

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
1.	<b>Society for Applied Microwave Electronics Engineering &amp; Research (SAMEER)</b>	Research & Development activities in the areas of its expertise	3.00	42.94	34.50	<b>R&amp;D in Core Areas</b>	Research leading to expertise in	System development ( including, design,development of Hardware, Software,int e-graton of the system and testing)  <b>Continuous Activity</b>	
				Includes Rs. 2.00 crore for NER			Design and development of indigenous digital ionosinde for ionospheric studies		

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
							Technology development for location of live subjects buried inder/hidden behind various barriers.	System development ( including, design,deve-lopment of Hardware, Software,inte-gration of the system and testing)  <b>Continuous Activity</b>	
							Technology development by implement-tation of active aperture in mini Radar	System development and evaluation  <b>Continuous Activity</b>	

## Chapter – II

## Financial Outlays &amp; Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
							Design and development of UWB sources,UWB antenna and testing for radiated susceptibility.	Radiated Susceptibility studies of UWB sources and antennas  <b>Continuous Activity</b>	
							Indigenous technology development of the Imaging system.	Development of Image processing algorithms and image processing system.  <b>Continuous Activity</b>	
							Development of Radio with cognitive features , possibly at two ISM frequency bands ( 2.4-2.4835 GHz & 5.15-5.35GHz)	System development and evaluation  <b>Continuous Activity</b>	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
							Technology development of Frquency Multiplier at 94 GHz	Design,fabrication and testing of Frequency multiplier in W band. Continuing	
		To engage in product development driven by technology and user requirement				Developememt of Dual Photon and multiple electron energy medical Linac	Advanced version of integrated oncology system	Design, development prototype. carryout user	
						Development of 15 MV Industrial Linac system	State of the art industrial LINAC	acceptance tests and make engineering	
						Development of 4 units of 6 MV Medical linac under Jai Vigyan Project (Phase II)	Development and deployment of units at the identified hospital TOT to industry &training	model fit for transfer of technology for bulk production	
						Development of Doppler SODARs	Vehicle mounted Doppler sodars with solar panel back ups will be developed and delivered to users	Timelines: Typically 6 months to 24 months	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						Development of ST radar at 200 MHz	State-of the art atmospheric radar for getting wind profiles up to 16-20 kms		
						Development of Tunable laser diode based water sensor.	Development of Prototype sensor modules based on tunable laser diode and delivery to user agency.		
						Research on Left Hand Maxwell (LHM) system	Fabrication of new metamaterial structures and experiments		
						Development of mm wave antennas	Fabrication and testing of millimeter wave antennas		
						Design and development of coherent transceiver at 94 GHz	Engineering of millimeter wave modules and prototype system demonstration		
						Research on Left Hand Maxwell (LHM) system	Fabrication of new metamaterial structures and experiments		

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						Development of Front-end for wireless data link at 60 GHz	Assembly of subsystems and demonstration of system		
						Development of mm wave antennas	Fabrication and testing of millimeter wave antennas		
		To provide test and measurement services and to undertake training and consultancy in areas of core competence.				Test, measurement and Design consultancy services Calibration and reference to support EMI test instrumentation  Periodical calibration and 10 mtr chamber for automobile industry  Conduct training and consultancy and guiding students to carry out projects for their engineering degrees.	600 test assignments for EMI/EMC and 10 test assignments for thermal design and analysis.  Training of manpower	Analyze the product design for its EMC and make test plan for its compliance to international standard. Incase of non-Compliance, Offer EMC design assistance. Timeline: Continuous activity	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		Strengthening institutional infrastructure to support ongoing programmes				Construction of Residential quarters for Scientists and utility building at Navi Mumbai  Construction of Scientist Hostel building at SAMEER ,Powai campus Construction of Utility building at SAMEER,Powai Campus And Site development.  Augmentation of Facilities	Awarding contract, execution and creating infrastructure    Procurement and augmentation	12-18 months    12 months	
		To keep pace with rapidly changing technology by continuous training of its manpower				Deputation of staff in India/Abroad to attend workshop, conference and seminars. To invite experts to deliver talks/seminars at SAMEER centres.	Interaction with national and international experts and exchange of ideas	Continuous activity.	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
2.	<b>Micro-electronics and Nano-technology Development Programme</b>	To establish nanoelectronics & microelectronics base in the country through setting up of centres of excellence, technology development & capacity building through sponsored R&D projects in the area of nanoelectronics, nanometrology, Microelectronics, and MEMS.	-	100.00 Includes Rs. 5.00 crore for NER	-	3 large/medium/small nanoelectronics projects will be initiated.  14 on-going nanoelectronics projects will be continued.  2 projects on microelectronics will be initiated.  11 on-going microelectronics projects will be continued.	It would enable creation of a strong R&D base in microelectronics and nanoelectronics in the country	April 2011-March 2012	



Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
3.	Technology Development Council (Incl. ITRA)	IT for Industrial Applications  To strengthen local base for R&D/ application in Electronics & IT in the field of Industrial Electronics, Agriculture and Water Resources.	-	79.00  Includes Rs. 7.00 crore for NER	-	<b>National Mission on Power Electronics Technology Phase II (NaMPET II)</b>			
						<b>First Qr. 1.4.2011 –30.6.2011</b>			
						Initiation of Full Spectrum Simulator Miniature model	Miniature model of Full spectrum simulator for educational institutes.	May 2011	Assuming that NaMPET phase2 will commence before March 2011.  SFC Note is under submission for approval of competent authority.
						Creation of Simulation Centre at IIT Bombay	Initiation of the project Simulation Centre at IIT Bombay for Power Electronics Systems.	June 2011	
<b>Second Qr 1.7.11 – 30.9.2011</b>									
• Infrastructure up-gradation at Nodal centre (starting)	Starting of activities of Lab Infrastructure at Nodal Centre	July 2011	-do-						
• Conduct First Short-term course on Power Electronics	One Short-term course	July 2011							

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b>Third Qr 1.10.11 – 31.12.2011</b></p> <ul style="list-style-type: none"> <li>• Conduct Second Short-term course on Power Electronics</li> <li>• Up-gradation of NaMPET website at Nodal Centre</li> <li>• National Workshop on Power Electronics -NWPE 2011</li> </ul>	<p>One Short-term course</p> <p>Enhanced version of NaMPET website <a href="http://www.nampet.in">www.nampet.in</a></p> <p>NWPE 2011</p>	<p>Oct 2011</p> <p>Nov 2011</p> <p>Nov 2011</p>	<p>-do-</p>
						<p><b>Fourth Qr. 1.1.2012 -31.3.2012</b></p> <ul style="list-style-type: none"> <li>• Conduct Third Short-term course on Power Electronics</li> </ul>	<p>One Short-term course</p>	<p>Feb.2012</p>	<p>-do-</p>
<b>Automation System Technology Centre (ASTeC)</b>									
						<p><b>First Qr. 1.4.2011 –30.6.2011</b></p> <p>Embedded Controller &amp; General Purpose Controller</p> <p>Initiation of Demonstration projects</p>	<p>Completion of field trials</p> <p>Preparation of detailed project report, study of sub systems</p>	<p>June 2011</p> <p>June 2011</p>	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b>Second Qr 1.7.11 – 30.9.2011</b></p> <p>Real Time Expert System Shell</p> <p>MEMS level sensor</p> <p>Demonstration projects</p>	<p>Field trials of Failure Forecast Engine</p> <p>Development of MEMS sensor prototype</p> <p>Completion of system engineering of sub systems</p>	<p>Aug 2011</p> <p>Sept 2011</p> <p>Sept 2011</p>	
						<p><b>Third Qr 1.10.11 – 31.12.2011</b></p> <p>Wireless Sensor Network</p> <p>MEMS level sensor</p>	<p>Completion of testing &amp; commissioning of WSN</p> <p>Integration with electronics</p>	<p>Dec 2011</p> <p>Dec 2011</p>	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b>Fourth Qr. 1.1.2012 to 31.3.2012</b></p> <p>Wireless Sensor Network</p> <p>MEMS level sensor</p> <p>Demonstration projects</p>	<p>Development of Mote for vehicle sensing</p> <p>Completion of packaging &amp; field trials</p> <p>Completion of testing &amp; Commissioning</p>	<p>March, 2012</p> <p>March 2012</p> <p>March 2012</p>	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<b>A Collaborative Intelligent Transportation System Endeavour For Indian Cities (ITS)</b>			
						<b>First Qr. 1.4.2011 –30.6.2011</b>			
						Congestion Management using RFID	Completion of field trials and demonstration	April 2011	
						Wireless Traffic Control Systems	Prototype to be ready for field trials	June 2011	
						Second Generation CoSiCoSt (2G-CoSiCoSt)	Release of Traffic Simulator Software beta version	June 2011	
						Intelligent Parking lot Management System	Complete testing at CDAC T Parking area.	June 2011	
						Red light Violation Detection System	Complete field trial at Trivandrum	June 2011	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b>Qr. 2 1.7.11 – 30.9.2011</b></p> <p>Wireless Traffic Control Systems</p> <p>Real-time Traffic Counting and Monitoring System</p> <p>Intelligent Parking lot Management System</p>	<p>Completion of field trials</p> <p>Setting up of Control room at IIT Bombay.</p> <p>Completion of field trials</p>	<p>Sept. 2011</p> <p>Sept. 2011</p> <p>Sept. 2011</p>	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b>Qr. 3 1.10.11 – 31.12.2011</b></p> <p>Second Generation CoSiCoSt (2G-CoSiCoSt)</p> <p>Real-time Traffic Counting and Monitoring System</p> <p>Intelligent Parking lot Management System</p> <p>Intelligent Transit Trip Planner and Real-time Route Information</p> <p>Red light Violation Detection System</p>	<p>Release of Product.</p> <p>Loop and Video site installation Beta version of Algorithm for real time data display and reports</p> <p>Release of Product.</p> <p>Pilot testing of Real-time trip planner</p> <p>Release of Product.</p>	<p>Nov. 2011</p> <p>Dec. 2011</p> <p>Dec. 2011</p> <p>Dec. 2011</p> <p>Dec. 2011</p>	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b>Fourth Qr. 1.1.2012 to 31.3.2012</b></p> <p>Real-time Traffic Counting and Monitoring System</p> <p>Advanced Traveller Information System for Indian Cities</p> <p>Intelligent Transit Trip Planner and Real-time Route Information</p>	<p>Customized loop for heterogeneous traffic, Algorithm for real time data display and reports</p> <p>Video Cameras and communication network installation &amp;</p> <p>Travel time prediction algorithms, Real-time trip planner under operation</p>	<p>Mar. 2012</p> <p>Mar. 2012</p> <p>Mar. 2012</p>	
<b>Application of Electronics for Agriculture &amp; Environment (e-AGRIEN)</b>									
						<p><b>First Qr. 1.4.2011 –0.6.2011</b></p> <p>Development of Electronic Nose for odour handling</p>	<p>Procurement of Sensors and Testing</p>	<p>June 2012</p>	



Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b>Second Qr 1.7.11– 30.9.2011</b></p> <p>Agri Information Sysytem</p> <p>Decision Support system for Tea Production</p> <p>Membrane Electrode Array of Taste Characterisation of Agro Products</p>	<p>Development of Application Software</p> <p>Wireless Sensor Network Software development</p> <p>Sensor development</p>	<p>July 2011</p> <p>Sept 2011</p> <p>Sept. 2011</p>	
						<p><b>Third Qr 1.10.11–31.12.11</b></p> <p>Development of Electronic Nose for odour handling</p> <p>Digital Image processing in Tasar Sericulture</p> <p>Organization of Workshop/ Seminar</p>	<p>Integration of Sensor Array for odour handling</p> <p>Development of Hardware and software</p> <p>Dissemination of R&amp;D output and feedback.</p>	<p>Dec. 2011</p> <p>Dec. 2011</p> <p>Dec. 2011</p>	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b>Fourth Qr. 1.1.12- 31.3.2012</b></p> <p>Decision Support system for Tea Production</p> <p>Membrane Electrode Array of Taste Characterisation of Agro Products</p> <p>Procurement laboratory equipment as per need of the sub-projects</p> <p>Conduct Training Program</p>	<p>Field Testing of prototype</p> <p>Dev and Integration of sensing system</p> <p>Establishment of R&amp;D Infrastructure at C-DAC, Kolkata</p> <p>Upgradation of knowledge and skill to run the eAgriEn Program successfully.</p>	<p>Mar. 2012</p> <p>Mar. 2012</p> <p>Mar.2012</p> <p>Mar. 2012</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		<p><b>Emerging Areas in IT -</b></p> <p>To build and enhance competencies in Emerging Areas of Information Technology Including infrastructure creation and capacity Building in the country</p>				<p>Emerging Areas</p> <p>Ongoing projects of Scientific Computing, Ubiquitous Computing and Perception Engineering will be progressed and new projects will be initiated in other Emerging areas of IT.</p>	<p>Proliferation and absorption of emerging technologies in the country would be facilitated in the area of IT applications</p>	<p>March 2012</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		<p><b>Free &amp; Open Source Software (FOSS) Initiative</b></p> <p>Development and proliferation of Free/Open Source Software (FOSS) in India for bridging the digital divide and helping in creation of a knowledge society.</p>				<p>1. R&amp;D activities will be carried out to meet the targets and objectives of NRCFOSS Phase II project.</p>	<p>1. Proliferation and adoption of FOSS in the country will be facilitated.</p>	<p>March 2012</p>	
						<p>2. Project “Trainers Training &amp; Student Talent Transformation for CBSE” will be progressed</p> <p>New R&amp;D projects to be initiated in FOSS</p>	<p>2. Preliminary educational content will be developed</p>	<p>March 2012</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		<p><b>Bioinformatics Initiative</b></p> <p>To strengthen Bioinformatics base in the country through setting up Centres of Excellence, technology development &amp; capacity building through sponsored R &amp; D projects in the area of Bioinformatics.</p>				<p>2 New multi –institutional projects to be initiated in areas of application of neural networks/ SVM to system biology for identification of Genetic Risk factors and Prognostic Markers for Diabetic Retinopathy for developing novel intervention strategies and Development of a 3D structure database for identifying drug gable targets for malaria.</p>	<p>Create a strong R &amp; D base in Bioinformatics in the country by way of developing SW tools and databases to help in Genomic Research, Drug Designing and Agribioinformatics applications for better quality crops.</p>	<p>July 2011</p>	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						Four/ Five new large/medium/small projects to be initiated in areas such as creation of database of molecular alterations associated with various diseases like brain tumor , identify potential drug target for diseases such as chlamydia trachomatis etc	October 2011		
						Ongoing projects will be continued towards their completion.	March 2012		
		<b>M-Commerce Initiative</b>				Ongoing projects on Digital Preservation would be progressed.  Ongoing projects on ICT for low carbon emissions would be progressed.  Ongoing projects on mobile commerce would be progressed.	March 2012  March 2012  March 2012		

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		<b>IPR Promotion Programme</b>				Profile of IPR filed and Granted  SIP-EIT Scheme to provide support to SMEs for filing International Patent  Conduct of Workshops/ Seminars for IPR awareness  New projects to be initiated.	95 IPRs to be filed  15 Cases to be Processed.  20 IPR clinics/ Seminars	March 2012  March 2012  March 2012  March 2012	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		<p><b>Innovation Promotion</b></p> <p>Ongoing projects in the area of RFID will be progressed.</p> <p><b>Technology Innovation</b></p> <p>Technology Incubation and Development of Entrepreneurs (TIDE) scheme and Multiplier Grant scheme (MGS) will be progressed.</p>					<p>March 2012</p> <p>March 2012</p>		



Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		<p><b>IT Research Academy (ITRA)</b></p> <p>To build a National Resource for advancing the quality and quantity of R&amp;D in IT and Electronics</p>				<p>Identification and initiation of two Participating Institutions.</p> <p>Identification and initiation of four Research Groups</p>	<p>Enhancement of Quality of Research and Education in the country.</p> <p>Generate a pool of Doctorates in IT and Electronics for R&amp;D and academic purposes.</p>	<p>March 2012</p> <p>March 2012</p>	
4.	<b>Convergence, Communication Broadband and Strategic Electronics</b>	To undertake and support R&D projects for the development of Convergence, Communications and Broadband technologies	-	25.00 Includes Rs. 2.00 crore for NER	-	<p>Initiation of 10-15 projects in development/application of the Next Generation Communication, SDR &amp; Cognitive Radio, TETRA, Mobile Adhoc networks, Wireless Sensor Networks Systems, Cyber Physical systems, Broadband Technologies, IP based technologies, Green and digital broadcast technologies. ICT for strategic &amp; surveillance applications. Studies in cutting edge technologies and development of road map for the country.</p> <p>Monitoring of about 25 ongoing projects by the respective Project Review and Steering Groups.</p>	The R&D will lead to establishing indigenous capability in emerging technologies.	On an average 4 projects in quarter are proposed to be initiated. The projects are generally of 1-3 years duration.	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
5.	<b>Components &amp; Material Development Programme</b>	To support Infrastructure development and R & D projects for the development of Electronic Materials	0.60	25.00 Includes Rs. 1.00 crore for NER	13.18	<ul style="list-style-type: none"> <li>Development of lead free x-ray absorbing coating materials for TVs</li> </ul>	<ul style="list-style-type: none"> <li>To develop lead free material for X-ray absorption</li> </ul>	April 2011	Ongoing
						<ul style="list-style-type: none"> <li>Preparation of Carbon Aerogel and Development of Aerocapacitor for Electronic Applications</li> </ul>	<ul style="list-style-type: none"> <li>To develop the aerogel capacitor</li> </ul>	May, 2013	Ongoing
						<ul style="list-style-type: none"> <li>Design &amp; Development of Piezoelctric Multilayer Actuator for MEMS based Micro valve</li> </ul>	<ul style="list-style-type: none"> <li>To develop Piezoelctric Multilayer Actuator for MEMS based Micro valve</li> </ul>	May, 2013	Ongoing
						<ul style="list-style-type: none"> <li>Synthesis and Development of Broadband EMI shielding materials using Magneto-dielectric Nanoparticles</li> </ul>	<ul style="list-style-type: none"> <li>To develop Broadband EMI shielding materials using Magneto-dielectric Nanoparticles</li> </ul>	May, 2013	Ongoing
						<ul style="list-style-type: none"> <li>Hybrid solar cells based on organic polymers and Inorganic Nano particles” at C-MET, Pune along with Moser Baer, UP.</li> </ul>	<ul style="list-style-type: none"> <li>To develop alternative source of energy</li> </ul>	May, 2012	Ongoing
						<ul style="list-style-type: none"> <li>To initiate new projects on Electronics materials and components</li> </ul>		April,2011	New

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		To support development and initiatives to eradicate the issues related to electronics products affecting the environment				<ul style="list-style-type: none"> <li>Establishment of testing facilities for the hazardous substances as per European Union (EU) Directive of Restricting the use of hazardous substances (RoHS)</li> </ul>	<ul style="list-style-type: none"> <li>To establish a centre for testing of hazardous substances and RoHS certification</li> </ul>	October 2011	Ongoing
						<ul style="list-style-type: none"> <li>Environmentally sound methods for recovery of metals from Printed Circuit Boards” at C-MET, Hyderabad</li> </ul>	<ul style="list-style-type: none"> <li>To explore the environmental friendly recycling technology for Printed circuit boards</li> </ul>	May, 2012	Ongoing
						<ul style="list-style-type: none"> <li>To initiate new projects on Electronics waste recycling and green electronics</li> </ul>		May, 2011	New

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		To nurture photonic technologies relevant in IT and optical communication as well as develop technologies in the broader application areas of Photonics through sponsored R & D projects.				Biomedical and Material Analyses utilizing The built FCS Systems  Addition of TCSPC (Time Correlated Single Photon Counting )	Multi-institutional Work biophotonics for Health care	July 2011  Dec 2011	Ongoing
						Demonstrate high power fiber lasing action of the special fibers	Developing technology for High Power Fiber laser by nanoparticles	Sept 2011	Ongoing
						Fabrication and characterization of Interleaver for WDM based on SOI wave guides,	Dev of Silica on Silicon Technology for Opto electronic devices	May 2011	Ongoing
						Channel waveguide fabrication and characterization.	Dev of Wave-guides using rare earth doped glass systems	May2011	Ongoing
						Synthesing and Thermal deposition of Anthracene based derivatives for Blue OLED material  Initiate new projects in solid state lighting	Evolution of Green Photonics technology	Aug 2011  June 2011	Ongoing  New

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						Expanding of list of mentors and Institutions  Selection of second batch and airing of student with the mentor	Developing of a resource base of personnel trained to carry out advanced research in Photonics	April 2011  July 2011	Ongoing
		To support R & D projects for the development of Electronic Materials				<b>Integrated Electronics Packaging</b> <ul style="list-style-type: none"> <li>• Development of basic ferrite materials for integrated applications in LTCC</li> <li>• Development of direct-writing capability on LTCC and required conductor materials</li> <li>• Development of basic dielectric materials for low-k applications in LTCC</li> <li>• Continuation of fin-pitch lithography for fine bumping</li> </ul>	<ul style="list-style-type: none"> <li>• Process for Integrated Glass-Ceramic Packaging</li> </ul>	March, 2012	Ongoing

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b>Nanomaterials and devices</b></p> <ul style="list-style-type: none"> <li>• Preparation of quantum dots of QDs of Cu<sub>2</sub>Se and Ag<sub>2</sub>Se in various matrices including polymers</li> <li>• End user trials for nano-size metal/ metal oxides particles</li> <li>• n-type and p-type transparent conducting oxide thin films.</li> <li>• NTC Thermal Sensors of required specifications.</li> </ul>	<ul style="list-style-type: none"> <li>• Generation of Nano-powders, Nanocomposite &amp; Quantum dots of metals/ semiconductors/ for Electronics Technology and allied applications</li> </ul>	March, 2012	Ongoing
						<p><b>Ultra high purity materials</b></p> <ul style="list-style-type: none"> <li>• Wide band gap (WBG) SiC single crystals.</li> <li>• High purity Ga and its alloys / crystalline compounds.</li> <li>• Upscaling the solidification system, batch process and purity / yield improvement.</li> </ul>	<ul style="list-style-type: none"> <li>• Process technology /Pilot plant scale production of ultrapure metals</li> </ul>	March, 2012	Ongoing

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<b>Materials for Renewable Energy</b> <ul style="list-style-type: none"> <li>• Nanocomposites for solar cells</li> <li>• Nanostructured materials as a Photocatalyst for hydrogen generation</li> <li>• Fabrication of supercapacitors using carbon aerogels.</li> </ul>	<ul style="list-style-type: none"> <li>• Process for renewable energy material.</li> </ul>	March, 2012	Ongoing
						<b>Piezo sensors and Actuators</b> <ul style="list-style-type: none"> <li>• Fine tunings of bender actuators.</li> <li>• Development of low temperature piezo composition</li> <li>• Process for piezoelectric thin films of required specifications</li> <li>• Thin films characterization</li> </ul>	<ul style="list-style-type: none"> <li>• Process/technology for sensors and actuators.</li> </ul>	March, 2012	Ongoing

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
6.	Centre for Development of Advanced Computing (C-DAC)	High Performance Computing (HPC)	3.00	203.40 Includes Rs. 21.00 crore for NER	210.00	<ul style="list-style-type: none"> <li>• Preparation for Petascale Computing</li> <li>• HPC Applications</li> </ul>	<ul style="list-style-type: none"> <li>• R&amp;D towards Architecture of Petascale Computing</li> <li>• Advance research in domains of Science and Engineering with the use of PARAM systems as follows: <ul style="list-style-type: none"> <li>▪ Atmospheric and Environmental Science</li> <li>▪ Material and Structural Engineering</li> <li>▪ Computational Fluid Dynamics</li> <li>▪ Geophysical</li> <li>▪ Bio-informatics</li> </ul> </li> </ul>	<p>March 2014</p> <p>March 2014</p>	



Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		<b>Garuda</b>				<ul style="list-style-type: none"> <li>• Grid Technology Services for Operational Phase of Garuda</li> <li>• Applications on Garuda</li> </ul>	<ul style="list-style-type: none"> <li>• Migration to National Knowledge Network (NKN); Grid Tools and Technologies; Extensive participation of research and application communities; Reduction in lead time for research and technology development</li> <li>• Open Source Drug Discovery (OSDD)</li> </ul>	<p>July 2012</p> <p>March 2012</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		<b>Multilingual Computing</b>				<ul style="list-style-type: none"> <li>• Speech to Speech Machine Translation System</li> <li>• Machine Translation System (Indian to Indian Language for Administrative domain)</li> <li>• Optical Character Recognition (OCR)</li> <li>• Internationalized Domain Names (IDN)</li> <li>• Cross-lingual Information Access for Tourism &amp; Health Domains &amp; Video Search Engine</li> </ul>	<ul style="list-style-type: none"> <li>• Development of Speech to Speech translation system among English and Indian languages for Education Domain</li> <li>• Development of Machine Translation System from Regional Language to Hindi for administrative domain for state Government domain</li> <li>• Development and deployment of new emerging tools and capabilities</li> <li>• Localization of domain names to the remaining Indian languages</li> </ul>	<p>March 2016</p> <p>March 2013</p> <p>March 2012</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		Professional Electronics				<ul style="list-style-type: none"> <li>Smart Grid</li> <li>Mobile Ad hoc Network (MANET) &amp; Advanced Network Monitoring</li> <li>Software Defined Radio (SDR) – Phase II &amp; Cognitive Radio</li> </ul>	<ul style="list-style-type: none"> <li>Enhancement of electric delivery system, including generation, transmission, distribution and consumption through an automated distributed energy delivery network</li> <li>Development of technologies and solutions for advanced radio and network communications to address the military and civilian communications</li> <li>Software Communication Architecture (SCA) compliant hardware and</li> </ul>	<p>March 2014</p> <p>March 2014</p> <p>March 2012</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<ul style="list-style-type: none"> <li>• Intelligent transportation system</li> <li>• ASIC based Digital Programmable Hearing Aid</li> <li>• Next Generation Control System</li> </ul>	<p>waveforms, which can meet the requirements of reconfiguration and portability</p> <ul style="list-style-type: none"> <li>• Wireless Traffic Control System ; Red light violation detection system; Parking lot management system</li> <li>• Prototype for Advanced Programmable Hearing Aid</li> <li>• Enhancement of the features of existing control system and development of Field Bus interfaces like HART, Wireless</li> </ul>	<p>March 2011</p> <p>June 2012</p> <p>March 2014</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<ul style="list-style-type: none"> <li>Perception Engineering</li> </ul>	<p>HART and Profibus-Decentralized Peripherals</p> <p>March 2014</p> <ul style="list-style-type: none"> <li>Development of human perception advanced algorithms to solve problems in Image Processing and Pattern Recognition; Prototype of Automatic Facial Expression Analysis System (AFEAS) and e-Nose for detection of application related to food and beverages, environment, explosive detection etc.</li> </ul>		

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		<b>Software Technologies Mission</b>				<ul style="list-style-type: none"> <li>• Cloud Computing Infrastructure development and applications including scientific cloud</li> <li>• NRCFOSS- Phase II including desktop for the differently Able</li> </ul>	<ul style="list-style-type: none"> <li>• Development of Cloud Computing Framework including the middleware, security solution leading to cloud computing environment to be used as a test-bed for deployment of scientific applications</li> <li>• Development of Open Source Tools, Technologies and localized applications for enhancing the accessibility to IT for differently abled people</li> </ul>	<p>March 2014</p> <p>May 2012</p>	



Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<ul style="list-style-type: none"> <li>Information Rights Management</li> <li>India Development Gateway (InDG) – Phase II</li> </ul>	<ul style="list-style-type: none"> <li>IRM and preservation for digitally born documents in NeGP</li> <li>Capacity building of content consortiums; Delivery of value added information, products and services</li> </ul>	<p>March 2013</p> <p>March 2012</p>	



Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		Cyber Security and Cyber Forensics				<ul style="list-style-type: none"> <li>• Wireless Security</li> <li>• Biometric, Finger Print, Iris and Face Recognition</li> <li>• Data Recovery Centre</li> <li>• Cyber security Framework for e-Governance</li> <li>• Preventive Security Systems such as PAX-Insider Attack Detection for preventing data exfiltration</li> <li>• Technologies for compliance of amended IT Act 2008</li> </ul>	<ul style="list-style-type: none"> <li>• Development of Prototype System to Detect Insider Attack</li> <li>• Repository of information relevant to IT Act and its Amendment Act, including articles, tools and case studies. Framework for online identify management and tracking and analysis of Secure Electronic Signature</li> </ul>	<p>December 2012</p> <p>March 2013</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		<b>Health Informatics</b>				<ul style="list-style-type: none"> <li>• Knowledge Systems based on concept maps</li> <li>• Body Sensor Network</li> <li>• Architecture Development for Electronic Health Records (I)</li> <li>• Healthcare Delivery using SaaS model in Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>• Development of Web-based Symptoms Check Knowledge for Human Health, Animal Diseases and Plant Diseases</li> <li>• Development of Medical Kiosk with body sensor Network Health Portal for Doctors / Patients</li> <li>• Development of SaaS deployable HMIS Software Suite</li> </ul>	<p>March 2012</p> <p>March 2013</p> <p>March 2013</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		<b>Ubiquitous Computing</b>				<ul style="list-style-type: none"> <li>Development of hardware, middleware and application development for UbiComp</li> <li>Ubiquitous network privacy &amp; security</li> </ul>	<ul style="list-style-type: none"> <li>Devices and systems for Ubiquitous healthcare and Body Area Networks (BAN); Design and development of Wireless Vital Signs monitoring kit – Body Temperature, Pulse rate, Blood Pressure, Pulse oxi-meter</li> <li>Design and development of wireless sensor network systems and gateways</li> </ul>	<p>March 2012</p> <p>March 2012</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		<b>Building R&amp;D Infrastructure</b>				<ul style="list-style-type: none"> <li>Building R&amp;D infrastructure at Chennai, Delhi, Hyderabad, Pune and Thiruvanthapuram</li> <li>Additional Infrastructure at Mohali</li> </ul>	<ul style="list-style-type: none"> <li>To build an appropriate campus for C-DAC which can house a number of facilities of C-DAC</li> </ul>	Q3 2011-12	
7.	<b>Electronics in Health &amp; Telemedicine</b>	To promote development of medical electronic equipment, rehabilitation devices and Telemedicine Systems.	-	11.50 Includes Rs. 1.00 crore for NER	-	<p>Establishment of batch fabrication facility for Linac machines</p> <p>TOT of indigenously developed medical electronics products.</p> <p>Deployment of linac machines for cancer treatment.</p> <p>Initiation of new R&amp;D projects in the area of Medical electronics &amp; Telemedicine.</p>		<p>Dec. 2011</p> <p>Sept. 2011</p> <p>Dec. 2011</p> <p>March 2012</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
8.	<b>Technology Development for Indian Languages</b>	The major objectives of the programme are: To develop information processing tools to facilitate human machine interaction in Indian languages and to create and access to multilingual knowledge resources/content. (2) To promote collaborative development of futuristic technologies leading to innovative products and services.	-	35.00  Includes Rs. 3.00 crore for NER	-	<b><u>New Projects</u></b>  Machine Translation system , Cross-lingual Information Access System , OCR and OHWR with increased accuracy and performance towards product development	Consortium Mode Projects –Phase –II in the areas of Machine Translation, Cross-lingual Information Access, Optical Character Recognition and OHWR	Mar 2012	The feedbacks on Outputs from Phase –I of the consortia mode projects would be reviewed for improvement of performamnce

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						Development of English – Hindi Machine Translation System using Anusaraka approach	Project for implementation English – Hindi Machine Translation System using Anusaraka approach	Dec 2011	
						Phonetic engine and Phonetic Search systems in six Indian Languages	Consortium Mode project for Development of Phonetic search in Indian languages	Dec 2011	Proof of Concept Phonetic Engine & Phonetic search facility has been experiment ed.
						Development of Pronunciation Lexicon (PLS) in Indian languages as per W3C PLS Standards Example Lexicon for Hindi and Bengali with 3.0 L words	Project for implementation of Pronunciation Lexicon in Indian languages and Hindi and Bengali as example lexicons	Jan 2012	Project Initiation . National Standard for PLS would be developed for submission to W3C

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						Dravidian Wordnet for 4 South Indian languages Tamil, Telugu, Kananda and Malayalam	Project for implementation of Dravidian Wordnet for 4 South Indian languages Tamil, Telugu, Kananda and Malayalam	Sep 2011	Project Initiation
						Research & Development for, promotion and proliferation of Localization in official languages, Dev. Of localization tools showcasing Laboratory etc.	Establishment of National Localization Research and Resource Centre (NLRRC)	Dec 2011	Seeding activities towards establishment of NLRRC already initiated

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<b>On-Going Projects</b>			
						Stake holders consultation and Validation of the following : Consolidation of inputs for internalization in W3C standards namely CSS, PLS, Xforms, XHTML and E-Gov activity.	Web Internationalization , Standardization and W3C India Initiative	March 2012	Ongoing. Focused Workshop on Mobile Web Initiative and speech technology. Initiation of work towards evolution of National Input recommendations for W3C PLS , CSS and Voice XML standards



Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						Uploading of Language Technology Software Tools & resources	Indian Language Technology Proliferation and Deployment Centre	Dec 2011	Data Centre launched, Project under implementation
						Support for CD user base Percolation of CDs to new spheres . Reviewing of CD Contents & also upgrades of open source regions. Development of Indian Languages fonts for Mobile handsets	National Roll-Out Plan Phase-II	Feb 2012	Project under implementation
						Development of 15,000 Synsets in 4 North Eastern Languages	Development of Word-net for Languages of the North East	Feb 2012	Project under implementation
						<ul style="list-style-type: none"> <li>• POS Tagset standard</li> <li>• Annotated text corpora of 2 lakh words in 11 Indian Languages</li> </ul>	Indian language Corpora Initiative	Jan 2012	Project under implementation

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						Alpha version of Text-to-speech systems for 5 IIs (Hindi, Marathi, Tamil, Telugu, Malayalam)	Development of Text-to-Speech in Indian languages	Sep 2011	Project under implementation
						Alpha version of Speech Recognition Systems in 5 Indian Languages for Agricultural domain	Development of Automatic Speech Recognition for Indian Languages	Jan 2012	Project under implementation
						100 hours of Bodo speech Corpora and IPA representation of Bodo language would be developed.	Development of Bodo Speech Corpora and its IPA representation	June. 2011	Project under implementation
						Draft Script Grammar for major Indian languages A generic software develop environment independent of application/platform to support development of versions NLP applications.	Development of Fonts, Keyboard, Script , Grammar for major Indo-Aryan Languages	Dec 2011	Project under implementation
						Pre- alpha version of NLP Dashboard	Dashboard Development Environment for NLP Applications	Dec 2011	Project under implementation

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						Alpha version of Sanskrit –Hindi MT System	Development of Sanskrit Computational Tool Kit and Sanskrit-Hindi Machine Translation system	Dec 2011	Project under implementation
						Draft CLDR , Fonts, Keyboard layout & drivers for Assamese, Bodo, Manipuri and Nepali	Development of major North-Eastern Languages (NE Consortium)	Dec 2011	Project under implementation
9.	<b>IT for Masses (Gender, SC/ST)</b>	Upliftment of Women and Development of SC/ST using IT.	-	16.94 Includes Rs. 2.00 crore for NER, Rs.5.58 crore for SCSP & Rs.7.37 crore for TSP.	-	To conceive and formulate projects for development of Women and SC/ST.	Capacity building of Women and SC/ST through Infrastructure development, Training, & Entrepreneurial creation of target groups in different States/ UTs.	March, 2012	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
10.	Media Lab Asia	To undertake and facilitate Research, Development and deployment activities.	-	11.30 Includes Rs. 3.00 crore for NER	20.00	<ul style="list-style-type: none"> <li>5 projects will be introduced in the following areas: ICT – Education ICT – Empowerment of Disabled ICT – Livelihoods ICT – Healthcare</li> <li>5 projects will be completed</li> </ul>	Development and Deployment of ICT based models in thrust areas of Media Lab Asia viz. Livelihood Generation, Empowerment of the Disabled, Healthcare and education.	2 projects will be introduced during Apr – Sept 2011 3 projects will be introduced during Oct 2011 – mar 2012.  The projects will be completed as per schedule.	
11.	STQC	Establishment of Quality Assurance Infrastructure in the country to facilitate quality products & services at par with global	7.00	120.00 Includes Rs. 14.00 crore for NER	-	1.Up gradation of Test & Calibration facilities to cater to state-of-the-art products with emerging technologies	Allocated budget will be spent for up gradation of test and calibration facility to meet the demand industry.	March, 2012	
						2 Revenue target realization.	Revenue of Rs. 45 crores approx. likely to be generated.	March, 2012	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		standards and practices				3. Upgrade s/w test facilities for e-Governance application	S/w Test Tools for “Mission critical Project” like defense/space will be procured.	March, 2012	
						4. To up-grade Biometric device Certification Scheme	Bio-metric devices to be certified.	March, 2012	
						5. e-Security Standards /guidelines for e-Governance	Two E safe documents / Standards to be released	Dec., 2011	
						6. Upgrade testing and Auditing facilities for security of Network, systems, applications and websites	Tools and skills to be upgraded for better services	March, 2012	
						7. Common Criteria scheme and testing facilities operationalised to take up new IT products	CC test and scheme infrastructure established for Indian industry	March, 2012	
						8. Progress of construction activity of STQC Building at Noida.	Construction activity of first phase to be completed.	Dec., 2011	
						9. Launch of Intermediary scheme for empanelment of external training provider organisations	Intermediary scheme launched. External organisations started offering STQC training programs to industry.	March, 2012	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						10 .Human Resource Development by conducting DOEACC ‘O’ & ‘A’ level courses in NE region.	SC/ST/OBC/women / weaker section of society and unemployed youth of NE region will be benefited in Computer field.	March, 2012	
12.	STPI & EHTP	To promote exports of electronics & IT	-	2.50	167.00	This program is for promotion of exports and provide facility to Indian small and medium organization in export promotion events in the software and electronics sectors		On Continual basis	STPI is having 52 centers across the country and more than 10,000 companies are registered with STPI.

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
13.	<b>Electronic Governance (e-Governance)</b>	The National e-Governance Plan (NeGP) is an ambitious initiative to provide both horizontal and vertical connectivity to transform the socio-economic landscape of rural India and simultaneously bring significant improvement in the delivery of public services by enhancing efficiency, transparency and reliability in government services.	-	1087.31  Includes Rs. 108.00 crore for NER, Rs. 21.75 crore for SCSP and Rs. 92.42 crore for TSP.	-	<p><b><u>Establishment of SWAN</u></b></p> <p>To provide 2 Mbps data connectivity up to Block level in all States /UTs in phases. As Part of the ongoing Scheme both leased line and wireless based network would be created across the country.</p> <p>The SWAN in 23 States/UTs have been made operational. These States/UTs are Himachal Pradesh, Haryana, Punjab, Tamil Nadu, Gujarat, Karnataka, Kerala, Jharkhand, Chandigarh, Delhi, Puducherry, Tripura, Lakshadweep, West Bengal, Sikkim, Chhattisgarh, Uttar Pradesh, Orissa, Maharashtra, Assam, Madhya Pradesh, Bihar and Uttarakhand.</p> <p>Implementation of remaining States/UTs SWANs are at various stages of Implementation.</p> <p>Goa and Andaman &amp; Nicobar have opted out from the SWAN Scheme as these States/UTs have the Local Network in place.</p>	Implementation of remaining States/UTs SWANs.	In general, it is envisaged that it would take nearly 180 days for completing full process of selection of Network Operator for the SWAN. The processes involved for identification of Network Operator are: Selection of Consultant, Preparation of RFP, vetting of RFP, floating of RFP, scrutiny of bids which includes, pre-qualification scrutiny, technical evaluation, financial evaluation, identification of Network Operator conclusion of the contract with the Network Operator etc. Further to this, implementation of network by the designated Network Operator take anywhere between 36 weeks to 52 weeks. After commissioning of the network, the Scheme envisages operation of the network for five year. All SWANs by August, 2011	State Government, would leverage the SWAN as a core network infrastructure progressively to provide G2G services and later G2C services (even below Block Hqrs level when last mile connectivity would be made available) whose availability is presently confined to the location of the offices providing these services any where anytime over the entire State.

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		Some of the key challenges in implementation of such a complex programme include low levels of ICT literacy in rural India and therefore the importance of assisted access becomes even more relevant. In light of this, besides on-going programmes the declaration by the Hon'ble President to extend the existing CSC Scheme to cover all Panchayats				<p><b><u>State Data Centres</u></b></p> <p>State Data Centre has been identified as one of the important element of the core infrastructure for supporting e-Governance initiatives of NeGP.</p> <p>The Scheme has been approved by the Government at a total outlay of Rs1623.20 crores over a period of 5 years. It is proposed to set up Data Centers across 35 different States/UTs in the country during the 11<sup>th</sup> Plan.</p> <p>Three State Data Centres have been set up and operationalised till December 2010.</p>	<p>Secure and reliable data Repository sharable across various applications.</p> <p>State Data Centre will help in providing efficient electronic delivery of G2G, G2C and G2B services.</p>	<p>It is expected that around 11 SDCs shall be made operational by March, 2011.</p> <p>Additional 20 SDCs expected to be made operational by December, 2011.</p>	<p>The factors at the State level which may lead to delay in the execution of the project are:</p> <ul style="list-style-type: none"> <li>• Delay in identifying and handing over the site to the selected Bidder.</li> <li>• Delay in provisioning of raw power for the SDC.</li> <li>• Delay in awarding LoI and Contract to the selected Bidder.</li> </ul>



Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		by setting up additional 150,000 CSC will have far reaching consequences because it mark a paradigm shift in accessibility to public services.				<p><b><u>Common Service Centres (CSCs)</u></b></p> <p>The Government had earlier approved a Scheme for establishing 100,000+ CSCs, primarily in rural areas of the country. These Centres are envisaged to be broadband Internet enabled are presently providing various available government and private services at the doorstep of the citizen. The Scheme is to be implemented in Public Private Partnership. The Scheme had been approved at a total cost of Rs 5742 crore with Government of India contribution Rs. 856 crore and State Governments contribution being Rs 793 crore. The balance funds is being invested by the private sector who is a key stakeholder in the CSC eco-system known as Service Centre Agencies (SCAs). As on 31.12.2010, 87,594 CSCs have been rolled out.</p>	Complete the process of establishment of 100,000+ CSCs in the rural areas of the country by April - June 2011	June 2011	Majority of the remaining CSCs to be rolled out fall under difficult, inaccessible / and or areas having law and order/ naxalite problems. Therefore, the rollout for the remaining CSCs is a challenging task for the partners in the scheme i.e. the State Governments and the Service Center Agencies

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
									who are private sector entities entrusted with the responsibility of rollout and management of the CSCs. All efforts are being made to overcome the impediments in implementation of the scheme. Besides the States are also being continually advised to create and facilitate more and more G2C services to

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
									benefit the rural population and there by achieve objective of the scheme.  It is expected that Broadband Connectivity would be provisioned by BSNL for all the CSCs by April-June 2011.

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b>Bharat Nirman Common Service Centers (BN CSCs)</b></p> <p>Government of India has now proposed to upscale existing scheme of 1,00,000 CSCs to 2,50,000 lakh (2.5 lakh) CSCs so as to have one Bharat Nirman CSC at each panchayat. The proposal to setup additional 1,50,000 Bharat Nirman CSCs is under discussion as EFC Note and DPR have been prepared and circulated to the key Ministries / Departments / Offices for detailed deliberations on this subject. It is expected that the Cabinet approval for the Bharat Nirman CSCs would be obtained by end of March 2011.</p>	<p>Sanction the CSCs proposals for all the States / UTs in the country.</p> <p>Complete the rollout of 60,000 additional CSCs</p>	<p>April 2011- March 2012.</p>	<p>The proposed scheme of Bharat Nirman CSCs under circulation / discussion has taken into consideration certain constraints namely availability of assured power / energy and Broadband Connectivity, proportion of investment sharing between the SCA and VLE experienced in the phase I scheme of</p>

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
									<p>the CSCs. Therefore, in the proposal for BN CSCs, it is proposed to provide a fixed amount of revenue support to each CSC irrespective of the bid amount quoted by the prospective SCAs (bidders). This it is felt would facilitate speedy rollout of CSCs.</p> <p><b><u>Connectivity</u></b></p> <p>Department of Telecommunications is already</p>

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
									working out a plan to make available Broadband Connectivity for the entire number of villages in the country. Accordingly , no special problem or difficulty as such is envisaged in provisioning of Broadband Connectivity for the proposed 1.5 lakh BN CSCs.

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b>Facilitating Services through CSC by enabling Implementation of State Portal, SSDG, eForm Application and Gap Infrastructure</b></p> <p>The scheme of ensuring delivery of services through CSC by enabling the State Portal (SP), State Service Delivery Gateway (SSDG), Electronic form Application implementation and gap infrastructure under NeGP has been approved with a total outlay of Rs. 400 crore. It is envisaged that SP along with SSDG will be developed and implemented so that citizens are provided with outlets where they can access the services under a single interface mechanism in the form of the Portal.</p> <ul style="list-style-type: none"> <li>• Out of the approved 30 States/UTs proposals, around 17 States/UTs have floated the RFP for the selection of the Implementing Agency for the project.</li> <li>• Out of these 17 RFPs, 10 States/UTs have completed the bid process and are in the process of issuing the LoI to the selected Agency.</li> <li>• 5 States/UTs (Tamil Nadu, Goa, Himachal Pradesh, J&amp; K and UP)</li> </ul>	<ul style="list-style-type: none"> <li>• This will enable citizens to download forms and submit their applications electronically with help of <b>Electronic Forms</b> hosted on the <b>State Portal (SP)</b> and routed through a common State Services Delivery Gateway (<b>SSDG</b>).</li> <li>• Assured electronic delivery of the request from the citizen to the specified field office of the government department</li> <li>• The electronic</li> </ul>	<p>April 2011-March 2012</p> <ul style="list-style-type: none"> <li>• Selection of Implementing Agencies by States</li> <li>• Completion of project implementation in at least 10 States/UTs</li> <li>• User Acceptance Text (UAT) by STQC for 10 States</li> </ul>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p>have already started the project implementation and the remaining would shortly start implementation.</p> <ul style="list-style-type: none"> <li>• Empanelment of additional two Implementing agencies for the project is in progress.</li> </ul>	<p>acknowledgement of successful submission of application/request from department to the citizen and query the status of his/her application/request at any point in time.</p> <ul style="list-style-type: none"> <li>• A single gateway for information and citizen services for integrated service delivery.</li> <li>• Online public services to the citizen via State Portals</li> <li>• A front end application mechanism through e-Forms</li> <li>• All public service forms in an 'e' repository</li> </ul>		



Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b><u>e-District</u></b></p> <p>e-District as a concept proposes integrated and seamless delivery of citizen services by district administration through automation of workflow, backend digitization, integration and process redesign across participating departments for providing services to the citizens</p>	<p>1. Implementation of e-District pilot in 16 States (41 Districts) already sanctioned.</p> <p>2. Obtain approvals for the e-District Mission Mode Project Scheme</p> <p>3. Approve projects for eDistrict national roll out in those states (which have rolled out 70% CSC in the state and implemented pilot project)</p>	<p>April, 2011</p> <p>Jan.- February 2011</p> <p>April, 2012</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b><u>e-Bharat:</u></b></p> <p>The Department of Information Technology has been carrying out dialogue with World Bank for possible programmatic support for NeGP under the Bank's Development Policy Lending arrangement. The details are:-</p> <p>i. Development Policy Lending is rapidly-disbursing policy-based financing, which the Bank provides in the form of loans or grants to help a borrower address actual or anticipated development financing requirements. This lending aims to help a borrower achieve sustainable reductions in poverty through a program of policy and institutional actions that promote growth and enhance the well-being and increase the incomes of poor people.</p> <p>ii. Bank's decision to extend Development Policy Lending is</p>	<p>i. Increased program efficiency and reliability of Citizen Services through greater coordination.</p> <p>ii. Improved Citizens' Engagement.</p> <p>iii. Expanded access to e-Services.</p> <p>iv. Mainstreaming horizontal integration in NeGP.</p>	<p>Following agreement between DEA/DIT and the World Bank to take forward this project initiative, intensive deliberations between DIT and World Bank are currently underway as part of preparatory activities for this project including</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p>based on an assessment of the country's policy and institutional framework—including the country's economic situation, governance, environmental/natural resource management, and poverty and social aspects.</p> <p>iii. The Bank determines which of the agreed policy and institutional actions by the country are critical for the implementation and expected results of the program supported by the development policy loan.</p>		<p>identification of policy actions in the area of e-Governance for the purpose of this lending. On satisfactory completion of Bank's appraisal in terms of undertaking the policy actions as agreed, the loan funding will be approved and disbursed by the Bank.</p> <p>Keeping in view the present status of the project</p>	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
								being preliminary in nature, while it is difficult to arrive at a precise time frame, DIT has been emphasizing completion of project preparatory activities and its formal approval by both GoI and the Bank during 2011–2012.	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b><u>Capacity Building Scheme</u></b></p> <p>The scheme is mainly for providing technical &amp; professional support to State level policy &amp; decision-making bodies and to develop specialized skills for e-governance at a total outlay of Rs. 313 crore for all the States/UTs.</p> <p>Institutional Capacity Building for all the State/UTs.</p> <ol style="list-style-type: none"> <li>1. Recruitment of SeMT for all States/UTs</li> <li>2. Orientation of Political and Policy level personnel's (Leadership Meet)</li> <li>3. Specialized training to project level officials of all States/UTs</li> </ol>	<p>Setting up of SeMT in States/UTs</p> <p>Create awareness about e-Governance at policy and political level</p> <p>Training to Sr. officials, policy maker &amp; SeMT</p>	<p>Continuous activity</p> <p>Continuous activity</p> <p>Continuous activity</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b><u>GIS Application</u></b></p> <p>It is basically for the development of spatial decision support system. The activities :</p> <ol style="list-style-type: none"> <li>1. Initiation of New project</li> <li>2. Completion of some ongoing activities</li> </ol>	Developing spatial decision support system	Continuous activity	
						<p><b><u>Standards for e-Governance</u></b></p> <p>Standards for e-Governance are a high priority activity, which will ensure sharing of information and seamless interoperability of data and e-Governance applications under NeGP. The details are:-</p> <ul style="list-style-type: none"> <li>• Development and enhancement of Standards, Guideline, Policy in identified areas</li> <li>• Development of standards in the new areas like Digital Preservation</li> <li>• Publishing of standards on the website</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure Interoperability, integration &amp; seamless data sharing of e-Gov applications</li> <li>• Release of standards/ guidelines in Interoperability framework, Data &amp; Metadata phase II, Security, Enterprise Architecture, Quality &amp; other new areas that emerge</li> </ul>	Continuous activity	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b><u>National e-Governance Service Delivery Gateway (NSDG)</u></b></p> <p>NSDG is a middleware infrastructure, would act as standards based routing and a message switch de-linking the back end departments from the Front-end service access providers. This would facilitate standards based interoperability and integration to existing and new e-governance applications. The details are:-</p> <ul style="list-style-type: none"> <li>• A pilot implementation has been successfully developed and tested. The National Gateway is implemented by CDAC and is Live since Aug'08</li> <li>• Operations &amp; Maintenance for 5 years</li> <li>• To be plugged into various e-Gov projects like eBiz, Trademarks</li> </ul>	<p>This soft infrastructure which is based on standards will facilitate integration, interoperability &amp; data sharing amongst various eGov applications.</p>	<p>Go-Live done in August, 2008. Launch of integrated NSDG in 2011-12.</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b><u>R&amp;D in e-Governance</u></b></p> <p>To support research and development activities in various areas where R&amp;D will bring direct benefit.</p>	<p>Applied R&amp;D which would enable bringing innovative solutions which are cost-effective for the various e-Governance applications</p>	<p>Continuous activity</p>	



Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b><u>Open Technology Centre (OTC)</u></b></p> <p>GOI has initiated the setting up of an Open Technology Center through NIC aimed at giving effective direction to the country on Open Technology in the areas of Open Source Solutions, Open Standard, Open Processes, Open Hardware specifications and Open Course-ware. The OTC will provide the requisite support to the Standardization activity for e-Governance. The details are:-</p> <ul style="list-style-type: none"> <li>• Creation and Operation of National Repository for OSS</li> <li>• Creation of Knowledge Portal for the Identified OSS</li> <li>• Promotional Activities(Exhibitions, Awareness Programs, Workshops) for Adoption of OSS</li> <li>• Support Services for OSS</li> </ul>	<ul style="list-style-type: none"> <li>• Synergy in the overall components of Open Technology initiative that are being taken by various communities</li> <li>• Support on Open Technology</li> <li>• Support to the standardization activity for e-Governance.</li> </ul>	Continuous activity	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b><u>Assessment</u></b></p> <p>This programme is basically the Impact Assessment Studies of e-Governance projects and the e-Readiness survey of India.</p> <p>The impact could be in terms of quality of life, inclusion, access to information regarding benefits etc., economic in terms of either income generation or savings or even empowerment in terms of transparency, Right to information etc. An impact assessment of these e-initiatives will aid in gaining an empirical insight into issues relating to the dynamic and organic nature of governance such as how these projects are perceived and services accessed by the citizen and their effect on him as an individual as also on the politico cultural environment which sustains the project.</p> <p>A comprehensive list of e Government projects will be prepared to gain a bird's eye view of e Government projects in the country.</p>	<ul style="list-style-type: none"> <li>• Impact Assessment of 5 projects including at least 1MMP</li> <li>• Baseline Assessment of 2 projects including at least 1 MMP</li> <li>• Detailed Assessment of 2 projects in liaison with relevant line-ministry.</li> <li>• E-Readiness Assessment 2010-11 to be commissioned</li> </ul>	2011-2012	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b><u>Awareness &amp; Communication</u></b></p> <p>National Awareness Campaign for NeGP</p> <ul style="list-style-type: none"> <li>• To create awareness among citizens about the initiative and its objectives</li> <li>• To build distinctive brand of NeGP to be utilized across Departmental communications</li> <li>• To motivate other external stakeholders</li> <li>• Workshops and Seminars at MMPs /State/Divisional level</li> </ul>	<ul style="list-style-type: none"> <li>• Create awareness at the national level through a campaign on various aspects/components of NeGP in India.</li> <li>• Collaterals reaching out to people across urban fringe and rural locations.</li> <li>• To promote e-governance among top level political and bureaucratic setup, industry, academia and NGOs.</li> <li>• Awareness in states especially at grassroots level through outreach programmes.</li> </ul>	2011-2012	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
14.	<b>Cyber Security (incl. CERT-In, IT Act)</b>	Security Policy, compliance & assurance	-	45.20 Includes Rs. 3.00 crore for NER	-	Improvement in security posture of organisations and enhancement in the ability of IT systems and networks to resist cyber attacks.	<p>Implementation of Security Best Practices – ISO 27001 in Govt. &amp; critical sector</p> <p>Implementation of cyber security Crisis Management Plan (CMP) in Central Govt. Ministries/Deptt. as well as States/UT</p> <p>Cyber Security conformity Assessment Infrastructure (Product, Process &amp;</p>	<p>Ongoing.</p> <p>Status of compliance to be ascertained at periodic intervals.</p> <p>Ongoing,</p> <p>Periodic cyber security drills to be conducted to verify security posture and compliance. Sectoral Crisis Management Plans to be developed</p> <p>Ongoing,</p> <p>Empanelment activities to</p>	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
							People)  Establishment of Common Criteria (CC) product testing facility and certification scheme.	be conducted at periodic intervals  Ongoing,  Upgradation of facility to level 4 testing to be progressed	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		Security training – basic awareness as well as advanced				<p>Trained manpower to implement techniques to secure IT infrastructure.</p> <p>Trained manpower to collect, analyse and process digital evidence.</p> <p>Pre trained manpower will help in securing cyber space and check cyber crimes.</p>	<p>Specific training facilities, training modules and content development</p> <p>Awareness and training programmes to facilitate information sharing to deal with crisis situations.</p>	<p>Ongoing.</p> <p>Ongoing.</p> <p>Training programmes on specific topics of cyber security to be organised</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		Security R&D for indigenous skills & capabilities				Development /enhancement of skills and expertise in areas of cyber security	<p>Research and development of indigenous cyber security solutions, proof of concepts and prototypes and skilled manpower in areas of cyber security including</p> <ul style="list-style-type: none"> <li>• Crypto Analysis &amp; Research</li> <li>• Authentication</li> <li>• Network &amp; System Security - Mobile</li> <li>• Monitoring &amp; Forensics</li> <li>• Vulnerability</li> </ul> <p>through sponsored projects at recognized R&amp;D organisations.</p>	<p>Ongoing.</p> <p>Formulation of proposals with special focus on malware research, mobile security, SCADA security, advanced cyber forensics &amp; evaluation of proposals by Working Group</p> <p>Periodic review of individual projects</p>	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		Security incident – early warning and response (CERT-In)				Enhancing the security of communications and information infrastructure in the country	Rapid response, resolution and recovery  Security incident prediction, prevention and protection  Security assurance	Ongoing.  Continuous upgradation of CERT-In facilities and capabilities to counter growing cyber security threats. Comprehensive threat assessment and attack mitigation by means of net traffic analysis and deployment of honey pots. Realtime Malware tracking and analysis with special focus on virus/bots.  Real time response to cyber security incidents  Alerts, Advisories and vulnerability Notes  Cyber Security Mock drills	



Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		Cyber laws for supporting E-Commerce and E-Governance activities				A legal framework, which will instill confidence of the users and investors in the area of Information Technology in the country will be in place.	<p>Legal Framework that can effectively support growth of E-Commerce and E-Governance in the country.</p> <p>Operation and maintenance of Cyber Appellate Tribunal</p>	<p>Ongoing, Draft of Rules pertaining to additional sections</p> <p>Formulated and be finalized after public consultation</p> <p>Ongoing, Awareness programmes for adjudicating officers to be organized. National, Regional and State level seminars proposed.</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
15.	<b>Controller of Certifying Authority (CCA)</b>	To promote use of electronic/digital signatures for e-governance and e-commerce applications.  Training of law enforcement agencies, judiciary and other users.	-	9.00	-	Promotion of use of Electronic/Digital signature certificates	Enhanced use of electronic/digital signatures for e-governance and e-commerce, banking applications etc. Training facilities, modules and content development	Continuing process	
16.	<b>ERNET India</b>	To provide network infrastructure to connect Educational & Research Institutes to each other as well as to rest of the world.	-	0.01	77.00	Upgradation of Technology & Capacity of ERNET Network & Extension to South Asian countries through TEIN3.	The TEIN3 PoP was co-located at ERNET PoP in Mumbai. The connectivity to TEIN3 has been migrated to NKN .	2 years	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		To carry out research in Collaboration with partner institutions at national and international level.				1. Work on Mobile IPv6 Project and New R&D Initiatives . 2. Continuation of R&D initiative with EU through EU-India Grid 2 and other projects.	Interoperability of Grids, IPv6 deployment, future internet research & experimentation.	2 years	
		To implement turnkey ICT projects for targeted user domains.				1. Connecting Schools under KVS, JNV and ICT Vocational Centre for disabled. About 100 ICT Vocational centres are to be established and connected with internet. 300 JNVs have been provided Internet access.	Strengthening computer education in Kendriya Vidyalayas (KVs) & Jawahar Navodaya Vidyalayas.  Promotion of computer literacy among disabled children and their employability in ICT.	2 years	
						2. VSAT Connectivity with Internet/Intranet access & IT infrastructure at 200 KVKs of ICAR	To facilitate access and dissemination of information on agriculture to the farming community.	5 years	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						3. Setting up of centralized secure Data Centre and intranet of 274 ICAR institutes (A world bank funded project for ICAR)	A dedicated centralized Data centre for ICAR & its institutes for hosting agriculture related contents.	5 years	
						4. Continuation of Digital Library Initiatives.	The equipment for creating data repository of digital library has been installed and data from IISc is being migrated for access through internet by the targeted users.	3 years	
17.	<b>Promotion of Electronics / IT Hardware Manufacturing</b>	Promotion of Hardware Manufacturing in the country.	-	2.83	-	(a) To complete the recommendations of Appraisal Committee (AC) regarding applications for assistance received under Special Incentive Package Scheme (SIPS) including action for approval of Competent Authority  (b) To set up a National Electronics Mission (NEM)  (c) To introduce Modified Special Incentive Package Scheme and setting up of Electronics Manufacturing	These would encourage investment in electronics/IT hardware manufacturing sector	March 2012	(a) The actual manufacturing units taking off the ground will depend on market conditions. Further, the disbursement of subsidy to the selected applicants

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p>Clusters</p> <p>(d) To set up a dedicated “Electronics Development Fund” for promotion of Innovation, R&amp;D, Indian IP and development of Indian Microprocessor</p>			<p>will depend on their attaining financial closure, the NPV of investment exceeding the threshold value and other conditions.</p> <p>(b) to (d) These will be subject to obtaining requisite approvals from the Government</p>
18.	DOEACC	<ul style="list-style-type: none"> <li>To carry out HR Development in Information Electronics &amp; Communication Technology</li> </ul>	1.70	11.30 Includes Rs. 3.00 crore for NER	97.39	<p><b>(a) DOEACC Scheme</b> O/A/B &amp; C Levels (Non-Formal Sector of IT Education &amp; Training) Half Yearly Examinations. -15,000 students are expected to qualify at various Centres of courses during the year 2011-12.</p>	IT Trained Professionals will be available for the industry for employment and will be contributing to the economy.	July 2011 & January 2012	Academic Recognition of B&C level by AICTE & increasing acceptance for DOEACC

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		(IECT). <ul style="list-style-type: none"> <li>To produce quality professionals through Long Term &amp; Short Term Courses in the Formal &amp; Non-Formal Sector.</li> </ul>						courses may increase the employment prospects of O/A/B/C qualifiers.  Conduct Examination & Issue Certificates  Acceptability of the DOEACC qualifiers by the Industry.	

## Chapter – II

## Financial Outlays &amp; Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						(b) DOEACC Centres to conduct training for Formal Sector Long Term Courses (M.Tech, MCA, BCA, PGDCA, Diploma in EE & CS etc.) – 1,800 students.	-do-	Annual / Semester wise exams	M. Tech & MCA are AICTE approved courses. BCA and PGDCA courses are affiliated to respective State / Universities. Diploma courses are approved by AICTE and State Technical Boards.
						To conduct training for Non-Formal Sector Long Term Courses (DOEACC O/A/B Level courses, DOEACC Bioinformatics O/A Level courses, Hardware Courses at O/A Level – 14,500 students.	-do-	Annual / Semester wise exams	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						Training for Short Term courses of duration less than one year – 12,000 students.	-do-	Batch-wise exams	Industry Recognition - Efforts are made to create tailor made courses as per the changing need of industry to create manpower with employable skills.
						ITES/BPO Programme – 2000		Batch-wise exam	



Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						IT Literacy Programme (CCC) – 95,000		4 monthly exams and on every 1 <sup>st</sup> & 3 <sup>rd</sup> Saturday of a month on demand basis.	Few State Governments & Departments of Central Govt. has already recognized CCC Certificate as the minimum IT Literacy qualification for job purposes as well as promotions
19.	<b>Manpower Development (including Skill Development in IT)</b>	<b>E-learning</b>	-	127.69 Includes Rs. 25.00 crore for NER, Rs.2.55 crore for SCSP and Rs.10.85 crore for TSP.	-	Design and Development of Service Oriented Architecture based Standards Compliant e-Learning Framework with Personalized Learning Features - to develop an intelligent e-learning system catering to personalized learning complying with standards, using technologies like service oriented architecture (SOA), web mining and Rich internet applications (RIA).	E-learning standard compliant tool with support to Personalized learning  An integrated conversion tool for creating SCORM compliant content Integrated video streaming capability	Dec., 2011	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						Design and Development of a Framework for Adaptive Instruction (FAI) – to deliver instruction in personalized manner, to set up FAI server, to provide Indian language support.	Creation of an environment that presents learning material depending on the learner model and preferences	Feb., 2012	
						Video Compression and Decompression for E-Learning - to improve latency and performance of video compression and decompression techniques based on standard H.264 for lower bandwidths (below 128 kbps) and to provide better quality of video and audio at lower bandwidths and lesser latency for e-Learning.	To improve codec standard H.264 or to develop video compression and decompression (codec) standard for better quality of video such as 128 kbps.  A setup for e-Learning using the proposed standard	Dec., 2011	
						Online Labs (Olabs) for School Lab Experiments – to offer a joyful interactive learning experience for the student and to provide an environment to extend, improve, refine and assist the learning and/ or experimentation process. *	<ul style="list-style-type: none"> <li>• Lab Framework for experiments</li> <li>• Self evaluation through Quiz &amp; experiments</li> <li>• To train subject teachers</li> <li>• Pilot testing by students.</li> </ul>	Dec., 2011	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p>Adaptable e-Learning Accessibility Model for the Disabled - to carry out R&amp;D in the area of providing a solution for accessibility for the disabled in the domain of E-Learning that would result in development of tools and products in the area of accessibility from the emerging and promising technologies.*</p>	<ul style="list-style-type: none"> <li>• Development of Accessible E-Learning Framework</li> <li>• Launch of E-Learning web Portal with the support of local language</li> <li>• Awareness and training programmes and workshops to be organized</li> </ul>	Dec., 2012	
						<p>Content generation, adaptation and distribution in m-learning environment for Mobile phone applications - To identify and develop mobile learning content and to adapt and render the developed content for mobile phones suitable for finishing school students. Also to develop mobile video streaming application and to deploy and distribute the mobile learning content to the students of finishing schools*</p>	<ul style="list-style-type: none"> <li>• Mobile learning content suitable for finishing school students in the area of soft skill, data structure and C programming and Entrepreneurship</li> <li>• Software for mobile video streaming application</li> <li>• M-Learning environment set up for students of finishing schools</li> </ul>	Dec. 2011	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						Fresh project proposals for E-Learning in the area like development of authoring tools, Video Compression/ decompression techniques, developing content independent of Platform and environment, Personalized Learning and content management system etc. will be invited from various academic institutions, R&D labs etc. These projects will be placed before Working Group for deliberations/ recommendations before approval by the competent authority.			
		Human Resource Development in the country in the area of Information Security.				<ul style="list-style-type: none"> <li>• Launching/ continuation of Information Security Curriculum at B.Tech/ M.Tech/ Ph.D levels and train System Administrators;</li> <li>• Establishment of Information Security labs at RCs and PIs;</li> <li>• Training faculty of Participating Institutes;</li> <li>• Train Central and State Government Officers; and</li> <li>• Awareness Programmes in the area of Information Security.</li> </ul>	<p>Generate qualified IT security professionals for Industry/ Govt.</p> <p>Human Resource Development and awareness in the area of Information Security.</p> <p>Secured environment for BPO, Commerce and governance</p>	March 2012	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		Scheme of Manpower Development for the Software Export Industry				<ul style="list-style-type: none"> <li>• Creation of course curriculum, Contents and Question Bank</li> <li>• Generation of quality faculty and mentors</li> <li>• Upgradation of skills of graduates to make them employable</li> <li>• Augmentation of infrastructure facilities for ICT training to enhance the intake capacity</li> <li>• Expansion of state-of-the art facility for advanced (industry related) IT training programmes</li> <li>• National On-line Test System for Graduate Engineers in Information Technology</li> </ul>	<p>Human Resource Development in the area of Information Technology for software export industry</p> <p>Generation of Mentors/quality Faculty</p> <p>Enhancement of quality of ICT education in Engg. Colleges</p> <p>Virtualization of Technical Education in IT</p> <p>National On-line Test System for Graduate Engineers in Information Technology</p>	March 2012	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		Human Resource Development in the North-Eastern Region				<ul style="list-style-type: none"> <li>• Regional Institutes for e-Learning and Information Technology (RIELIT) at Kohima (Nagaland) and Agartala (Tripura)</li> <li>• New DOEACC Centres at Shillong (Meghalaya), Gangtok (Sikkim) and Itanagar (Arunachal Pradesh)</li> </ul>	<p>Create skilled manpower in the area of Computer Science and Information Technology and related disciplines for making available industry ready professionals and also cater to the needs of the respective state and the region as a whole.</p>	<p>March 2011 (RIELIT Kohima)</p> <p>March 2012 (RIELIT Agartala)</p> <p>Dec 2012 (DOEACC Shillong)</p> <p>July 2013 (DOEACC Gangtok)</p> <p>January 2014 (DOEACC Itanagar)</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		<b>Digital Library Initiatives –</b>  • <b>Digitization / preservation and web enabling of Copyright free data available in physical form</b>				<b>On-going Projects</b>  Digitize: - 8-10 Million pages  Providing bandwidth connectivity to IISc., IIT, Hyderabad and C-DAC, Noida  Hosting the DLI web site for accessing the digitized data  <b>New Projects</b>  Digitize around 20-25 Million pages	Strengthen Country’s identity by digitally preserving the national heritage and intellectual output                          Strengthen Country’s identity by digitally preserving the national heritage and intellectual output	March 2012                      March 2012	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
20.	<b>Facilitation of Setting-up of Integrated Townships (e-Infrastructure)</b>	Facilitation of setting up of Integrated Investment Regions (ITIRs), IT/ITES units in the ITIR region	-	0.10	-	Information Technology Investment Regions (ITIRs) set up in different States/UTs	Establishment of high quality infrastructure for promotion of IT and Electronics Hardware Manufacturing industry.  Creation of new employment opportunities for youth skilled in IT & Electronics.	These are long term processes requiring 5-15 years	Adequate industrial units not being set up in ITIRs in initial years.
		Setting up of Bio-IT research and training facility to create research and training facility, IPR/ entrepreneurship development in the area of genome sequencing, DNA and molecular Biology				Research & Training facility in the area of genome sequencing, DNA and molecular Biology	Research and training facility, IPR/ entrepreneurship development	This is a 5 year duration project initiated in March 2010	There may be global competition with better research facilities being set up outside India



Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		Setting up of ICT Vocational Centers for Physically challenged children Phase II. The project will help differently abled children to acquire ICT skills enabling them to seek employment and earn livelihood.				50 ICT vocational centers have already been set up in 17 different States/UTs. The equipment made available for ICT training includes Talking software, Screen Magnification, Talking Typing Teacher and Braille Embosser, OCR and Scanner, CCTV Print Magnifier device with TV for blind, and Assertive Listening Device and Hearing Amplification device for deaf. LAN & Internet connectivity is also provided.	The project will help differently abled children to acquire ICT skills enabling them to seek employment and earn livelihood.	50 ICT Vocational Centers have been commissioned in 17 different States/UTs by Nov 2010. Remaining 50 centers from remaining States/UTs are to be commissioned by March 2011.	Sustainability after two years is to be ensured by the respective States/UTs

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		Training of educators, Teachers, parents for rehabilitation of mentally retarded Children to set up Interactive ICT training Centers and contents for training of Trainers, educators, parents for rehabilitation of mentally retarded children.				Technology enablement to enhance interaction of trainee/education and children with disabilities and improve their learning abilities.	Skill set enhancement of children with disabilities and creation of opportunities for their rehabilitation through gainful employment.	The equipment has been identified and ordered and would be installed/commissioned by June 2011.	Sustainability is to be ensured by States/ NGOs/VOs

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
		Pilot project for setting up infrastructure for establishment of e-class room and e-teaching Hub using EDUSAT				ICT Hardware and Software for ICT Skill Development in the School Children at below Secondary Level	ICT skilled young Students from Schools in Rural Areas	2010-2013	Sustainability is assured by the State of Rajasthan through an MOU
						Research development and development of system level services for hosting education Cloud application, set up Cloud test bed for research and collaborative international test bed efforts	<ul style="list-style-type: none"> <li>• Cloud educational application</li> <li>• Cloud services for teaching</li> <li>• Cloud test bed</li> </ul>	2 ½ year	Being Research oriented project the time lines may slightly vary
21.	<b>Headquarter (Secretariat and Building)</b>	<ul style="list-style-type: none"> <li>• Secretariat &amp; Bldg.</li> <li>• Foreign Trade</li> <li>• Exhibitions</li> <li>• Others - Seminars/ Workshops</li> </ul>	28.91	39.98	-	<ul style="list-style-type: none"> <li>• To meet running expenditure of the Secretariat and Plan Schemes</li> <li>• CST re-imbursement of STPI units</li> <li>• To organise exhibitions abroad for promotion of Trade</li> <li>• To organise seminars/workshops for development of electronics in IT</li> </ul>	<ul style="list-style-type: none"> <li>• To run office smoothly.</li> <li>• Export promotion</li> <li>• Trade promotion</li> <li>• Development of electronics in IT</li> </ul>		

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
22.	<b>National Informatics Centre (NIC)</b>	Provide wide range of E-Governance infrastructure and services in the Country at various levels right from Central Government, State Governments to district administrations in their initiatives towards providing good Governance to the people.	-	754.00 Includes Rs. 75.00 crore for NER, Rs. 22.62 crore for SCSP and Rs. 67.86 crore for TSP.	-	<b>Cyber Security</b>  <ul style="list-style-type: none"> <li>Network and application security audit, Co-relation of security events, help desk facility for securing applications</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced security of NICNET resources and services.</li> </ul>	March, 2012	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<b>Certifying Authority</b> <ul style="list-style-type: none"> <li>Setting up of new Registration Authorities (RA)</li> <li>Enhancement of CA services for promotion of e-governance.</li> </ul>	<ul style="list-style-type: none"> <li>DSC Subscribers will be serviced by new RA office in selected states facilitating efficient services.</li> <li>Augmentation of CA services to cater to specialized applications.</li> </ul>	<p>March, 2012</p> <p>March, 2012</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<b>Computerization of Land Records</b> <ul style="list-style-type: none"> <li>• Integrated model of Land Records, Registration and Cadastral maps as per the guidelines.</li> <li>• Customization of Bhunaksha</li> <li>• Training to State level institutions including NIC-LRPR co-ordinators on NLRMP</li> </ul>	<ul style="list-style-type: none"> <li>• Integrated system will be operational in the West Bengal, Orissa.</li> <li>• The Bhunaksha will be implemented in Tripura, Haryana, Orissa.</li> <li>• The Training will enhance the capacities of state Land Revenue officials and NIC officers on latest digitization and survey technology.</li> </ul>	<p>December 2011</p> <p>March 2012</p> <p>August 2011</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<p><b>Videoconferencing infrastructure development</b></p> <ul style="list-style-type: none"> <li>• Web based HD VC system</li> <li>• Augmentation of VC infrastructure at States and districts.</li> </ul>	<ul style="list-style-type: none"> <li>• High definition VC facility would be provided over the desks of users across NICNET for easy to use and effective in communication.</li> <li>• It will replace all old Standard Definition VC systems with latest state-of-art High Definition Group Videoconferencing system.</li> </ul>	<p>July 2011</p> <p>Sept 2011</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<b>India Image</b> <ul style="list-style-type: none"> <li>• Augmentation of Comprehensive WWW Service</li> <li>• Website Design and Development Infrastructure , Training/ workshops</li> </ul>	<ul style="list-style-type: none"> <li>• Enhanced and State-of-the-Art features in web hosting services. It is a continuous activity.</li> <li>• To enable Government department in establishing citizen centric up to date and universally accessible websites.</li> </ul>	<p>March, 2012</p> <p>December, 2011</p>	
						<b>Remote Sensing &amp; GIS</b> <ul style="list-style-type: none"> <li>• GIS ICT infrastructure.</li> <li>• Deployable GIS data</li> <li>• Raster as well as Vector GIS Services over NICNET for E-governance and planning.</li> </ul>	<ul style="list-style-type: none"> <li>• Customized GIS data products and services over NICNET for E-governance &amp; Planning</li> </ul>	<p>March, 2012</p>	



Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<b>Utility Mapping Project</b> <ul style="list-style-type: none"> <li>• Base map updation for roads of North Delhi</li> <li>• Training on GIS software and system administration.</li> <li>• The existing business process will be studied and gaps will be identified and filled</li> </ul>	<ul style="list-style-type: none"> <li>• Updated road map will help in secured planning</li> <li>• Trained manpower will use the system effectively and at their own i.e. without NIC's assistance.</li> <li>• S/W will be customize as per the requirement of Utility Agencies for better management of operation &amp; Maintenance services.</li> </ul>	<p>March, 2012</p> <p>March, 2012</p> <p>March, 2012</p>	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
						<b>Data Centre</b> <ul style="list-style-type: none"> <li>Establishment of data centre at Delhi</li> <li>Phase II expansion of National Data Centre at Hyderabad.</li> <li>Setting up National Data Centre at Bhubaneswar</li> </ul>	<ul style="list-style-type: none"> <li>To meet growing demand of web based applications.</li> </ul>	December 2011	
						<b>High Speed Terrestrial Circuits</b> <ul style="list-style-type: none"> <li>Enhancement of Terrestrial bandwidth of State Capital and District connectivity</li> <li>Secondary link from different NLD at key districts</li> <li>Some of the districts will have additional STM1 channelized connectivity to extend last mile connectivity</li> </ul>	<ul style="list-style-type: none"> <li>Increase of connectivity capacity and Bandwidth. Improve reliability leading to improved e-gov.</li> </ul>	March, 2012	
						<b>NICNET International Gateway project</b> <ul style="list-style-type: none"> <li>Gateway Bandwidth will be upgraded to 10 Gbps</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced and efficient availability of Internet Services</li> </ul>	Oct, 2012	

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
23.	<b>National Knowledge Network (NKN)</b>	The objective of the National Knowledge Network is to bring together all the stakeholders in Science, Technology, Higher Education, Research & Development, and Governance (with speeds of the order of gigabits per second coupled with extremely low latencies; through PoPs in the respective institutions/ organisations).	-	250.00 Includes Rs. 25.00 crore for NER, Rs. 7.50 crore for SCSP and Rs. 22.50 crore for TSP.	-	<b><u>Likely Plan for 2011-12</u></b>  i. All the core links of NKN would be 10G. The complete setup would then be operating on NKN CORE infrastructure. ii. NKN Links to reach the districts and expand the CORE with Distribution layer. iii. Connect the rest of the Institutes to NKN ( 1000 Approx) iv. Setting-up of full DATA CENTRE at Shastri Park v. Setting-up of CALL-CENTRE for the NKN vi. Facility management Support at all the locations. vii. IPv6 numbers from APNIC for the complete network viii. IPv6 implementation in full scale	The output of the project will be a high capacity countrywide Infrastructure at education & research Institute level, which will be available 24x7 to support education and research application, and other application as envisaged by these institution which require very high bandwidth. A high speed data communication network would be established, which would interconnect Institutions of higher learning, research & Governance.  The NKN will facilitate the knowledge	End of FY 2011-12	

Chapter – II

Financial Outlays & Projected Physical Outputs/Outcomes

Sr. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 (Rs. in crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			Non-Plan	Plan Budget	Comp IEBR				
							sharing, collaborative research, countrywide classrooms (CWCR) etc. and help the country to evolve as Knowledge Society. This will also contribute in socio-economic activities of the country indirectly.		