Statement of Outlays and Outcomes/ Targets : Annual Plan 2005-06

(Rs. in crores)

S.No	SCHEME NAME	Objective/Outcome	Outlay 2005-06	Quantifiable Deliverables	Processes/ Timelines	Remarks/ Risk
	R&D PROGRAMMES					
1	SAMEER	R&D in Microwave Engineering and Electromagnetic Technology, Radar, RF Communication, High Voltage Electronics and Electromagnetic interference	32.00	1. Delivering of prototype units of Active Radar Seeker for Air Defence Programme	Development and fabrication October 2005	System integration involving other partner agencies
				2. Commissioning of integrated LINEC oncology system at Wardha	Development, fabrication and installation September 2005	Need for manpower for TOT documentation and follow up
				3. TOT to industry of integrated radio and line modem units	Discussion with potential partners December 2005	
				4. Installation of Doppler Sodar for ADE, Bangalore	Development and fabrication- August 2005	
				5. Commissioning of Solid State amplifier for Radio Ion Beam programme of VECC, Kolkata	Development and fabrication - Dec 2005	
				6. Pseudolite system for centre for airborne systems	Development and fabrication - March 2006	
				7. Two units of RACON to DGLL.	Development and fabrication August 2005	

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2	Microelectronics and Nanotech Development Programme	Setting up of Nanoelectronics Centres at IITB & IISc, Bangalore	40.00	There will be 11 deliverables. **IITB:** Sub 100 nm CMOS Process Development; Nanosystems for Healthcare and Environmental Monitoring; Organic and Biopolymer Devices; GaN Devices; Characterization, Modeling and Simulation of Nanoelectronics Devices **IISc:** Magnetic materials for LC Resonator; Acoustic sensor; Ferroelectrics for FRAMs and Phase shifters; Rare earth metal oxide for MOS gate dielectric; Molecular Rectifier Based on Organic Thin Films (Self Assembled Monolayers and LB films **Joint :** RF Oscillator The quantifiable deliverables will start coming out from end of third year onwards from the date of initiation.	Preparation, evaluation and finalization of tenders for the procurement of capital equipments.	EFC has approved the proposal on 6.7.2005. The project requires approval of the Minister, CIT and the FM.
3	Technology Development Council	**Industrial Electronics Promotion Transport and Power Electronics** • Development and promotion of application of Electronics and IT in	17.00	**National Mission on Power Electronics Technology Project** • Completion of 1st phase field trials of the prototype on the short-term R&D	Prototype development and deployment March 2006	

S.No	SCHEME NAME	Objective/Outcome	Outlay 2005-06	Quantifiable Deliverables	Processes/ Timelines	Remarks/ Risk
		the field of Industrial Electronics. • Specific application development thrust for the Transport and Power Sector. • Cost-effective technology solutions and field demonstrations to meet local conditions and to demonstrate benefits • To strengthen local base for design, manpower development and to assist Indian SME sector to be competitive in the business.		project on 'Universal IGBT Gate Driver' • First Industry-Academic Meet for Awareness Creation • Initiation of Futuristic R&D project on Full Spectrum PE Simulator • Holding of first short-term course for industry/ engineering colleges **Other R&D Projects**, • Completion of the Advanced Traffic Control System project for Pune City and TOT to prospective manufacturers • Completion with successful demonstration of the WebNC project at IIT-Mumbai providing a step forward towards Tele-manufacturing. • Completion with successful demonstration of Black Box for Automobiles with possible TOT • Initiation of a project on Development and Application of	Introduction with academia / industry done in June 2005 Working Group approval - Sept 2005 September, 2005 System integration, testing and discussions with the industry Sept.-Dec. 2005 Prototype development and testing Sept.-Dec. 2005 System integration, testing and discussions with the industry Dec. 2005 Approval of Working Group Sept 2005	

S.No	SCHEME NAME	Objective/Outcome	Outlay 2005-06	Quantifiable Deliverables	Processes/ Timelines	Remarks/ Risk
				Imaging/Vision Technology for Steel Plants		
4	Convergence,Comm and Strategic Electronics	To undertake R&D in Convergence, Communications & Broadband Technologies	6.00	Initiate projects in Wireless Communications, software define Radio, Converged Access Devices & embedded software applications	Two projects in each quarter Approval of Working Group	
5	Components and Material Development Programme	• To support R&D projects for development of electronics materials • To set-up facilities for characterization of electronics materials, prototyping and testing of devices • To develop photonic core technologies and applications	12.60	• Strengthening the infrastructure and R&D activities of C-MET • Support 2-3 new R&D projects for data storage, display devices and microwave devices • Upgradation of Optoelectronics packaging centre with laser welding facility for active device pigtailing and packaging • System integration of optical amplifier	On going activity December 2005 Approval of Working Group Identification of incremental equipment Feb 2006 Interconnecting and testing of sub-systems March 2006	
6	C-DAC	**High Performance and Grid Computing** • Strategic initiative to prevent India against black mailing by advanced nations in the supply of HPC systems. • Facilitate high-end research of science and engineering through use of HPC systems.	152.00	• Completion of PoC Garuda phase • 5 Tera Flop system • 10 Gbps interconnect • Grid-enabled applications in areas of Bioinformatics and Disaster Management	• Nov 2005 – 1st set of grid nodes • Mar 2006 – complete PoC grid infrastructure • 5 TF system by Dec 2005 • 10 Gbps interconnect by Dec 2006	

S.No	SCHEME NAME	Objective/Outcome	Outlay 2005-06	Quantifiable Deliverables	Processes/ Timelines	Remarks/ Risk
		• Demonstrate the impact of Grid Computing • Enable new applications, technologies and collaborations using Grid infrastructure for global competitiveness			• Two grid-enabled applications by Nov 2005 • Additional grid-enabled applications by March 2006.	
		Multilingual Computing and Allied Areas • Development of local language base for IT for use by masses. • Development and use of content in major Indian languages and automatic content generation from one language to another • New R&D initiatives in speech technologies and machine-assisted translation		• Release of Indian language CDs • OTF for 8 languages • OCRs for Hindi, Marathi, Bangla & Malayalam • Urdu spell checker and Hindi/Urdu dictionary • Multilingual Corpora • TTS for English, Hindi, Bangla & Malayalam	• Release of CDs and OT –June2005(3 languages) Dec 2005 (3 languages); March 2006(2 languages) OCRs – Oct 2005, (Hindi & Malayalam), Dec 2005 (Marathi), March 2006 (Bangla)	
		Power/Agri/ Strategic Electronics, Real-Time/ Embedded Systems and VLSI Design • To develop technologies for Real-time, high-speed Digital Controllers and Power Semiconductor devices for power quality improvement, electric		• Three ASIC IP core - Sigma-Delta Analog/Digital converter, Triple DES IP core, PLL • AMR based energy meter technology for townships • 1 KVA Lab model demonstration for solar grid connected UPS • Sensors and signal	Dec 2005, March 2006 Oct 2006 March 2006 Oct 2006	

S.No	SCHEME NAME	Objective/Outcome	Outlay 2005-06	Quantifiable Deliverables	Processes/ Timelines	Remarks/ Risk
		traction, pollution free vehicles, automotive electronics, non-conventional energy sources, remote controlled vehicles, energy efficient power supplies and drives, and so on. • To strengthen India's capabilities in hardware technology development		processing devices for explosives detection • Prototype of acoustic land mine detector for army • Prototype of deep sea (10000 mtrs.) eco-sounder for navy • Demo of sensors for underwater range • Demo of liquid level sensor • CAN based intelligent controller • Digital dashboard for Indica car • Basic engine for embedded systems for language technology using ARM RISC core	Oct 2006 Dec 2005 Sept 2005 Sept 2005 Dec 2005 March 2006 Dec 2005	
		Cyber Security • Production of cost-effective, tailor-made, indigenous security products and solutions for use within the nation and even for exporting them to interested countries.		• Security tools for network forensics • Algorithms for steganography • Intrusion Detection System • Cryptanalysis: Algorithms and High Performance Computing Technologies	Oct 2005 March 2006 March 2006 Dec 2005	
		Open Source Software (OSS) and ICT Applications including e - Governance		• Setting up of National Open Source Software Resource Centre (OSSRC) • OSS tools for various	Nov 2005 March 2006	

S.No	SCHEME NAME	Objective/Outcome	Outlay 2005-06	Quantifiable Deliverables	Processes/ Timelines	Remarks/ Risk
		• To reduce investments in software purchase by developing OSS for various disciplines and promoting their usage. • To develop and deploy e-Solutions, which promise improved transparency, speedy information dissemination, higher administrative efficiency and improved public services. • To participate in central, state and local e-Governance initiatives, projects and programmes		disciplines of C-DAC's activities such as security solutions, e-Learning solutions, e-Governance applications and HPC systems • Standards and component based service architecture for OSS tools • Content creation and search tools for Digital Library for Indian Heritage • Deployment of Telemedicine system in Kerala, UP, Orissa, Himachal Pradesh and other states • HR Portal for Health Services Department of Kerala • Tools & Products for ICT applications of mass appeal	Dec 2005 March 2006 Dec 2005, March 2006 Oct 2005 March 2006	
7	Electronics in Health	• To promote application of electronics and IT in Healthcare and to develop cost effective medical electronics equipment • To develop IT based products for benefit of disabled persons	14.00	• Initiation of project for establishment of a facility for batch production of Linac Tubes and Linac Machines • Initiation of phase-II of Jai Vigyan project for 6 MV Linac System	SFC in August 2005 Approval of Steering Committee March 2006	
8	Technology Dev for Indian Languages	• Information Processing Tools in all Indian	7.00	• Software Tools and Fonts in Hindi and Tamil (Fonts,	April / June 2005 Completed	

S.No	SCHEME NAME	Objective/Outcome	Outlay 2005-06	Quantifiable Deliverables	Processes/ Timelines	Remarks/ Risk
		Languages comprising of Spell Checkers, dictionaries, Messaging system, utilities and Web design and content management tools • Optical Character Recognition (OCR) Systems in all Indian Languages with multiple font supports • Machine Translation Systems		OCR, Spell Checker, Dictionary, etc.,) Fonts and Tools in Tamil language released in April 2005 and Hindi in June 2005. • 25 Fonts in Malayalam, Gurumukhi and Bangla • 15 Fonts in Kannada, Telugu and Gujrati; 20 Fonts in Oriya, Bengali, Assamese • OCR in Gurumukhi, Tamil, Devanagari, Telugu, Oriya • Spell Checkers in Hindi • Punjabi-English, Urdu-Kashmiri-Hindi Word Processor • Translation Support System (English-Hindi) Marathi-Hindi, Gurumukhi-Shahmukhi Transliteration	November 2005 March 2006 February 2006 July 2005 December 2005 August 2005 November 2005	
9	IPR Promotion Programme	To promote IPR culture in India to make it TRIPs conformant	1.00	• IPR awareness by organizing IPR clinics - four clinics • IPR facilitation • Development of IPR tools, technologies	June, September, December 2005 and Feb 2006 25 cases during the year 5 projects on going, 3 new projects – Dec'05	
10	E-Commerce and Info-Security	To promote R&D in information security through supporting projects	8.00	Development/enhancement of skill and expertise in areas like:	All projects are time bound with specific milestones & these	

S.No	SCHEME NAME	Objective/Outcome	Outlay 2005-06	Quantifiable Deliverables	Processes/ Timelines	Remarks/ Risk
		at recognized R&D organizations to develop national capability and skill		• Development of survivable architecture • Fore-warning systems and services • Vulnerability/threat analysis and incident handling • Cryptography and cryptanalysis • Cyber-forensics • Biometrics identification/ authentication	are monitored periodically by expert groups.	
11	IT for Masses (Telemedicine)	Demonstrate use of ICT to provide specialist consultation for diagnosis and treatment in rural/remote locations	8.00	1.Establishing advanced hospital management system for efficient hospital administration and improved patient health care at - Sewagram (Maharashtra) - Imphal (Manipur) 2.Telemedicine networks connecting specialist hospitals with rural hospitals in various parts of the country like - Kerala - Tripura - West Bengal - Himachal Pradesh	Installation of hardware, software, networking and testing December 2005 December 2006 Installation of hardware, software, connectivity and patients consultation October 2005 March 2006 December 2006 April 2007	The progress is critically dependent on state governments for providing site and logistics support at hospitals.
12	Media Lab Asia	Research and innovate ICT relevant for the common	11.00	• Completion/follow-up on 8 on-going projects	Dec 2005	Subject to restructuring

S.No	SCHEME NAME	Objective/Outcome	Outlay 2005-06	Quantifiable Deliverables	Processes/ Timelines	Remarks/ Risk
		man and to promote deployment of research projects in rural and remote areas to serve the poor and needy population		• Continuation/progress of 14 on-going projects • Initiation of 15 new projects – use of ICT in the areas of Health, education, agriculture, empowerment of disabled and livelihood • Deployment/scaling of projects in areas of rural connectivity, health, education, empowerment of disabled • Workshop/Conference on ICT for development	March 2006 March 2006 March 2006 March 2006	of MLA
	II. INFRASTRUCTURE DEVELOPMENT					
13	Vidya Vahini' and 'Gyan Vahini' Prog.	To integrate internet and intranet in learning environment	1.50	Recurring cost of international bandwidth to 140 Schools and 7 Training Institutes under Vidya Vahini programme.	On-going	
14	STQC	Establishment of Quality Assurance Infrastructure in the country to facilitate quality productsand services at par with global standards and practices	42.00	1.Establish facilities for Security product, Testing & Certification 2.To develop a suitable Quality Assurance Framework (Software, Security & Service Quality and infrastructure for Testing & Certification of e-Governance products). 3.To introduce Internationally	March, 2006 Sept., 2005 March, 2006	Availability of escalated outlay (Rs.8.85 crore in place of Rs.4.85 crore) and recruitment of skilled personnel on contract basis as per project document (about 20

S.No	SCHEME NAME	Objective/Outcome	Outlay 2005-06	Quantifiable Deliverables	Processes/ Timelines	Remarks/ Risk
				Accredited Training Programmes in Quality Management and Test Engineering. 4.Establish new facilities to cater for Testing and Calibration of state-of-the-art products with emerging technologies. 5.To support establishment of Regulatory Framework in the area of Safety & EMI/EMC in Electronics & IT. 6.Earn Rs.35 crore as revenue earning to reach the break even point	On continual basis December 2005 March, 2006	persons).
15	STPI & EHTP	• Setting up of new STPI Centres • Incubation facility at Guwahati	5.90	• Setting up of new STPI Centres at Siliguri, Haldia (West Bengal), Kakinada (AP) and Berhampur (Orissa) • Incubation facility at Guwahati	State Government making available land, built-up space and grant Dec 2005 SFC Approval March 2006	
16	Digital DNA Park	Setting up of Bio-IT Park in the form of a Public Private partnership modal	10.00	• Creation of infrastructure facility including common computing facility for the Bio-tech/ Bio-informatics/IT sector	EFC approval March 2007	

17	Electronic Governance	E-Governance Facilitating and catalyzing e-governance packages in the Central and State Governments through implementation of the National E-Governance Plan	300.00*	**State Wide Area Networks** • SWAN proposals from 14 States have been sanctioned with a total outlay of Rs.1027.63 crore and Rs.206 crore has been released as the first installment. • SWAN proposals from 8 more States/UTs have been received and are currently being processed for sanction. • A Workshop on SWAN implementation was organized by the Department on 30th May 2005. IT Secretaries from 20 States and representatives from NIC, BSNL, ERNET, STPI & TCIL participated in the Workshop. Various implementation issues were discussed in the Workshop. **Common Services Centres** • Draft Policy Guidelines for providing support for establishment of Common Services Centres (CSCs) for delivery of services	Approval of Empowered Committee August 2005 May 2005 Completed Approval of M(CIT) July 2005	

				have been formulated and are being considered for approval. • A process of consultation with State Governments has been initiated to work out modalities for establishing CSCs. **State Data Centres** • The Policy Guidelines on State Data Centres are under formulation. Broad guidelines prepared and are being discussed with experts from States and NIC. **Standards** • The Core Group on Standards has submitted its report on the Institutional mechanism in E-Governance. • The Core Group has identified the priority areas for standards in E-Governance. The priority areas identified are – Technical / Interoperability, Quality and Documentation, Localization, Meta Data & Data and Security	Approval of M(CIT) August 2005 Approval of M(CIT) September 2005	

				Standards. The Report is under consideration for implementation. **India Portal** • NIC has submitted an SFC proposal for the implementation of India Portal Project and the same is under consideration. **E-Governance Gateway** • NISG has been identified as the implementing agency for the Pilot and to validate the gateway standards in consultation with the industry as well as prepare the RFP (request for proposal) for the operational gateway. • An amount of Rs 58 lakhs has been released for the Pilot project. The Pilot Gateway is likely to be up by July 2005. **Apex Committee Meetings** • Line Ministries/ Departments have been	 SFC approval September 2005 Specification validation on Pilot, selection of an agency to build and run Gateway March 2006 July 2005 August 2005	

				advised to define the services and service levels of their respective Mission Mode Projects. DIT has appointed M/S PWC as consultant to assist them in this task. The draft report of the consultant giving details of services and service level has been received. Service levels in respect of the Mission Mode Projects of Central Excise, Property Registration, Road Transport, Municipalities, Treasuries, E-Biz, Employment Exchanges have been finalized with the concerned Line Ministries.		
18	IT Act/Certification & Network Security	• Creating trust in electronic environment • Implementation of IT Act • Enhancing Cyber Security	7.00	• More e-Governance packages to make use of Digital Signature • Training judiciary and law enforcement agencies in Cyber Crime and Forensic • Enhancing cyber security through proactive measures and responding to security incidents	On-going activity On-going activity On-going activity	

19	Community Information Centres (CIC)	• To reduce the digital divide by providing internet access and IT enabled services to the community at large and to facilitate citizen interface with the Government.	50.00	• 487 CICs at Block level in the North Eastern States and Sikkim established. • To address the issue of sustainability of CICs in the N-E States and handing over to States • 60 CICs in J&K operational, balance 75 to be made operational • Setting up of CICs in Andaman & Nicobar • Setting up of CICs in Lakshadweep • Setting up of 95 CICs and Hub at Roorkee / Dehradun • Balance 233 CICs in Uttaranchal	March 2006/ February 2007 October 2005 Site preparation, system installation and Internet connectivity January 2006 January 2006 EFC approval Sept. 2006 Sept. 2007	State Govt interest Sustainability of CICs Limited local content Maintenance Technology becoming obsolete after few years
20	Setting-up of Megafab	Seed money for creating a Special Purpose Vehicle for establishing a Megafab in Public Private Partnership mode	10.00			
	III. HUMAN RESOURCE DEVELOPMENT					
21	DOEACC		49.76	O/A/B and C Levels (Non-Formal Sector of IT Education and Training) Half Early Examinations – 20,000 students To conduct training for formal sector Long Term	July 2005 and January 2006 Conduct examination and issue certificate Annual / Semester wise exams	M.Tech, MCA, BCA,

				Courses (M.Tech, MCA, BCA, PGDCA, Diploma in EE and CS etc.) – 1,200 students To conduct training for non-formal Sector Long Term Courses (DOEACC O/A/B Level Courses, DOEACC Bio-informatics O/A Level Courses) - 1,800 students Training for short Term Courses of duration less than one year – 11,392 students	Annual / Semester wise exams Batch-wise exams	PGDCA courses are affiliated to respective state universities Tailor made to requirement of end-user
22	Manpower Development	Human Resource Development and awareness in Information Security. Information Security Curriculum at B.Tech, M.Tech and research level, training of system administrators, Govt. Officers	20.00	• Identification of nine Resource Centres (RCs) and 35 participating institutes (PIs) and NICSI as Implementing Agency. • Approvals for conducting Information Security courses • Course recognition • Set up of labs and infrastructure • Organise / offer courses in IS, Training of faculty,	Completed Governing Councils/ Board of RCs/PIs approval, MOUs October 2005 Approvals from AICTE/ UGC - April 2006 Tendering, procurement, installation - Feb 2006 On-going activity	

				Development of learning material, Awareness Campaign, Training Govt. Officers • Training of Master Trainers	Tie-up with institutions December 2005	
23	Sp Manpower for VLSI Design	To increase availability of trained manpower in VLSI design to attract investment	13.00	• SMDP-I in 7 Resource Centres (RCs) and 12 participating institutes (PIs) . Output of 1000 students likely in 2004-05 • SMDP-II PIs to be increased to 25. Likely output 2500 by 5th year. Project approved in March 2005 • Hardware and EDA Tool procurement and installation at 19 institutions • Instruction Enhancement Programme (IEP) • ZOPP Workshop	March 2005 Project completed MOUs with institutes 5 Years Tendering, procureme installation commissioning March 2006 Conduct training cour for faculty of PIs December 2005 To allocate tasks to PIs and RCs December 2005	
	IV. OTHERS					
24	Headquarter (Secretariat & Bldg.)		9.70	To meet running expenditure of the Secretariat under plan schemes		

25	Semiconductor Complex Ltd.		0.10	Transferred to Department of Space		
26	**NIC**	To provide • Network Infrastructure Facility Provider(NIFP). • Network Service Provider(NSP). • Application Service Provider. • Content ASP to the Central Government, State Governments, District Administrations and other Government bodies.	260.00	• Network Infrastructure for providing Internet and data services network to the Government Departments, State Governments, District Administrations and other Government bodies [Rs.84.90 crore] • Cyber Security at network, server and application levels for NICNET.[Rs.7.00 crore] • Disaster Centre for Network Infrastructure for providing backup data services in case of network failure.[Rs.5.20 crore] • Video Conferencing Network enhancement.[Rs.6.90 crore] • Data Centre Infrastructure (including storage).[Rs.13.25 crore]	• Tendering, ordering and operationalisation. October 2005. • Tendering for hardware,software and outsourcing of security audit - March 2006. • Tendering, procurement and operationalisation of the Centre. December 2005. • Procurement of MCU for Madhya Pradesh. December 2005 • Procurement and commissioning. December 2005	

				• Capacity Building for e-Governance Applications Development and Implementation. [Rs.142.75 crore]	• Tendering, ordering and commissioning of hardware and software tools. March 2006.	
	Grand Total		**1087.56**			

* In addition, an ACA of Rs.300 crore has been approved for the National E Governance Action Plan (NEGAP).