

Chapter - I
Introduction, Organisational set-up and Programmes/Schemes

CHAPTER – I

Introduction.

A. Objectives.

Department of Information Technology (DIT), in the Ministry of Communications and Information Technology is responsible for formulation, implementation and review of national policies in the field of Information Technology. All policy matters relating to silicon facility, computer based information technology and processing including hardware and software, standardisation of procedures and matters relating to international bodies, promotion of knowledge based enterprises, internet, e-commerce and information technology education and development of electronics and coordination amongst its various users are also addressed by the Department.

In pursuit of aforesaid objectives, the Department has formulated a three pronged strategy, namely-

- Supporting technology development in the field of IT.
- Setting up of critical infrastructure for development of IT.
- Providing enabling policy environment for the growth of IT industry.

B. Following are the business allocated to the Department of Information Technology:

1. Policy matters relating to information technology; Electronics; and Internet (all matters other than licensing of Internet Service Provider).
2. Promotion of Internet, IT and IT enabled services.
3. Assistance to other Departments in the promotion of E-Governance, E-Commerce, E-Medicine, E-Infrastructure, etc.
4. Promotion of Information Technology education and Information Technology-based education.
5. Matters relating to Cyber Laws, administration of the Information Technology Act 2000 (21 of 2000) and other IT related laws.
6. Matters relating to promotion and manufacturing of Semiconductor Devices in the country excluding all matters relating to Semiconductor Complex Limited (SCL), Mohali. The Semiconductor Integrated Circuits Layout Design Act, 2000 (37 of 2000).
7. Interaction in IT related matters with international agencies and bodies e.g. Internet for Business Limited (IFB), Institute for Education in Information Society (IBI) and International Code Council- online (ICC).
8. Initiative on bridging the Digital Divide: Matters relating to Media Lab Asia.
9. Promotion of Standardization, Testing and Quality in IT and standardization of procedure for IT application and Tasks.
10. Electronics Export and Computer Software Promotion Council (ESC).
11. National Informatics Centre (NIC).
12. Initiatives for development of Hardware/Software industry including knowledge based enterprises, measures for promoting IT exports and competitiveness of the industry.
13. All matters relating to personnel under the control of the Department.

Chapter - I

Introduction, Organisational set-up and Programmes/Schemes

C. Schemes/programmes being implemented by Department of Information Technology.

In order to operationalise the objectives of the Department schemes are formulated and implemented by the Department. The schemes are implemented directly by the Department and through the organisations / institutions under its jurisdiction. To make the technology robust and state-of-the-art, collaboration of the academia and the private / public sector is also obtained. The following broad programmes/schemes are implemented by the Department.

Society for Applied Microwave Electronics Engineering and Research (SAMEER), Micro-electronics and Nano-technology, Technology Development Council (TDC), Convergence, Communication & Strategic Electronics, Component and Material Development, Centre for Development of Advanced Computing (C-DAC), Electronics in Health and Tele-medicine, Technology Development for Indian Languages (TDIL), IT for Masses(Gender, SC/ST), Media Lab Asia, Standardisation, Testing and Quality Certification (STQC) Directorate, Software Technology Parks of India(STPI) & EHTP, Digital DNA Park, E-Governance, Cyber Security(including CERT-In, IT Act), Promotion of Electronics/IT Hardware Manufacturing, Department of Electronics Accreditation of Computer Courses (DOEACC), Manpower Development, Facilitation of setting up of Integrated Townships, DIT Secretariat & Building) and National Informatics Centre (NIC),

D. Organizational set-up.

The Department of Information Technology in the Ministry of Communications and Information Technology (MC&IT) is headed by Secretary who assists Hon'ble Minister/Minister of State for Ministry of Communications and Information Technology in carrying out the business allocated to the Department of Information Technology. The Department has various groups viz. Research and Development (R&D) in IT, R&D in Electronics, R&D in Convergence, Communications and Broadband Technologies, e-Commerce and Cyber Laws, International Co-operation and Industrial Promotion, e-Governance Programme Implementation, Language Computing, e-Infrastructure/ e-Learning, Coordination, Economic Planning, Financial Management, Personnel and Support Groups.

The Department has two attached offices – (i) National Informatics Centre (NIC) and (ii) Standardisation, Testing and Quality Certification (STQC) and three statutory organizations – (i) Controller of Certifying Authority (CCA) and (ii) Cyber Regulation Appellate Tribunal (CRAT) and (iii) Semiconductor Integrated Circuits Layout Design Registry(SICLDR). The department also has seven Autonomous societies under its control namely: (i) Society for Applied Microwave Electronics Engg & Research (SAMEER); (ii) Centre for Development of Advance Computing (C-DAC); (iii) Software Technology Parks of India (STPI); (iv) Department of Electronics Accreditation of Computer Courses (DOEACC); (v) Centre for Materials for Electronics Technology (C-MET); (vi) Education & Research Network (ERNET) and (vii) Electronics and Computer Software Export Promotion Council (ESC). Besides above, there are three section 25 companies viz. (i) Media Lab Asia, (ii) National Informatics Centre Services Inc.(NICS) and National Internet Exchange of India(NIXI).

Chapter - I
Introduction, Organisational set-up and Programmes/Schemes

1. Attached Offices.

1.1 National Informatics Centre (NIC) ;

National Informatics Centre (NIC) is the premier S&T organization of the Department of Information Technology for facilitating the process of governance in the country. During the last 30 years, NIC has scored many firsts in the field of Informatics Development & Networking for Decision Support in the Central Government Departments, 35 State Governments/ UTs and about 602 District administrations at sub-state level. It is the only organization in the country to provide total informatics support to the Ministries, Departments of the Central, State Governments, District Administrations and other Government bodies. Today, NIC has poised itself as main backbone for delivery of e-governance upto grass root level through its countrywide network of skilled and motivated pool of officers. Some of the major national e-governance initiatives in which NIC is playing pivotal role at all the levels are Passport, Visa Issuance Systems, Land Records, Panchayat, Judiciary, Property Registration, Treasuries, Transport, AGMARKNET (Agriculture Market Network), Customs, e-procurement, Commercial Taxes, Vehicle registration, Driving License, e-Post, DACNET (Department of Agriculture & Co-operative Network), DGFT Computerization, India Portal, Collab CAD, Compact, e-lekha, CIPA (Common Integrated Police Applications) CRISP(Computerized Rural Information Systems Project, Stamina(Sales Tax Administration Management Information Network Aided System). In order to facilitate e-governance in the Government sector, NIC has been providing Network services (WAN, MAN, LAN), Data Centers, Capacity Building through Human Resources Development, Data Mining and Data Warehousing, total ICT Solutions, Video Conferencing & Web Services, Certification Authority and PKI Services, Internet Domain (gov.in) Registrar, Computer Emergency Response Team (CERT) Services, National Disaster Recovery Centre, GIS and Utility Mapping services, Sectoral ICT Plan formulation, ICT projects consultancy capacity building etc.

1.2 Standardisation, Testing & Quality Certification (STQC) Directorate;

Standardization, Testing & Quality Certification (STQC) Directorate, an attached office of Department of Information Technology is a key assurance service-providing agency of the Department of Information Technology in the area of Quality & Information Technology. Through National/ International accreditation and recognition for test services, STQC Directorate has also earned an International reputation and its testing & certification services are being recognized both nationally and globally. Apart from being a major testing & calibration network in the country and primary institution in this field, STQC has also initiated a number of schemes aimed at Exports Promotion, Information Security and Software Quality Engineering. STQC has strengthened its infrastructure and activities in the area of Information Security and Software Testing & Certification, keeping in view the department's thrust in these areas.

STQC Directorate is having four Electronics Regional Test Laboratories (ERTLs) & eleven Electronics Test and Development Centres(ETDCs) including Centre for Reliability (CFR), Chennai

Chapter - I
Introduction, Organisational set-up and Programmes/Schemes

2. Statutory Organisation.

2.1 Office of Controller of Certifying Authorities (CCA);

The Controller of Certifying Authorities (CCA) appointed under Information Technology Act, 2000 licenses Certifying Authorities(CAs) to issue digital signature certificates. In addition to exercising supervision over their activities, CCA certifies the public keys of the CAs, lays down the standards to be maintained by the CAs, and performs several other functions under the IT Act to regulate the functioning of CAs in the country. The CCA also operates technical infrastructure comprising the Root Certifying Authority of India(RCAI) and the National Repository of Digital Signature Certificates(NRDC). So far seven CAs have been licensed by the CCA under the IT Act, 2000.

2.2 Cyber Regulation Appellate Tribunal (CRAT)

Government of India enacted the Information Technology Act, 2000. Section 48 (1) of this Act provides for establishment of one Appellate Tribunal to be known as Cyber Regulation Appellate Tribunal (CRAT). Any person aggrieved by an order made by Controller of Certifying Authorities or by an Adjudicating officer under the IT Act may prefer an appeal before the Cyber Appellate Tribunal having jurisdiction in the matter. This Tribunal is headed by a Presiding Officer who is appointed by the Central Government by Notification as provided under Section 49 of the IT Act, 2000.

2.3 Semiconductor Integrated Circuits Layout-Design Registry (SICLDR)

Govt. of India has enacted Semiconductor Integrated Circuit Layout Design Act, 2000. The legislation lays down mechanisms for registering and protecting the intellectual property of the Integrated Circuit Layout Designs. Section 5 (1) of the Act provides for establishment of Registry to be known as Semiconductor Integrated Circuits Layout Design Registry. The Registry is to receive IP Registration applications, make determinations on the ones eligible for Registrations and grant Registrations. The Registry is headed by Registrar appointed by Government as per section 3(1) of the Act.

Chapter - I
Introduction, Organisational set-up and Programmes/Schemes

3. Societies/Autonomous Bodies.

3.1 Society for Applied Microwave Electronics Engineering and Research (SAMEER);

SAMEER is a society of the Department with a broad mandate to undertake R&D work in the areas of RF/Microwave Electronics, Electromagnetic Technology and its related areas. At present SAMEER has three Centres – one each at Mumbai, Chennai and Kolkata specializing in the areas of RF & Microwaves, Communication, EMI/EMC, Antenna & Millimeter wave technology respectively.

SAMEER is a premier R&D institution working in the hi-technology area of microwave and allied disciplines. SAMEER has a long-term strategy, which consists of building of expertise by doing core R&D and keeping abreast of latest trends and state of art technologies. This is achieved by building up the infrastructure for making R&D and deliverables viable and meaningful in terms of technology and duration. This institution continues to be in a position of strength in handling design, development and delivery of hardware to meet stringent specifications of user agencies in its expert areas of High Power RF amplifiers, RF communication systems, Atmospheric Radar Instrumentation, Linear Accelerators, Electromagnetic Interference/compatibility (EMI/EMC), Thermal Engineering of electronic hardware, RF/Microwave/Millimeter wave antennas, Photonic devices, Microwave components/modules and Industrial RF/Microwave application products.

3.2 Centre for Development of Advanced Computing (C-DAC);

Centre for Development of Advanced Computing (C-DAC) is a Society of the Department of Information Technology (DIT), carrying out R&D in IT, Electronics and associated areas. Starting from its initial mission on building indigenous supercomputers, C-DAC has progressively grown to build an ecosystem and institutional framework for innovation, technology development, skills development, delivery plans, collaboration, partnership and market orientation in a number of niche areas of national importance and market relevance in ICT and Electronics Through in-house research, technology and product development efforts in collaboration with Academia, Research Labs and Industry in India or abroad, it endeavors to identify promising ideas nurtured building of ideas and competencies convert many of them into practical tools, technologies, products and services to meet the needs of : SMEs and other industrial players in the country; intermediate players; and end-users in Science and Engineering, manufacturing & service sectors, government, health, development and strategic sectors.

Chapter - I

Introduction, Organisational set-up and Programmes/Schemes

3.3 Software Technology Parks of India (STPI);

Software Technology Parks of India has been set up as an Autonomous Society of the Department with an objective to implement STP/EHTP Scheme, set-up and manage infrastructure facilities and provide other services like technology assessment and professional training. The objectives of the Software Technology Parks of India are: to promote development of software and software services, to provide statutory services to the exporters by implementing STP/EHTP Scheme, to provide data communication services including various value added services to IT industries and corporate houses, to provide Project Management and Consultancy services both at national and international level, to promote small and medium entrepreneurs by creating a conducive environment in the field of Information Technology and to promote Bio-informatics/Bio-technology industries by providing infrastructural and statutory support.

The main services rendered by STPI for the software exporting community have been, statutory services, data communications services and incubation facilities. STPI has also played a developmental role in the promotion of software exports with a special focus on SMEs and start up units. The STP scheme has been widely successful and the exports made by STP units have grown manifold over the years. Today the exports by STPI registered units are more than 95% of the total software exports from the country. STPI has also been providing incubation facilities for the software exporters, specifically to the SMEs and start up units. The incubation facilities include ready to use built up space with plug and play facilities and other backup resources such as power, DG set, internet enabled workstations etc., which have been very useful for the start-up units and SMEs.

3.4 Department of Electronics Accreditation of Computer Courses (DOEACC) Society;

DOEACC Society is a Society of the Department of Information Technology engaged both in the formal & Non formal Education in the area of ICT besides development of Industry oriented quality education and training in the state-of-the-art areas, establish standards to be the country's premier institution for Examination and Certification in the field of ICT. It has its own 10 Centres at Aizawl, Aurangabad, Calicut, Chandigarh, Gorakhpur, Imphal, Srinagar/Jammu, Kohima, Kolkata and Tezpur/Guwahati and three Branch Offices at Delhi, Lucknow and Shimla with its Headquarters at New Delhi. DOEACC Society accredits institutes/organizations for conducting courses particularly in the non-formal sector of IT Education & Training. At the same time, it is the only organization engaged in formal as well as non-formal education. It is also a National Examination Body, which accredits institutes/organizations for conducting courses particularly in the non-formal sector of IT Education & Training.

DOEACC Centres are conducting long-term courses at Post-Graduate level in Electronics Design & Technology, Embedded Systems etc, which are not offered by Universities/Institutions in the formal sector. Other long term courses conducted by the Centres are Diploma Level in Electronics Production & Maintenance, Electronic Engineering, Computer Science & Engineering, Masters in Computer Application, Bachelor in Computer Applications etc., which are affiliated to respective State University/Technical Board. The DOEACC Centres are also engaged in Short Term Courses in the area of Information Technology, Electronics Design & Technology, Manufacturing Technology, and Maintenance Engineering etc. About 40,000 candidates are trained through these short term courses annually. Besides the training activities, DOEACC Centres are offering consultancy services and software development.

Chapter - I

Introduction, Organisational set-up and Programmes/Schemes

3.5 Centre for Materials for Electronics Technology (C-MET);

Centre for Materials for Electronics Technology (C-MET) has been set up as a Society under Department of Information Technology as a unique concept for development of viable technologies mainly in the area of electronics materials. C-MET's mission is to develop knowledge base in electronics materials and their processing technology for Indian industries and to become a source of critical electronic materials, know-how and technical services for the industry and other sectors of economy". C-MET is operating with its laboratories with well carved out programmes at Pune, Hyderabad and Thrissur. The objectives of C-MET are to establish the technology up to pilot scale for a range of electronic materials transfer the same to industry for commercialization; to establish relevant characterization facilities; to undertake applied research activities in the area of its operation; to establish national Data Base on Electronics Materials.

3.6 Education & Research Network (ERNET) India;

Education & Research Network (ERNET), India is a Society of the Department of Information Technology with its activities organized around five technology focus areas: National Academic and Research Network; Research and Development in the area of Data Communication and its Application; Human Resource Development in the area of High-end Networking; Educational Content; and Campus-wide High Speed Local Area Network. All the five areas have contributed significantly in the growth of ERNET India. The innovations and breakthrough achieved through these areas, represent the core strengths of ERNET. ERNET has been working to ensure that end-users enjoy the best experience and satisfaction. The architecture of the Network is designed to deliver broadband value added service and applications like Web casting, IPcasting, Digital Library and Distance Learning. ERNET India is in a position to connect any institution anywhere in the country on its backbone to share resources and undertake collaborative research and applications. The ERNET Backbone is IPV6 enabled.

3.7 Electronics and Computer Software Export Promotion Council (ESC);

Electronics and Computer Software Export Promotion Council (ESC) is mandated to promote India's exports of Electronics, Telecom, Computer Software and IT Enabled Services. ESC offers a varied set of services to its members for accelerating exports. ESC has emerged as the premier nodal agency to promote trade of information technology and Electronics between India and the rest of the world. Headquartered at Delhi, the Council has regional offices at Bangalore, Chennai, Hyderabad and Kolkata as well as a representative office in Dubai. ESC has a membership base of over 2200 manufacturers and exporters covering the entire gamut of Electronics, Telecom and Software Industry (including : consumer electronics, electronic components, instrumentation, telecommunication hardware & services, computer hardware, computer software and information technology enabled services). With a wide array of membership, primarily comprising of exporting SMEs, the Council has been laying emphasis on facilitating the interaction of Indian SMEs with potential buyers in the global market. ESC's IT SME member-exporters are well represented in its all programmes such as ICT delegations abroad, organization of Indian participation in various IT / ICT specific trade fairs, Buyer Seller Meets etc.

Chapter - I
Introduction, Organisational set-up and Programmes/Schemes

4. Other Organisations.

4.1 Media Lab Asia (MLA);

Media Lab Asia is a not-for-profit organization under Section 25 of Companies Act with a vision of leveraging the information and communication technologies and other advanced technologies for the benefit of the common man. Media Lab Asia works on the paradigm of collaborative research in the task of developing relevant and sustainable technologies and bringing them to the daily lives of people. Media Lab Asia works with academic and R&D institutions, industry, NGOs and Governments in the endeavor. It has already established research hubs at five IITs at Delhi, Mumbai, Chennai, Kanpur and Kharagpur, IIIT Hyderabad, Byrraju Foundation, All India Institute of Medical Sciences (AIIMS), Sarva Shiksha Abhiyan, National Association for the Blind, AMRITA Vishwa Vidyapeetham, Coimbatore.

4.2 National Informatics Centre Services Incorporated (NICSI);

National Informatics Centre Services Incorporated (NICSI) has been set up under Section 25 of the Companies Act, mainly to promote utilization of Information Technology, computer communication network, informatics, development of services, technology supplementing developments by NIC, promote value added computer and computer communication services, etc. In a way it is an extended arm of NIC for implementing ICT projects of the Government. Many Central and State Government Departments have retained NICSI as their "Total-IT-Solution" provider.

4.3 National Internet Exchange of India (NIXI);

The National Internet Exchange of India (NIXI) is a not-for-profit organization under Section 25 of Companies Act to facilitate handing over of domestic Internet traffic between the peering ISP members. This will enable more efficient use of international bandwidth, save foreign exchange. It will further improve the quality of services for the customers of member ISPs, by being able to avoid multiple international hops and thus lowering delays. Four Internet Exchanges Nodes have been operationalised at Noida (Delhi), Mumbai, Chennai and Kolkata and as many as 40 ISPs connected with these nodes.