- d) Enable and facilitate all reforms and activities as committed under the PROJECT and contained in the PIP, through appropriate actions and orders, including the greater delegation of academic, administrative and financial powers to participating institutes in the STATE/UT. Ensure the implementation of all reforms and activities as committed under the PROJECT in participating institutes in the STATE.
- e) Ensure that the SPIU follows the guidelines and processes described in the Financial Management Manual and the Procurement Manual, contained in the PIP. Ensure that the SPIU follows the procedures for Procurement of all Goods, Works and Services in accordance with the World Bank guidelines titled: Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers” dated January 2011 (revised July 2014) (Procurement Guidelines); and Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers” dated January 2011 (revised July 2014) (Consultant Guidelines); and the agreed procedures and limits described in the Financing Agreement.
- f) Sign Memoranda of Understanding with participating institutes in the STATE/UT in the formats prescribed in the PIP.
- g) Ensures that the SPIU submits to the MHRD/NPIU all reports and documents related to the PROJECT as specified in the PIP and at such frequency as may be required by the MHRD/NPIU.
- h) Ensures that the SPIU supports and participates in the support systems developed for the PROJECT such as the TEQIP Project Management System.
- i) Implement the Disclosure Management Framework, Environment Management Framework and Equity Action Plan as described in the PIP.
- j) Issue orders to participating institutes in the STATE/UT to seek and obtain autonomous status as per the University Grants Commission’s norms and procedures.

- k) Provide all necessary support to participating institutes in the STATE/UT through the institutes' affiliating university to achieve the objectives of the institutes' Institutional Development Plan and the PROJECT, including, but not limited to facilitating autonomous status from the University Grants Commission.
- l) Direct participating institutes in the STATE/ UT to put aside 8% of all revenue (as defined by the PIP) into Sustainability Fund (Four Funds), to be used to sustain project activities after the project closes, subject to the provisions of the PIP.
- m) Constitute a Board of Governors at each participating institute in the STATE/UT, with composition and powers as set out in the PIP, and ensure that the positions on the Board of Governors to be filled by the STATE/UT continue to be filled throughout the PROJECT and that these members attend all meetings of the BoG.
- n) Permit participating institutes in the STATE/UT to retain and utilize all revenue generated, including 100% of tuition and other fee and charges from students without adjusting the revenue retained in their non plan grants.
- o) Ensure that the participating Affiliating Technical University(s) in the STATE/UT, if any, permits all affiliated colleges to participate in activities undertaken under the University's Development Plan and to utilise facilities created under the project on equal terms, including eligibility, fees etc., regardless of the management type (government, private aided, and private unaided) and whether the college is participating in the PROJECT.
- p) Ensure the constitution of a suitably empowered Faculty/Department/College Management Committee in the participating faculties/departments/non-autonomous constituent colleges of university in the STATE/UT. The Faculty/Department/College Management Committee will be responsible for the overall strategic direction to the department/faculty/non-autonomous constituent college. The composition and powers of the Department/College Management Committee are set out in the PIP.
- q) Ensure that the bank accounts of the SPIU and the participating institutes in the STATE/UT are audited as indicated in the PIP and that the SPIU furnishes the audited accounts along with a copy of the audit reports to the MHRD/NPIU as per the schedule indicated in the PIP.
- r) Ensures that the SPIU meets all necessary and incidental expenses for the performance of responsibilities like expenses for meetings, travel, professional fees, cost for pre-project activities, etc., which will not be the liability of the MHRD unless specifically mentioned in this MOU or otherwise agreed in writing.
- s) Use of the Direct Benefit Transfer System for facilitating transfer of funds to participating institutes in the STATE/UT for their use under the PROJECT.

SECTION II

The MHRD agrees to:

- a) Provide all necessary support and assistance to the STATE/UT, including to the SPIU and the Department/Directorate of Technical/Engineering Education, through the NPIU. The functions and responsibilities of the NPIU are set out in the PIP.
- b) Provide mentoring and support to participating institutes in the STATE/UT, through individual mentors and institutional mentors, as per the scheme set out in the PIP.
- c) [Applicable to Low Income and Special Category States Only] Provide to all government and government-aided engineering colleges (as declared by the AICTE) in the STATE/UT that do not meet the enabling mechanisms for participation in the PROJECT set out in the PIP, support, guidance, and capacity enhancement through expert mentors and seed money to be used for the provision of campus Wi-Fi, e-libraries, staff training etc. as per the provisions of the PIP. Institutes that meet all the above-mentioned enabling mechanisms by October 2018 will be eligible for Institutional Development Grants in accordance with their Institutional Development Plans.
- d) Provide to the STATE, as per the schedule and provisions set out in the PIP, all establishment and running costs of the SPIU.
- e) Provide University/Institutional Development Grants to participating institutes in the STATE/UT as described in SECTION III.

SECTION III

- a) The MHRD will provide University/Institutional Development Grants to participating institutes in the STATE/UT through a Direct Benefit Transfer System. The Finance Manual describes the functioning of the Direct Benefit Transfer System, the rules and procedures governing its use, and the roles and responsibilities of the MHRD and the STATE/UT.
- b) Fund release to participating institutes in the STATE/UT will be dependent on the satisfactory performance against PROJECT performance benchmarks as set out in the PIP/notified by NPIU from time to time. More details about how satisfactory performance is to be assessed can be found in the PIP.

SECTION IV

- a) Amendments can be made to the MOU only (a) under exceptional circumstances, and (b) presentation of reasonable cause. The amended MOU will come into force only after due approval, and through written agreements duly authenticated and executed by the authorized representatives of all Parties to the original MOU.
- b) This MOU will become effective when signed by duly authorized representatives of all parties, and shall remain in force until the completion of the activities covered by the MOU, or until it is duly terminated by the Parties.
- c) Notwithstanding the provisions of this MOU, if the PROJECT is suspended or terminated, this MOU will be automatically considered null and void from the date of such suspension or termination.

SECTION V

The Project implementation schedule:

- a) The Project becomes effective on **3rd March 2017**.
- b) The Project is expected to proceed over 3 (three) years commencing on **3rd March 2017** and is expected to be completed by **30th September 2020**.

SECTION VI

- By this MOU all parties affirm their commitment to carry out the activities and achieve the objectives mutually agreed upon.
- Any dispute between the parties shall always be resolved by mutual consultation without any resort to arbitration or other form of legal remedy including Court of Law.
- This Memorandum of Understanding will continue to be effective up to the closure of the Project.

Signed at _____ on this _____ day of _____ 2017.

FOR AND BEHALF OF
THE STATE/UT OF _____

FOR AND BEHALF OF
THE MINISTRY OF HUMAN RESOURCE
DEVELOPMENT, GOVERNMENT OF
INDIA

Principal Secretary, Department of
Technical Education
(Name & Signature)

Secretary, Higher/Technical Education
(Name & Signature)

MEMORANDUM OF UNDERSTANDING
BETWEEN
STATE/UNION TERRITORY OF _____
AND
(NAME OF THE INSTITUTE UNDER COMPONENT 1.1/1.3)
FOR IMPLEMENTATION OF INSTITUTIONAL DEVELOPMENT PLAN
UNDER
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME PHASE III

PARTIES

This Memorandum of Understanding (hereinafter referred to as 'MOU') is made and entered into on this _____ day of _____ 2017 between the Department of Technical/Higher Education, Government of _____ through _____ Principal Secretary, (hereinafter referred to as the 'DEPARTMENT') and (name of the institute) through _____, Chairman, Board of Governors (hereinafter referred to as the 'INSTITUTE') affiliated to/ department of _____ University. AICTE Approval number _____, (place of signing).

PURPOSE

WHEREAS the objective of the TECHNICAL EDUCATION QUALITY IMPROVEMENT PROJECT III (hereinafter referred to as the 'PROJECT') is to improve quality and equity in selected engineering education institutes and improve the efficiency of the engineering education system.

AND WHEREAS the Government of India and the World Bank have signed a Financing Agreement dated XX 2017, under which the World Bank shares financing to support the PROJECT.

AND WHEREAS the comprehensive description, implementation and operating conditions for the Project are contained in the document entitled the Project Implementation Plan of TEQIP-III (hereinafter referred to as the 'PIP'), as may be revised from time to time.

AND WHEREAS the DEPARTMENT will support and maintain a State Project Implementation Unit (hereinafter referred to as the 'SPIU') in the form of State Project Team, to carry out overall supervision and facilitate project implementation in the state. The structure, functions and responsibilities of the SPIU are set out in the PIP.

AND WHEREAS the INSTITUTE has been selected to receive a conditional financing of [XXX] INR to pursue the goals set out in its Institutional Development Plan (hereinafter referred to as the 'IDP'), as approved by the INSTITUTE's Board of Governors (hereinafter referred to as the 'BOG'), such financing which may be increased or decreased upon the performance of the INSTITUTE in accordance with the procedures set out in the PIP.

NOW THEREFORE the parties agree as follows.

SECTION I

The INSTITUTE agrees to:

- a) Follow the Project guidelines and procedures prescribed in the PIP and as may be prescribed from time to time by the Government of India for implementation of the PROJECT, in pursuance of the obligations set forth or referred to in the Financing Agreement dated XXX signed between the Government of India and the World Bank.

- b) Adhere to the IDP and take all necessary actions to achieve the goals set out in the IDP, including, but not limited to: entering into contracts or agreements for civil works, goods and services (including consulting services and training/development) and managing those contracts or agreements such that to the extent possible they are completed on time, within budget and to the desired standards.
- c) Ensure that the [enabling mechanisms] [eligibility criteria] applicable for the INSTITUTE, and which are within the responsibility of the INSTITUTE, continue to be fulfilled for the duration of implementation of the IDP.
- d) Assign responsibility for implementation of the IDP to an appropriate unit within the INSTITUTE (or establish such a unit) with powers, functions and structures as set out in the PIP.
- e) Implement all reforms and activities as committed by the INSTITUTE in its IDP under the Project and contained in the PIP including through any amendments required to the rules, policies and guidelines under the jurisdiction of the INSTITUTE.
- f) Take all necessary actions to achieve the PROJECT performance benchmarks as notified by NPIU from time to time; and such benchmarks which need to be met in a timely fashion in order to continue to receive funding under the PROJECT for implementation of the IDP as set out in the PIP and/or notified by NPIU from time to time.
- g) Apply for and complete the procedures required for NBA accreditation of the INSTITUTE's undergraduate and post-graduate programs. Apply for reaccreditation before the current accreditation lapses, in the case of programs the NBA has already accredited.
- h) Publish each year INSTITUTE's annual reports on its website, including information on indicators listed in the PIP, in the format and as per the timetable suggested in the PIP.
- i) Carry out monitoring and evaluation and data collection activities as set out in the PIP, and provide documents and data to the SPIU and NPIU, as and when requested, in the agreed format and within stipulated timelines.
- j) Participate in all systems set up to facilitate the implementation of the Project, such as the TEQIP Project Management System.
- k) Participate in all supervision and coordination activities conducted by the SPIU and NPIU.
- l) Facilitate the participation of faculty, technical and administrative staff and students in training sessions, seminars and conferences planned so as to achieve the objectives of the IDP.
- m) Follow the guidelines and processes described in the Financial Management Manual and the Procurement Manual, contained in the PIP. Follow the procedures for Procurement of all Goods, Works and Services in accordance with the World Bank guidelines titled: Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011 (revised July 2014) (Procurement Guidelines); and Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011 (revised July 2014) (Consultant Guidelines); and the agreed procedures and limits described in the Financing Agreement.

- n) Each year put aside 8% of total revenue (as defined by the PIP) earned by the INSTITUTE into a Sustainability Fund (Four Funds), to be used to sustain project activities after the project closes, subject to the provisions of the PIP.
- o) Comply with the Social Management Framework and Equity Action Plan, contained in the PIP.
- p) Comply with the Environment Management Framework, contained in the PIP.
- q) Mentor a PROJECT college through activities specified in the IDP (applicable for the institutes under subcomponent 1.3).

SECTION II

The DEPARTMENT agrees to:

- a) Provide all necessary support to the INSTITUTE through the SPIU. The functions and responsibilities of the SPIU are set out in the PIP.
- b) Facilitate all reforms and activities as committed under the Project and contained in the PIP, through appropriate actions and orders, including the greater delegation of academic, administrative and financial powers to the INSTITUTE for all the INSTITUTE's activities (not limited to PROJECT activities), adopt a Block Grant pattern for fund releases of at least the non-salary non-Plan component of grants to the INSTITUTE, permit the INSTITUTE to retain and utilize the revenue generated, including 100% of tuition and other fee and charges from students without adjusting the revenue retained in their non-Plan grants, authorize the INSTITUTE to fill up the faculty vacancies (over and above the benchmark value) to 100% on 11 month or longer contracts till such time that these vacancies are filled-up on a regular basis, constitute Board of Governors at the INSTITUTE, and maintain [enabling mechanisms] [eligibility criteria] for the INSTITUTE, which are within the responsibility of the DEPARTMENT, for the duration of the PROJECT.
- c) Provide all necessary support to the INSTITUTE through the INSTITUTE's affiliating university to achieve the objectives of the IDP and the PROJECT, including, but not limited to facilitating autonomous status from the University Grants Commission.
- d) Use of the Direct Benefit Transfer System for facilitating transfer of funds to the INSTITUTE for its use under the PROJECT.

SECTION III

- a) Ministry of Human Resource Development, Government of India will provide the project funds to the INSTITUTE through a Direct Benefit Transfer System. The PIP describes the functioning of the Direct Beneficiary Transfer System, the rules and procedures governing its use, the schedule and conditions for release of the project fund, and the roles and responsibilities of the INSTITUTE and the DEPARTMENT.
- b) Fund release to INSTITUTE will be dependent on satisfactory performance against PROJECT performance benchmarks as set out in the PIP/notified by NPIU from time to time.

SECTION IV

Amendments can be made to the MOU only (a) under exceptional circumstances and (b) presentation of reasonable cause. The amended MOU will come into force only after due approval, and through written agreements duly authenticated and executed by the authorized representatives of all Parties to the original MOU.

This MOU will become effective when signed by duly authorized representatives of all parties, and shall remain in force until the completion of the activities covered by the MOU, or until it is duly terminated by the Parties.

Notwithstanding the provisions of this MOU, if the Project is suspended or terminated, this MOU will be automatically considered null and void from the date of such suspension or termination.

SECTION V

The Project implementation schedule:

- a) The Project became effective on _____ 2017.
- b) The Project is expected to proceed over 3 (three) years commencing on _____ 2017 and is expected to be completed by _____ 2020.

SECTION VI

- By this MOU both parties affirm their commitment to carry out the activities and achieve the objectives mutually agreed upon.
- Any dispute between the parties shall always be resolved by mutual consultation without any resort to arbitration or other form of legal remedy Court of Law.
- This Memorandum of Understanding will continue to be effective up to the closure of the Project.

Signed at _____ on this _____ day of _____ 2017.

FOR AND BEHALF OF
THE (NAME OF THE INSTITUTE)

FOR AND BEHALF OF
THE DEPARTMENT OF TECHNICAL
EDUCATION

Chairman, Board of Governors
(Name & Signature)

Principal Secretary,
Higher/Technical Education,
Government of _____
(Name & Signature)

**MEMORANDUM OF UNDERSTANDING
BETWEEN
(NAME OF CENTRALLY FUNDED INSTITUTION UNDER COMPONENT 1.1/1.3)
AND
MINISTRY OF HUMAN RESOURCE DEVELOPMENT
GOVERNMENT OF INDIA
FOR IMPLEMENTATION OF THE INSTITUTIONAL DEVELOPMENT PLAN
UNDER
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME PHASE III**

PARTIES

This Memorandum of Understanding (hereinafter referred to as 'MOU') is made and entered into on this _____ day of _____ 2017 between (name of centrally funded institution) through _____ Chairman, Board of Governor (hereinafter referred to as the 'INSTITUTE') and the Ministry of Human Resource Development–Government of India through _____ Secretary, Higher/Technical Education (hereinafter referred to as the 'MHRD'). (Place of signing).

PURPOSE

WHEREAS the objective of the TECHNICAL EDUCATION QUALITY IMPROVEMENT PROJECT III (hereinafter referred to as the 'PROJECT') is to improve quality and equity in selected engineering education institutes and improve the efficiency of the engineering education system.

AND WHEREAS the Government of India and the World Bank have signed a Financing Agreement dated XXX 2017, under which the World Bank shares financing to support the PROJECT.

AND WHEREAS the comprehensive description, implementation and operating conditions for the Project are contained in the document entitled the Project Implementation Plan for TEQIP-III (hereinafter referred to as the 'PIP'), as may be revised from time to time.

AND WHEREAS the MHRD will establish the National Project Implementation Unit (hereinafter referred to as the 'NPIU') in the form of Central Project Team, which will be in charge of the day-to-day project implementation at the national level.

NOW THEREFORE the parties agree as follows.

SECTION I

The INSTITUTE agrees to:

- a) Follow the Project guidelines and procedures prescribed in the PIP and as may be prescribed from time to time by the Government of India for implementation of the PROJECT, in pursuance of the obligations set forth or referred to in the Financing Agreement dated XXX 2017 signed between the Government of India and the World Bank.
- b) Adhere to the IDP and take all necessary actions to achieve the goals set out in the IDP, including, but not limited to: entering into contracts or agreements for civil works, goods

and services (including consulting services and training/development) and managing those contracts or agreements such that to the extent possible they are completed on time, within budget and to the desired standards.

- c) Ensure that the [enabling mechanisms] [eligibility criteria] applicable for the INSTITUTE, and which are within the responsibility of the INSTITUTE, continue to be fulfilled for the duration of implementation of the IDP.
- d) Assign responsibility for implementation of the IDP to an appropriate unit within the INSTITUTE (or establish such a unit) with powers, functions and structures as set out in the PIP.
- e) Implement all reforms and activities as committed by the INSTITUTE in its IDP under the Project and contained in the PIP including through any amendments required to the rules, policies and guidelines under the jurisdiction of the INSTITUTE.
- f) Take all necessary actions to achieve the PROJECT performance benchmarks as notified by NPIU from time to time; and such benchmarks which need to be met in a timely fashion in order to continue to receive funding under the PROJECT for implementation of the IDP as set out in the PIP and/or notified by NPIU from time to time.
- g) Apply for and complete the procedures required for NBA accreditation of the INSTITUTE's undergraduate and post-graduate programs. Apply for reaccreditation before the current accreditation lapses, in the case of programs the NBA has already accredited.
- h) Publish each year INSTITUTE's annual reports on its website, including information on indicators listed in the PIP, in the format and as per the timetable suggested in the PIP.
- i) Carry out monitoring and evaluation and data collection activities as set out in the PIP, and provide documents and data to the SPIU and NPIU, as and when requested, in the agreed format and within stipulated timelines.
- j) Participate in all systems set up to facilitate the implementation of the Project, such as the TEQIP Project Management System.
- k) Participate in all supervision and coordination activities conducted by the NPIU.
- l) Facilitate the participation of faculty, technical and administrative staff and students in training sessions, seminars and conferences planned so as to achieve the objectives of the IDP.
- m) Follow the guidelines and processes described in the Financial Management Manual and the Procurement Manual, contained in the PIP. Follow the procedures for Procurement of all Goods, Works and Services in accordance with the World Bank guidelines titled: Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011 (revised July 2014) (Procurement Guidelines); and Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011 (revised July 2014) (Consultant Guidelines); and the agreed procedures and limits described in the Financing Agreement.

- n) Each year put aside 8% of total revenue (as defined by the PIP) earned by the INSTITUTE into a Sustainability Fund (Four Funds), to be used to sustain project activities after the project closes, subject to the provisions of the PIP.
- o) Comply with the Social Management Framework and Equity Action Plan, contained in the PIP.
- p) Comply with the Environment Management Framework, contained in the PIP.
- q) Mentor a PROJECT institution through activities specified in the IDP (applicable for the institutes under subcomponent 1.3).

SECTION II

The MHRD agrees to:

- a) Provide all necessary support and assistance to the INSTITUTE through the NPIU for PROJECT implementation. The functions and responsibilities of the NPIU are set out in the PIP.
- b) Provide mentoring and support to the INSTITUTE, through individual mentors and institutional mentors, as per the scheme set out in the PIP.
- c) Provide project funds to the INSTITUTE as described in SECTION III.

SECTION III

- a) The MHRD will provide project funds to the INSTITUTE through a Direct Benefit Transfer System. The Finance Manual describes the functioning of the Direct Benefit Transfer System, the rules and procedures governing its use, and the roles and responsibilities of the MHRD and the INSTITUTE.
- b) Fund release to the INSTITUTE will be dependent on the satisfactory performance against PROJECT performance benchmarks as set out in the PIP/notified by NPIU from time to time.

SECTION IV

- a) Amendments can be made to the MOU only (a) under exceptional circumstances, and (b) presentation of reasonable cause. The amended MOU will come into force only after due approval, and through written agreements duly authenticated and executed by the authorized representatives of all Parties to the original MOU.
- b) This MOU will become effective when signed by duly authorized representatives of all parties, and shall remain in force until the completion of the activities covered by the MOU, or until it is duly terminated by the Parties.
- c) Notwithstanding the provisions of this MOU, if the PROJECT is suspended or terminated, this MOU will be automatically considered null and void from the date of such suspension or termination.

SECTION V

The Project implementation schedule:

- a) The Project became effective on _____ 2017.
- b) The Project is expected to proceed over 3 (three) years commencing on _____ 2017, and is expected to be completed by _____ 2020.

SECTION VI

- By this MOU all parties affirm their commitment to carry out the activities and achieve the objectives mutually agreed upon.
- Any dispute between the parties shall always be resolved by mutual consultation without any resort to arbitration or other form of legal remedy including Court of Law.
- This Memorandum of Understanding will continue to be effective up to the closure of the Project.

Signed at _____ on this _____ day of _____ 2017.

FOR AND BEHALF OF
THE (NAME OF INSTITUTE)

FOR AND BEHALF OF
MINISTRY OF HRD, GOVERNMENT OF
INDIA

Chairman, Board of Governor
(Name & Signature)

Secretary, Higher/Technical Education
(Name & Signature)

MEMORANDUM OF UNDERSTANDING
BETWEEN
STATE/UNION TERRITORY OF _____
AND
(NAME OF THE AFFILIATING UNIVERSITY UNDER COMPONENT 1.1/1.3)
FOR IMPLEMENTATION OF UNIVERSITY DEVELOPMENT PLAN
UNDER
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME PHASE III

PARTIES

This Memorandum of Understanding (hereinafter referred to as 'MOU') is made and entered into on this _____ day of _____ 2017 between the Department of Technical/Higher Education, Government of _____ through _____ Principal Secretary, (hereinafter referred to as the 'DEPARTMENT') and (name of the university) through _____, Vice-Chancellor (hereinafter referred to as the 'UNIVERSITY'), established by (name of the university act, date). Registration number _____, (place of signing).

PURPOSE

WHEREAS the objective of the TECHNICAL EDUCATION QUALITY IMPROVEMENT PROJECT III (hereinafter referred to as the 'PROJECT') is to improve quality and equity in selected engineering education institutes and improve the efficiency of the engineering education system.

AND WHEREAS the Government of India and the World Bank have signed a Financing Agreement dated XX 2017, under which the World shares financing to support the PROJECT.

AND WHEREAS the comprehensive description, implementation and operating conditions for the Project are contained in the document entitled the Project Implementation Plan of TEQIP-III (hereinafter referred to as the 'PIP'), as may be revised from time to time.

AND WHEREAS the DEPARTMENT will establish a State Project Implementation Unit (hereinafter referred to as the 'SPIU') in the form of State Project Team, to carry out overall supervision and facilitate project implementation in the state. The structure, functions and responsibilities of the SPIU are set out in the PIP.

AND WHEREAS the UNIVERSITY has been selected to receive a conditional financing of [XXX] INR to pursue the goals set out in its UNIVERSITY Development Plan (UDP), as approved by the UNIVERSITY's Executive Council, such financing which may be increased or decreased upon the performance of the UNIVERSITY in accordance with the procedures set out in the PIP.

NOW THEREFORE the parties agree as follows.

SECTION I

The UNIVERSITY agrees to:

- a) Follow the Project guidelines and procedures prescribed in the PIP and as may be prescribed from time to time by the Government of India for implementation of the PROJECT, in pursuance of the obligations set forth or referred to in the Financing Agreement dated XX 2017 signed between the Government of India and the World Bank.

- b) Adhere to the UDP and take all necessary actions to achieve the goals set out in the UDP, including, but not limited to: entering into contracts or agreements for civil works, goods and services (including consulting services and training/development) and managing those contracts or agreements such that to the extent possible they are completed on time, within budget and to the required standards.
- c) Ensure that any [enabling mechanisms] [eligibility criteria] applicable to the UNIVERSITY, and which are within the responsibility of the UNIVERSITY, continue to be fulfilled for the duration of implementation of the IDP.
- d) Assign responsibility for implementation of the UDP to an appropriate unit within the UNIVERSITY (or establish such a unit) with powers, functions and structures as set out in the PIP.
- e) Take all necessary actions to achieve the PROJECT performance benchmarks as notified by NPIU from time to time; and such benchmarks which need to be met in a timely fashion in order to continue to receive funding under the PROJECT for implementation of the UDP as set out in the PIP and/or notified by NPIU from time to time.
- f) Publish each year an Annual Report on its website, including information on indicators listed in the PIP, in the format and as per the timetable suggested in the PIP.
- g) Carry out monitoring and evaluation and data collection activities as set out in the PIP, and provide documents and data to the SPIU and NPIU, as and when requested, in the agreed format and within stipulated timelines.
- h) Participate in all systems set up to facilitate the implementation of the Project, such as the TEQIP Project Management System.
- i) Participate in all supervision and coordination activities conducted by the SPIU and NPIU.
- j) Facilitate the participation of faculty, technical and administrative staff and students in training sessions, seminars and conferences planned so as to achieve the objectives of the UDP.
- k) Permit all affiliated colleges to participate in activities undertaken under the UDP and utilise facilities created under the project on equal terms, including eligibility, fees etc., regardless of the management type (government, private aided, and private unaided) and whether the college is participating in the Project.
- l) Follow the guidelines and processes described in the Financial Management Manual and the Procurement Manual, contained in the PIP. Follow the procedures for Procurement of all Goods, Works and Services in accordance with the World Bank guidelines titled: Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers” dated January 2011 (revised July 2014) (Procurement Guidelines); and Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers” dated January 2011 (revised July 2014) (Consultant Guidelines); and the agreed procedures and limits described in the Financing Agreement.
- m) Comply with the Social Management Framework and Equity Action Plan, contained in the PIP.

- n) Comply with the Environment Management Framework, contained in the PIP.
- o) Mentor a PROJECT Affiliating Technical University in another State as set out in the UNIVERSITY's UDP (applicable for the institutions under subcomponent 1.3).
- p) Take all actions necessary to facilitate reforms and activities being pursued by colleges affiliated to the UNIVERSITY who are participating in the PROJECT and contained in the PIP including through any amendments required to the rules, policies and guidelines under the jurisdiction of the UNIVERSITY, including but not limited to student assessment.

SECTION II

The DEPARTMENT agrees to:

- a) Provide all necessary support to the UNIVERSITY through the SPIU. The functions and responsibilities of the SPIU are set out in the PIP.
- b) Facilitate all reforms and activities as committed under the Project and contained in the PIP, through appropriate actions and orders, including the greater delegation of academic, administrative and financial powers to the UNIVERSITY as and when required.
- c) Maintain the [enabling mechanisms] [eligibility criteria] for the UNIVERSITY, which are within the responsibility of the DEPARTMENT, for the duration of the PROJECT.
- d) Use of the Direct Benefit Transfer System for facilitating transfer of funds to the UNIVERSITY for its use under the PROJECT.

SECTION III

- a) Ministry of Human Resource Development, Government of India will provide the project funds to the UNIVERSITY through a Direct Benefit Transfer System. The PIP describes the functioning of the Direct Benefit Transfer System, the rules and procedures governing its use, the schedule and conditions for release of the project funds, and the roles and responsibilities of the UNIVERSITY and the DEPARTMENT.
- b) Fund release to UNIVERSITY will be dependent on satisfactory performance against PROJECT performance benchmarks as set out in the PIP/notified by NPIU from time to time. More details about how satisfactory performance is to be assessed can be found in the PIP.

SECTION IV

Amendments can be made to the MOU only (a) under exceptional circumstances and (b) presentation of reasonable cause. The amended MOU will come into force only after due approval, and through written agreements duly authenticated and executed by the authorized representatives of all Parties to the original MOU.

This MOU will become effective when signed by duly authorized representatives of all parties, and shall remain in force until the completion of the activities covered by the MOU, or until it is duly terminated by the Parties.

Notwithstanding the provisions of this MOU, if the Project is suspended or terminated, this MOU will be automatically considered null and void from the date of such suspension or termination.

SECTION V

The Project implementation schedule:

- a) The Project became effective on _____ 2017.
- b) The Project is expected to proceed over 3 (three) years commencing on _____ 2017 and is expected to be completed by _____ 2020.

SECTION VI

- By this MOU both parties affirm their commitment to carry out the activities and achieve the objectives mutually agreed upon.
- Any dispute between the parties shall always be resolved by mutual consultation without any resort to arbitration or other form of legal remedy including Court of Law.
- This Memorandum of Understanding will continue to be effective up to the closure of the Project.

Signed at _____ on this _____ day of _____ 2017.

FOR AND BEHALF OF
THE (NAME OF THE UNIVERSITY)

FOR AND BEHALF OF
THE DEPARTMENT OF TECHNICAL/
HIGHER EDUCATION

Vice Chancellor
(Name & Signature)

Principal Secretary,
Technical/Higher Education,
Government of _____
(Name & Signature)

**MEMORANDUM OF UNDERSTANDING
BETWEEN
STATE/UNION TERRITORY OF _____
AND
(NAME OF THE UNIVERSITY)
FOR IMPLEMENTATION OF INSTITUTIONAL DEVELOPMENT PLAN
IN THE UNIVERSITY's
(NAME OF THE FACULTY/DEPARTMENT/NON-AUTONOMOUS
CONSTITUTENT COLLEGE UNDER COMPONENT 1.1/1.3)
UNDER
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME PHASE III**

PARTIES

This Memorandum of Understanding (hereinafter referred to as 'MOU') is made and entered into on this _____ day of _____ 2017 between the Department of Technical/Higher Education, Government of _____ through _____ Principal Secretary, (hereinafter referred to as the 'DEPARTMENT') and (name of the UNIVERSITY) through _____, Vice-Chancellor (hereinafter referred to as the 'UNIVERSITY') established by (name of the university act, date). (Place of signing).

PURPOSE

WHEREAS the objective of the TECHNICAL EDUCATION QUALITY IMPROVEMENT PROJECT III (hereinafter referred to as the 'PROJECT') is to improve quality and equity in selected engineering education institutes and improve the efficiency of the engineering education system.

AND WHEREAS the Government of India and the World Bank have signed a Financing Agreement dated XX 2017, under which the World Bank shares financing to support the PROJECT.

AND WHEREAS the comprehensive description, implementation and operating conditions for the Project are contained in the document entitled the Project Implementation Plan of TEQIP-III (hereinafter referred to as the 'PIP'), as may be revised from time to time.

AND WHEREAS the DEPARTMENT will establish a State Project Implementation Unit (hereinafter referred to as the 'SPIU') in the form of State Project Team, to carry out overall supervision and facilitate project implementation in the state. The structure, functions and responsibilities of the SPIU are set out in the PIP.

AND WHEREAS the [NAME OF THE FACULTY/DEPARTMENT/NON-AUTONOMOUS CONSTITUTENT COLLEGE] of the UNIVERSITY has been selected to receive a conditional financing of [XXX] INR to pursue the goals set out in its Institutional Development Plan (hereinafter referred to as the 'IDP'), as approved by the Vice-Chancellor/Executive Council, such financing which may be increased or decreased upon the performance of the [DEPARTMENT/FACULTY/NON-AUTONOMOUS CONSTITUTENT COLLEGE] in accordance with the procedures set out in the PIP.

NOW THEREFORE the parties agree as follows.

SECTION I

The UNIVERSITY agrees to:

- a) Constitute a suitably empowered Faculty/Department/College Management Committee in the [NAME OF THE FACULTY/DEPARTMENT/NON-AUTONOMOUS CONSTITUTENT COLLEGE]. The Faculty/Department/College Management Committee will be responsible for the overall strategic direction of the department/faculty/non-autonomous constituent college. The composition and powers of the Department/College Management Committee are set out in the PIP.
- b) Ensure that the project fund is utilised to pursue the goals set out in the [NAME OF THE DEPARTMENT/FACULTY/NON-AUTONOMOUS CONSTITUTENT COLLEGE]'s Institutional Development Plan in accordance with the procedures set out in the PIP.
- c) Implement all reforms and activities, within the responsibility of the UNIVERSITY, as required for the implementation of the [NAME OF THE DEPARTMENT/FACULTY/NON-AUTONOMOUS CONSTITUTENT COLLEGE]'s IDP.
- d) Ensure that the [NAME OF THE DEPARTMENT/FACULTY/NON-AUTONOMOUS CONSTITUTENT COLLEGE]:
 - i. Follows the PROJECT guidelines and procedures prescribed in the PIP and as may be prescribed from time to time by the Government of India for implementation of the PROJECT, in pursuance of the obligations set forth or referred to in the Financing Agreement dated XXX signed between the World Bank and Government of India.
 - ii. Adheres to the IDP and takes all necessary actions to achieve the goals set out in the IDP, including, but not limited to: entering into contracts or agreements for civil works, goods and services (including consulting services and professional development) and managing those contracts or agreements such that to the extent possible they are completed on time, within budget and to the desired standards.
 - iii. Assigns responsibility for implementation of the IDP to an appropriate unit within the [NAME OF THE DEPARTMENT/FACULTY/NON-AUTONOMOUS CONSTITUTENT COLLEGE] (or establishes such a unit) with powers, functions and structures as set out in the PIP.
 - iv. Ensures that the [enabling mechanisms] [eligibility criteria] applicable for the [NAME OF THE DEPARTMENT/FACULTY/NON-AUTONOMOUS CONSTITUTENT COLLEGE], and within its responsibility, continue to be fulfilled for the duration of implementation of the IDP.
 - v. Takes all necessary actions to achieve the PROJECT performance benchmarks as notified by NPIU from time to time; and such benchmarks which need to be met in a timely fashion in order to continue to receive funding under the PROJECT for implementation of the IDP as set out in the PIP and/or notified by NPIU from time to time.
 - vi. Publish each year an Annual Report on its website, including information on indicators listed in the PIP, in the format and as per timetable suggested in the PIP.
 - vii. Carries out monitoring and evaluation and data collection activities as set out in the PIP, and provides documents and data to the SPIU and NPIU, as and when requested, in the agreed format and within stipulated timelines.

- viii. Participates in all systems set up to facilitate the implementation of the Project, such as the TEQIP Project Management System.
- ix. Participates in all supervision and coordination activities conducted by the SPIU and NPIU.
- x. Facilitates the participation of faculty, technical and administrative staff and students in training sessions, seminars and conferences planned so as to achieve the objectives of the IDP.
- xi. Follows the guidelines and processes described in the Financial Management Manual and the Procurement Manual, contained in the PIP. Follows the procedures for Procurement of all Goods, Works and Services in accordance with the World Bank guidelines titled: Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers” dated January 2011 (revised July 2014) (Procurement Guidelines); and Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers” dated January 2011 (revised July 2014) (Consultant Guidelines); and the agreed procedures and limits described in the Financing Agreement.
- xii. Complies with the Social Management Framework and Equity Action Plan, contained in the PIP.
- xiii. Complies with the Environment Management Framework, contained in the PIP.
- xiv. Mentors the PROJECT faculty/department/non-autonomous constituent college of a university through activities specified in the IDP (applicable for the institutions under subcomponent 1.3).

SECTION II

The DEPARTMENT agrees to:

- a) Provide all necessary support to the UNIVERSITY through the SPIU. The functions and responsibilities of the SPIU are set out in the PIP.
- b) Facilitate all reforms and activities as committed under the Project and contained in the PIP, through appropriate actions and orders, including the greater delegation of academic, administrative and financial powers to the UNIVERSITY and maintain [enabling mechanisms] [eligibility criteria] for the [NAME OF THE DEPARTMENT/FACULTY/NON-AUTONOMOUS CONSTITUTENT COLLEGE], which are within the responsibility of the DEPARTMENT, for the duration of the PROJECT.
- c) Use of the Direct Benefit Transfer System for facilitating transfer of funds to the UNIVERSITY (or [NAME OF THE DEPARTMENT/FACULTY/NON-AUTONOMOUS CONSTITUTENT COLLEGE]) for its use under the PROJECT.

SECTION III

- a) Ministry of Human Resource Development, Government of India will provide the project funds to the UNIVERSITY (or [NAME OF THE DEPARTMENT/FACULTY/NON-AUTONOMOUS CONSTITUTENT COLLEGE]) through a Direct Benefit Transfer System. The PIP describes the functioning of the Direct Benefit Transfer System, the rules and procedures governing its use, the schedule and conditions for release of the project

funds, and the roles and responsibilities of the UNIVERSITY (or [NAME OF THE DEPARTMENT/FACULTY/NON-AUTONOMOUS CONSTITUTENT COLLEGE]) and the DEPARTMENT.

- b) Fund release to UNIVERSITY (or [NAME OF THE DEPARTMENT/FACULTY/NON-AUTONOMOUS CONSTITUTENT COLLEGE]) will be dependent on satisfactory performance of the [NAME OF THE DEPARTMENT/FACULTY/NON-AUTONOMOUS CONSTITUTENT COLLEGE] against PROJECT performance benchmarks as set out in the PIP/notified by NPIU from time to time.

SECTION IV

Amendments can be made to the MOU only (a) under exceptional circumstances and (b) presentation of reasonable cause. The amended MOU will come into force only after due approval, and through written agreements duly authenticated and executed by the authorized representatives of all Parties to the original MOU.

This MOU will become effective when signed by duly authorized representatives of all parties, and shall remain in force until the completion of the activities covered by the MOU, or until it is duly terminated by the Parties.

Notwithstanding the provisions of this MOU, if the Project is suspended or terminated, this MOU will be automatically considered null and void from the date of such suspension or termination.

SECTION V

The Project implementation schedule:

- a) The Project became effective on _____ 2017.
- b) The Project is expected to proceed over 3 (three) years commencing on _____ 2017 and is expected to be completed by _____ 2020.

SECTION VI

- By this MOU both parties affirm their commitment to carry out the activities and achieve the objectives mutually agreed upon.
- Any dispute between the parties shall always be resolved by mutual consultation without any resort to arbitration or other form of legal remedy including resort to Court of Law.
- This Memorandum of Understanding will continue to be effective up to the closure of the Project.

Signed at _____ on this _____ day of _____ 2017.

FOR AND BEHALF OF
THE (NAME OF THE UNIVERSITY)

FOR AND BEHALF OF
THE DEPARTMENT OF
TECHNICAL/HIGHER EDUCATION

Vice Chancellor
(Name & Signature)

Principal Secretary,
Technical/Higher Education,
Government of _____
(Name & Signature)