

CHAPTER - III

REFORMS MEASURES AND POLICY INITIATIVES

NIC

NIC is developing e-Governance applications and ICT infrastructure for National, State and Grass root level. It also facilitates ICT services such as e-mail, videoconferencing, Data Centre, website development and hosting for government at various levels. The highlights of NIC's programme for 2015-16 are as follows:

- e-Sampark
- e-Cabinet
- e-samiksha
- Project proposal submission and its monitoring
- Revamping of Mission mode projects

Draft Policy on Internet of Things

One of the top most initiatives in the form of Digital India Program of the Government which aims at 'transforming India into digital empowered society and knowledge economy' is expected to provide the required impetus for development of the IoT industry ecosystem in the country.

Department of Electronics and Information Technology, (DeitY) has come out with a draft IOT Policy document which focuses on following objectives:

- i. To create an IoT industry in India of USD 15 billion by 2020. It has been assumed that India would have a share of 5-6% of global IoT industry.
- ii. To undertake capacity development (Human & Technology) for IoT specific skill-sets for domestic and international markets.
- iii. To undertake Research & development for all the assisting technologies.
- iv. To develop IoT products specific to Indian needs in all possible domains.

The Policy framework of the IoT Policy has been proposed to be implemented via a multi-pillar approach. The approach comprises of five vertical pillars (Demonstration Centres, Capacity Building & Incubation, R&D and Innovation, Incentives and Engagements, Human Resource Development) and 2 horizontal supports (Standards & Governance structure).

The policy was put up for public comments on 17th October 2014. The feedback received from industry, academia and public is being incorporated. The final policy shall then be put for Cabinet approval.

NKN

A high speed Data Communication Network is being established in the country. National Knowledge Network (NKN) is to inter-connect all knowledge institutions across the country through high speed data communication network to encourage sharing of resources and collaborative research. These would cover about 1500 Institutions comprising of all Universities, Institutions of Higher Learning, and Research. NKN will facilitate creation, acquisition and sharing of Knowledge resources among the large participating Institutions; collaborative research; countrywide classrooms (CWCR) etc. and help the country to evolve as Knowledge Society. As on 31st December, 2014 about 1362 institutions have already been connected to NKN (this includes **360** links to institutions under NMEICT, which have been migrated to NKN) which include: IITs, IIMs and premiere research institutions such as AIIMS, CSIR, IISc, etc. A total of 66 virtual classrooms have been created till date.

STPI

- 1.** Performance and dispersal linked incentive scheme for STP registered units is being formulated to ensure accelerated growth of IT/ITES exports and the dispersal of IT/ITES industry to the Tier II and Tier III cities across the country.
- 2.** The present incubation programme of STPI would be further strengthened for innovation led Business Incubation and entrepreneurial development for start-up units. This programme would be designed to provide venture, infrastructural and mentoring support to the entrepreneurs. In addition to the existing infrastructure available at 53 STPI centres, STPI is in process of creating additional incubation space at Mohali, Allahabad, Bhilai, Bhubaneswar, Hyderabad etc. STPI would explore creating more and more incubation space in Tier II and Tier III cities across the country.
- 3.** STPI is working on ESDM Incubators for creation of a holistic eco-system for encouraging R&D, innovation, Entrepreneurship in the ESDM sector and enabling creation of Intellectual Property within the country for maximizing the domestic value addition and diminishing the external dependence in the sector.

4. STPI would promote and to assist the start-up companies in innovation/research & development. Further, STPI would also create awareness & encourage the start-up companies to register the IPR of their innovative products.
5. STPI is working on an on and off-campus training-cum-internship & employment assistance program for undergraduate engineering students in Computer Science, IT, Electronics & related disciplines to establish close relations between engineering colleges and the business world for enhancing the quality and relevance of the instruction students receive. It intends to bridge the gap between academia and the industry by helping undergraduate engineering students.
6. SMEs in India are facing unprecedented challenges necessitating the need for ICT adoption in their business processes and integrating into globalized economic environment. With ICT tools, the SME sector can improve upon the way it is doing businesses currently and become more vigilant in the finer details in its day-to-day operations thereby increasing its own competitiveness. The ICT adoption in manufacturing sector can change the way the organizations conduct their business which will enable them to compete in the national and international markets. The major objective of ICT application is the cost-effective and efficient improvement in business activities.

E-Governance

1. E-mail Policy of Government of India

The “E-mail policy of the Government of India” lays down the guidelines with respect to use of e-mail services. As per the proposed policy, e-mail accounts will be given to all the employees of the Governments and it will be mandatory for them to use this e-mail service for all official communication. The use of e-mail accounts of external mail service providers will be prohibited for official communication. The objective of this policy is to ensure secure access and usage of GoI e-mail services by its users.

In order to implement the email policy, significant augmentation in the existing e-mail infrastructure is required. The department has already initiated the process of this augmentation. The infrastructure will be scaled up to address the requirements of issuing e-mail ids to 5 million Government employees and to cater to a larger user base as and when required.

2. Policy on use of IT Resources of Government of India

Policy on Acceptable Use of IT Resources of Government of India lays down the guidelines with respect to use of all IT resources. This would apply to all IT resources, owned or leased by Government of India, and services accessible on or through them. The objective of this policy is to ensure proper access and usage of Government of India IT resources by all its users and protect the ICT infrastructure of Government of India from any misuse.

For the purpose of this policy, the term “IT resources” includes:

- Computers and desktop devices
- Portable devices such as laptops, PDAs, tablets and mobiles
- External storage devices such as Pen Drives
- Personally-owned devices connected to GoI resources and
- Network resources such as internet connections, email accounts, etc.

Status:

The draft policies were circulated to various ministries/departments and to all States/UTs for comments. Most of the ministries/ departments and states/UTs have supported the draft policies. The comments have been appropriately incorporated. The policy has been submitted to the committee of Secretaries (CoS) for consideration and approval.

The policies were discussed in three COS. In the last CoS held on 15.7.2014 it was agreed to present the policies in Cabinet. The policies was modified according to suggestions of CoS and circulated to all ministries for suggestions.

The policies were modified in light of suggestions received and the finalized Cabinet Note along with the policies was sent to Cabinet Secretariat for approval of Cabinet on 10th December 2014.

The Electronic Delivery of Services (EDS) Bill, 2011

The Electronic Delivery of Services (EDS) Bill 2011 was introduced in the Lok Sabha on 27th December 2011. The Bill was referred to the Parliament Standing Committee on Information Technology on 5th January 2012. The Committee has submitted its Report to Lok Sabha (laid in Rajya Sabha) on 30th August 2012. The Bill has been approved by the Cabinet on 18th March 2013 and has to be introduced in the Parliament

as per established procedure. Ministry of Law and Justice, Government of India has suggested to DeitY that in view of the stand taken by Ministry of Law and Justice not to make references to a legislation which is not in existence or which is yet to be enacted, the proposed Electronic Delivery of Services Bill, 2013 should await enactment of the Right of Citizens for Time Bound Delivery of Goods and Services and Redressal of Grievances Bill, 2011 (now renamed as “Right to Services and Grievances Bill, 2014).

Department of Electronics & Information Technology (DeitY), in the meanwhile, has proposed to seek Cabinet Approval for introduction of EDS Bill, 2015 in the Parliament which would mandate provisioning all public services compulsorily through electronic means. A Draft Note for the Cabinet in this regard is currently under inter-ministerial consultations.

National Institute of Electronics and Information Technology (NIELIT)

‘Nil’

Promotion of Electronics/IT Hardware Manufacturing

Electronics & IT Hardware Industry- An Overview

It has been estimated that demand of electronics products and systems in India would grow to about USD 400 Billion by 2020. At the conventional rate of growth of domestic production, it would only be possible to meet demand of about USD 100 Billion by 2020. The Government attaches high priority to electronics & IT hardware manufacturing. It has the potential to generate domestic wealth and employment, apart from enabling cyber-secure ecosystem.

There have been some efforts for rapid growth of the electronics (including telecom) hardware manufacturing sector in the past like 100% FDI permitted under automatic route, no Industrial license requirement, payment of technical know-how fee and royalty for technology transfer under automatic route. However, these efforts have not led to a substantial impact; partly because of India is a signatory to the Information Technology Agreement (ITA-1) that has resulted in a zero duty regime on import of the goods covered under the Agreement. India has also executed Free Trade Agreements (FTAs) and Preferential Trade Agreements (PTA) with several countries/ trading blocks, which has enabled zero duty import of items not covered under ITA. Other factors hampering the growth of electronics includes lack of reliable power, high cost

of finance, poor logistics & infrastructure, weak components manufacturing base, lack of targeted & proactive R&D in collaboration with industry etc.

Digital India Programme- Promotion of Electronics Manufacturing

Under the Digital India programme of the new Government, the Government has laid down the roadmap to transform India into a digitally empowered society and knowledge economy. One of the pillars of this programme is promotion of electronics manufacturing.

Earlier, the Government had approved the National Policy on Electronics (NPE) 2012 on October 25, 2012 with the vision “To create a globally competitive electronics design and manufacturing industry to meet the country's needs and serve the international market”.

The steps being taken to develop the electronics manufacturing in the country are mentioned below:

Modified Special Incentive Package Scheme (M-SIPS)

Modified Special Incentive Package Scheme (M-SIPS) was announced by the Government in July 2012. The salient features of the policy are as follows:

- I. The scheme provides subsidy for investments in capital expenditure- 20% for investments in Special Economic Zones (SEZs) and 25% in non-SEZs. It also provides for reimbursements of CVD/ excise for capital equipment for the non-SEZ units. For select very high technology and high capital investment units like fabs, reimbursement of central taxes and duties which include Customs duty, Service Tax and Excise Duties is also provided. The incentives are provided on reimbursement basis.
- II. The incentives are available for a period of 10 years from the date of approval of application.
- III. The incentives are available for selected electronic products categories/ verticals. Units across the value chain starting from raw materials including assembly, testing, packaging and accessories of these products and their chips, components are included.
- IV. The threshold of investment for each project has been prescribed. The thresholds vary from Rs 1 crore for manufacture of accessories to Rs 5000 crore for memory semiconductor wafer fabrication unit.
- V. The policy is open for application for three years from its notification, i.e. up-to July 2015.

- VI. The policy provides for an inter-ministerial Appraisal Committee to evaluate investment applications. Based on the recommendation of Appraisal Committee, approval of Competent Authority is obtained.
- VII. The overall financial ceiling under the Modified SIPS is initially limited to Rs 10,000 crore during the 12th five year plan.

Current Status of M-SIPS applications

Status	Number	Investment (Rs in crore)
Applications received	55	18898
Applications approved	29	4420
Applications under process	26	14478

First sanction order of Rs 11.82 crore for disbursement of incentives under M-SIPS released in favour of M/s Bosch Automotives Electronics, Bangalore for investments under M-SIPS in automotive electronics.

Revision of M-SIPS

Based on the feedback received from various stakeholders, the Modified Special Incentive Package Scheme (M-SIPS) is proposed to be revised. The salient features of this revision are:-

- I. Extension of timeline beyond July 2015.
- II. Expanding the scope of M-SIPS.
- III. Streamlining the procedure of appraisal and approval.

The Draft final Cabinet Note (DCN) regarding review of policy is being finalised for submission to Cabinet Secretariat after inter-ministerial consultations.

Electronic Manufacturing Clusters (EMC)

The Government has notified Electronics Manufacturing Cluster (EMC) Scheme in October 2012 to support creation of world-class infrastructure for attracting investments in the electronics. This Scheme is open for receiving applications for a period of five years from the date of notification. The assistance for the projects in Greenfield Electronics Manufacturing Clusters is restricted to 50% of the project cost subject to a ceiling of Rs. 50 crore for every 100 acres of land. For larger areas, pro-rata ceiling applies. For lower extent, the extent of support would be decided by the Steering Committee for Clusters (SCC) subject to the ceiling of Rs. 50 crore. For Brownfield EMC, 75% of the cost of infrastructure, subject to a ceiling of 50 crore is provided as grant.

Till date DeitY has received 31 applications under EMC scheme [29 applications for setting up Greenfield EMCs and 2 applications for setting up of Common facility centres in Brownfield clusters], out of which department has accorded final approval to two Greenfield Clusters and In-Principle approval to 10 Greenfield EMCs and two Common facility centres in Brownfield Clusters. Further, Department has also indentified and notified 60 areas wherein considerable activities are going on in the ESDM sector which have been notified as Electronics manufacturing Clusters for the purpose of M-SIPS.

List of Final Approved Greenfield EMC

S.No.	State	Location/City
1	Madhya Pradesh	Village-Badwai, District-Bhopal
2		Village-Purva, District-Jabalpur

First instalment of Grant-in-aid of 20% of the Government of India Grant was sanctioned to two Greenfield EMCs at Badwai, Bhopal and Purva Jabalpur, in the state of Madhya Pradesh.

List of Greenfield EMCs accorded In-Principle approval

S.No.	State	Location/ City
1	Andhra Pradesh	Village-Chilamathur, Anantapur district,

2	Jharkhand	Adityapur, Saraikela- Kharsawan District
3	Kerala	Kakkanad district
4	Odisha	Khurda ,Bhubaneswar Industrial Area,
5	Rajasthan	Khushkera, Bhiwadi
6	Tamil Nadu	Krishnagiri ,Hosur
7	Telangana	e-city Hyderabad
8		Raviriyal village, Maheshwaram,
9	Chattisgarh	Naya Raipur, Raipur District
10	West Bengal	Naihati Town, North 24 Parganas District, West Bengal

List of Common Facility Centres accorded In-Principle approval

S.No.	State	Location/City
1	Karnataka	Electronic City Bangalore
2		KIADB Industrial Area Hebbal Hootagall , Mysore

Setting up of Semiconductor Wafer Fabs

The Cabinet in its meeting held on 12.02.2014 accorded approval to the two proposals in the matter of establishing the semiconductor wafer manufacturing facilities in India. The broad project parameters of two FAB facilities are as under:

	M/s Jaiprakash Associates Limited (with IBM, USA and Tower Semiconductor Limited, Israel as partners; JIT consortium)	M/s HSMC Technologies India Pvt. Ltd. (with ST Microelectronics and Silterra Malaysia Sdn. Bhd. as partners; HSS consortium)
1. Project Cost	INR 34,399 Crore	INR 29,013 Crore
2. Technology	90/65/45/28 nm	90/65/45/28/22 nm
3. Capacity	40,000 WSPM of 300 mm size	40,000 WSPM of 300 mm size
4. Location	Yamuna Expressway, Uttar Pradesh	Prantij, Gujarat

- I. The following main incentives have been extended:
- 25% subsidy on capital expenditure and tax reimbursement as admissible under Modified Special Incentive Package Scheme (M-SIPS).
 - Exemption of Basic Customs Duty (BCD) for non-covered capital items.
 - 200% deduction on expenditure on R&D as admissible under Section 35(2AB) of the IT Act.
 - Investment linked deductions under Section 35AD of the IT Act.
 - Interest Free Loan of approx. Rs. 5124 Crore each.
- II. As per the recommendations of the EC, Letters of Intent (LoI) dated 19.03.2014 were issued to the two consortia with 28.04.2014 as last date for submission of documents for demonstration of commitment for setting up of FAB facility in India.
- III. The final cabinet note for re-constitution of Empowered Committee, which was set up to identify technology and potential investors for establishment of Semiconductor Wafer Fabs in India, has been sent to Cabinet Secretariat on 7.01.2015 after the inter-ministerial consultations process with the approval of Hon'ble MCIT.

- IV. Deficiencies in Detailed Project Reports were pointed out to both consortia vide emails dated 05.11.2014. M/s. Jaiprakash Associates Ltd. vide letter dated 02.12.2014 and M/s. HSMC Technologies India Pvt. Ltd. vide letter dated 10.12.2014 had sought extension till January 31, 2015 and March 31, 2015 respectively for submission of deficiencies in DPR and other documents required for demonstration of commitment. With the approval of Empowered Committee, last date has been extended for both the consortium as per their request.
- V. RFP for selection of Consultants for appraisal of Detailed Project Reports submitted by both consortia for setting up Semiconductor Wafer Fabrication manufacturing facilities in India has been issued for fourth instance on 12.12.2014.

Preference to Domestically Manufactured Electronic Products (DMEP) in Government procurement

The Department of Electronics and Information Technology (DeitY) has notified the policy for providing preference to domestically manufactured electronic products in Government procurement for its own use and not with a view to commercial resale or with a view to use in the production of goods for commercial sale on 23.12.2013. The Domestically Manufactured Electronic Products (DMEPs) are products manufactured by companies registered in India and engaged in Manufacture in India and including Contract Manufacturers, but excluding traders. The electronic products to be notified under this policy shall meet the minimum 25% domestic value-addition in terms of Bill of Material (BoM) from domestic manufacturers. The percentage of procurement to be made from DMEP(s), which shall not be less than 30% of the total procurement value of that electronic product(s).

Scope: The policy is applicable to all Ministries / Departments (except Ministry of Defence) and their agencies for electronic products purchased for Governmental purposes and with a view to commercial resale or with a view to use in goods for commercial sale. This is also applicable for procurement of electronic products made under all Centrally Sponsored Schemes and grants made by Central Government.

Current Status: 9 generic electronic products, which are procured across sectors, viz., Desktop PCs, Laptop PCs, Tablet PCs, Dot Matrix Printers, Smart Cards, LED Products, Biometric Access Control/ Authentication Devices, Biometric Finger Print Sensors and Biometric Iris Sensors have been notified by the DeitY and 23 Telecommunications Products have been notified by the Department of Telecommunications (DoT), in furtherance of the policy. DGS&D has issued guidelines for implementing the policy in their rate contract process.

The Committee of Secretaries (CoS)'s meeting was held at Cabinet Secretariat on 26.11.2014 regarding implementation of the policy for providing preference to domestically manufactured electronics products in Government procurement. Vide letter dated 10.12.2014, all

Ministries/Departments (except Ministry of Defence) and Chief Secretaries of States were informed regarding the implementation of the policy, insertion of template in their RFD/Tender and submission of their quarterly report to this Department starting from 31.12.2014.

Electronic Development Fund (EDF) Policy

Creating a vibrant ecosystem of Innovation, Research and Development (R&D) and with active industry involvement is essential for thriving electronics industry. The Union Cabinet on December 10, 2014 has approved the “Electronics Development Fund Policy” for promotion of R&D and IP Generation in the area of Electronics System Design and Manufacturing. The policy provides a framework where the decision to support R&D is based on market conditions and through industry professionals well versed with industry requirements. It is with this objective that an Electronics “Daughter Funds” which in turn will provide risk capital to companies developing new technologies in the area of electronics, nano-electronics and Information Technology (IT). They will also support acquisition of foreign companies and technologies for products imported in India in large volume. The Electronics Development Fund (EDF) shall be created in a financial institution like SIDBI or a similar organization. Assuming that the average participation of EDF in Daughter Fund is 25%, the policy will help leverage four times Government funding in the area of R&D and Innovation. It will help create a battery of Daughter Funds and Fund managers who will be seeking good start-ups (potential winners) and selecting them based on professional considerations.

Compulsory Safety Standards for Electronics

In order to create non-tariff barrier for sub-standard electronics products in the country, the “Electronics and Information Technology Goods (Requirements for Compulsory Registration) Order, 2012” was notified on 03 Oct. 2012 under the provision of compulsory Registration Scheme of BIS Act, 1986. This order had comes into effect from 03rd July 2013. The order necessitates creation of institutional mechanism for developing and mandating standards and certification for electronic products to strengthen Quality Assessment infrastructure nationwide. The initiative aims to:

- Provide Indian consumers with the right to enjoy world class goods.
- Upgrade the quality of domestic products for bringing Global competitiveness.
- Develop strategy to stop dumping of non-compliant goods.
- Save business interest of entrepreneurs for effective negotiation at International trade agreements, Bilateral and Multilateral trade agreements.
- For projecting a positive image internationally as a country with quality production of the Electronics & IT goods.

As per the Scheme, the manufactures seeking registration of goods with the Bureau of Indian Standards (BIS) have to get their products tested at BIS recognised labs. Testing is also to be performed on selected samples during the surveillance subsequent to Registration. The surveillance is to be conducted by DeitY.

This Order initially covers 15 notified electronic products categories namely Electronic Games (Video), Laptop/Notebook/Tablets, Plasma/LCD/LED Television of screen size 32” or above, Optical disc players with built in amplifiers or input power 200w and above, Microwave Ovens, VDUs, Video Monitors of screen size 32” above, Printers/Plotters, Scanners, Wireless Keyboards, Telephone Answering Machines, Amplifiers with input power 2000w and above, Electronic Musical Systems with input power 200w and above, Electronics clocks with Main powers, Set Top Box and Automatic Data Processing Machines.

The following Fifteen additional electronic items have been notified under the ambit of CRO on 13th November 2014:

Power Adaptors for IT Equipments; Power Adaptors for Audio, Video & Similar Electronic Apparatus; UPS of rating \leq 5kVA; Invertors of rating \leq 5kVA; Secondary Cells / Batteries / Power Banks containing Alkaline or other non-acid Electrolytes for use in portable applications; D.C. Supplied Electronic Control gear for LED Modules; Self-Ballasted LED Lamps for General Lighting Services; Fixed General Purpose LED Luminaires; Mobile Phones; Cash Registers; Point of Sale Terminals; Copying Machines / Duplicators; Smart Card Readers; Mail Processing Machines / Postage Machines / Franking Machines and Passport Reader.

BIS has recognized 11 labs to test the notified products. To develop conformity assessment infrastructure in the country a “Scheme for Financial Support for Test Labs” has been announced. DeitY has also come out with a “Scheme for Financial Support for MSMEs” to support Electronic Industry to comply with the provisions of the Order. The Order has resulted into 90% plus compliance testing of notified electronic goods to Indian safety standards at BIS registered labs and more than 1200 manufacturing units have been registered with BIS covering approximately 10,000 products models/series.

A portal entitled “Electronics Standards of India” to bring transparency & make information easily available to stakeholders has been launched facilitating online registration process, surveillance process, access to database of Registered Manufacturing Units and products covered. Regular stakeholder consultations by periodic meetings with stakeholders at various levels including Technical consultations were held under the aegis of Technical Advisory Committee set up for the purpose.

Promotion of indigenous manufacturing of Set Top Boxes (STBs)

The Department is taking steps to promote indigenous manufacturing of Set Top Boxes (STBs) for Cable / DTH TV, keeping in view the huge indigenous requirement on account of roadmap for digitalization of the broadcast sector. Following specific measures have been taken for promoting domestic manufacturing of Set Top Boxes:

- I. A Basic Customs Duty (BCD) of 10% has been imposed on imported STBs w.e.f. 01.03.2013.
- II. The domestic STB manufacturers had to pay CST equivalent to VAT rate (typically 12.5%) since the Multi-System Operators (MSOs) were unable to issue C-Form because these are not sold to the users but installed at the customer's premises on "Right to Use" basis. In this model, an imported STB by the service provider does not require State VAT to be paid. To resolve the issue, the Department of Revenue has issued an O.M dated 13th August, 2014, wherein the facility of form 'C' has been extended to Set Top Boxes which have been defined as goods for use in the "Telecommunication Network" under Section 8(3)(b) of Central Sales Tax Act, 1956. This has addressed the issue of inverted duty faced by domestic manufacturers of STBs over their imported counterparts.
- III. Export incentive of 5% has been provided for export of STBs under Foreign Trade Policy vide DGFT's Public Notice No.51(RE2012)/2009-14 dated 05.03.2013.
- IV. To curb inflow of sub-standard STBs, especially from China mandatory compliance to notified safety standards has been provided for w.e.f. 3rd July 2013.
- V. Development and implementation of Indian Conditional Access System (CAS).

Scheme for National Awards in ESDM Sector

The Department of Electronics & IT has taken a new initiative to recognize the achievements of successful industry in the ESDM sector, to encourage entrepreneurs and to encourage new investments and innovation in the sector. This is a first ever scheme for presentation of National Awards in the Electronics System Design and Manufacturing (ESDM) Sector. The scheme is expected to lead to greater encouragement in electronics sector. The scheme is initially available for three years for every calendar year. As per the provisions of the scheme, a State Level Committee (SLC) has to be constituted at State Level, including Hon'ble MP as one of the members. The SLC will invite applications from

eligible organisation/ entities and send the same to National Level Committee (NLC) for finalization of awards. The first ever National Awards would be given for the calendar year 2013-14.

National Centre of Excellence for Large Area Flexible Electronics (CFLEX)

Large area electronics is an emerging area of electronics which is based on the monolithic integration of electronic components on amorphous substrates which typically results in products that are large in size with length scales ranging from a few centimetres as in sensors, to a few decimetres as in displays and lighting, to several meters as in organic solar cell based panels. This is in contrast to conventional microelectronics where integrated circuits (ICs) are fabricated on crystalline substrates and length scales are typically only a few millimetres. At the heart of this revolution lie two significant capabilities: designing products that are flexible and form fitting, and their manufacturing by printing based processes. The combination of the two may lead to roll-to-roll, large volume and high throughput manufacturing. There are no well established players in flexible electronics at the moment and even those who are actively involved have been in it for a relatively short period. The Indian industry must make use of this opportunity to get a foothold in the emerging market for large area flexible electronics. IIT Kanpur submitted a Detail Project Report (DPR) to set-up National Centre of Excellence in Large Area Flexible Electronics to be set up in IIT Kanpur.

Financial Outlays: The total outlay to set up the CFLEX is Rs 132.99 crore over the period of five years and Rs 111.12 crore will be funded by DeitY. The contribution of IIT Kanpur in the centre will be Rs 21.87 crore.

CFLEX has been approved by the Department and the Administrative Approval issued on 14-11-2014. The grant in aid of Rs. 27.44 crore was also released on 18.11.2014 to IIT-Kanpur.

Development of Indian Conditional Access System (CAS)

A Conditional Access System (CAS) is a system used to limit the access of TV signals to only authorized viewers and forms an integral part of Set Top Boxes (STBs). Conditional Access systems are highly proprietary and dominated by few global companies which is a major impediment in design and development of domestic STBs.

Based on the recommendations of a Committee of Experts, the specifications of the proposed Indian CAS were finalized. After following due tendering processes, M/s. ByDesign India Pvt. Ltd., Bangalore has been shortlisted for the development and implementation of the Indian CAS in association with the Centre for Development of Advanced Computing (C-DAC). C-DAC will be primarily responsible for design review, code review, monitoring, testing and validation of the entire project.

Out of the total project cost of Rs.29.99 crore, Rs.19.79 crore is the DeitY's support amount and remaining amount will be contributed by M/s. ByDesign India Pvt. Ltd., Bangalore.

The main terms of development of Indian CAS are as follows:

- The developed Indian CAS would be integrated for at least 5 operators for at least 250,000 end users, in any combination.
- The domestically produced CAS would be made available to domestic vendors @ USD 0.5 for a period of 3 years as against current market value of nearly USD 2 or more per STB;
- Even after expiry of three years, the developer will always make license available to operators and domestic manufacturers of Head-end and STBs at commercial rate.
- IPR generated out of this project will reside in India so that Government of India has access and complete control to these rights in times of emergency to protect national interest.

Letter of Award was issued to M/s. ByDesign India Pvt. Ltd., Bangalore on 05.11.2014. Tripartite Agreement has been executed between DeitY, C-DAC and M/s. ByDesign India Pvt. Ltd., Bangalore for development and Implementation of Indian CAS on 18.11.2014. CAS system is expected to be built, tested and be ready for integration and deployment within 12 months from the date of issuance of Letter of Award.

Scheme for setting up / up-gradation of Electronic products testing / Quality Control Laboratories

To strengthen the conformity assessment infrastructure, DeitY notified "Scheme for setting up / up-gradation of Electronic product testing / Quality Control Laboratories" on 25th August 2013. The objective of the scheme is to encourage setting up testing facilities by Central / State / Academic Institutions which will be used for evaluating goods under the "Electronics and Information Technology Goods (Compulsory Registration Order, 2012).

The scheme for Grant-in-Aid is open for setting up / up-gradation of upto 15 labs. The total GIA available under the scheme is Rs 150 (lacs) subject to the following:

- For laboratory equipment is Rs.120 Lacs (maximum).

- 25% cost of basic supporting testing infrastructure is Rs. 20 Lacs (maximum).
- Professional Fee/ Expert fee for setting up / up-gradation of laboratories and cost of obtaining recognition/ accreditation / calibration charges thereof, cost for follow up action as well as interim assessments by DeitY is Rs 10 Lakhs (maximum).

Scheme for supporting MSMEs in the electronics sector

The Scheme for supporting MSMEs in the electronics sector aims at providing financial support to MSMEs to promote manufacturing, to build quality into Indian manufacturing & also to encourage exporters. The support under the Scheme will be provided in the form of reimbursement to the manufacturers in the MSMEs. The scheme for providing financial support as Grant in Aid is expected to benefit the manufacturers, domestic industry, exporters in the electronics sector. The Scheme will provide GIA for the following activities:-

- I. Reimbursement of expenses relating to compliance of electronic goods with “Indian Standards”.
- II. Reimbursement of expenses for testing and certification required for export.
- III. Development of Electronic Manufacturing Clusters.

The Scheme is available for 2 years from the date of its notification for the MSMEs, which could be extended based on necessary approvals. The GIA under the scheme would be available for no. of models proposed under the Scheme or till the allocated budget is available for that particular area of the Scheme, whichever is earlier.

Setting up of Incubation Centre in Delhi-NCR: Department has approved project for setting up of an Incubator by Software Technology Parks of India (STPI), New Delhi in association with India Electronics & Semiconductor Association (IESA) and Delhi University (DU). The project is being setup with Grant-in-aid of Rs 21.17 Crore by DeitY. The Electropreneur Park is being set in area of over 10,000sq. Ft. constructed space with state of the art facilities at South Campus, Delhi University. The total project duration to set up the Electropreneur Park is 5 years. DeitY will be providing the funding support required to set up and manage the centre over the initial 5 years, thereafter the project will be run by the implementing agencies in a self-sustaining mode. The project will support 50 start-ups will be benefitted over a period of 5 Years. The 1st instalment of Rs. 3.58 crore released 25-06-2014.

Setting up of Incubation Centre with focus on Medical Electronics at IIT Patna - An Incubation Centre at IIT- Patna with the focus of promoting innovation in the area of Medical Electronics i.e. Micro Electro Mechanical Systems (MEMS: Lab on Chip), Low Cost Medical

Diagnostic System, Low Cost Ultrasound, Electronic Device Reliability and Medical/Industrial X-ray Tubes, Medical Telemedicine related Electronic products has been approved on 11.12.2014. The overall project outlay of this project is Rs 47.10 crore, which is proposed to be implemented through joint funding from DeitY (Rs 22.10 Crore) and Government of Bihar (25.0 Crore) as matching Grant. This incubation centre is being set up in area of 3000 sq meters constructed space. The administrative approval has been issued. The project envisages 45 start-ups over a period of 5 years The Working Group recommendation is presently under consideration of DeitY for approval.

Electronics Incubator by IITM-Kerala and Start-up Village at Cochin, Kerala: The Working Group for development of IP and Innovation in the area of Electronics System Design Manufacturing (ESDM), in its 6th meeting held on 10th December, 2014, recommended the project proposal of Electronics Incubator submitted by Indian Institute of Technology and Management, Thiruvananthapuram, Kerala. The main objectives of the Electronics Incubator is creation of new enterprises focused on Consumer Electronics, Providing entrepreneurs access to infrastructure that facilitates manufacture of electronic hardware in a cost effective and sophisticated manner, Mitigate the risk that start-ups face while manufacturing electronics hardware by providing mentorship, Bridge the time delay taken to absorb new technologies.

The Electronics Incubator will provide mentorship, entrepreneurial trainings and infrastructure for the incubates such as wearable lab, Do It Yourself (DIY) Innovation Centre which consists of Microcontroller & Microprocessor Innovation Centre, Robotics Innovation Centre and Internet of Things (IoT) Innovation Centre, and Fab Lab. The total cost of project is estimated to be Rs 49.91 Crore over a period of 4 years to incubate 40 start-ups, out of which Rs. 24.74 Crore as grants-in-aid from Department of Electronics and Information Technology (DeitY) and the remaining fund Rs. 25.17 Crore from Government of Kerala, IITM-Kerala and Startup Village. Government of Kerala will be providing 25,000 square feet of the Technology Innovation zone at KINFRA Hi-Tech Park, Cochin for establishment of the incubator and these projects will be jointly implemented by IITM Kerala and Startup Village.

Policy for Promotion of Fabless Design Industry: Semiconductors, also known as chips or ICs, are at the heart of any electronics product and constitute around 30% of the total value of the Bill of Material (BOM) and in case of high-end equipment and mobile handsets; this content goes as high as 60%. Semiconductor chip manufacturing is characterized by two type of companies: Integrated Device Manufacturers (IDMs) and Fabless Manufacturers. The IDMs (such as Intel, Texas Instruments) designs, manufactures and sells its own chips while fabless companies (like Qualcomm, Broadcom) designs and sells its chips but gets the chip manufactured by a third-party. Presently, most of the major chip innovations have come from fabless design companies. India has a huge opportunity to develop the fabless design industry in the country. In order to tap this opportunity, this department has formulated a draft policy, was circulated on 30-6-2014 for inter-ministerial consultations. Based upon the comments of Ministry of Finance, the policy is being revised.

Promoting Collaborative Funding in R&D through GITA: To provide funding and support to Industry and Academic institutions for doing collaborative research, a proposal submitted by Global Innovation and Technology Alliance (GITA) has been approved. The project aims to promote Innovation, IP, R&D and commercialization of products, etc. in the ESDM sector by providing funding support to an Industry, for

doing collaborative research with an Academic Institute in the priority areas with a timeline of not more than two years. Sectors and areas of focus would be identified by the DeitY appointed Technical Committee. It is proposed to fund 9 R&D projects under the scheme. Initial list of Countries for this bilateral programme are Canada, Finland, Israel, Japan, South Korea, Spain, Sweden, Taiwan and the UK. The total funding of the project is Rs. 15.6 crore for a period of 2 years. In this regard, administrative approval has already been issued on 14-08-2014 and acceptance of terms and conditions from GITA is awaited.

Supporting research in Medical Electronics through BIRAC: To promote scientific and technological research in Medical Electronics sector in India a proposal submitted by Biotechnology Industry Research Assistance Council (BIRAC) has been approved on 05.11.2014 on the recommendation of Working Group and the administrative approval issued on 17.11.2014. The proposal aims to fund a portfolio of Indian led pilot projects that seems to target innovations in the multi-disciplinary areas comprising of electronics, engineering, medical devices, healthcare, and software, algorithms and information technology. BIRAC has identified 4 potential areas, which are:

- I. Imaging and navigation
- II. Technologies for chronic diseases
- III. Convergence of medical device and bioinformatics
- IV. Outpatient-care and telemedicine

The Total amount requested from DeitY is Rs 10.5 crore (Rs. Ten Crore Fifty Lakhs only).

STQC

1. Establishing Test and Calibration infrastructure at Ajmer

New Test & calibration infrastructure for Solar Photo-voltaic panels and telecom products is being established at Ajmer as a `Greenfield` project.

It will offer services in the following areas-

- Testing services
- Product Development Assistance services
- Metrology services
- Capacity building.