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Introduction

A. Objectives

Department of Electronics and Information Technology (DeitY) in the Ministry of Communications and Information Technology is *inter alia* responsible for formulation, implementation and review of national policies in the field of Information Technology, Electronics and Internet (all matters other than licensing of Internet Service Provider). All policy matters including e-Governance (which aims to make all Government Services accessible to the common man in his locality), computer based information technology and processing including hardware and software, standardisation of procedures and matters relating to international bodies, establishing the National Knowledge Network with multiple gigabit bandwidth to connect Knowledge Institutions across the country, 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.

B. Following are the business allocated to the Department of Electronics and 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 – on line (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 and Computer Software Export 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 Department.

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C. Organisational set-up

The Department of Electronics and Information Technology (DeitY) in the Ministry of Communications and Information Technology (MC&IT) is headed by Secretary who assists Hon'ble Minister for Communications and Information Technology/Minister of State for Communications and Information Technology in carrying out the business allocated to the Department. DeitY has two Attached Offices, four Statutory Organizations and seven Autonomous Societies besides three Section 25 companies under its control to carry out the business allocated to the Department.

D. Schemes/Programmes being implemented by Department of Electronics and Information Technology

In the 12th Five Year Plan, the following six thrust areas have been identified:

- e-Government
- e-Learning
- e-Security
- e-Industry (Electronics Hardware)
- e-Industry (IT-ITeS)
- e-Innovation/R&D

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 various organisations / institutions. 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 (incl. ITRA); Convergence, Communication & Strategic Electronics; Component and Material Development; Centre for Development of Advanced Computing (C-DAC); R&D in Medical Electronics & Health Informatics (erstwhile Electronics in Health and Tele-medicine); Technology Development for Indian Languages (TDIL); Media Lab Asia; Standardisation, Testing and Quality Certification (STQC); Software Technology Parks of India (STPI) & EHTP; E-Governance (incl. (i) Programme on Good Governance & Best Practices and (ii) Programme on enabling all schools with virtual classrooms); Cyber Security (incl. CERT-In, IT Act); National Informatics Centre (NIC); National Knowledge Network; Controller of Certifying Authorities (CCA); ERNET; Promotion of Electronics/IT Hardware Manufacturing; National Institute of Electronics & Information Technology (NIELIT); Digital India Programme and Manpower Development for Skill Development in IT and IT for Masses; Facilitation of setting up of Integrated Townships and Others including Secretariat Economic Services.

DeitY has two attached offices – (i) National Informatics Centre (NIC) and (ii) Standardisation, Testing and Quality Certification (STQC) and four statutory organizations – (i) Controller of Certifying Authorities (CCA), (ii) Cyber Appellate Tribunal (CAT), (iii) Semiconductor Integrated Circuits Layout Design Registry (SICLDR) and (iv) Indian Computer Emergency Response Team (CERT-In). 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 Advanced Computing (C-DAC); (iii) Software Technology Parks of India (STPI); (iv) National Institute of Electronics & Information Technology (NIELIT); (v) Centre for Materials for Electronics Technology (C-MET); (vi) Education & Research Network (ERNET) and (vii) Electronics and

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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. (NICSI) and (iii) National Internet Exchange of India (NIXI).

1. Attached Offices

1.1 National Informatics Centre (NIC)

National Informatics Centre (NIC), an attached office of the department, is a premier organization providing e-Governance ICT Infrastructure, applications and services for the delivery of citizen centric services. The role of NIC has become pivotal in the implementation of ICT based initiatives at the central/state government level. One of the major responsibilities of NIC is to keep strategic control of these e-Governance applications on behalf of the government.

NIC provides ICT support to the Government in 80 Ministries/Departments, 36 States/UTs and 650 districts. NICNET, the nationwide Network has more than 70,000 end users. More than 2 million users access NIC portals every day for information and services. The data centres of NIC host more than 7000 websites of the Government. The NIC National Cloud is presently hosting a number of critical applications on over 2500 virtual servers. NIC has the largest e Mail service of the country with more than 90 million e Mails per month. It has the largest Video Conferencing network in the country facilitating more than 25,000 conference hours per month.

NIC has been playing a major role in development of e-Governance applications for important socio-economic sectors. With the launching of Digital India Programme by Hon'ble Prime Minister with the objective to transform India into a digital empowered society and knowledge economy, the role of NIC has increased manifold. Development and launching of MyGov Portal, Aadhar Enabled Biometric Attendance System (AEBAS), Jeevan Praman for Pensioners, eSameeksha, eGreetings, eSampark Programme, National Portal for lost and found children, Tourist Visa on Arrival, Secure email within Government, Shram Suvidha Portal etc. are some of the key initiatives undertaken by NIC during this year. Apart from this, ICT support to Rural Development, Food and Civil Supplies, Agriculture, Industry and Commerce, Labour and Employment, Judiciary etc. has been provided. NIC has been responsible for country-wide implementation of various e-Governance projects including many Mission Mode Projects of the department. Mobile Fertilizer Monitoring System (mFMS), ePanchayat, Cooperative Core Banking Solution (CCBS), National Portal on eTransaction Analysis and Aggregation Layer (eTaal), National Animal Disease Reporting System (NADRS), e-Courts, ePrisons, Immigration Visa Foreigners Registration & Tracking (IVFRT), Central Plan Schemes Monitoring System (CPSMS), e-Scholarship, etc. are some of the major ICT initiatives taken up by NIC.

1.2 Standardisation, Testing & Quality Certification (STQC) Directorate

Standardization, Testing, Quality and Certification (STQC) Directorate, an attached office of the Department of Information Technology provides Testing, Calibration, Training and Certification services through its well-developed network of laboratories spread across the country. Electronic Regional Test Labs (ERTL) at Delhi, Kolkata, Mumbai & Thiruvananthapuram and Electronic Test & Development Centres (ETDC) at

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Bengaluru, Chennai, Hyderabad, Pune, Goa, Mohali, Solan, Guwahati, Agartala & Jaipur are providing test and calibration services. In order to provide software evaluation services, IT Centres have been established at Delhi, Kolkata, Bengaluru, Chennai, Hyderabad, Pune, Guwahati, Agartala, Mohali & Thiruvananthapuram. Additionally, Indian Institute of Quality Management (IIQM) at Jaipur, Centre for Electronic Test Engineers (CETE) at Bengaluru, Hyderabad, Pune, Noida & Kolkata, Center for Reliability (CFR) at Chennai and Regional Certification Centers at Delhi, Mumbai, Kolkata and Bengaluru have been rendering specialized services in the respective areas. Currently, STQC services are being utilized by more than 10,000 organizations representing the entire segment of industry, Government departments, R&D organizations etc.

Through National / International accreditation and recognitions, STQC Directorate has also earned an International reputation and its testing & certification services are being recognized globally. Apart from being a major testing & calibration network in the country and primary institution in this field, 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. A number of projects sponsored by the Department in the field of Software Quality Assurance, Common Criteria, Information Security Management, Website Quality, Biometrics, e-procurement etc. have been successfully executed.

2. Statutory Organizations

2.1 Controller of Certifying Authorities (CCA)

The Controller of Certifying Authorities (CCA) has been appointed under Section 17 of the IT Act, 2000 to promote the growth of e-commerce and e-governance through the use of digital signatures. The number of digital signature certificates issued till December 2014 is about 9.3 million and continues to grow rapidly and is expected to increase significantly with the launch of various e-governance/e-commerce programmes such as Aadhar based DSC issuance and initiation of eSign project. Initiatives have been taken in this respect through coordinated interactions between the e-governance/e-commerce application service providers and the Certifying Authorities.

CCA is assisted by Deputy Controllers, Assistant Controllers, Technical Officers and other support staff.

2.2 Cyber Appellate Tribunal (CAT)

In accordance with the provision contained under Section 48(1) of the IT Act 2000, the Cyber Regulations Appellate Tribunal (CRAT) has been established in October 2006. The Cyber Regulations Appellate Tribunal after the amendment of the IT Act in the year 2008 (which came into effect on 27.10.2009) is known as the Cyber Appellate Tribunal (CAT). As per the IT Act, any person aggrieved by an order made by the Controller of Certifying Authorities, or by an adjudicating officer under this Act may prefer an appeal before the Cyber Appellate Tribunal. This Tribunal is headed by a Chairperson who is appointed by the Central Government by notification as provided under Section 49 of the IT Act 2000.

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Before the amendment of the IT Act in the year 2009, the Chairperson was known as the Presiding Officer. Provision has been made in the amended Act for the Tribunal to comprise a Chairperson and such number of other members as the Central Government may notify / appoint.

2.3 Semiconductor Integrated Circuits Layout-Design Registry (SICLDR)

Very large Scale integrated (VLSI) circuits are ubiquitous in the modern world, and designing them efficiently is becoming increasingly challenging with the development of ever smaller chips. Hence, the layout-design i.e. layout of transistors and other circuitry elements, including lead wires connecting such elements and expressed in any manner of a semiconductor integrated circuit as an intellectual property, is quite significant.

Under Section 6 of Trade Related aspects of Intellectual Property Rights (TRIPS) Treaty of the World Trade Organization (WTO), the Member Countries have agreed for providing protection to layout designs i.e. topographies of integrated circuits to cater to legal framework of creation / protection / trading aspects of intellectual property rights of products and services by member nations. India is signatory to TRIPs Treaty. Government of India through Department of Electronics & Information Technology, Ministry of Communications & Information Technology, enacted “Semiconductor Integrated Circuits Layout-Design (SICLD) Act 2000 which was notified in the Gazette of India Extraordinary No. 46 dated 4th Sep 2000 after receiving Presidential assent. The Semiconductor Integrated Circuits Layout-Design Act empowers the registered proprietor of the layout-design an inherent right to use the layout-design, commercially exploit it and obtain relief in respect of any infringement.

It is envisaged that the protection of the intellectual property of semiconductor integrated circuit by Registering the layout design under the Act will significantly benefit the Electronic System Design & Manufacturing (ESDM) industry, involved in chip design and fabrication in the country, to grow and contribute towards Government’s “Make in India” initiative.

2.4 Indian Computer Emergency Response Team (CERT-In)

CERT-In has been designated under Section 70B of Information Technology (Amendment) Act 2008 to serve as the national agency to perform the following functions in the area of cyber security:

- Collection, analysis and dissemination of information on cyber incidents
- Forecast and alerts of cyber security incidents
- Emergency measures for handling cyber security incidents
- Coordination of cyber incident response activities
- Issue guidelines, advisories, vulnerability notes and whitepapers relating to information security practices, procedures, prevention, response and reporting of cyber incidents

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- Such other functions relating to cyber security as maybe prescribed

CERT-In has been evolved as the most trusted referral agency in the area of information security in the country. Activities of CERT-In include regular interaction with Critical Infrastructure Organisations and sectorial CERTs to ensure security to the critical systems, collaboration with IT product and security vendors to mitigate the vulnerabilities in various systems, cooperation with international CERTs and security organizations on information sharing and incident response, promotion of R&D activities in the areas of Artifact analysis and Cyber Forensics and security training and awareness.

3. Societies/Autonomous Bodies

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

Society for Applied Microwave Electronics Engineering & Research (SAMEER) is an autonomous R & D institute under Department of Electronics and Information Technology(DeitY), Ministry of Communications and Information Technology (MC&IT), Govt. of India since 1984. It was created with sole objective of pursuing research and development in the field of RF & microwaves. Ever since its formation, SAMEER has been involved in development of many RF and microwave based systems and products which are required by various government agencies like Defence, Space, Earth Sciences and Indian Meteorology Department. The headquarters of SAMEER is located at Powai, Mumbai. The other two Centers of SAMEER are located at Chennai and Kolkata respectively known as Centre for Electromagnetics and Centre for Millimeter Wave Research. SAMEER undertakes and executes sponsored projects for various Government agencies, public sector undertakings and industries in its expert areas of RF/Microwave/Millimeter wave systems and subsystems, High Power RF amplifiers, RF communication systems, Atmospheric Radar Instrumentation, Linear Accelerators, Electromagnetic Interference/compatibility (EMI/EMC), Thermal Engineering of electronic hardware, 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 under DeitY for carrying out R&D in IT, Electronics and associated areas. Originally established to develop indigenous capabilities in supercomputing, the R&D of C-DAC has expanded to various other areas such as grid and cloud computing, multilingual computing, heritage computing, professional electronics including VLSI and embedded systems, cyber security and cyber forensics, health informatics, software technologies and education related to these technologies. C-DAC collaborates with various academic and scientific research organizations in India and abroad under various domains and contributes towards research advancements, benefitting end-users in many areas such as science and engineering, government, healthcare, agriculture and strategic sectors. Based on the research expertise, C-DAC also carries out various training programmes in critical areas of Information Technology and Electronics.

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3.3 Software Technology Parks of India (STPI)

Software Technology Parks of India was set up in 1991 as an Autonomous Society under the Department of Electronics & Information Technology (DeitY) with the following objectives:

- To promote the development and export of software and software services including information technology (IT) enabled services/ Bio-IT.
- To provide statutory and other promotional services to the exporters by implementing Software Technology Parks (STP)/ Electronics and Hardware Technology Parks (EHTP) schemes and other such schemes which may be formulated and entrusted by the government from time to time.
- To provide Data Communication Services including value added services to IT/IT Enabled Services (ITES) related industries.
- To promote micro, small and medium entrepreneurs by creating conducive environment for entrepreneurship in the field of IT/ITES.

STPI is responsible for implementation of the Software Technology Parks (STP) scheme and the EHTP scheme. The phenomenal success of the IT-ITES industry has been possible, inter-alia, due to pivotal role played by the STP Scheme and fiscal benefits provided under Section 10A of the Income Tax Act. The fiscal benefit was available upto 31-03-2011. STP Scheme is a unique scheme, designed to promote the software industry including innovations and growth of Start-Ups and SMEs without any locational constraints. As on 31.12.2014, more than 3,300 STP units are operational under this Scheme.

REGULATORY ROLE (STP and EHTP schemes):

In an effort to achieve its primary objective of promotion and development and export of software and software services, STPI has been implementing the Software Technology Parks (STP) scheme for promoting software & Information Technology service companies and Electronic Hardware Technology Park Scheme (EHTP) for Electronic hardware industry. These schemes have been widely successful and the exports made by the units registered under them have grown manifold over the years. As on 31.12.2014, more than 3,300 units were operating under STP scheme and more than 80 units were operating under EHTP scheme. During the FY 2014-15 (till December 2014), export from STP units was Rs. 1,97,690 Cr.(estimated) and from EHTP units was Rs.3,523 Cr. (estimated).

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STP and EHTP schemes are ongoing schemes but the income tax benefit under Section-10A of Income Tax Act were available till 31/3/2011. The units under the STP and EHTP regimes continue to avail the exemptions from custom/excise duties, Central Sales Tax reimbursement and other benefits.

3.4 National Institute of Electronics and Information Technology (NIELIT)

National Institute of Electronics & Information Technology (NIELIT),(erstwhile DOEACC Society), an Autonomous Scientific Society under the administrative control of Department of Electronics & Information Technology (DeitY), Ministry of Communications and Information Technology, Government of India, was set up to carry out Human Resource Development and related activities in the area of Information, Electronics & Communications Technology (IECT). NIELIT is engaged both in Formal & Non-Formal Education in the area of IECT besides development of industry oriented quality education and training programmes in the state-of-the-art areas. NIELIT has endeavoured to establish standards to be the country's premier institution for Examination and Certification in the field of IECT. It is also one of the National Examination Body, which accredits institutes/organizations for conducting courses in IT in the non-formal sector.

- At present, NIELIT has thirty one (31) offices located at Agartala, Aizawl, Ajmer, Aurangabad, Calicut, Chandigarh, Chennai, Chuchuyimlang, Churachandpur, Delhi, Gangtok, Gorakhpur, Guwahati, Imphal, Itanagar, Jammu, Jorhat, Kohima, Kolkata, Kokrajhar, Leh, Lucknow, Lunglei, Patna, Ranchi, Senapati, Shillong, Shimla, Silchar, Srinagar, Tezpur with its Head quarters at New Delhi. It is also well networked throughout India with the presence of about 800 institutes.
- Over the last two decades, NIELIT has acquired very good expertise in IT training, through its wide repertoire of causes, ranging from 'O' Level (Foundation), 'A' Level (Advance Diploma), 'B' Level (MCA equivalent), 'C' Level (M-Tech level), IT literacy courses such as CCC (Course on Computer Concept), BCC (Basic Computer Course) and other such long term and short term course in the non formal sector like courses on Information Security, ITeS-BPO(Customer Care/Banking), Computer Hardware Maintenance (CHM-O/A level), Bio-Informatics(BI-O/A/B level), ESDM etc, besides, high end courses offered by NIELIT Centres at Post-Graduate level (M.Tech) in Electronics Design & Technology, Embedded Systems etc. which are not normally offered by Universities/Institutions in the formal sector, in association with the respective state Universities.
- The basket of activities of NIELIT is further augmented by the wide range of projects that it undertakes. NIELIT has demonstrated its capability and capacity to undertake R&D projects, consultancy services, turnkey projects in office automation, software development, website development etc. NIELIT is also the nodal implementing agency on behalf of DeitY for Data Digitization of the population of 15 assigned States and 2 Union Territories for the creation of National Population Register (NPR) project of Registrar General of India (RGI).
- NIELIT is functioning under the overall control and guidance of the Governing Council. The Hon'ble Union Minister for Communications and Information Technology is the Chairman of the Council. Members of the Council are from various fields / organizations such as Government Departments, Industry, Academia and representatives of various professional bodies. The Institute also has a Management Board chaired by the Secretary, Department of Electronics & Information Technology (DeitY), Government of India. Each NIELIT Centre has an Executive Committee

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consisting of representatives from respective State Governments, academic institutions and industries for the effective implementation of the decisions of the Board and the Council. The Finance & Accounts Committee chaired by the Managing Director, NIELIT assists the Governing Council by recommending the Budget Estimates / Revised Estimates and Financial Issues / Solutions of the Organisation. The Committee is also mandated to scrutinize the Audited Annual Accounts of the Institute before their submission to the Governing Council for adoption. The F&A Committee also advises the Institute from time to time in various financial matters and appointment of Auditors of the Institute. The day to day activities of NIELIT are managed by the CEO designated as the Managing Director.

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 the Department of Electronics & 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 defined 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 an autonomous Scientific Society under the administrative control of the Department of Electronics & Information Technology. ERNET India has been serving institutions in various sectors namely, health, agriculture, higher education, schools and science & technology and thus, understands the needs of these knowledge institutions. ERNET India is helping to create a truly global research community where advanced resources and new learning can be effectively shared by connecting the research network in Europe with ERNET. ERNET network is a judicial mix of terrestrial and satellite based wide area network. ERNET Network Supports IPv4 and IPv6 Internet protocol in dual stack. IPv6 routing protocol OSPFv3, end-to-end Ethernet services, QoS, Video Conferencing, authentication and authorization have also been implemented on ERNET network. At national level, ERNET India is working with other premier academic and research institutions on several R&D projects. ERNET has pioneered to take the lead in the IPv6 propagation in the county and is already doing a lot of activities in collaboration with other NREN's across the globe in terms of network performance and IPv6 related applications for which necessary infrastructure on IPv6 has been created. Application servers to monitor and manage IPv6 activities for Research and Development have been deployed and as the applications grow, more such devices would be required to be setup.

ERNET India has deployed educational cloud connecting 14 Kendriya Vidyalaya schools to demonstrate learning and teaching services based on Cloud model. Open source edX Massive Open Online Courseware (MOOC) platform was used for hosting e-learning contents.

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There are also other R&D projects in the pipeline: a distributed Internet of Things (IoT) Test bed in collaboration with premier academic institutions for conducting IoT research and experiments and a Centre of Excellence for IoT is also planned jointly with NASSCOM to help develop the “IoT industry eco-system” in India.

3.7 Electronics and Computer Software Export Promotion Council (ESC)

Electronics and Computer Software Export Promotion Council (ESC), sponsored by the Government of India is India’s largest Electronics and IT trade facilitation organization. Starting in 1989, with an export performance of US\$ 200 million, ESC has successfully steered India’s Electronics and Software Exports to US\$ 91.67 billion during 2013-14 with membership of over 2000 exporters today. ESC facilitates global interests of foreign companies interested in establishing business linkages in India. ESC’s excellent match – making services help interested ICT companies to locate a reliable partner in India for their business requirements.

In an Industry where the degree of technological obsolescence is very high, ESC is striving hard to elevate India’s position in the international trading arena of the Electronic and Computer Software.

ESC operates through State, Regional, Sectoral and Territorial Committees. The ESC Committees comprise of leading exporters and senior Government officials. ESC represents interests of Indian electronics and IT sector at Joint Trade Committees of Ministry of Commerce, Government of India as well as at Joint Business Councils of various countries.

- ESC implements foreign assisted development programmes to facilitate joint ventures, technical /financial collaborations and strategic alliances.
- ESC undertakes Market Research / Studies in major overseas markets.
- For enhancing the brand equity of Indian IT industry, ESC undertakes publicity Campaigns in overseas markets.
- ESC facilitates business interface between Indian and foreign companies through Buyers – Seller Meets, Receiving and Mounting Business Missions and Match-making and Contact Promotion.
- ESC locates new business partners for Indian electronics, computer software and IT companies.
- For facilitating foreign trade, ESC provides on-line facility for Data Search, Information Dissemination and Broadcast using internet and Dial-up facilities.
- ESC promotes India’s electronics, software and IT trade and facilitates participation in global trade shows/expositions, conferences/congress, etc.

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ESC provides a set of value-added services to its members as well as overseas companies. These are:

- ESC has a critical mass of Information on electronics, IT and services sectors.
- ESC provides information at a single point.
- ESC assists in moving up the value chain.
- ESC acts as an Information Kiosk for small enterprises.

4. Other Organisations

4.1 Media Lab Asia (MLA)

Media Lab Asia was set up by Government of India, Ministry of Communications and Information Technology as a not-for-profit organization under Section 25 of Companies Act with the objective of bringing the benefits of the Information & Communication Technologies (ICT) and other advanced technologies to the common man. Media Lab Asia is presently working in the application areas of Education, Livelihood Enhancement, Primary Healthcare and Empowerment of Persons with Disabilities.

Media Lab Asia works on the paradigm of collaborative research in the task of developing relevant and sustainable technologies and culturally appropriate solutions and bringing them to the daily lives of people. Media Lab Asia works with academic and research & development institutions, industry, NGOs and Government in this endeavor. The Board of Directors of the company is chaired by the Hon'ble Union Minister of Communications and Information Technology and there is a Technology Advisory Board chaired by Scientific Secretary in office of Principal Scientific Adviser to the Government of India.

IT Research Academy (ITRA), National e-Governance Division (NeGD) and Visvesvaraya PhD scheme for Electronics and IT are three additional major activities under Media Lab Asia.

ITRA is a National Programme to build a national resource for advancing the quality and quantity of Research & Development (R&D) in Information & Communication Technologies and Electronics (ICTE) while institutionalizing an academic culture of IT based problem solving and societal development by closely collaborating teams of researchers and institutions having expertise in the different aspects of the chosen research or application problems.

National e-Governance Division (NeGD) is created as an independent business division within Media Lab Asia for taking up the Programme Management of the National e-Governance Plan (NeGP) at Department of Electronics & Information Technology (DeitY).

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Visvesvaraya Phd. scheme has been initiated to enhance the number of PhDs in the Electronic Design and Manufacturing (ESDM) and IT/IT enabled Services (ITES) sector. The scheme is to support 1500 PhDs in each of ESDM and IT/ITES sectors over a period of 5 years (Total : 3000 PhDs).

4.2 National Informatics Centre Services Incorporated (NICS)

NICS was set up by NIC in 1995 as a Section 25 Company to help in the implementation of ICT projects developed by NIC in a faster and efficient manner. The main objective of NICS is to promote the economic, scientific, technological, and cultural development in India by promoting the utilization of Information Technology, Computer Communication Network, Informatics, etc. by a spin off of the expertise developed by National Informatics Centre of Government of India including its Computer Communication Network, NICNET and associated infrastructure and services. NICS, since its inception has been providing services to government organizations in coordination with NIC. NICS has implemented large number of e-Governance projects. It helps in the conceptualization of ICT projects, procurement of hardware and system software and establishment of ICT infrastructure including LAN/WAN/VC and Data Centres. It also facilitates in providing consultancy services in coordination with its empanelled organizations and under the overall technical guidance of NIC.

4.3 National Internet Exchange of India (NIX)

NIX is a not for profit organization set up under Section 25 of the Companies Act 1956 for peering of Internet Service Providers (ISPs) to the NIX node for the purpose of routing the domestic traffic within the country. This will result in better quality of service, reduced latency and savings on international bandwidth. Seven Internet Exchange Nodes are functional at Delhi (Noida), Mumbai, Chennai, Kolkata, Hyderabad, Bengaluru, and Ahmedabad.

NIX also operates the .IN Registry for managing the .IN Country Code Top Level Domains (ccTLDs). As of February 2013 Registration of .IN domain has crossed the 1.7 million domain names. The INRegistry ensure operational stability, security and reliability of the .in ccTLD. The INRegistry implements the policies of Department of electronics and Information Technology, Ministry of Communications and Information Technology, Government of India from time to time. The INRegistry facilitates the registration of domain names through its accredited registrars spread all over world. .IN is India's Country Code Top Level domain (ccTLD). The Govt. of India delegated the operations of INRegistry to NIX in 2004. The INRegistry operates and manages India's .IN ccTLD.

Recently, NIX has started the operations of National Internet Registry (NIR) for India. NIR has been named as the Indian Registry for Internet Names and Number (IRINN). IRINN will be responsible for allocation of IP address and AS numbers within the country to its affiliates.