6

**STANDING COMMITTEE ON**

**INFORMATION TECHNOLOGY**
**(2014-15)**

**SIXTEENTH LOK SABHA**

# MINISTRY OF COMMUNICATIONS AND INFORMATION TECHNOLOGY (DEPARTMENT OF ELECTRONICS AND INFORMATION TECHNOLOGY)

## DEMANDS FOR GRANTS
## (2015-16)

## SIXTH REPORT


**LOK SABHA SECRETARIAT**
**NEW DELHI**

*April, 2015/ Vaisakha, 1937 (Saka)*

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**(SIXTEENTH LOK SABHA)**

## MINISTRY OF COMMUNICATIONS AND INFORMATION TECHNOLOGY (DEPARTMENT OF ELECTRONICS AND INFORMATION TECHNOLOGY)

## DEMANDS FOR GRANTS (2015-16)

***Presented to Lok Sabha on 24.04.2015***
***Laid in Rajya Sabha on 24.04.2015***


**LOK SABHA SECRETARIAT**
**NEW DELHI**

*April, 2015/ Vaisakha, 1937 (Saka)*

**CONTENTS**

## COMPOSITION OF THE STANDING COMMITTEE ON INFORMATION TECHNOLOGY (2014-15)

**Shri Anurag Singh Thakur - Chairperson**

**Lok Sabha**

2. Shri L.K. Advani
3. Shri Prasun Banerjee
4. Dr. Sunil Baliram Gaikwad
* 5. Dr. K.C. Patel
6. Shri Hemant Tukaram Godse
7. Dr. Anupam Hazra
8. Dr. J. Jayavardhan
9. Shri P. Karunakaran
10. Shri Virender Kashyap
11. Shri Harinder Singh Khalsa
12. Smt. Hema Malini
13. Shri Keshav Prasad Maurya
14. Ms. Mehbooba Mufti
15. Shri Paresh Rawal
16. Dr. (Smt.) Bhartiben Dhirubhai Shiyal
17. Shri Abhishek Singh
18. Shri D.K. Suresh
19. Shri Ramdas C. Tadas
20. Smt. R. Vanaroja
**21. **VACANT**

**Rajya Sabha**

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23. Shri Salim Ansari
24. Smt. Jaya Bachchan
25. Shri Vijay Jawaharlal Darda
26. Shri Santiuse Kujur
27. Shri Derek O'Brien
28. Dr. K.V.P. Ramachandra Rao
29. Shri Sachin Ramesh Tendulkar
30. Mahant Shambhuprasadji Tundiya
\# 31. Shri Meghraj Jain

**Secretariat**

| | | |
|---|---|---|
| 1. | Shri K. Vijayakrishnan | Additional Secretary |
| 2. | Shri J. M. Baisakh | Director |
| 3. | Smt. Rinky Singh | Executive Assistant |

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* Nominated to the Committee w.e.f. 11.09.2014 *vice* Shri Feroze Varun Gandhi, M.P., *vide* Bulletin Part – II w.e.f. 11.09.2014.

** Shri Deepender Singh Hooda, M.P. Lok Sabha ceased to be a Member of the Committee as he has been shifted to the Committee on Energy *vide* Bulletin Part - II w.e.f. 14.11.2014.

\# Nominated to the Committee w.e.f. 14.01.2015 *vide* Bulletin Part – II dated 16.01.2015.

## ABBREVIATIONS

| | | |
|---|---|---|
| AE | - | Actual Expenditure |
| BCC | - | Basic Computer Course |
| BE | - | Budget Estimate |
| BIRAC | - | Biotechnology Industry Research Assistance Council |
| BHQ | - | Block Head Quarter |
| BNCSCs | - | Bharat Nirman Common Service Centers |
| CAS | - | Conditional Access System |
| CAT | - | Cyber Appellate Tribunal |
| CAREL | - | Core Advisory Group for R&D in the Electronics Hardware Sector |
| CBI | - | Central Bureau of Investigation |
| CCA | - | Controller of Certifying Authority |
| C-DAC | - | Centre for Development of Advanced Computing |
| CGO | - | Central Government Offices |
| C-MET | - | Centre for Materials for Electronics Technology |
| CERT-In | - | Indian Computer Emergency Response Team |
| CRAC | - | Cyber Regulation Advisory Committee |
| CSC | - | Common Service Centres |
| CSIR | - | Council of Scientific and Industrial Research |
| CVD | - | Countervailing Duty |
| DCO | - | Data Centre Operator |
| DAE | - | Department of Atomic Energy |
| DARE | - | Department of Agricultural Research & Education |
| DBT | - | Department of Biotechnology |
| DeitY | - | Department of Electronics and Information Technology |
| DGCI&S | - | Directorate General of Commercial Intelligence and Statistics |
| DGS&D | - | Directorate General of Supplies and Disposals |
| DHQ | - | District Head Quarter |
| DMEP | - | Domestically Manufactured Electronic Products |
| DOEACC | - | Department of Electronics Accreditation of Computer Courses |
| DoS | - | Department of Space |
| DPR | - | Detailed Project Report |
| DTH | - | Direct-To-Home |
| DST | - | Department of Science and Technology |
| DRDO | - | Defence Research and Development Organization |
| EDF | - | Electronic Development Fund |
| EFC | - | Empowered Finance Committee |
| EFC | - | Expenditure Finance Committee |
| EHTP | - | Electronics Hardware Technology parks |
| EMDC | - | Electronic Materials Developments Council |
| EoI | - | Expression of Interest |
| ESDM | - | Electronics Systems Design and Manufacturing |
| ERNET | - | Education and Research Network |
| EMC | - | Electronics Manufacturing Clusters |
| FAB | - | Semiconductor Wafer Fabrication |
| GePNIC | - | Government e-Procurement System of NIC |
| GGE | - | Group of Governmental Experts |
| G2B | - | Government to Business |
| G2C | - | Government to Citizen |
| G2G | - | Government to Government |
| GITA | - | Global Innovation and Technology Alliance |
| HQ | - | Head Quarter |
| IEBR | - | Internal and Extra Budgetary Resource |
| ICT | - | Information and Communication Technology |
| ICTE | - | Information, Communication Technology and Electronics |
| ICT4D | - | ICT for Development |
| ITA | - | Information Technology Agreement |
| ITeS | - | Information Technology enabled Services |

| | | |
|---|---|---|
| MHRD | - | Ministry of Human Resource Development |
| MEMS | - | Micro Electro Mechanical Systems |
| MLA | - | Media Lab Asia |
| MoES | - | Ministry of Earth Sciences |
| MoU | - | Memorandum of Understanding |
| MMPs | - | Mission Mode Projects |
| M-SIPS | - | Modified Special Incentive Package Scheme |
| NASSCOM | - | National Association of Software and Services Companies |
| NCRB | - | National Crime Records Bureau |
| NCCC | - | National Cyber Co-ordination Centre |
| NCETIS | - | National Centre of Excellence in Technology for Internal Security |
| NIELIT | - | National Institute of Electronic and Information Technology |
| NeGD | - | National e-Governance Division |
| NeGP | - | National e-Governance Plan |
| NeGAP | - | National e-Governance Action Plan |
| NEBPS | - | North East BPO Promotion Scheme |
| NER | - | North Eastern Region |
| NIC | - | National Informatics Centre |
| NICSI | - | National Informatics Centre Services Inc |
| NIXI | - | National Internet Exchange of India |
| NKN | - | National Knowledge Network |
| NO | - | Network Operator |
| NCPUL | - | National Council for Promotion of Urdu Language |
| NLP | - | Natural Language Processing |
| NSM | - | National Supercomputing Mission |
| NTP | - | National Time Protocol |
| OLED | - | Organic LED |
| PCs | - | Personal Computers |
| PoPs | - | Point of Presence |
| PoC | - | Proof of Concept |
| R/C | - | Rate Contract |
| R&D | - | Research and Development |
| RE | - | Revised Estimate |
| SAMEER | - | Society for Applied Microwave Electronics Engineering and Research |
| SCA | - | Service Centre Agency |
| SDAs | - | State Designated Agencies |
| SDC | - | State Data Centre |
| SHQ | - | State Head Quarter |
| SICLDR | - | Semiconductor Integrated Circuits Layout-Design Registry |
| SIPS | - | Special Inventive Package Scheme |
| SMEs | - | Small and Medium Enterprise |
| SPV | - | Special Purpose Vehicle |
| STB | - | Set Top Box |
| STePs | - | Specialized Training for e-Governance Programmes |
| STQC | - | Standardisation, Testing and Quality Certification |
| STPI | - | Software Technology Park of India |
| SWAN | - | State Wide Area Network |
| TDIL | - | Technology Development for Indian Languages |
| TDC | - | Technology Development Council |
| ToT | - | Transfer of Technology |
| UCs | - | Utilisation Certificates |
| USD | - | United States Dollar |
| UT | - | Union Territory |
| VGF | - | Viability Gap Funding |
| VSAT | - | Very Small Aperture Terminal |
| WTO | - | World Trade Organization |

## INTRODUCTION

I, the Chairperson, Standing Committee on Information Technology (2014-15), having been authorized by the Committee to submit the Report on their behalf, present this Sixth Report on Demands for Grants (2015-16) of the Ministry of Communications and Information Technology (Department of Electronics and Information Technology).

2. The Standing Committee on Information Technology (2014-15) was constituted on 31st August, 2014. One of the functions of the Standing Committee, as laid down in Rule 331E of the Rules of Procedure and Conduct of Business in Lok Sabha, is to consider the Demands for Grants of the Ministry/Department concerned and to make a Report on the same to the House.

3. The Committee considered the Demands for Grants pertaining to the Ministry of Communications and Information Technology (Department of Electronics and Information Technology) for the year 2015-16 which were laid on the Table of the House on 18th March, 2015. The Committee took evidence of the representatives of the Department of Electronics and Information Technology on 8th April, 2015.

4. The Report was considered and adopted by the Committee at their sitting held on 20th April, 2015.

5. The Committee wish to express their thanks to the officers of the Department of Electronics and Information Technology for appearing before the Committee and furnishing the information that the Committee desired in connection with the examination of the Demands for Grants.

6. The Committee would also like to place on record their appreciation of the assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.

7. For facility of reference and convenience, Recommendations/Observations of the Committee have been printed in bold letters in Part-II of the Report.

**New Delhi;**
**21 April, 2015**
**01 Vaisakha, 1937 (Saka)**

**ANURAG SINGH THAKUR,**
**Chairperson,**
**Standing Committee on**
**Information Technology.**

# PART – I

# REPORT

## I. Introductory

The Department of Electronics and Information Technology (DeitY) under the Ministry of Communications and Information Technology is responsible for the 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). The Vision of the Department is e-Development of India as the engine for transition into a developed nation and an empowered society. The Mission is to promote e-Governance for empowering citizens, promoting the inclusive and sustainable growth of the Electronics, IT & ITeS industries, enhancing India's role in Internet Governance, adopting a multipronged approach that includes development of human resources, promoting R&D and innovation, enhancing efficiency through digital services and ensuring a secure cyber space.

2. 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 organizations/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.

3. During the year 2015-16, all the ongoing schemes/programmes/projects, being implemented by DeitY, have been amalgamated under the 'Digital India Programme' – a programme implemented by the entire Government and being coordinated by the Department of Electronics & Information Technology (DeitY). However, each individual element under the Digital India Programme stands on its own and it is also part of the entire Government. In addition to these schemes, other Autonomous Societies/Bodies, *viz*. SAMEER, ERNET, NIELIT, EMDC, C-MET and MLA have been included under the head C-DAC and other Autonomous Societies/Bodies during the year 2015-16. The Department also have two Attached Offices, *viz*. NIC and STQC to carry out the business allocated to them.

## II. Implementation status of the recommendations contained in the Second Report of the Committee on Demands for Grants (2014-15) of the Department of Electronics and Information Technology

4. The Second Report of the Standing Committee on Information Technology on the 'Demands for Grants' of the Department of Electronics and Information Technology for the year 2014-15 was presented to Lok Sabha/laid in Rajya Sabha on 22nd December, 2014. Under Rule 34(1) of 'Rules of Procedure of Departmentally Related Standing Committees (DRSCs)', the Ministry/Department concerned is required to furnish a statement showing the action taken by them on the observations/recommendations contained in the Report of the Committee within three months from the date of the

presentation of the Report. The requisite Action Taken Notes on the observations/recommendations contained in the Second Report on the Demands for Grants (2014-15) is yet to be submitted by the Department.

## III. BUDGET ANALYSIS

### i. Demands for Grants No.16 of Department of Electronics and Information Technology (DeitY) for the year 2015-16

5. The budget estimate allocation for DeitY under Plan and Non-Plan for the year 2015-16 is as under:-

(₹ in crore)

| | BE 2015-16 | | |
|---|---|---|---|
| | Plan | Non-Plan | Total |
| Revenue | 2440.85 | 62.00 | 2502.85 |
| Capital | 127.15 | - | 127.15 |
| Total | 2568.00 | 62.00 | 2630.00 |

* Tentative

6. Activity-wise classification of budget provisions for the Financial Year 2015-16 (Plan & Non-Plan) is as under:-

(₹ in crore)

| Sl. No. | Schemes/ Programmes (after rationalization) | BE 2015-16 | | |
|---|---|---|---|---|
| | | Plan | Non-Plan | Total |
| | Digital India Programme* | 1586.80 | 0.00 | 1586.80 |
| | National Informatics Centre (NIC) | 700.00 | 0.00 | 700.00 |
| | C-DAC & Other Autonomous Societies/Bodies** | 123.20 | 11.86 | 135.06 |
| | Standardisation Testing and Quality Certification (STQC) | 100.00 | 7.00 | 107.00 |
| | DeitY Secretariat | 58.00 | 39.04 | 97.04 |
| | Other Schemes | 0.00 | 1.00 | 1.00 |
| | Foreign Trade and Export | 0.00 | 3.10 | 3.10 |
| | **Total** | **2,568.00** | **62.00** | **2,630.00** |

7. Detailed Annual Plan proposal and the approved Gross Budgetary Support (GBS) for the year 2015-16 are as under:-

(₹ in crore)

| Sl. No | Scheme/Programme | Annual Plan (2015-16) | | | |
|---|---|---|---|---|---|
| | | Proposed | | Approved | |
| | | Outlay | Gross BS | Outlay | Gross BS |
| 1 | National Informatics Centre (NIC) | 1300.00 | 1300.00 | 700.00 | 700.00 |
| 2 | STQC Programme | 125.00 | 125.00 | 100.00 | 100.00 |
| 3 | Digital India Programme | 4302.29 | 4034.10 | 1854.99 | 1586.80 |
| | Digital India Programme and Manpower Development * | 907.00 | 907.00 | 714.80 | 714.80 |
| | Electronic Governance | 994.00 | 994.00 | 450.00 | 450.00 |
| | Technology Development Council Projects | 150.00 | 150.00 | 30.00 | 30.00 |
| | Micro-Electronics and Nano-Tech Prog. | 100.00 | 100.00 | 35.00 | 35.00 |
| | Convergence, Comm. & Strategic Electronics | 90.00 | 90.00 | 15.00 | 15.00 |
| | R&D in Medical Electronics & Health Informatics | 15.00 | 15.00 | 6.00 | 6.00 |
| | Cyber Security (incl. CERT-In, IT Act) | 297.00 | 297.00 | 85.00 | 85.00 |

| | | | | | |
|---|---|---|---|---|---|
| | Promotion of IT & ITeS Industries/Electronics & IT Hardware mfg. | 478.00 | 478.00 | 74.00 | 74.00 |
| | Facilitation of setting-up of Integrated Townships | 0.10 | 0.10 | 0.00 | 0.00 |
| | Technology Development for Indian Language | 140.00 | 140.00 | 20.00 | 20.00 |
| | National Knowledge Network | 855.00 | 855.00 | 150.00 | 150.00 |
| | Controller of Certifying Authority (CCA) | 8.00 | 8.00 | 7.00 | 7.00 |
| **4** | **C-DAC & Other Autonomous Societies/Bodies** | **1400.64** | **770.90** | **752.94** | **123.20** |
| | Centre for Dev. of Advanced Computing (C-DAC) | 844.50 | 574.50 | 345.00 | 75.00 |
| | Society for Applied Microwave Electronics Engg & Research (SAMEER) | 142.00 | 94.00 | 68.00 | 20.00 |
| | Electronics Materials Development Council (EMDC) | 77.50 | 60.00 | 10.00 | 10.00 |
| | Centre for Materials for Electronics Technology (C-MET) | | | 27.50 | 10.00 |
| | Educational Research NetWork (ERNET) | 70.10 | 0.10 | 70.10 | 0.10 |
| | NIELIT (erstwhile DOEACC ) | 236.54 | 12.30 | 232.24 | 8.00 |
| | Media Lab Asia | 30.00 | 30.00 | 0.10 | 0.10 |
| **5** | **Secretariat-Economic Services (DeitY)** | **55.00** | **55.00** | **58.00** | **58.00** |
| **6** | **National e-Governance Action Plan (NeGAP)**** | **3765.00** | **3765.00** | **0.00** | **0.00** |
| | **Grand Total** | **10947.93** | **10050.00** | **3465.93** | **2568.00** |

* Nomenclature of erstwhile Manpower Development Programme has been changed in view of its inclusion with Digital India Programme.

** NeGAP scheme has been transferred to States for implementation from their own resources from the FY 2015-16 onwards.

## ii. Plan allocations and utilizations of the Twelfth Five Year Plan

8. The Budget Estimate for the Twelfth Five Year Plan (2012-17) is ₹ 36,078.00 crore. The Plan allocations and utilization for the period 2012-13 to 2015-16 are as under:-

(₹ in crore)

| Financial Year | Proposed | BE | RE | Actual Utilization | %age Utilization w.r.t. RE | %age Utilization w.r.t. BE |
|---|---|---|---|---|---|---|
| **2012-13** | 10491.33 | 3000 | 2000 | 1859.88 | 92.99% | 61.99% |
| **2013-14** | 6927.84 | 3000 | 2140 | 2117.89 | 98.96% | 70.60% |
| **2014-15** | 12133.49 | 3815 | 3600 | 3471.71 * | 96.00% | 91.00% |
| **2015-16** | 10947.93 | 2568 | - | - | - | - |

*Expenditure as on 31.03.2015.

9. The monthly/quarterly expenditure targets envisaged by DeitY for the year 2015-16 are as under:-

**(₹ in crore)**

| | 1st Quarter | | | | 2nd Quarter | | | | 3rd Quarter | | | | 4th Quarter | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Apr | May | June | 1st Qtr Total | July | Aug | Sept | 2nd Qtr Total | Oct | Nov | Dec | 3rd Qtr Total | Jan | Feb | Mar | 4th Qtr Total | |
| Plan | 102.60 | 173.65 | 255.50 | 531.75 | 154.70 | 209.70 | 437.70 | 802.10 | 160.55 | 181.40 | 255.40 | 597.35 | 228.60 | 232.60 | 175.60 | 636.80 | 2568.00 |
| Non-Plan | 9.50 | 7.90 | 4.50 | 21.90 | 3.91 | 3.91 | 12.21 | 20.03 | 3.28 | 3.26 | 4.76 | 11.30 | 3.25 | 3.45 | 2.07 | 8.77 | 62.00 |
| **TOTAL** | **112.10** | **181.55** | **260.00** | **553.65** | **158.61** | **213.61** | **449.91** | **822.13** | **163.83** | **184.66** | **260.16** | **608.65** | **231.85** | **236.05** | **177.67** | **645.57** | **2630.00** |

## iii. Budgetary Provision for the North-Eastern Region (NER) and Sikkim

10. Allocation during the 1st four years of the 12th Plan for NER is as follows:-

(₹ in crore)

| Financial Year | BE | RE | Actuals |
|---|---|---|---|
| **2012-13** | 300.00 | 200.00 | 181.91 |
| **2013-14** | 300.00 | 214.00 | 220.59 |
| **2014-15** | 382.00 | 360.00 | 360.00* |
| **2015-16** | 257.00 | - | - |

* Tentative

11. Budgetary allocation for NER and Sikkim for the year 2015-16 is as under:-

| S.No. | Programme/Scheme | Plan *(₹ in Crore)* | Purpose |
|---|---|---|---|
| i) | Digital India Programme | 167.00 | As per Government instructions, 10% of the Central Plan Allocation is being earmarked and spent for the schemes for the benefit of the North Eastern Region and Sikkim. |
| ii) | National Informatics Centre (NIC) | 70.00 | |
| iii) | STQC | 7.00 | |
| iv) | C-DAC & Other Autonomous Societies/Bodies | 13.00 | |
| **Total** | | **257.00** | |

12. The Committee were informed that the Department had taken some initiatives to overcome the impediments encountered in implementing the schemes/projects in the North Eastern region, which broadly related to providing connectivity to remote locations through technologies like Very Small Aperture Terminals (VSAT) and to provide solar back-up to address the power shortage problem at Common Service Centres (CSCs). According to DeitY, it was decided in the 7th Empowered Committee Meeting that connectivity through VSATs would be provided for CSCs in North-Eastern States and difficult areas where connectivity through BSNL is unavailable. The project was approved with a total cost of ₹ 49.88 Crore, to be implemented by National Informatics Centre Service Inc. (NICSI) and CSC e-Governance Services India Ltd. (CSC-SPV). CSC-SPV is providing and managing roll out of VSATs and bandwidth & transponder / hub infrastructure is being provided by NICSI. The status of the project as on February 2015 is as under:-

| State/UT | VSATs Planned | WPC Cleared | Installed VSATs |
|---|---|---|---|
| Arunachal Pradesh | 90 | 90 | 79 |
| Assam | 354 | 347 | 272 |
| HP | 361 | 334 | 235 |
| J&K | 37 | 34 | 25 |
| Jharkhand | 326 | 325 | 245 |
| Manipur | 355 | 349 | 263 |
| Meghalaya | 147 | 147 | 140 |
| Mizoram | 136 | 135 | 116 |
| Nagaland | 127 | 96 | 36 |
| Rajasthan | 167 | 167 | 146 |
| Tripura | 145 | 144 | 118 |
| Uttarakhand | 207 | 206 | 194 |
| **Total** | **2452** | **2374** | **1869** |

13. To address the power shortage problem at CSCs, DeitY have proposed that the State Designated Agencies (SDAs) in the North-East & difficult States may provide solar power backup to CSCs facing acute power problems, including non-availability of power for less than 4 hours in a day or bad quality of power. Under the scheme, while the Ministry of New & Renewable Energy, GoI (MNRE) would provide 90% subsidy on the actual capital expenditure of complete solar power systems required, including comprehensive maintenance for a period of 5 years, the remaining 10% of the subsidy would be funded by the State Government. The status of proposals submitted & approved by MNRE is as below:-

a. MNRE has approved Solar Power back-up proposal of Manipur, Meghalaya, Mizoram and Nagaland till date.
b. 351 and 217 solar power back-up units have been installed and commissioned at CSCs in Manipur and Mizoram, respectively.
c. Himachal Pradesh, Assam and J&K have submitted their proposals to MNRE for enabling Solar power back-up at CSCs and are under consideration of MNRE.
d. Arunachal Pradesh has to re-submit the proposal as per the revised benchmark set by MNRE.
e. Uttarakhand and Tripura are expected to submit their proposals in this financial year 2015-16.

Now 1869 CSCs have been provided with connectivity through VSATs and are providing services to the citizens. Similarly, 568 CSCs got solar power backup in the region.

14. Under the Cyber Security Programme, efforts are being made to promote R&D activities and Cyber Security awareness and training at various North East institutions. The budget allocated during 2013-14 (₹ 1crore) & 2014-15 (₹ 4 crore) for the Cyber Security activities under North East head has been stated to be fully utilized.

15. The Committee have been informed that under the Digital India Programme, a North East BPO Promotion Scheme (NEBPS) has been approved to incentivize BPO Operations in NER for creation of employment opportunities for the youth and growth of IT-ITES Industry. The Administrative Approval for implementation of the NEBPS to incentivize establishment of 5000 seats, with capital support in the form of Viability Gap Funding (VGF), with an outlay of ₹ 50 crore (Rupees fifty crore only) for the remaining period of the 12$^{th}$ Five Year Plan, i.e. 31.03.2017 has been issued on 30$^{th}$ January 2015. The Software Technology Parks of India (STPI), an autonomous society under DeitY, has been designated as the Nodal Agency for implementation of the NEBPS. The Request For Proposal (RFP) document for open bid of NEBPS is stated to be under finalization.

## iv. Internal and Extra Budgetary Resources (IEBR)

16. The consolidated position of IEBR for the past two years, i.e. 2013-14 and 2014-15 is as under:-

| Name of the Society | 2013-14 | | | 2014-15 | | |
|---|---|---|---|---|---|---|
| | BE | RE | Actuals | BE | RE | Actuals (up to Feb'15) |
| NIELIT | 146.66 | 169.94 | 202.05 | 178.58 | 202.01 | 174.87 |
| ERNET | 90.00 | 45.00 | 47.51 | 75.00 | 60.00 | 43.40 |
| STPI/EHTP | 204.53 | 170.13 | 168.41 | 226.20 | 188.38 | 140.15 |
| C-DAC | 242.00 | 221.00 | 230.11 | 254.00 | 254.00 | 225.40 |
| SAMEER | 43.00 | 40.00 | 21.64 | 45.00 | 48.00 | 17.80 |
| C-MET | 16.40 | 20.00 | 20.58 | 17.00 | 17.00 | 24.70 |
| **Total** | **742.59** | **666.07** | **690.30** | **795.78** | **769.39** | **626.32** |

Note: The IEBR achievements for the month of March'15 is yet to be received from the Societies.

17. The proposed IEBR and the targets set under various schemes for the year 2015-16 are as under:-

| Name of the Society | 2015-16 | |
|---|---|---|
| | Proposed | Target |
| NIELIT | 224.24 | 224.24 |
| ERNET | 70.00 | 70.00 |
| STPI/EHTP | 268.19 | 268.19 |
| C-DAC | 270.00 | 270.00 |
| SAMEER | 48.00 | 48.00 |
| C-MET | 17.50 | 17.50 |
| **Total** | **897.93** | **897.93** |

## IV. SCHEMES/PROJECTS OF DEITY

### A. National Informatics Centre (NIC)

18. The 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. 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.

19. As against the proposed allocation of ₹ 1300 crore, the BE provided for the year 2015-16 for NIC is ₹ 700 crore. The details of BE, RE and actual expenditure (AE) in respect of NIC are as under:-

(₹ in crore)

| Financial Year | BE | RE | AE |
|---|---|---|---|
| 2013-14 | 830.00 | 749.10 | 744.11 |
| 2014-15 | 800.00 | 800.00 | 777.03 crore* |
| 2015-16 | 700.00 | - | - |

* As on 31.03.2015.

20. NIC's main focus is in providing the latest Sate-of-the-art ICT infrastructure. The Committee have been informed that manpower has been a big constraint for the Organization. As per the IT requirement of the State/District, it has become difficult for NIC to sustain the number of projects with same manpower now. The other major constraint is stated to be the basic infrastructure across the country to match with its massive expansion of activities.

21. To strengthen the technical manpower in NIC, a proposal (Cabinet Note) has been mooted by the Department for the creation of 1407 posts at different levels of Scientific and Administrative cadre. The break-up of positions of 1407 posts across different levels is as below:-

| No. of posts | Designation |
|---|---|
| 30 | Senior level experts to support MMPs in the DeitY and Central line Ministries |
| 44 | Scientist 'E' and 'F' |
| 62 | Scientist 'D' |
| 120 | Scientist 'C' |
| 178 | Scientist 'B' |
| 309 | Scientific Officer/Engineer 'SB' |
| 554 | Scientific/Technical Assistants |
| 110 | Administrative Staff at different levels" |

22. Some of the recent steps taken to upgrade NIC include setting up of new NIC Cloud at Delhi, approval of new Data Centre at Bhubaneshwar, upgrading NICNET by linking it with NKN, State Informatics Offices and District Informatics Offices in new States and new districts created across the country, support for new

Ministries/Departments and Central Government organizations across the country, e-office and e-procurement infrastructure for the whole of Government, etc.

## B. Digital India Programme

23. The 'Digital India Programme' is an umbrella programme which amalgamates all the ongoing schemes/programmes/projects being implemented by DeitY. It weaves together a large number of ideas and thoughts into a single, comprehensive vision so that each of them can be implemented as part of a larger goal. Each individual element stands on its own, but is also part of the entire Government.

24. The vision of Digital India is centered on three key areas, *viz*., (i) Infrastructure as a Utility to Every Citizen; (ii) Governance and Services on Demand; and (iii) Digital Empowerment of Citizens. The programme aims to provide the much needed thrust to the nine pillars of growth areas, *viz*., (i) Broadband Highways, (ii) Universal Access to Phones, (iii) Public Internet Access Programme, (iv) e-Governance – Reforming Government through Technology, (v) e-Kranti - Electronic Delivery of Services, (vi) Information for All, (vii) Electronics Manufacturing, (viii) IT for Jobs and (ix) Early Harvest Programmes. The details of BE, RE and actual expenditure components of this programme being implemented by DeitY are:-

(₹ in crore)

| Sl. No. | Name of the Scheme/ Programme<br><br>Digital India Programme | 2013-14 | | | 2014-15 | | | 2015-16 | |
|---|---|---|---|---|---|---|---|---|---|
| | | BE | RE | AE | BE | RE | AE (Tentative as on 23.03.2015) | Proposed | Allocated |
| 1. | Digital India Programme and Manpower Development | 150 | 107 | 106.82 | 660 | 660 | 390.21 | 907.00 | 714.80 |
| 2. | Electronic Governance | 700 | 385 | 378.92 | 475 | 479.92 | 209.63 | 994.00 | 450.00 |
| 3. | Technology Development Council Projects | 85 | 50 | 49.48 | 50 | 50 | 45.08 | 150.00 | 30.00 |
| 4. | Micro-Electronics and Nano-Tech Prog. | 100 | 57 | 56.84 | 75 | 75 | 71.34 | 100.00 | 35.00 |
| 5. | Convergence, Comm. & Strategic Electronics | 30 | 15.75 | 15.75 | 26 | 26 | 25.79 | 90.00 | 15.00 |
| 6. | R&D in Medical Electronics & Health Informatics | 10 | 7.75 | 7.75 | 10 | 9 | 4.87 | 15.00 | 6.00 |
| 7. | Cyber Security (incl. CERT-In, IT Act) | 54.37 | 42.37 | 41.22 | 120 | 62 | 53.14 | 297.00 | 85.00 |
| 8. | Promotion of IT & ITeS Industries/Electronics & IT Hardware mfg. | 152.50 | 14.20 | 10.03 | 95 | 80.08 | 60.24 | 478.00 | 74.00 |
| 9. | Facilitation of setting-up of Integrated Townships | 0.10 | 0.10 | 0 | 0.10 | 0 | 0 | 0.10 | 0.00 |
| 10. | Technology Development for Indian Language | 35 | 18 | 18 | 25 | 25 | 24.09 | 140.00 | 20.00 |
| 11. | National | 360 | 352.23 | 352.23 | 300 | 300 | 300 | 855.00 | 150.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Knowledge Network | | | | | | | | |
| 12. | Controller of Certifying Authority (CCA) | 6 | 6 | 4.04 | 8 | 7 | 4.75 | 8.00 | 7.00 |

25. On being asked about the impact of the reduced allocation on some of the major schemes under the 'Digital India Programme' like Technology Development Council Projects, Micro-Electronics and Nano-Tech Programme, R&D in Medical Electronics & Health Informatics, Cyber Security (incl. CERT-In, IT Act), Promotion of IT & ITeS Industries/Electronics & IT Hardware manufacturing, Technology Development for Indian Language and National Knowledge Network, the Department, in a written note, submitted as under:-

> "The budgetary allocation under Technology Development Council (TDC) Projects Budget Head is being utilized for supporting R&D activities in six different programmes, *viz*. (i) Electronics System Development & Applications covering industrial electronics and automation, (ii) High Performance Computing, (iii) Emerging areas in IT, (iv) Innovation Promotion & IPR (v) Free and Open Source Software (FOSS) and (vi) Information Technology Research Academy (ITRA). The drastic cut in the budgetary allocation of TDC Projects from ₹ 50.0 crore in 2014-15 to ₹.30.0 crore in 2015-16, against the projection of ₹ 150.0 crore in 2015-16 for meeting the requirement of committed expenditure in the above mentioned six programmes, is going to have very adverse impact on the R&D activities being supported under these programmes by DeitY.
>
> The Electronics System Development & Applications (ESDA) Division has supported R&D activities in the different areas of industrial and service sectors such as power electronics, transportation, agriculture, process industries, Paper, Tea, Jute, Steel, etc. industrial automation affecting the economy of the country, through ESDA Sub Head under TDC Budget Head till 2014-15. It may be noted that based on the successful completion of R&D projects and demonstration of building block technologies for Industrial Automation and Intelligent Transportation System, a number of technology transfers have been signed during the year 2014-15 leading to commercialization of the indigenous technologies in the country. With regard to the ESDA Division, we had projected requirement of ₹ 34.0 crore for the year 2015-16. This included our commitment of about ₹ 28.0 crore for the ongoing projects and remaining amount of ₹ 6.0 crore for taking up new projects. Based on these projections, ESDA Division has identified thrust areas and given call for new project proposals from R&D and academic institutions through DeitY website. However, considering the allocation of ₹ 30.0 crore for overall TDC projects during 2015-16, an allocation of about ₹ 6.0 crore is anticipated for ESDA Sub Head. Ministry of Finance will be requested for providing more funds for TDC Projects Head at RE stage.
>
> Major initiatives in the identified thrust areas of Medical Electronics and Health Informatics would not be taken up due to drastic cut in allocation.
> The allocation for the Cyber Security programme was in line with the Department's total allocation.
>
> The budget proposed for Cyber Security programme is to take care of the requirement of Indian Computer Emergency Response Team (CERT-In) (operational expenditure), Cyber Appellate Tribunal (CAT) (operational expenditure) and Cyber Security R&D (Grant-in-aid) and implementation of two key initiatives. As part of implementation of National Cyber Security Policy, two

key initiatives related to creation of mechanisms for security threat early warning and response to security threats are being taken up for priority implementation. These key initiatives include establishment of (i) National Cyber Co-ordination Centre (NCCC) for generating necessary situational awareness on cyber attacks and (ii) Botnet Cleaning and Malware Analysis Centre for detection and cleaning of malware-infected computer systems. The reduction of the allocation will have an impact on the implementation of the key initiatives which may hamper the pace of building a safe cyber eco-system in the country.

The growth of electronics manufacturing in the country is one of the pillars of Digital India Programme and National Policy on Electronics had also laid down to accelerate the domestic electronics manufacturing. Various policy schemes such as M-SIPS; EMC; EDF and other programmes are in operation, which are at ripe stage. The disbursement of grants; incentives as enunciated in the Schemes announced by the Government to the Industry on fulfillment of requisite parameters is critical for the growth of electronics industry as it would instill confidence in the Investors.

The reduced allocation for the Technology Development for Indian Language project would definitely hamper the progress of various technologies which are in the advanced stage of development under consortia mode wherein each consortia is having 10-12 consortium partners spreading across the country addressing the languages of their region as a part of the project. The constraints due to non-availability of budget would lead to the following :

Trained manpower in this area is not available in the open market as it is an inter-disciplinary area of research. The computer scientists trained under the project specifically for the research being undertaken have left the project which has resulted in shortfall of the targets.

Projects are being unduly time over run without productive out-comes.

The delays in implementation of consortia projects have cumulative effect on the pace of overall technology development in this area."

e-Locker

26. e-Locker, envisaged as a part of Digital India vision, is an ecosystem with collection of repositories and gateways for issuers to upload the documents in the digital repositories, requesters to access the documents and a digital locker space for each resident to access his/her documents from the repositories or upload legacy documents. In this regard, the Secretary, in evidence submitted as under:-

"Beta release of Digital Locker system is done to provide private space on a public cloud to each citizen where he/she can keep public records and can even exchange it for availing various services."

27. The components of the Digital India Programme are dealt with in the succeeding paragraphs:-

i. Digital India Programme and Manpower Development

28. This programme especially targets HRD activities to ensure availability of trained human resources for the manufacturing and service sectors of electronics and IT industry. Initiatives include identifying gaps emerging from the formal sector and planning programmes in non-formal and formal sectors for meeting these

gaps. Further, this includes Skill Development in IT initiatives in pursuance of the National Skill Development Policy which has set a target of skilling 10 million persons by 2022 in the domain of Electronics & IT and related areas. Internet Governance component of this programme involves development and application by governments, the private sector and civil society in their respective roles of shared principles, norms, rules, decision-making procedure and programmes that shape the evolution and use of the Internet. The objective of IT for Masses component of the programme is empowerment of women and development of SC/ST using ICT.

29. Regarding the number of persons that are skilled under the 'Skill Development in IT' initiative, the Committee have been informed that the Department through their Autonomous bodies, *viz*. National Institute of Electronics and Information Technology (NIELIT), Centre for Development of Advanced Computing (CDAC) and other implementing agencies have achieved skilling target of 371211 persons who are registered / trained / undergoing training till February 2015. Further, NIELIT also trained 25935 persons in Basic Computer Course (BCC) of 40 hrs duration.

30. The following schemes/activities pertaining to Human Resource Development for Electronics and ICT sector that have been targeted and have been approved/under formulation in DeitY are as under:-

I. Post Graduate and Doctorate Level

This scheme has been formulated to give a thrust to Research in areas of Electronic System Design and Manufacturing (ESDM) and IT/IT Enabled Services (ITES) [the PhD Scheme now renamed as the "Visvesvaraya PhD Scheme for Electronics and IT"]. The objective of the above scheme is to generate 1500 PhDs for each of ESDM and IT/ITES sectors over a period of 5 years, in order to promote innovation and development of new products in IT/ITES and ESDM sectors. Government has approved implementation of the PhD Scheme at a total estimated cost of ₹ 401 crore (Rupees Four Hundred one crore only) over a period of nine years in February 2014. The Scheme was launched since academic-year 2014-15, and the Academic Committee (for the PhD Scheme) has approved support to 291 full time and 38 part time PhDs at different Institutions as of January 2015.

II. Graduate level

This Scheme has been formulated to provide Financial Assistance for setting up of Electronics and ICT Academies

The objective of the scheme is to set up seven (07) Electronics and ICT Academies as a unit in IITs, IIITs, NITs, etc., for faculty/mentor development/upgradation to improve the employability of the graduates/diploma holders in various streams, through active collaboration of States/UTs with financial assistance from the Central Government. Electronics and ICT Academy would aim to provide specialized training to the faculties of Engineering, Arts, Commerce & Science colleges, Polytechnics, etc, by developing state-of-the-art facilities. The Scheme has been approved on 14.11.2014 with a total outlay of ₹ 147.48 crore over a period of five years. Empowered Committee under the Chairmanship of Secretary, DeitY, during its meeting held on 16-03-2015, has approved setting up of three Electronics and ICT Academies in the IIITDM, Jabalpur(Madhya Pradesh), NIT, Warangal(Telangana) and NIT, Patna(Bihar).

III. Vocational, Skill development level

(i) Scheme for financial assistance to States/UTs for Skill Development in Electronics System Design and Manufacturing (ESDM) sector

A 'Scheme for Financial Assistance to six (06) States/UTs for Skill Development in Electronics System Design and Manufacturing (ESDM) sector' with a target of skilling 90,000 candidates (in five levels) at a total outlay of ₹ 113.77 crore with Grant-in-support of ₹ 100.00 crore (approx.) has been approved. An 'Empowered Committee' has recommended the proposals of seven States, viz. Andhra Pradesh(including Telengana), Jammu & Kashmir, Karnataka, Kerala(for 3 levels only), Punjab, Uttarakhand and Uttar Pradesh (for two levels only). So far, 47 courses have been identified by the Expert Committee for rollout of the Scheme. So far, 6487 candidates have been registered / trained / undergoing training.

(ii) 'Skill Development in Electronics Hardware' being implemented by NCPUL/NIELIT Chandigarh

The project has been approved for a duration of 3 years for conducting One-year Diploma course jointly by National Council for Promotion of Urdu Language (NCPUL) and NIELIT, Chandigarh for training 10,000 candidates. The training is being conducted at 50 select NCPUL centres where requisite training facilities has been set up and trained faculty is being provided by NIELIT.

(iii) Efforts to generate greater participation of Industry through Sector Skill Councils – Electronics, Telecom, IT/ITeS

DeitY is actively associating and supporting the various skill development activities of the following Sector Skill Councils (SSCs) concerning the domains addressed by this Department:

i. Sector Skill Council: Electronics
ii. Sector Skill Council: IT-ITeS
iii. Sector Skill Council: Telecom

The above Sector Skill Councils have taken up various courses for skilling of candidates in their respective domains. During the F.Y. 2014-15 the details of persons trained by Electronics & Telecom SSCs are as below:

a. Sector Skill Council: Electronics – Candidates trained/enrolled/undergoing training so far under the STAR Scheme- 15,668.
b. Sector Skill Council: IT-ITeS – Candidates trained/enrolled/undergoing training Persons so far under the STAR Scheme – 3,04,673 and under other Projects - 20,810.
c. Sector Skill Council: Telecom – Candidates trained/enrolled/undergoing training Persons so far under the STAR Scheme - ~ 2,10,000.

IV. Niche Areas

(i) Information Security Education and Awareness (ISEA) Project

The ISEA Project which is aimed at generation of manpower in the area of Information Security at various levels, train government officials and create mass awareness was completed on 31.3.2014 under which more than 42,000 students were trained in various formal and non-formal course at various academic institutions, NIELIT and CDAC; and more than 500 awareness workshops were conducted throughout the country. Phase-II of the project has been approved with an outlay of ₹ 96.08 crore to be implemented over a period of 5 years w.e.f. 01.4.2014. Under the ISEA Phase-II, 1.14 lakh persons are proposed to be trained under formal and non-formal courses, faculty training, etc. In addition, about 400 Paper publications are expected. The project also aims to provide training to more than 13,000 Government officials and creating mass information security awareness.

(ii) Capacity building in the areas of Electronic Product Design and Production Technology

The project has been initiated for development of human resource at various levels, including Certificate, Diploma, Post Graduate and Research Professionals with adequate competence levels with a target of training 11,515 candidates in five years. The project further aims at upgrading the competence of working professional in Indian Industries and knowledge/ skills of faculty of technical institutions. The project is being implemented by NIELIT Centres at Aurangabad & Chennai and CDAC Hyderabad. Under this project, NIELIT Aurangabad has launched M.Tech(part time) in Electronic product design and B.Tech(full time), both in affiliation with Dr. B.A.M. University, Aurangabad with a vision to bridge the gap between academia and Industry, the implementing agencies have launched 6 week modular courses in Electronic Product Design, Embedded System Design, Electronic Packaging, Wireless Embedded System. Further, a 6 month (full time) Post Graduate Diploma in Electronic Product Design has also been launched.

(iii) Special Manpower Development Program for Chips to Systems

A project entitled "Special Manpower Development Program for Chips to Systems" has been approved by the Department. The project aims at developing skilled / specialised manpower in the area of Microelectronics/ VLSI Design/ System Development (including embedded system)/ System on Chip. The project also aims at broadening the base of quality research in these areas in institutions other than premier institutions like IITs / IISc, etc. by involving faculty of these premier institutions to guide researchers of such other institutions. The program will be initiated in 60 academic/Research & Development institutions across the country. The proposed outlay of the project is ₹ 99.72 Crore with a duration of 5 years.

V. Grass root level

Scheme for IT Mass Literacy (National Digital Literacy Mission) in the Country
In line with the objective of the National Policy on IT 2012 to make one person in every household in the country e-literate, a scheme for IT Mass Literacy (renamed as National Digital Literacy Mission) with an objective to provide IT training, relevant to the need of the trainee, which enables the beneficiaries to use IT and related applications for their livelihood earning and employability with an outlay of ₹ 97.02 crore (Grant-in-aid from DeitY: ₹ 89.71 crore) has been approved. The Scheme aims to train 10 lakh persons at two levels of literacy throughout the country over a duration of 18 months. The Scheme has been launched by Hon'ble Prime Minister at Ranchi, Jharkhand on 21-08-2014.

VI. Create skill development facilities in deprived areas through strengthening of National Institute of Electronics and Information Technology (NIELIT)

A project on "Development of North-Eastern Region by enhancing the Training/ Education capacity in the Information, Electronics & Communications Technology (IECT) Area" has been initiated with the following objectives:

(a) Upgrading the six existing centres of the NIELIT in the North-Eastern Region at Guwahati, Imphal, Shillong, Itanagar, Gangtok and Aizwal.; and

(b) Setting up of ten new Extension centres and upgrading two existing Extension centres

- Setting up/ upgradation of NIELIT Centres at Srikakulam, Ladakh Region of Leh, Kolkata, Patna, Ranchi, Ajmer, Chennai, and Ropar is underway

VII. Digital India Initiative:

(i) Scheme for 'Digital Saksharta Abhiyan' (दिशा) under 'Digital India'

Digital Empowerment of citizens by providing Universal Digital Literacy is an integral component of the Hon'ble Prime Minister's vision of 'Digital India' initiative. Keeping this in view, a scheme entitled 'Digital Saksharta Abhiyan' (दिशा) to make 42.5 lakh persons

digitally literate in selected households throughout the country at a total outlay of ₹ 380.00 crore (approx) over a period of 4 years has been approved on 09.12.2014 under Digital India. Out of the total target, 4 lakh candidates are to be trained by Industry, NGOs and others through their own resources/ under CSR and remaining 38.5 lakh candidates would be supported by Government. This is in continuation of the above mentioned scheme for IT Mass Literacy (renamed as National Digital Literacy Mission). Both the Schemes are being implemented concurrently and so far 48449 candidates (including 29911 Anganwadi / ASHA / Authorised Ration Dealers) have been registered / undergoing training / trained.

(ii) Scheme for 'Skill Development in ESDM for Digital India'

Under the aegis of 'Digital India' programme launched by Hon'ble Prime Minister, the Department has approved a Scheme for "Skill Development in ESDM for Digital India" on 09.12.2014 to cover all the States/UTs of the country in order to facilitate creation of an eco-system for development of ESDM sector in the entire country for facilitating skill development for 3,28,000 persons in ESDM sector at an outlay of ₹ 411 crore (approx.) in a period of 4 years. This is in continuation of the above mentioned 'Scheme for Financial Assistance to select States/UTs for Skill Development in Electronics System Design and Manufacturing (ESDM) sector' approved earlier which is being implemented in 8 States. Both the Schemes are to be implemented concurrently.

31. During the year 2014-15, as against the targets of 1800 women beneficiaries, a total of 2103 women were trained under the 'Digital India Programme and Manpower Development for Skill Development in IT & IT for Masses'.

**ii. Electronic Governance (NeGP, Programme on enabling all schools with virtual classrooms and Good Governance and Best Practices had been contemplated)**

32. The National e-Governance Plan (NeGP), approved by the Government in May 2006, comprises of 31 Mission Mode Projects (MMPs) having a singular mission to make all Government Services accessible to the common citizen in his/her locality, through efficient, transparent and reliable mechanism.

33. As against the proposed allocation of ₹ 994 crore, the BE provided for the year 2015-16 for e-Governance is ₹ 450 crore. The details of BE, RE and AE in respect of Electronic Governance during the year 2014-15 is as under:-

**(₹ in crore)**

| *Year* | *Head* | *Component* | *BE* | *RE* | *AE* |
|---|---|---|---|---|---|
| **2014-15** | Electronic Governance (incl. Prog. on Good Gov & Best Practices and Enabling all schools with Virtual Classrooms | General | 260.00 | 264.92 | 298.13 |
| | | NE | 60.00 | 60.00 | _ |
| | | SCSP | 15.00 | 15.00 | 8.90 |
| | | TSP | 40.00 | 40.00 | 15.61 |
| | | Ext. Aid | 100.00 | 100.00 | 92.26 |
| | | **Total** | **475.00** | **479.92** | **414.90** |

34. When asked about the utilization status of the physical and financial targets for the year 2014-15 under (i) Programme on enabling all schools with virtual classrooms

and (ii) Good Governance and Best Practices schemes, the Committee have been informed that the targets have been met and ₹ 55.00 crore and ₹ 70.87 crore have been utilized for 'Programme on enabling all schools with virtual classrooms' and 'Good Governance and Best Practices' projects, respectively.

35. Regarding the progress made with respect to the objectives of these two schemes, the Committee have been informed as under:-

"Programme on enabling all schools with virtual classrooms: In the first phase, 3500 schools and 50 DIETs having ICT infrastructure are being targeted to make them enabled with virtual classrooms in five States, namely, Himachal Pradesh, Gujarat, Rajasthan, Tamil Nadu and Tripura. The project has been approved by DeitY.

Good Governance and Best Practices: Letters have been sent to the Ministries/ Departments concerned and all states/UTs to formulate suitable project proposals for the development of new applications and for replication of successful e-Governance applications in various domains. Various proposals have been received. 8 projects have been approved by the competent authority and administrative approval has been issued. 4 projects are at various stages of approval in DeitY."

36. With respect to the core components of NeGP, *viz*. State Wide Area Network (SWAN), Common Service Centres (CSCs) and State Data Centres (SDCs) schemes, the updated status is as under:-

"SWANs:

Presently, the SWANs have been made operational in 34 States/UTs, i.e. Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chandigarh, Chhattisgarh, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Lakshadweep, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Puducherry, Punjab, Rajasthan, Sikkim, Telangana, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh, West Bengal, Dadra Nagar Haveli and Daman and Diu.

Andaman & Nicobar Islands has issued LoI to the Network Operator. In J&K, re-bid process is under way.

25 States/UTs are utilizing more than 60% of bandwidth of the existing link capacity; these are Andhra Pradesh, Bihar, Chandigarh, Chhattisgarh, Delhi, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Lakshadweep, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Sikkim, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh, West Bengal, Meghalaya, Puducherry and Punjab.

State Government, would leverage the SWAN as a core network infrastructure progressively to provide G2G services and later G2C services (even below Block Hqrs level then last mile connectivity would be made available) whose availability is presently confined to the location of the offices providing these services any where anytime in the entire State/UT.

CSCs (as on 28.02.2015)
Total no. of CSCs Operational – 1,40,712
Total no. of CSCs with connectivity – 1,25,387
Total no. of CSCs with BSNL connectivity – 77,342

SDCs:

23 SDCs have been made operational out of which 19 SDCs are utilizing more than 50% of the SDC Infrastructure (percentage of rack space utilized).
4 SDCs have made operational in 2013-14.
SDC in Mizoram has been made operational in 2014-15
4 SDCs (Himachal Pradesh, Punjab, Dadra Nagar Haveli and Daman & Diu) have been planned to be completed in year 2015-16."

### iii. Cyber Security (incl. CERT-In and IT Act)

37. A holistic approach is followed by the Government to secure Indian Cyber Space. The approach includes R&D, legal framework, security incidents - early warning and response, best security policy compliance & assurance, international cooperation and security training. CERT-In, designated as the national agency for responding to Computer Security incidence, creates awareness on security issues and operates 24×7 incident response helpdesk. One of the objectives of this programme is to implement the National Security Policy which mandates for establishment of (i) National Cyber Co-ordination Centre, (ii) Botnet Cleaning Centre and (iii) Malware Analysis Centre. The allocations and utilization during the years 2013-14, 2014-15 and 2015-16 under this head are as under:-

**(₹ in crore)**

| Name of the Scheme/ Programme<br><br>Digital India Programme | 2013-14 | | | 2014-15 | | | 2015-16 | |
|---|---|---|---|---|---|---|---|---|
| | BE | RE | AE | BE | RE | AE (Tentative as on 23.03.2015) | Proposed | Allocated |
| Cyber Security (incl. CERT-In, IT Act) | 54.37 | 42.37 | 41.22 | 120 | 62 | 53.14 | 297.00 | 85.00 |

38. Status of financial and physical targets of the two key initiatives under this scheme, *viz*. i) National Cyber Co-ordination Centre (NCCC) and (ii) Botnet Cleaning Malware Analysis Centre are as under:-

"The projected outlay of National Cyber Coordination Centre (NCCC) project is ₹ 770 crore over a period of five years out of which requirement for the first year is ₹ 266 crore. The NCCC project required extensive consultation with all the stake holder entities as well as evaluation of all the technological aspects of the project. This initiative has completed the consultation and evaluation process and the project has reached the advance stage of approval for implementation. During the current year, first stage implementation, including site preparation, procurement of equipment and creation manpower resource, is proposed.

The Project for setting up of Botnet Cleaning and Malware Analysis Centre has been approved. The project has an outlay of ₹ 90 Crores over a period of five years. For the current year 2015-16 an estimated financial outlay is of ₹ 25.85 Crores. The project implementation has already started. Procurement of equipment and site preparation are in progress."

39. As against the proposal amount of ₹ 297.00 crore, ₹ 85.00 crore has been allocated under Cyber Security. The Committee have been informed that the reduction of the allocation will have an impact on the implementation of the key initiatives which may hamper the pace of building a safe cyber eco-system in the country and more funds are required to meet the requirements of the National Cyber Coordination Centre project.

40. As regards the details of the Government websites that have been hacked during the year 2013-14 and 2014-15 and 2015-16, the Committee have been informed that as per the information reported to and tracked by Indian Computer Emergency Response Team (CERT-In), a total number of 28481, 32323 & 4241 websites were hacked by various hacker groups spread across the world during the year 2013, 2014 and 2015 (till Feb, 2015). These include a total number of 371, 189, 155 and 19 Government websites hosted under 'gov.in' & 'nic.in' domains during the period.

41. The financial loss due to e-fraud, during the year 2014-15, as provided by the Department, is as under:-

> "The data regarding the financial loss due to e-fraud is maintained by Reserve Bank of India (RBI). As per Reserve Bank of India (RBI), a total no. of 10048, 8765, 9500 and 9362 cyber fraud cases related to Credit Cards, ATM/Debit Cards and Internet Banking, resulting in losses of ₹ 38 crore, ₹ 67 crore, ₹ 78 crore and ₹ 60 crore have been reported during 2011-12, 2012-13, 2013-14, and April to December 2014, respectively.
>
> In addition, Central Bureau of Investigation (CBI) has also registered 46 cases (14 PEs & 32 RCs) relating to Cyber Crime in various parts of the country during last 3 years i.e, 2012, 2013, 2014 and 2015 (till February). An amount of ₹ 90 crore, ₹ 158 crore and ₹ 6 crore was involved in these cases registered during the year 2012, 2013 and 2014, respectively."

**a) Mechanism/Resources/Preparedness to tackle Cyber threat**

42. The Committee desired to know about the steps taken by the Department to reduce financial loss due to e-fraud during 2014-15. The Department have taken focusing measures and policy decisions to check e-frauds and cyber crimes in the country:-

i) The Information Technology Act, 2000, as amended by the Information Technology (Amendment) Act, 2008, provides legal framework to address various types of prevalent cyber crimes and security breaches of information technology infrastructure.

ii) Reserve Bank of India (RBI) has issued a Circular to all Commercial Banks on phishing attacks and preventive / detective measures to tackle phishing attacks. RBI has also advised Banks to leverage technology to support Business processes and implement all stipulations outlined by RBI from time to time. Banks are also advised to ensure implementation of basic Organizational framework and put in place policy and procedure to prevent financial frauds through Internet. RBI has mandated the banks to

put in place additional authentication/validation for all on-line transactions based on information available on the credit/debit/prepaid cards. RBI has also suggested that chip based Cards may be used as an alternative to magnetic strip cards based, as a measure to counter the risks of skimming of ATM cards.

iii) Reserve Bank of India (RBI) had issued Circular dated 1st July, 2011 on Credit Card operations by Banks. The Banks have been advised to set up internal control system to combat frauds and to take proactive fraud control and enforcement measures. The Banks are required to fulfill 'Know Your Customer (KYC)' requirements. RBI has also issued advisories relating to fictitious offers of funds transfer, remittance towards participation in lottery, money circulation schemes and other fictitious offers of cheap funds. RBI also has cautioned public through Notification against fictitious offers of remitting cheap funds from aboard.

iv) A major programme has been initiated on development of cyber forensics tools, setting up of infrastructure for investigation and training of the users, particularly police and judicial officers in the use of this tool to collect and analyse the digital evidence and present them in Courts.

v) The Department has formulated a set of investigation manuals with procedures for Search, Seizure Analysis and Presentation of digital evidence in courts. The manuals have been circulated to Law Enforcement Agencies in all States.

vi) Indian Computer Emergency Response Team (CERT-In) and Centre for Development of Advanced Computing (CDAC) are involved in providing basic and advanced training to Law Enforcement Agencies, Forensic labs and judiciary on the procedures and methodology of collecting, analysing and presenting digital evidence.

vii) Cyber forensics training lab has been set up at Training Academy of Central Bureau of Investigation (CBI) to impart basic and advanced training in Cyber Forensics and Investigation of Cyber Crimes to Police Officers associated with CBI. In addition, cyber forensic training and investigation labs have been set up in the States of Kerala, Assam, Mizoram, Nagaland, Arunachal Pradesh, Tripura, Meghalaya, Manipur and Jammu & Kashmir for training of Law Enforcement and Judiciary in these States.

viii) In collaboration with Data Security Council of India (DSCI), NASSCOM. Cyber Forensic Labs have been set up at Mumbai, Bengaluru, Pune and Kolkata for awareness creation and training programmes on Cyber Crime investigation. National Law School, Bangalore and NALSAR University of Law, Hyderabad are also engaged in conducting several awareness and training programmes on Cyber Laws and Cyber crimes for judicial officers.

ix) Information Sharing and Analysis Centres (ISACs) for financial services has been set up at the Institute for Development and Research in Banking Technology (IDRBT). Such a centre exchange information on cyber incidents in financial sector and advises them for appropriate mitigation. Action has been initiated to set up similar ISACs in power and petroleum sector.

x) The Indian Computer Emergency Response Team (CERT-In) issues alerts and advisories regarding latest cyber threats and countermeasures on regular basis. CERT-In has published guidelines for securing the websites, which are available on its website (www.cert-in.org.in). CERT-In also conducts regular training programmes to make the system administrators aware about secure hosting of the websites and mitigating cyber attacks.

xi) CERT-In regularly conducts cyber security drills involving financial institutions and banks to improve the security posture of their IT systems and networks.

xii) A website (secureyourpc.in) for children, home users and elderly is available for safeguarding their computer systems and learning the risks on internet.

These measures have been helpful in creating necessary awareness among the stakeholders as well as enhancing the capacity of law enforcement agencies in dealing with the instances of e-frauds. In addition, these measures have resulted in processes and mechanism to improve the ability of financial institutions in resisting cyber attacks and frauds.

43. Adding on the issue of cyber attacks and financial loss, the Director General, CERT-In, in evidence submitted as under:-

"On the issue of financial fraud, as far as this Department is concerned, we have a key enabling role in helping or curbing that financial fraud as essentially the cyber crime investigation and prosecution is in the domain of the Ministry of Home Affairs. As far as we are concerned, we are working with the Reserve Bank of India and many other agencies like the IDRBT in increasing the user awareness. Also, time to time advisories and alerts are provided by the CERT India. When we are working with the Reserve Bank of India and other agencies, we are trying to look at institutionalised capacity building exercises and increasing the capacity of law enforcement agencies in preventing these types of frauds.

As far as cyber security attacks are concerned, as you are already aware, the unique nature of cyber space makes it that much challenging. All the efforts that we are making are to be continuous and have to be on an on-going basis. We are taking the composite legal, technical and other measures to counter those attacks. Because of this unique nature, whenever we are seeing that an attack is emanating from the cyber space of one country, it invariably means that that attack is not coming from that country because people use a lot of masquerading techniques and anonymizers and proxy servers are there. They hide behind that and it is practically impossible for us to know unless there is a determined effort and we get cooperation from other countries and other agencies as well which is largely difficult. But we know that where the attacks are coming from, especially we decipher from the impact of the incident, in the sense when we are looking at an attack that is having financial effect we know which kind of groups are operating because only certain groups specialise on certain types of capabilities. Based on that we can infer but we can never be able to reach because of the peculiar characteristics.

As far as the cyber space is concerned, there are a couple of issues that we are currently focusing on based on the concerns that we carry. We have on a pilot basis from the Indian Computer Emergency Response Team demonstrated the technical possibility and the capability of seeing what is happening in the network cyber space without actually infringing on anybody's privacy or the corporate affairs. So, seeing at the peripheral level itself, we are improving our capabilities of detecting. In the public space what kind of cyber attacks can happen and we are providing a lot of proactive alerts. We have moved from security incident prevention to prediction. So, we are graduating to that level but this needs to be skilled. So, from that purpose we are working on the mechanism of aggregating the cyber security threat intelligence from all sources and we are working on the National Cyber Coordination Centre, which is

in the advanced stage of approval and hopefully we should be able to implement that."

44. Regarding the rapid growth of infected computers called as 'Botnets', the Director General, CERT-In, in evidence stated:-

"This has become a severe headache across the world and everybody is trying to find out how to deal with it. To specifically deal with this issue, we have already got a project sanctioned. It is called Botnet Cleaning and Malware Analysis Centre. This Centre will help us in actually detecting the infected systems. We are working out a mechanism with ISPs to reach out to those infected systems and actually clean them up. That is a massive task. As I am speaking, already more than 1.4 million bots have been detected and it goes on. We close on one type of botnet and some other type of botnet comes up. So, this is continuously going on. The issue of cooperation with the ISPs and reaching out to the end users has become very difficult. If the end user is the corporate user it is much easier for us. But if the end user is the home user, it is absolutely very challenging for us to reach out.

The security of core Internet resources is another concern which we have to work internationally. Within the country we have a limited action left with us. The rapidly changing security threatened landscape also is posing a technical challenge by itself because we have to continuously keep learning and that is a catch up game. Fortunately, the team is quite young and it is quite savvy in terms of learning different challenges. The ability to integrate with the overground and underground operators to gather the necessary intelligence is what is being tried."

45. As regards the mechanism available at international level for tackling cyber threats, the Director General, CERT-In further stated:

"There is no international mechanism. If one country is feeling that it is threatened by the abuse of an ICT of other country, there is no mechanism by which we can see it. So, we are currently working with the United Nations Group of Government Experts. We have been continuously member of that. We were co-sponsors of the Resolution at the United Nations level as to how the countries can come together and put their brains together and then find out a uniform response. If a country genuinely feels that it is being attacked by another country, even if it is abused by a third country, still there should be a redressal mechanism and there should be a probable prompt action in addressing the concerns of the country that is at the receiving end.

Absence of global cyber space norms also is one of the key issues on which we are working continuously. The platform of United Nations Group of Government Experts gives us an excellent opportunity to sit with others and understand and come out with global cyber space norms. Right now the cyber space norms are terribly unregulated and unlike the traffic, where licensing and other things are there, users can simply recklessly also operate. All types of users are there. So, the problems can be manifold. These are my submissions as far as cyber security and other issues are concerned."

b) Cyber security experts

46. The Committee, during the examination of the Demands for Grants (2014-15), had observed that against the growing demand for cyber security experts in the country (estimated to be 5 lakh by 2016), India has 44,000 information security professionals out of which around 600 are in the Government. When asked about the updated status

of cyber security experts and auditors in the country, the Department, in a written note, submitted as under:-

> "The Information Security Education and Awareness (ISEA) Project which is aimed at generation of manpower in the area of Information Security at various levels, train government officials and create mass awareness was completed on 31.3.2014 under which more than 42,000 students were trained in various formal and non-formal courses at various academic institutions, NIELIT and CDAC; and more than 500 awareness workshops were conducted throughout the country. Phase-II of the project has been approved with an outlay of ₹ 96.08 crore to be implemented over a period of 5 years w.e.f. 01.4.2014. Under the ISEA Phase-II, 1.14 lakh persons are proposed to be trained under formal and non-formal courses, faculty training etc. In addition, about 400 Paper publications are expected. The project also aims to provide training to more than 13,000 Government officials and creating mass information security awareness targeted towards Academic users, Government users and General users (approximately 3 crore Internet users in five years through direct and indirect mode).
>
> Training centres have been set up at all the State Capitals of North East, Kerala, CBI, National Police Academy (NPA) and other organisations to facilitate advance training in the area of cyber crime investigations for Law and Enforcement agencies. Computer forensic labs and training facilities have been set up in J&K State and all the State Capitals of North East. The forensic training centres have also been set up with help of NASSCOM at Mumbai, Bengaluru, Kolkata, Pune and Haryana. Virtual training environment, based training modules, are also being introduced for training the law enforcement personnel.
>
> In addition to the above, CERT-In conducts awareness and exposure program once in 15 days where the technical professionals from all over the country are exposed to the labs, cyber security threats and the ways and means to mitigate those cyber attacks. The programme is very popular and is over subscribed. During the year 2014-15, CERT-In has conducted 26 trainings on various specialized topics of cyber security and 878 officers, including System/Network Administrators, Application Developers, IT Managers, Chief Information Security Officers (CISOs)/ Chief information officers (CIOs), and IT Security professional have been trained. In addition to the above, CERT-In together with Data Security, Council of India is conducting workshop to create awareness about the need of cyber security among the users and other professionals across the country. CERT-In has launched two websites, namely, secureyourpc.in and cert-in.org.in where the users are guided on different aspects of securing of IT systems. The Ministry of Human Resource Development has created the skill registries involving the programme to establish certification courses in different areas of cyber security in line with the industry and the country.
>
> Indian Computer Emergency Response Team (CERT-In), has created a panel of 51 'IT Security Auditors' for auditing, including vulnerability assessment and penetration testing of computer systems , networks & applications of various organizations of the Government, critical infrastructure organizations and those in other sectors of the Indian economy. The empanelled auditors will assess the information security risks. They will determine the effectiveness of information security controls over information resources and assets that support operations in the auditee organizations on their request."

### c) Right to be forgotten online

47. The Committee, while noting the emergence of the concept of 'Right to be forgotten online', during the examination of the Demands for Grants (2014-15), had desired to be kept apprised about the progress made in this regard. When asked for the

latest position in this regard, the Department have informed that in the context of increased awareness in the country with regard to freedom of expression and privacy, the developments in this area are being followed to enable the Cyber Regulatory Advisory Committee (CRAC) to deal with these issues and advise the Government as appropriate.

48. The Secretary, DeitY, during evidence on the subject 'Cloud computing and Net Neutrality' on 9th January, 2015, had stated that they are formulating a right to privacy - a privacy legislation in the Government and right to be forgotten online is actually connected with the right to privacy – and they have made a reference to the Department of Personnel and Training to incorporate whatever they would like to incorporate in the new law which they are framing.

### d) Development related to Section 66A of IT Act, 2000

49. The Committee, in their Forty-fourth Report (15th L.S.) on DFG (2013-14), while noting that there were a few controversies related to Section 66A and Section 79 of the IT Act, 2008 had recommended the Department to take necessary corrective steps for revision of the clauses of the Act. In view of the Supreme Court's judgement of striking down Section 66A of Act, the Committee desired to know about the position taken by the Department and future course of action on the issue. To this, the Department have informed that the Government have welcomed the Hon'ble Supreme Court's decision on Section 66A. After detailed discussions, the Government filed an affidavit before the Hon'ble Supreme Court making its stand absolutely clear that the Government respect the freedom of speech and expression. The Department, in the due course of time, would study and understand the operational implications of the judgment for any possible action in the future.

50. On the judgement of the Supreme Court on Section 66A, the Director General, CERT-In, in evidence further submitted as under:-

> "With regard to the judgement on Section 66A of the IT Act, immediately following the Supreme Court's judgement our Hon. Minister welcomed the judgement and clearly articulated the Government's stand with regard to the impugned Sections. He said that the Government absolutely respect the right of freedom of speech and expression on social media and has no intention of curbing it. That was the stand with which we were working. Following the Supreme Court's judgement, we are now focusing extensively on increasing the users' awareness with regard to the responsible user behaviour and acceptable norms and how people should be able to use the cyber space. In any case even after the Section 66A that has been struck down, the IPC provisions still apply for any serious violation of individual privacy and dignity. So, from that perspective we can now focus extensively on creating the user awareness. That is one programme that we can definitely have."

## iv. Promotion of IT & ITeS Industries/Electronics & IT Hardware Manufacturing.

51. The National Policy on Electronics (NPE) 2012 is expected to create an indigenous manufacturing eco-system for electronics in the country. It will foster the manufacturing of indigenously desired and manufactured chips, creating a more cyber secure ecosystem in the country. The increased development and manufacturing in the sector will lead to greater economic growth through more manufacturing and consequently greater employment in the sector. ESDM is of strategic importance as well.

52. The BE, RE and AE for Promotion of IT & ITeS Industries/Electronics & IT Hardware Manufacturing for the years 2013-14, 2014-15 and 2015-16 are as under:-

(₹ in crore)

| Sl. No. | Name of the Scheme/ Programme | 2013-14 | | | 2014-15 | | | 2015-16 | |
|---|---|---|---|---|---|---|---|---|---|
| | | BE | RE | AE | BE | RE | AE (Tentative as on 23.03.2015) | Proposed | Allocated |
| 1. | Promotion of IT & ITeS Industries/Electronics & IT Hardware mfg. | (52.50 + 100)# | (4.20+ 10)# | (2.13+7. 90)# | (10 +85)* | (5.08+ 75)* | (2+58.24) | 478.00 | 74.00 |

# During the year 2013-14 the Scheme existed as STPI & EHTP and was found to be put under Promotion of IT & ITeS Industries. Therefore, the BE, RE and AE are of STPI & EHTP and promotion of Electronics & IT Hardware Manufacturing.

* During the year 2014-15 the Scheme Promotion of IT & ITeS Industries/Electronics & IT Hardware Manufacturing existed as separate head.

53. The Budgetary allocation for Promotion of IT/ITes Industries during the year 2015-16 is ₹ 5 crore whereas Promotion of Electronics & IT Hardware manufacturing sector is ₹ 69 crore.

54. When asked for the details of the revenue and employment generated from IT and ITes sector during the years 2013-14 and 2014-15 along with the target for the year 2015-16, the Department, in a written note, stated that according to the National Association of Software and Services Companies (NASSCOM), Indian IT-ITES industry has been growing progressively. The revenue of the Indian IT-ITES industry (both domestic and exports) during the year 2013-14 and estimated for year 2014-15 is as under:-

(US$ in Billion, INR in ₹ in Crores)

| | 2013-14 | | 2014-15(E) | | 2015-16(P) |
|---|---|---|---|---|---|
| | US$ | INR | US$ | INR | US$* |
| **Exports** | **87.3** | **527292** | **98.1** | **612144** | **~ 110 to 112** |
| **Domestic** | **19.0** | **114784** | **21.0** | **131040** | **~ 23 to 24** |
| **Total** | **106.3** | **642076** | **119.1** | **743184** | **~ 133 to 136** |

(E) = Estimate , (P) = Projections * at constant currency rate
Source: NASSCOM

55. As per NASSCOM, the direct employment generated by the Indian IT-ITES industry during FY 2013-14, FY 2014-15(E) and projected for FY 2015-16(P) is given below:-

| | 2013-14 | 2014-15(E) | 2015-16(P) |
|---|---|---|---|
| Employees (In Million) | 3.29 | 3.52 | ~ 3.72 to 3.75 |

E = Estimate
Source: NASSCOM

56. The Committee also desired to know about details of the import and export revenue from the Electronics & IT Hardware manufacturing sector for the year 2013-14 and 2014-15. The Department, in a written note, stated that the imports of electronic items during the year 2013-14 was ₹ 187306.38 crore and during the year (Apr 2014 till Feb 2015) was ₹ 206399.58 Crore (Provisional) as per DGC&IS. The exports of electronic items during the year 2013-14 was ₹ 46703.78 crore and during the year (Apr 2014 till Feb 2015) was ₹ 33634.29 crore (Provisional) as per DGC&IS.

57. The current status of indigenous production and demand of electronics hardware in the country is as under:-

(₹ in crore)

| | | |
|---|---|---|
| Sl. No. | Verticals / Item | 2013-14 # (Esttd.) |
| 1 | Consumer Electronics* | 54463 |
| 2 | Industrial Electronics * | 33600 |
| 3 | Automotive Electronics** | 7278 |
| 4 | Medical Electronics*** | Data Not Available |
| 5 | IT Hardware* | 10139 |
| 6 | Communication & Broadcasting Equipments and Telecom * *(Including Mobile Handsets)* | 57000 |
| 7 | Mobile Handsets * (@) | 57000 |
| 8 | Strategic Electronics* | 10260 |
| 9 | Electronic Components * | 30641 |
| 10 | Solar Photovoltaic Cells*** (part of Electronic Components) | Data Not Available |
| 11 | LED* (part of Electronic Components) | 1941 |
| 12 | Electronic Design*** *[New Vertical Introduced]* | Data Not Available |
| | Total (Electronics Hardware) | 205321.85 |

* Note: 1): Sources: (*) – Industry Associations / (**) – M/s. Gartner / (***) – The data above does not include data for Annual Report of DeitY.

(2) : (@) :
Data for Mobile Handsets has been considered in Communications & Broadcast and Telecom.
(3): Data for Communications & Broadcasting and Telecom Equipment (except for Mobile Handsets) is not available for 2012-13 & 2013-14.
(4) # Estimated / derived based on inputs from Industry Associations & other concerned Ministries / Departments / Organizations.

58. The following steps have been taken by the Department to promote indigenous manufacturing of electronic products:-

- Modified Special Incentive Package Scheme (M-SIPS)

Modified Special Incentive Package Scheme (M-SIPS) provides financial incentives to offset disability and attract investments in the sector. 61 applications have been received with investment of ₹ 20,282 crore out of which 30 applications worth ₹ 6547 crore approved and 31 applications worth ₹ 13735 crore are under process. The Incentives of ₹ 12.05 crore disbursed to two applicants. The scheme is under revision.

- Electronic Manufacturing Clusters (EMC)

Electronics Manufacturing Clusters (EMC) Scheme provides financial assistance for creating world-class infrastructure for electronics manufacturing units. As of now, DeitY has received 34 applications (32 for Greenfield EMCs and 2 for setting up of Common Facility Centre (CFC) over an area of 5218.477 acres with project outlay of ₹ 6295.93 crore for seeking grant assistance of ₹ 2743.84 crore; out of this, Department has accorded final approval to two Greenfield Clusters and In-Principle approval to 14 Greenfield EMCs and two Common Facility Centres in Brownfield Clusters. Further, Department has also indentified and notified 62 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. The grant of ₹ 4.17 crore for one Greenfield EMC cluster at Badwai, Bhopal released.

- Setting up of Semiconductor Wafer Fabs

The Cabinet, in its meeting held on 12.02.2014, accorded approval to the two proposals of two consortia of M/s. Jaiprakash Associates Ltd. & M/s. HSMC Technologies India Pvt. Ltd.) for setting up of semiconductor wafer manufacturing facilities in India. 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. Deficiencies in Detailed Project Reports were pointed out to both consortia vide emails dated 05.11.2014. Vide letter dated 02.12.2014 and vide letter dated 10.12.2014 had sought extension for submission of deficiencies in DPR and other documents required for demonstration of commitment. The Union Cabinet, at its meeting held on 28.01.2015, approved the proposal for re-constitution of Empowered Committee, which was set up to identify technology and potential investors for establishment of Semiconductor Wafer Fabs in India and the Empowered Committee has been re-constituted vide DeitY's O.M. dated 11.02.2015. The 21$^{st}$ meeting of the newly constituted EC was held on 11$^{th}$ March 2015.

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

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. Secretary, DeitY vide D.O. letter dated 2$^{nd}$ Feb. 2015 has informed operationalisation of 'PMA Online

Monitoring System' http://www.deity-pma.gov.in w.e.f. 27.01.2015 for reporting by Ministries/Departments about the compliance of Policy.

- Electronic Development Fund (EDF) Policy

The Union Cabinet, on 10th December, 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 and the notification No. 8(9)/2011-IPHW dated 6th January, 2015 was published in the Gazette of India, Extraordinary in Part I-Section I on 9th January 2015.

- Compulsory Safety Standards for Electronics

This Order initially covered 15 notified electronic products categories and fifteen additional electronic items have been notified under the ambit of CRO on 13th November 2014.

- Scheme for setting up / up-gradation of Labs

The scheme for Grant-in-Aid is open for setting up / up-gradation of up-to 15 labs. In this regard, the following project proposals have been approved and 1st installment released:

(i) CEC, IIT Madras, Chennai for total GIA of ₹ 140 lakh and amount of ₹ 56.00 lakh released.

(ii) CSIR -Central Institute of Mining and Research (CIMFR), Dhanbad for total GIA of ₹ 142.75 lakh and amount of ₹ 57.10 lakh released.

(iii) MPSEDC, Bhopal for total GIA of ₹ 127.50 lakh and amount of ₹ 51 lakh released.

(iv) NRTC-Parwanoo for total GIA of ₹ 140.27 lakh and amount of ₹ 56.10 lakh released.

- Promoting Collaborative Funding in R&D through GITA:

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, a proposal submitted by Global Innovation and Technology Alliance (GITA) has been approved. The total funding of the project is ₹ 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 the Biotechnology Industry Research Assistance Council (BIRAC) has been approved with the aim 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, software, algorithms and information technology. The total amount requested from DeitY is ₹ 10.5 crore (₹ Ten Crore Fifty Lakhs only). The 1st instalment of ₹ 3.5 crore sanctioning the grant-in-aid issued on 15-12-2014.

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

National Centre of Excellence in Large Area Flexible Electronics is being set up in IIT Kanpur with the objectives to promote R&D; Manufacturing; Ecosystems; Entrepreneurship; International Partnerships and Human Resources and develop prototypes in collaboration with industry for commercialization. The total outlay is ₹ 132.99 crore over the period of five years and ₹111.12 crore will be funded by DeitY. The contribution of IIT Kanpur in the centre will be ₹21.87 crore. CFLEX has been approved by the Department and the Administrative Approval issued on 14-

11-2014. The grant in aid of ₹ 27.44 crore was also released on 18.11.2014 to IIT-Kanpur. MoU executed with IIT Kanpur on 16.12.2014.

- National Centre of Excellence in Technology for Internal Security (NCETIS):

To address the internal security needs of the nation on continuous basis and to deliver technology prototypes required for internal security and to promote domestic industry in internal security, a Centre of Excellence in Technology for Internal Security is proposed to be set up at IIT Bombay with the total outlay of the project is ₹ 100.87 crore, over a period of five years to be funded by DeitY. The project has been appraised and is in approval process.

- Policy for Promotion of Fabless Design Industry:

The revised Draft Cabinet Note regarding the Policy for Promotion of Fabless Design Industry was circulated to the Ministries/Departments concerned on 16th February 2015.The proposed policy provides a framework to promote the fabless chip design, embedded software and board design industry in India by providing benefits under M-SIPS; 25% of the non-recurring expenditure for mask development; benefits under Section 35(2AB) of the IT Act; setting up Incubation Centres; 50% of the cost of filing international patents and export incentives of 2% under Focus Product Scheme, etc.

- Development of Indian Conditional Access System (CAS):

For the development and implementation of the Indian Conditional Access System (CAS), steps have been taken to promote indigenous manufacturing of Set Top Box (STB) for Cable / DTH TV, keeping in view the huge indigenous requirement on account of roadmap for digitalization of the broadcasting sector. Out of the total project cost of ₹ 29.99 crore, ₹ 19.79 crore is the DeitY's support amount and remaining amount will be contributed by M/s. By Design India Pvt. Ltd., Bangalore. 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. 1st installment of ₹ 5.93 crore has been released as grant to M/s. ByDesign India Pvt. Ltd.

- 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 disbursements were made to the tune of ₹ 1.40 lakh and ₹ 1.5 lakh to M/s EOS Power India Pvt. Ltd. and M/s. Robonik (India) Pvt. Ltd., respectively.

- Setting up of Incubation Centre in Delhi-NCR:

The 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) is being setup with Grant-in- aid of ₹ 21.17 Crore by DeitY. The 1st installment of ₹ 3.58 crore was released on 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 ₹ 47.10 crore, which is proposed to be implemented through joint funding from DeitY (₹ 22.10 Crore) and the Government of Bihar (₹ 25.0 crore) as matching Grant. The administrative approval has been issued. The project envisages 45 start-ups over a period of 5 years.

59. Rationalalisation of tariff and Budget announcement during 2014-15 and 2015-16:-

- Boost for indigenous manufacturing of Mobile Handsets
  - Excise duty structure for mobile handsets including cellular phones is being changed from 1% without CENVAT credit or 6% with CENVAT credit to 1% without CENVAT credit or 12.5% with CENVAT credit.
- Boost for indigenous manufacturing of Personal computers (Desktop, Laptop and Tablets)
  - SAD exempted on import of inputs/components used in the manufacture of personal (laptops/desktops) and tablet computers falling under heading 8471.
  - Excise duty structure of 2% without CENVAT credit or 12.5% with CENVAT credit is being prescribed for tablet computers. To facilitate this, parts, components and accessories (falling under any Chapter) for use in the manufacture of tablet computers and their sub-parts for use in manufacture of parts, components and accessories are being fully exempted from Basic Customs Duty (BCD), Countervailing Duty (CVD) and Special Additional Duty of Customs (SAD).
- Boost for indigenous manufacturing of TVs
  - BCD on LCD, LED or OLED TV panels reduced from 10 % to zero.
  - BCD on Colour picture tubes for manufacture of cathode ray TV reduced from 10 % to zero.
  - BCD on Specified parts of LCD and LED TV (including open cell, plate diffuser, film diffuser, Back light unit module) reduced from 10%/7.5% to zero.
  - Reduction of BCD of Back Light Unit Module for use in the manufacture of LCD/LED TV panels from 10% to Nil and that of Organic LED (OLED) TV panels from 10% to Nil.
- Boost for indigenous manufacturing of ITA Products
  - To address the problem of CENVAT credit accumulation, for all goods except populated PCBs, falling under any Chapter of the Customs Tariff, for use in manufacture of Information Technology Agreement (ITA) bound goods (where BCD is Nil), SAD has been reduced from 4% to Nil.
- Boost for indigenous manufacturing of LED Lights
  - Excise Duty on LED (Light Emitting Diode) driver and MCPCB (Metal Core Printed Circuit Board) for use in manufacture of LED lights and fixtures or LED lamp reduced from 12/10 % to 6 %.
  - Excise duty on inputs for use in the manufacture of LED drivers and MCPCB for LED lights, fixtures and LED lamps has been reduced from 12% to 6%.
  - SAD on inputs for use in the manufacture of LED drivers and MCPCB (Metal Clad Printed Circuit Board) for LED lights, fixtures and LED lamps has been reduced from 4% to Nil.
- Boost for indigenous manufacturing of Medical Electronic Products
  - BCD, Excise Duty / CVD and SAD have been fully exempted on specified raw materials [battery, titanium, palladium wire, eutectic wire, silicone resins and rubbers, solder paste, reed switch, diodes, transistors, capacitors, controllers, coils (steel), tubing (silicone)] for use in the manufacture of pacemakers. BCD on certain specified inputs for use in the manufacture of flexible medical video endoscopes has been reduced from 5% to 2.5%.

- Boost for indigenous manufacturing of Solar Photovoltaic Cells
  - Excise duty exempted on
  - EVA sheets and solar back sheets and specified inputs used in their manufacture.
  - Solar tempered glass used in the manufacture of solar photovoltaic cells and modules.
  - Flat copper wire, round copper wire and tin alloys for the manufacture of PV ribbons for use in solar cells and modules.
  - BCD exempted on
  - Specified goods used in manufacture of solar back sheet and EVA sheet or solar PV cells/modules.
  - Flat copper wire for the manufacture of PV ribbons.
  - Machines/parts related to manufacture of solar voltaic cells and setting up of solar energy production projects.
- Boost for indigenous manufacturing of smart cards
  - Excise duty on Recorded smart cards increased from 2% without CENVAT and 6% with CENVAT to 12%.
  - Excise duty on Wafers for use in the manufacture of integrated circuit (IC) modules for smart cards reduced from 12% to 6%.
  - SAD exempted on import of PVC sheet and ribbon used in the manufacture of smart cards.
- Boost for indigenous manufacturing of Microwave Ovens
  - BCD on Magnetron up to 1KW for use in the manufacture of microwave ovens reduced to Nil.
- Rationalization of tariff structure for manufacture of optical fibre cables
  - High Density Poly Ethylene (HDPE) for use in the manufacture of telecommunication grade optical fibre cables reduced from 7.5% to Nil.
- Semiconductor wafer fab manufacturing units
  - Investment linked deduction under Section 35AD extended to semiconductor wafer fab manufacturing unit.
- Telecommunication Equipment Manufacturing
  - BCD on Telecommunication equipment not covered under ITA increased from zero to 10%.
- Set Top Box manufacturing
  - The domestic STB manufacturers had to pay CST equivalent to VAT rate (typically 12.5%). It has been resolved by extending the facility of form 'C' to STBs vide Department of Revenue's O.M. dated 13th August, 2014.
  - Export incentive of 5% has been provided to STBs under Foreign Trade Policy vide DGFT's Public Notice No.51(RE2012)/2009-14 dated 05.03.2013.

60. The hindrances impacting growth of Electronics and IT Hardware manufacturing sector are enumerated below:-

- India is signatory to the Information Technology Agreement-1 (ITA-1) of the World Trade Organization (WTO) which came into force in 1997. India has implemented zero duty regimes on 217 tariff lines. Moreover, India has also signed Free Trade Agreements/Economic Agreements with countries like South Korea, Japan, etc. and with ASEAN.

Due to zero duty, the domestic manufacturing sector faced direct competition from the manufacturers of the countries like China; Japan; Taiwan; South Korea; Malaysia; United States of America and European countries, etc.

- Since domestic manufacturing has been suffering from various disabilities *vis-a-vis* global comparison, the domestic manufacturing capabilities has declined from last two decade or so. The main factors by which, electronics/IT hardware manufacturing in India has suffered in comparison to global counterparts are:-

  a) High finance cost;
  b) Poor infrastructure & logistics;
  c) Unreliable & poor quality of power;
  d) Inverted tax duty structure wherein Importers get favorable tax regime *vis-a-vis* domestic manufacturers and
  e) High transaction cost due to large number of regulatory clearances requirements.

- The global companies have achieved mammoth scale of economies, which has made entry of new players difficult in the sector. Each product is globally dominated by a few companies. The electronic goods typically have low weight, low volume and high cost. The ratio of freight to capital cost of products is extremely low enabling companies to manufacture at one location and sell globally.

61. With regard to the places where Semiconductor Wafer fab establishment are to be established, the representative of the Department, in evidence, submitted as under:-

"We have taken up this exercise of inviting business consortium to set up two semi-conductor wafer fabs. After going through the international process inviting Expression of Interest internationally, we had received two proposals at that time. One was by the consortium comprising of JP Associates, IBM and Towerjazz. Towerjazz is an Israeli Company. They had proposed that they will set up the semiconductor wafer fab in Greater Noida.

The second proposal is from a consortium comprising of HSMC, STMicro Electronics and Silterra. They had proposed that they will set up the semiconductor wafer fab at Prantij, near Gandhinagar, Gujarat. Both these proposals have been approved by the Government. These consortia are in the process of finalising their DPR and arranging money for the project.

Apart from that we have been receiving one or two enquiries of some other people also. But these are at a very preliminary stage. We do not know whether they will materialise or not. But preliminary discussions are going on with these people."

**E-waste**

62. On the issue of e-waste and the role of DeitY in managing the same, the representative of the Department, in evidence, submitted as under:-

"The e-waste problem occurs when we unscientifically try to process them and a lot of litching with atmosphere and it produces a lot of health hazards to the environment around. The second problem is the huge inventory that gathers. Now, if you are able to apply technological solutions for processing the e-waste we can minimise the problem of at least the environment. Our Department's role primarily has been to come out and develop R&D solutions for processing and extraction of precious metals, plastics out of the e-waste.

In the e-waste, there are two categories of things which come out. One is plastics and we have supported and come out with technology where plastics

can be taken out, categorised and reused. It has been used to make car bumpers and switches. Now we are trying to give them transfer of technology so that manufacturers can set up and use these plastics for manufacturing value added goods.

The second is the printed circuit board which has components. It has components and copper. There also, we have supported two kinds of technology development, that is, how to segregate the components out of the PCB. In our country since there is a lot of labour available at competitive cost, segregation becomes easy. But in certain countries, they put everything in a smelter and try to extract the metal out of it. Now in that process, what we have done is, from the PCB we have developed a technology for extraction of metals and we have put a demo plant at Bangalore along with a company, C-MAT, which will be extracting about one metric tonnes of metal from the PCB per day. After the successful demo, we will be trying to give this technology to any manufacturer who would like to use it and recycle the waste.

The other thing is, we have tried to put up e-waste awareness programme and about four to five days back, we have got the approval for that. Under that, we will do an elementary analysis. So far, the amount of wastage is one lakh metric tonne for the entire country but it may be substantially higher. We will institute a study on this. Then we will create awareness both at the manufacturer level as well as at the school/colleges/RWA levels and see how they can help to recycle this e-waste. The primary problem comes when these goods are taken by unorganised sector and channelised and processed in a non-friendly manner. Otherwise, the Ministry of Environment and Forests has put up the law on who will be the authorised collector, how they will segregate it and how it needs to be processed. We are working jointly with the Ministry of Environment so that we can give our technological solutions to them and they can, in fact, help us in identifying areas in which we can set up certain ecological parks where some plant could be set up out of whatever technology we have developed and then recycling could be done."

63. Responding to a query regarding the policy/plan/proposal to promote entrepreneur to take care of the e-waste, the Secretary, DeitY, in evidence, submitted as under:-

"Our Department is essentially in the side role of providing technological solutions to have a scientific e-waste technologies. The basic implementation of e-waste is done by the Ministry of Environment and Forests. Essentially, they have the rules relating to that. They also licence the collectors. If there is a person who wants to collect the e-waste, then he has to get a licence from the Central Pollution Control Board or the State Pollution Control Board about which I am not very sure but a licence has to be got.

Secondly, they have a system of penalties that they should not be done in a non-scientific manner and should not create pollution. So, it is that Ministry who regulates the entire set up. They also have extended producers policy which means that every producer is legally liable to take back the product which they have sold in the market. So, they should have the collection centre. If I purchase a television or a PC and that PC has lived its life and now it is a waste, the company which has sold that PC also has the responsibility to take back that waste. That law exists. Unfortunately, both the laws relating to taking back the systems are not put in place. So, there is implementation issue but as far as the basic legal framework, it is the Ministry of Environment and Forests which is doing it.....x..x..x..Any plant manufacturing electronics goods will get 25 per cent cash back on the capital expenditure. We are including e-waste processing plant also into that category. They will also be eligible for 25 per cent cash

back if they do that. So, there are incentives for doing that. Hopefully, since that decision is very recent, we will see more and more scientific and electronic e-waste disposal units in future."

64. As regards the solution, the representative of the Department, in evidence, suggested that every city has a municipal waste and if we can somehow come out with e-waste city wise then the cost would not be much.

### v. Technology Development for Indian languages

65. Standards in the Natural Language Processing (NLP) and Development of language resources are the key components of the advanced language technologies. The objective of TDIL Programme is to promote development of linguistic resources and tools. The programme is also playing a catalytic role for wider proliferation of Indian language technology products and solutions by making them available to common people through Data Centre in addition to the resources for research for the language technology researchers. The Budgetary allocation and utilization for this project during the year 2013-14, 2014-15 and 2015-16 are as under:-

(₹ in crore)

| Name of the Scheme/ Programme<br><br>Digital India Programme | 2013-14 | | | 2014-15 | | | 2015-16 | |
|---|---|---|---|---|---|---|---|---|
| | BE | RE | AE | BE | RE | AE (Tentative as on 23.03.2015) | Proposed | Allocated |
| Technology Development for Indian Language | 35 | 18 | 18 | 25 | 25 | 24.09 | 140.00 | 20.00 |

66. Regarding the impact of reduced allocation for the Technology Development for Indian Language project, the Department have stated that it would definitely hamper the progress of various technologies which are in the advanced stage of development under consortia mode wherein each consortia is having 10-12 consortium partners spread across the country addressing the languages of their region as a part of the project. According to the Department the constraints due to non-availability of budget would lead to following :-

i. Trained manpower in this area is not available in the open market as it is an inter-disciplinary area of research. The computer scientists trained under the project specifically for the research being undertaken have left the project which has resulted in shortfall of the targets.

ii. Projects are being unduly time over run without productive out-comes.

iii. The delays in implementation of consortia projects have cumulative effect on the pace of overall technology development in this area.

iv. This is a home grown area of research in which we, as a nation, have to take care of our languages being supported on ICT in all possible ways as there is no other substitute to preserve the correctness of linguistic representation and ensuring adherence to not only to the ICT standards but also language specific standards, including setting of the standards. Thus, the Department needs to mitigate the above said consequences by enhancing the budget allocation to TDIL Programme without which the public delivery of services in local languages can also suffer.

67. The Committee have further been informed that during the year 2014-15, several projects in the area of Technology, Language Resource and Standardization could not achieve its desired targets due to Shortage of the Budgets. Only token amount of Grants-in-Aid have been released to several projects, which results in delay in the achieving targets for the project. Further, during the Financial year 2014-15, no new projects for the development of Multilingual computing in future technology areas could be initiated.

## C. C-DAC and other Autonomous Societies/Bodies

68. In the current fiscal (2015-16) the schemes SAMEER, ERNET, NIELIT, EMDC, C-MET and MLA have been included under C-DAC and other Autonomous Societies/Bodies. The Budgetary allocation and utilization for this product during the year 2013-14, 2014-15 and 2015-16 are as under:-

(₹ in crore)

| Sl. No. | Components/Schemes under (C-DAC & Other Autonomous Societies/Bodies) | 2013-14 | | | 2014-15 | | | 2015-16 | |
|---|---|---|---|---|---|---|---|---|---|
| | | BE | RE | AE | BE | RE | AE (Tentative as on 23.03.2015) | Proposed | Allocated |
| 1. | Centre for Dev. of Advanced Computing (C-DAC) | 205 | 122 | 122 | 148 | 148 | 141 | 574.50 | 75.00 |
| 2. | Society for Applied Microwave Electronics Engg & Research (SAMEER) | 50 | 50 | 50 | 50 | 50 | 50 | 94.00 | 20.00 |
| 3. | Electronics Materials Development Council (EMDC) | 30 | 23 | 22.99 | 27 | 27 | 26.58 | 60.00 | 10.00 |
| 4. | Centre for Materials for Electronics Technology (C-MET) | | | | | | | | 10.00 |
| 5. | Educational Research Network (ERNET) | 0.01 | 0 | 0 | 0.01 | 0 | 0 | 0.10 | 0.10 |
| 6. | NIELIT (erstwhile DOEACC ) | 10.75 | 9.75 | 9.64 | 10 | 10 | 10 | 12.30 | 8.00 |
| 7. | Media Lab Asia (MLA) | 26.27 | 15.75 | 15.75 | 10 | 0 | 0 | 30.00 | 0.10 |

### i. Center for Development of Advanced Computing (C-DAC)

69. The allocation for C-DAC during the year 2015-16 is ₹ 75.00 crore as against the proposed outlay of ₹ 574.50 crore. The proposed allocation, BE, RE and actual expenditure in respect of C-DAC for last two years is as under:-

(₹ in crore)

| Components/Schemes under (C-DAC & Other Autonomous Societies/Bodies) | 2013-14 | | | 2014-15 | | | 2015-16 | |
|---|---|---|---|---|---|---|---|---|
| | BE | RE | AE | BE | RE | AE (Tentative as on 23.03.2015) | Proposed | Allocated |
| Centre for Dev. of Advanced Computing (C-DAC) | 205 | 122 | 122 | 148 | 148 | 141 | 574.50 | 75.00 |

70. Major Concerns faced by C-DAC are as under:-

i. C-DAC is an R&D organization and their main objective is to carry out in R&D in ICT&E areas. Due to non-allocation of smooth funding on year to year basis for the R&D activities, C-DAC is unable to focus on the core areas of research.

ii. The state of the art infrastructure is ongoing since 2009 and due to non-allocation of sufficient funds (DeitY share) on timely basis, these are extended and as a result, cost is escalating. C-DAC is also paying huge money on rentals for hired premises.

iii. Non-Plan allocation of at least ₹ 200.00 crore is required for salary and allowances of sanctioned manpower and administrative expenses of 11 centres and Corporate Office.

iv. For funded projects, the grants are released only after the utilization of previous grants and, therefore, sometimes due to cut in allocation the releases are delayed and it is therefore proposed to release second installment after utilization of 50% of the first installment and not relating the release to all the projects or the total grant to C-DAC.

71. On being asked whether all the targets were met under C-DAC, during the year 2014-15, the Department, in a written note, stated as under:-

> "C-DAC is working in the following thematic areas like High Performance Computing (HPC), Grid and Cloud Computing, Multilingual Computing & Heritage Computing, Professional Electronics including VLSI and Embedded Systems, Software Technologies including FOSS, Cyber Security and Cyber Forensics, Health Informatics and Education and Training.
>
> In the above areas, C-DAC has taken up the projects from plan grants, The projects are reviewed from time to time by the Project Review and Steering Group (PRSG) and the R&D Working Group who have generally found the project progress satisfactorily and have recommended closure/extension of the projects considering the progress and the allocation of funds by the sponsoring agencies. In view of the above, C-DAC has almost achieved its target for FY 2014-15."

72. In view of the huge requirement of millions of STBs in the country, during examination of the previous DFG, the Committee were informed that M/s ByDesign India Pvt. Ltd, Bangalore, had been shortlisted for development and implementation of the India CAS in association with C-DAC. The Committee have been informed that a Tripartite agreement had 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. A Project Review and Steering Group (PRSG) had been constituted on 08.01.2015, to

periodically monitor the project in all respects including technical and financial, during the development and implementation stages. First meeting of PRSG was held on 18.02.2015 to review the progress of the project wherein PRSG has expressed satisfaction with the progress made by M/s. ByDesign India Pvt. Ltd. and C-DAC in the project so far. The Committee have also been informed that the first installment of DeitY's support amount has already been released as advance to M/s. ByDesign India Pvt. Ltd. Indian CAS system is expected to be built, tested and be ready for integration and deployment by November' 2015.

73. Further, the Committee have been informed that the Government have taken the following initiatives for promotion of indigenous manufacturing of STBs:-

(i) A Basic Customs Duty (BCD) of 10% has been imposed on import of Set Top Boxes.
(ii) The domestic STB manufacturers had to pay CST equivalent to VAT rate (typically 12.5%). The issue has been resolved by extending the facility of form 'C' to STBs vide Department of Revenue's O.M. dated 13th August, 2014.
(iii) To curb inflow of sub-standard STBs, these have been notified under the Compulsory Registration Order for compliance to safety standards.

### ii. Electronic Materials Developments Council and Centre for Materials for Electronics Technology (EMDC & C-MET)

74. The EMDC Programme was conceived to support research in the emerging areas of materials for electronics, Photonics and E-waste. The program is a combination of the Materials Development program which was conceived and initiated in 1986 and the Photonics Development program which was initiated by the National Photonic Council through its working group in 1990-1991. At the initial stages, the target was to consolidate and strengthen R&D activities where infrastructure had been set up and to bring the sub-optimum R&D efforts to pilot/commercial level. Special emphasis was to be given to materials having local availability of raw-materials to take up R&D activities to support optical communication through development of materials, components and devices as well as support socially import programme.

75. The Centre for Materials for Electronics Technology (C-MET) which was established in 1990, is an Autonomous Scientific Society under Department of Information Technology (MIT), Government of India, dedicated to R&D on Electronic Materials. It has three laboratories located in Pune, Hyderabad and Thrissur. C-MET basic target is to develop knowledge base in electronic materials and their processing to support related Industries and to become a source of critical electronic materials, know-how and technical services and to develop and establish small quantity production base for materials which are crucial for high technology projects for space, defence, atomic energy, IT and communication.

76. For the year 2015-16, as against the proposed GBS of ₹ 60 crore, there has been an allocation of ₹ 10 crore each for EMDC & C-MET.

77. The Committee have been informed that the research projects initiated in C-MET and under EMDC have resulted in major technology and ToT for the same are to be implemented in the following areas:-

(i) Chip thermistors and chip in glass thermistors
(ii) Piezo ceramic compositions
(iii) Microwave substrates
(iv) BMT ceramics

78. However, according to the Department, achieving of the targeted objectives is subject to the availability of the funds as requested by C-MET and EMDC.

## PART – II

## OBSERVATIONS/RECOMMENDATIONS

### DEITY BUDGET

**1. The Committee note that for the year 2015-16, against the proposed Gross Budgetary Support of ₹ 10050.00 crore, an allocation of ₹ 2568.00 crore has been made for DeitY. The budget estimate has been reduced by 33% compared to the BE allocation in the year 2014-15. So far as the budgetary support for the year 2014-15 is concerned, the amount allocated at BE and RE stages were ₹ 3815 crore and ₹ 3600 crore, respectively, and the actual utilization upto March, 2015 was ₹ 3471.71 crore which is 96% of the RE allocation. Significantly, expenditure for the year 2014-15 is 64% higher than that of 2013-14. The Committee note with satisfaction that the expenditure with respect to the BE allocations during the last three years have also improved from 61.99% to 91%. While appreciating the continuous improvement in expenditure, the Committee desire that the momentum gained in this direction be sustained and consolidated steps be taken to achieve the monthly/quarterly expenditure and quantifiable targets set for the current fiscal. In the face of increased expenditure in 2014-15, a reduction of 33% of allocation at BE for the current fiscal by the Ministry of Finance appears a little unfair to the Department. As such, the concern of the Committee in this regard should be brought to the notice of the Ministry of Finance.**

### Budgetary Provision for the North-Eastern Region (NER) and Sikkim

**2. The Committee note that the Budgetary allocation for NER and Sikkim for the year 2015-16 is ₹ 257.00 crore. As far as utilization of funds for this region is concerned, the Committee again note with satisfaction that the Department have improved their expenditure during the first three years of**

**the Twelfth Five Year Plan. During the previous DFG (2014-15), the Committee had taken notice of the corrective measures initiated by DeitY to address impediments faced in the implementation of projects in NER. Those mainly related to providing connectivity to remote locations through technologies like Very Small Aperture Terminals (VSAT), initiatives to provide solar back-up to address the power shortage problem at CSCs and a Plan to open a BPO in the region. With regard to the developments in these matters:**

**(a) The Committee note that till date 1869 CSCs have been provided with connectivity through VSATs. During the previous DFG (2014-15), the Committee had been informed that out of 2,500 VSATs sanctioned for North East and other difficult areas, 1,705 VSATs had been installed till 30th September, 2014. While noting that in six months an additional 164 CSCs have only been connected through VSATs, the Committee apprehend that at this slow pace of connectivity, the Department may not be able to complete the target of 2500 VSATs within this Plan period. The Committee, therefore, recommend to the Department to take urgent necessary steps to accomplish connectivity to CSCs in the remotest locations of this region through VSATs within the timeline.**

**(b) The Committee note that with regard to the Solar Power back-up for CSCs, the Ministry of New & Renewable Energy, (MNRE) GoI, have approved Solar Power back-up proposal of Manipur, Meghalaya, Mizoram and Nagaland; 351 and 217 Solar Power back-up units have been installed and commissioned at CSCs in Manipur and Mizoram, respectively; Himachal Pradesh, Assam and J&K have submitted their proposals to MNRE for enabling Solar Power back-up at CSCs which are under consideration; Arunachal Pradesh has to re-submit the proposal as per the revised benchmark set by MNRE; Uttarakhand and Tripura are**

**expected to submit their proposals in this financial year. While appreciating that 568 CSCs have been provided with Solar Power back-up in this region, the Committee observe that the Department have a long way to go to cover every single CSC in this region. The Committee, therefore, recommend to the Department to emulate the success of Solar Power back-up in other States like Meghalaya, Mizoram, Nagaland, Himachal Pradesh, Assam, J&K and Arunachal Pradesh and in the other difficult areas. The Committee also desire that the Department should put in place a mechanism for regular review and monitoring of proper functioning of Solar Power back-up units after their establishment. The Committee be apprised of further progress made in this regard.**

**(c) A North East BPO Promotion Scheme (NEBPS) has been approved for creating employment opportunities for the youth of the region and for growth of IT-ITES Industry. The Administrative Approval for implementation of the NEBPS to incentivize establishment of 5000 seats with capital support of ₹ 50 crore in the form of Viability Gap Funding (VGF) for the remaining period of the Twelfth Five Year Plan (i.e. till 31.03.2017), has been issued on 30th January 2015. The Committee recommend that the Software Technology Parks of India (STPI), an autonomous society under DeitY, has been designated as the Nodal Agency for implementation of the NEBPS and that the Request For Proposal (RFP) document for open bid of this Scheme is under finalization. While lauding the initiative of NEBPS, the Committee emphasise that the exercise of finalization of the Request For Proposal (RFP) and all the necessary clearance be completed well in time so that the Scheme can be implemented as per the scheduled timelines and the**

**benefit can be availed by the youth of the region at the earliest. The Committee be kept informed about the progress made in this regard.**

**While appreciating the initiatives of the Department to address the impediments encountered in NER, the Committee stress the need for sustained efforts to implement these initiatives as well as remove other hindrances encountered. The Committee further desire that the Department should also take initiatives for promoting R&D activities and conduct training programmes for Cyber Security awareness at various North East institutions.**

**SCHEMES/PROJECTS OF DEITY**

**National Informatics Centre (NIC)**

**3. The Committee note that as against the proposed allocation of ₹ 1300 crore, the BE provided for the year 2015-16 for NIC is ₹ 700 crore. As far as the financial performance of NIC is concerned, the Committee understand that during the last three years, the outlay available at RE stage has almost been fully utilized by them. However, the Committee are given to understand that NIC is witnessing severe constraints relating to manpower, so much so that it has become extremely difficult for it to sustain the number of projects, as per the IT requirements of the States/Districts. The other major constraint faced by NIC is related to the expansion of basic infrastructure across the country. On both the issues, the Committee have been repeatedly expressing their concern. While examining DFG (2014-15), the Committee had recommended expediting the proposal for creating posts to strengthen the technical arm of NIC and to initiate action for upgradation of basic infrastructure at NIC centres across the country. In this regard, a proposal (Cabinet Note) has been mooted by the Department for the creation of 1407 posts at different levels of Scientific and Administrative cadre. The Committee**

**recommend to the Department to take the proposal to the conclusive end and resolve issues relating to manpower constraints at the earliest. The Committee would like to re-emphasize that time-bound resolution of both the issues is very significant because the man power requirement is bound to increase in view of the setting up of the new NIC Cloud at Delhi, new Data Centre at Bhubaneshwar and NIC being an attached office of the Department and providing e-Governance ICT Infrastructure, applications and services for the delivery of citizen-centric services. Needless to say, there is an urgent need for upgrading the basic infrastructure too because the Data Centres of NIC host more than 7000 websites of the Government. Not only this, NIC has the largest e-Mail service of the country with more than 90 million e-Mails per month and the NIC National Cloud is presently hosting a number of critical applications on over 2500 virtual servers. The Committee desire to be kept apprised of the progress made in resolving the genuine concerns of NIC.**

**Digital India Programme**

**4. The Committee find that under the 'Digital India Programme' - an umbrella programme of the Department for the year 2015-16 - there have been reduced allocations under some of the major schemes, like Technology Development Council Projects, Micro-Electronics and Nano-Tech Programme, R&D in Medical Electronics & Health Informatics, Cyber Security (incl. CERT-In, IT Act), Promotion of IT & ITeS Industries/Electronics & IT Hardware manufacturing, Technology Development for Indian Language and National Knowledge Network. It is a matter of concern that the drastic cut in the budgetary allocations are going to adversely impact on the R&D activities supported under these programmes of DeitY. The Committee are given to understand that the major initiatives in the thrust areas of Medical Electronics and Health Informatics would not be taken up due to the drastic cut in**

**allocation; the reduction will also have an impact on the implementation of the key initiatives under the Cyber Security programme which may hamper the pace of building a safe cyber eco-system in the country; growth of electronics manufacturing will be affected and there will also be delays in implementation of projects under the Technology Development Council Projects and Technology Development for Indian Language. The Committee foresee that these hindrances will have a cumulative adverse effect on the pace of the overall technology development in the country. The Committee, therefore, recommend that the Department may take up the matter with the Ministry of Finance with a view to getting adequate funds at RE stage so that the momentum of 'Digital India Campaign' does not suffer a setback.**

**<u>e-Locker/ Digital locker</u>**

**5. The Committee note that the Department have envisaged 'e-Locker' as a part of the Digital India vision, which is an ecosystem with collection of repositories and gateways for issuers to upload the documents in the digital repositories, requesters to access the documents and a digital locker space for each resident to access his/her documents from the repositories or upload legacy documents. The Committee consider it to be a laudable initiative that the Beta release of Digital Locker system is done to provide private space on a public cloud to each citizen where he/she can keep public records and can even exchange it for availing various services. It is, however, essential that the Department should evolve a device to address the apprehensions associated with 'Digital Locker', such as security threats, data hacking, privacy issues, etc. The Committee are of the opinion that there is a need to have a data privacy policy to take care of the apprehensions associated with this praiseworthy concept and in addition the Department should have the requisite tool to deter any attempt to compromise data privacy. The**

**Committee also recommend to the Department to conduct a study of the user's response/satisfaction so that they can specifically address any problem areas that come to their notice.**

**Digital India Programme and Manpower Development**

**6. The 'Digital India Programme and Manpower Development' scheme targets HRD activities to ensure availability of trained human resources for the manufacturing and service sectors of electronics and IT industry and includes Skill Development in IT initiatives. Besides, the Internet Governance component of this programme involves development and application by Governments, the private sector and civil society in their respective roles of shared principles, norms, rules, decision-making procedures and programmes that shape the evolution and use of the Internet. The objective of 'IT for Masses' component of the programme is empowerment of women and development of SCs/STs using ICT.**

**The Committee note that under this scheme, 371211 persons have been skilled through Autonomous bodies *viz*. NIELIT, CDAC and other implementing agencies (registered/trained/undergoing training) till February 2015. Further, NIELIT has trained 25935 persons in Basic Computer Course (BCC) of 40 hrs duration. The Committee have been apprised that the Department are in the process of formulating some schemes/activities relating to Human Resource Development for Electronics and ICT sector which *inter-alia* include Skill Development in Electronics Hardware (being implemented by NCPUL/NIELIT Chandigarh), Information Security Education and Awareness (ISEA) Project, Capacity building in the areas of Electronic Product Design and Production Technology, special Manpower Development Program for Chips to Systems, creation of skill development facilities in deprived areas through**

**strengthening of National Institute of Electronics and Information Technology (NIELIT), Scheme for 'Digital Saksharta Abhiyan' (दिशा), for Skill Development in ESDM, for Post Graduate and Doctorate Level, Graduate level, for vocational Skill development, for Grass root level, etc. In addition, during the year 2014-15, as against the target of 1800 women beneficiaries, a total of 2103 women have been trained under the 'Digital India Programme and Manpower Development for Skill Development in IT & IT for Masses'.**

**The Committee also note that under the aegis of 'Digital India' the Department have approved a Scheme for 'Skill Development in ESDM for Digital India' on 09.12.2014 to cover all the States/UTs of the country for facilitating skill development for 3,28,000 persons in ESDM in a period of 4 years with an outlay of ₹ 411 crore (approx.). In fact, this scheme is in continuation of the scheme for financial assistance to select States/UTs for 'Skill Development in Electronics System Design and Manufacturing (ESDM) sector' approved earlier and is being implemented in 8 States, and both the Schemes are to be implemented concurrently. While appreciating the progress made under this Scheme, the Committee recommend to the Department to progressively evaluate and suitably modify the modules/programmes of the Scheme more practically as per the emerging demands of the Electronics and IT Sector. The Committee also recommend to the Department to set annual targets for the ESDM Scheme and cover all the States/UTs as per the scheduled timeline.**

**<u>Electronic Governance (NeGP, 'Programme on enabling all schools with virtual classrooms' and 'Programme on Good Governance and Best Practices')</u>**

**7. The Committee note that Electronic Governance include NeGP (approved in May 2006), 'Programme on Good Governance and Best Practices' and 'Programme on enabling all schools with virtual classrooms' (approved in 2014-15 with a corpus of ₹ 100 crore each). During the year 2015-16, as**

**against the proposed allocation of ₹ 994 crore, the BE allocation is ₹ 450 crore, whereas during the year 2014-15, the BE and RE were ₹ 475.00 and ₹ 479.92 crore, respectively and the actual expenditure was ₹ 414.90 crore. With regard to the progress under the 'Programme on enabling all schools with virtual classrooms and 'Good Governance and Best Practices schemes', the Committee are given to understand that the physical and financial targets for the year 2014-15 have been met and ₹ 55.00 crore and ₹ 70.87 crore have been utilized for each project, respectively. In the first phase of the 'Programme on enabling all schools with virtual classrooms', 3500 schools and 50 DIETs having ICT infrastructure are being targeted to enable them with virtual classrooms in five States, namely Himachal Pradesh, Gujarat, Rajasthan, Tamil Nadu and Tripura and this project has been approved by DeitY. Further, with regard to 'Good Governance and Best Practices', letters have been sent to the Ministries/Departments concerned and all States/UTs to formulate suitable project proposals for the development of new applications and for replication of successful e-Governance applications in various domains. The Committee note that in response to this, various proposals have been received of which 8 projects have been approved by the competent authority and administrative approvals have been issued, whereas 4 projects are at various stages of approval in DeitY.**

**However, with respect to three core components of NeGP scheme (under Electronic Governance), *viz*. State Wide Area Network (SWAN), Common Service Centres (CSCs) and State Data Centres (SDCs) schemes, the Committee observe that presently SWAN has been made operational in 34 States/UTs, of which 25 States/UTs are utilizing around 60% of bandwidth of the existing link capacity. The total number of operational CSCs (as on 28.02.2015) is 1,40,712, of which only 1,25,387 CSCs have connectivity. With regard to SDCs, the Committee find that 23 SDCs have been made operational,**

**out of which 19 SDCs are utilizing around 50% of the SDC Infrastructure (percentage of rack space utilized). The Committee also note that 4 SDCs have been made operational during the year 2013-14 whereas only one SDC, in Mizoram, has been made operational in the year 2014-15 and the target set for the year 2015-16 is to complete 4 SDCs (Himachal Pradesh, Punjab, Dadra Nagar Haveli and Daman & Diu) in the year 2015-16. With regard to establishment/operationalisation of SWAN and CSCs, there is an increase in their number when compared to the previous years. However, with regard to the SDCs, the number has remained the same. Not only this, the Committee find that the Department during the previous DFG (2014-15) had stated that the timeline for completing the implementation in two Union Territories (i.e. Dadra and Nagar Haveli and Daman and Diu) was March, 2015; however, this appears not to have been achieved in the light of their target for this financial year 2015-16 (to complete 4 SDCs in Himachal Pradesh, Punjab, Dadra Nagar Haveli and Daman & Diu). It is further disquieting to note that the usage of SDC Infrastructure and existing bandwidth have not improved over the last year's performance. The Committee have been recommending repeatedly to the Department to complete the establishment of these components of NeGP as per scheduled targets. While noting the non-completion of these components in all the States/non-functional status of some of the components and non-utilization of infrastructure and the existing bandwidth capacity, the Committee reiterate their stand and call upon the Department to take requisite steps for establishment/operationalisation/roll-out of all the components of NeGP. The Committee also earnestly desire that efforts should be made to ensure that the targets set under the 'Programme on enabling all schools with virtual classrooms' and 'Good Governance and Best Practices schemes' are not deferred. The Committee may be kept**

**apprised of the improvement made in achieving the targets under these schemes.**

**Cyber Security (incl. CERT-In and IT Act)**

**8. The Committee observe that the holistic approach of securing Indian Cyber space include the objective of implementing the National Security Policy which mandates the establishment of the National Cyber Co-ordination Centre (NCCC), Botnet Cleaning Centre and Malware Analysis Centre (BCCMAC). The Committee, while examining DFG (2014-15), had observed under-funding and non-utilization of the RE allocation under Cyber Security programme and had called for an improvement in the situation. In this regard, the Committee note that during the year 2015-16, though the allocation at BE stage is reduced around 3.5 times (i.e. ₹ 85 crore) against the proposed sum of ₹ 297 crore, there has been an increase in the allocation when compared to last year's RE allocation of ₹ 62 crore. With regard to the National Cyber Co-ordination Centre, the projected outlay is ₹ 770 crore, for a period of five years, out of which the requirement for the first year is ₹ 266 crore. The Committee note that under NCCC project, the initiative of consultation with all the stakeholders as well as evaluation of all the technological aspects of the project initiative have been completed and have reached the advance stage of approval. During the current year, the first stage of implementation, which includes site preparation, procurement of equipment and creation of manpower resource, have been proposed. The Committee also note that the project for setting up of Botnet Cleaning and Malware Analysis Centre has also been approved with an outlay of ₹ 90 crore for a period of five years and for the current year (2015-16), the estimated financial outlay is ₹ 25.85 crore. The project implementation has already started and procurement of equipment and site preparation are in progress. The Committee desire that these two key**

**initiatives should not be hampered due to want of funds as it would, in turn, hamper the pace of building a safe cyber eco-system in the country.**

**9. The Committee, in their Second Report on DFG (2014-15), had noted that though the number of cyber fraud cases during the last three years had come down, yet financial loss due to e-fraud had increased. Further, the data maintained by the Reserve Bank of India (RBI) reveals that a total number of 10048, 8765, 9500 and 9362 cyber fraud cases related to Credit Cards, ATM/Debit Cards and Internet Banking have accounted for losses of ₹ 38 crore, ₹ 67 crore, ₹ 78 crore and ₹ 60 crore during the years 2011-12, 2012-13 and 2013-14 (till December 2014), respectively. Besides, the Central Bureau of Investigation (CBI) has reportedly registered 46 cases (14 PEs and 32 RCs) relating to Cyber Crime in various parts of the country during the last 3 years, i.e. 2012, 2013, 2014 and 2015 (till February). An amount of ₹ 90 crore, ₹ 158 crore and ₹ 6 crore, respectively was involved in these cases. However, the number of cases of Government websites being hacked has come down over the years. The report of the Indian Computer Emergency Response Team (CERT-In) indicates that a total number of 28481, 32323 & 4241 websites were hacked by various hacker groups spread across the world during the years 2013, 2014 and 2015 (till Feb, 2015) and these include a total number of 371, 189, 155 and 19 Government websites hosted under 'gov.in' & 'nic.in' domains during the period.**

**<u>Mechanism/Resources/Preparedness to tackle Cyber threat</u>**

**10. With regard to the mechanism/preparedness to tackle Cyber threat, the Committee note that apart from the provisions of the Information Technology Act, 2000, initiatives by CERT-In and guidelines/circular by the Reserve Bank of India (RBI), the Department have taken several measures like programme on development of cyber forensics tools and setting up of infrastructure for investigation and training of the users, particularly police and judicial officers.**

**Further, Information Sharing and Analysis Centres (ISACs) have been set up at the Institute for Development and Research in Banking Technology (IDRBT) and a website (secureyourpc.in) for children, home users and elderly is available for safeguarding their computer systems and learning the risks on internet. While acknowledging the Department's submission that their measures have been helpful in creating awareness for dealing with e-frauds, the Committee feel that a lot more has to be done in this field in view of the uniquely challenging nature of cyber space.**

**The Committee are given to understand that there is no international mechanism to tackle cyber attacks and the Department are working with the United Nations Group of Government Experts to find out a uniform response. Taking note of the absence of uniform global cyber space norms, the Committee recommend to the Department to use the UN platform to come out with global cyber space norms and develop a consensus for a uniform Cyber Jurisprudence which regulates and facilitates extradition of cross-border cyber criminals.**

**<u>Cyber security experts</u>**

**11. With regard to cyber security professionals, the Committee, in their Second Report on DFG (2014-15), had noted that against the growing demand for cyber security experts in the country, which is estimated to be 5 lakh by 2016, India had only 44,000 information security professionals. The Committee note with concern that there is no significant increase in the availability of cyber professionals in the country, particularly with respect to Cyber auditors in the country numbering just 51. While appreciating the Department's submission that they are moving from security incident prevention to prediction, the Committee urge the Department to meet the estimated requirement of manpower to tackle cyber threats at the earliest.**

**Right to be forgotten online**

**12. With regard to the emergence of the concept of 'Right to be forgotten online', the Committee note that the Department are following the developments in this area so as to enable the Cyber Regulatory Advisory Committee (CRAC) to deal with these issues. The Committee are given to understand that the Department are formulating a privacy legislation (the 'Right to be forgotten online' is connected with the right to privacy) and they have made a reference to the Department of Personnel and Training (DoPT) for incorporation of their view in the new law. The Committee are of the opinion that in view of the increased awareness regarding freedom of expression and privacy, the Department need to remain alert to take cognizance of developments associated with this concept and act swiftly. The Committee may be kept informed about the progress in formulation of the proposed law.**

**Development related to Section 66A of IT Act, 2000**

**13. With regard to the Supreme Court judgement on Section 66A of the Information Technology Act, the Committee have been informed that the Government have welcomed the Hon'ble Supreme Court's decision of scrapping Section 66A. The Committee also note that after detailed discussions, the Government had filed an affidavit before the Hon'ble Supreme Court making their stand clear that they respect the freedom of speech and expression on social media and has no intention of curbing it. Besides, the Department, in due course of time, would study and understand the operational implications of the judgment for any possible action in the future. Regarding the future course of action following the Supreme Court judgement, the Committee note that the Department are now focusing extensively on increasing user awareness with regard to responsible user behaviour and**

**acceptable norms and how people should be able to use the cyber space. The Department have also assured the Committee that even after Section 66A has been struck down, the IPC provisions still exist for any serious violation of individual privacy and dignity. The Committee, in their Forty-fourth Report (15th L.S.) on DFG (2013-14), had noted a few controversies related to Section 66A and other Sections of the IT Act, 2008 (as amended) and had asked the Department to take necessary corrective steps for revision of the clauses of the Act and the Committee once again recommend to the Department to be proactive in such situations. The Committee would await Government's response in the matter.**

**<u>Promotion of IT & ITeS Industries/Electronics & IT Hardware Manufacturing</u>**

**14. The Committee note that during the current financial year, promotion of IT & ITeS Industries and promotion of Electronics and IT Hardware Manufacturing have been put under one head. The budgetary allocations during the year 2015-16 are ₹ 5 crore and ₹ 69 crore, respectively, for the two schemes. The Committee also note that as per the assessment of NASSCOM, the Indian IT-ITES industry is growing progressively. However, the fact of the matter is that in spite of several measures taken by the Department over the years, there has been rapid increase in import of electronic items [which has increased from ₹ 187306.38 crore in the year 2013-14 to ₹206399.58 crore in the year 2015-16 (till Feb 2015)] and decline in exports of electronic items [which was ₹ 46703.78 crore during the year 2013-14 and ₹ 33634.29 crore during the current year (till Feb 2015)]. Nevertheless, the Committee take note of the steps taken by the Department to promote this sector which *inter-alia* include the Modified Special Incentive Package Scheme (M-SIPS); Electronic Manufacturing Clusters (EMC); Setting up of Semiconductor Wafer Fabs; preference to Domestically Manufactured Electronic Products (DMEP) in**

**Government procurement; Electronic Development Fund (EDF) Policy approved on 10th December, 2014; Compulsory Safety Standards for Electronics; Scheme for setting up/up-gradation of Labs; Promoting collaborative funding in R&D; Supporting research in Medical Electronics through BIRAC; National Centre of Excellence for Large Area Flexible Electronics (CFLEX); National Centre of Excellence in Technology for Internal Security (NCETIS); Policy for Promotion of Fabless Design Industry; Development of Indian Conditional Access System (CAS); Scheme for supporting MSMEs in the electronics sector; Setting up of Incubation Centre in Delhi-NCR; Setting up of Incubation Centre with focus on Medical Electronics at IIT Patna, etc. The Committee also note that rationalization of tariff and Budget announcement have been made during the year 2014-15 and 2015-16 for boosting indigenous manufacturing of Mobile Handsets, Personal computers (Desktop, Laptop and Tablets), TVs, indigenous manufacturing of ITA Products, LED Lights, Medical Electronic Products, Solar Photovoltaic Cells, smart cards, Microwave Ovens, optical fibre cables, Semiconductor wafer fab, Telecommunication Equipment Manufacturing, Set Top Boxes, etc.**

**The Committee have been given to understand that some areas which are major hurdles hindering this sector from taking off are zero duty regimes on 217 tariff lines [India being a signatory to the Information Technology Agreement-1(ITA-1) of the World Trade Organization (WTO)], the domestic manufacturing sector facing direct competition from the manufacturers of countries like China, Japan, Taiwan, South Korea, Malaysia, United States of America and European countries, etc. The other identified obstacles relate to the declining domestic manufacturing capabilities and various disabilities like high finance cost, poor infrastructure and logistics, unreliable and poor quality of power, inverted tax duty structure wherein importers get favorable tax regime vis-a-vis domestic manufacturers and high transaction cost due to the**

**large number of regulatory clearances requirements, etc. This has added to the slow growth of Electronics and IT Hardware manufacturing sector.**

**The Committee, however, note that during the year 2014-15 the Department have taken up the exercise of inviting business consortium to set up two Semiconductor wafer fabs and they have received two proposals. The Committee understand that these proposals have been approved by the Government and the consortia are in the process of finalising their DPR and arranging money for the project. While appreciating this development, the Committee recommend to the Department to take measures to see to it that there is no procedural delay in finalising and setting up the two Semiconductor wafer fabs.**

**<u>E-waste</u>**

**15. With regard to the role of DeitY in managing e-Waste, the Committee note that the Department's primary role is to develop R&D solutions for processing and extraction of precious metals from Printed Circuit Board (PCB) and plastics out of the e-waste. The Committee further note that DeitY have come out with technology where plastics can be taken out, categorized and reused to make car bumpers and switches and they are trying to transfer the technology to manufacturers for manufacturing value added goods. With regard to the Printed Circuit Board as well, the Department have supported technology development for segregating and extraction of metals/components out of the PCB and they, along with another company, have put up a demo plant at Bengaluru for extraction of about one metric tonne of metal from the PCB per day. The Committee are also given to understand that after the successful demo, they will give this technology to any manufacturer who would like to use it and recycle the waste. The Department have got approval to put up the e-waste awareness programme under which they will do an elementary analysis and then will create awareness both at the manufacturer**

**level and at the school/college/RWA levels and help to recycle e-waste. The basic implementation of legal framework for e-waste management is the responsibility of the Ministry of Environment and Forests (M/o E&F). However, to address the primary problem of e-waste being taken by unorganized sectors and channelized and processed in a non-friendly manner, DeitY are working jointly with the M/o E&F by giving technological solutions to them and receiving help from them for identifying areas in which DeitY can set up ecological parks /some plant for recycling. Taking note of another initiative of DeitY of providing 25% cash back on the capital expenditure for e-waste processing plant, the Committee feel that there need to be continuous efforts on the part of the Department to manage e-waste scientifically and more number of scientific and electronic e-waste disposal units should be set up in future. The Committee also recommend to the Department to draft a policy, in co-ordination with Mo E&F, for increasing e-waste awareness in the country and come out with a plan for 'e-waste handling site' in each city.**

**Technology Development for Indian languages**

**16. The Technology Development for Indian Languages (TDIL) programme is playing an important and catalytic role in promoting development of linguistic resources/tools and for wider proliferation of Indian language technology products and solutions. The Budgetary allocation and utilization under this project reveal that the targets of RE allocation have been met during last two years. Nevertheless, the Committee note with concern that in spite of utilizing almost all the RE allocations during the previous years, the amount allocated for the year 2015-16 (₹ 20 crore) for this programme has been reduced by 7 times from the proposed sum of ₹ 140 crore. The Committee would like the Department to intimate the concern of the Committee to the Ministry of Finance. The implication is accentuated in view of the**

**Department's submission that the targets in several projects in the area of Technology, Language Resource and Standardization, under TDIL, could not be achieved due to shortage of budget and only token amount of Grants-in-Aid have been released to several projects, resulting in delay in achieving the targets. Disquietingly, during the year 2014-15, no new projects for the development of Multilingual computing in future technology area could be initiated. Further, the computer scientists trained under the project have left the project which has resulted in shortfall of the targets; the delay in implementation of projects has a cumulative effect on the pace of overall technology development in this area. Considering the Government's mission of 'Digital India', the Committee are of the opinion that there is an urgent need to have IT facilitates in Indian languages for spread of IT to the masses and hindrances in the projects will hamper the public delivery of services in local languages. The Committee, therefore, recommend to the Department to mitigate the said consequences by enhancing the budget allocation to TDIL Programme and also pursue their case with the Ministry of Finance.**

**<u>C-DAC and other Autonomous Societies/Bodies</u>**

**17. The Committee note that during the current fiscal (2015-16) the schemes/projects/councils/societies like Center for Development of Advanced Computing (C-DAC), Society for Applied Microwave Electronics Engineering & Research (SAMEER), Educational Research Network (ERNET), Electronics Materials Development Council (EMDC), Centre for Materials for Electronics Technology (C-MET), NIELIT (erstwhile DOEACC ) and Media Lab Asia (MLA) have been included under the head 'C-DAC and other Autonomous Societies/Bodies'. The Committee stress that closes monitoring of the functioning of these bodies will go a long way in the overall performance of DeitY.**

**Center for Development of Advanced Computing (C-DAC)**

**18. With regard to the allocation for C-DAC, during the year 2015-16, an allocation of ₹75.00 crore has been made as against the proposed outlay of ₹ 574.50 crore. They have been able to spend almost hundred per cent fund at RE stage during the past two years, which speaks well of this financial performance. However, the matter of concern is that due to non-allocation of funds on year- to-year basis for R&D activities, C-DAC is unable to focus on the core areas of research and the state of-the-art infrastructure, which is ongoing since 2009, is being extended, resulting in cost escalation. C-DAC is also paying huge money on rentals for hired premises. In addition, there is a requirement of Non-Plan allocation of at least ₹ 200.00 crore for salary and allowances of sanctioned manpower and administrative expenses of 11 centres and the Corporate Office. The Committee, while noting that C-DAC carries out R&D in ICT&E area, the organization need to be extended requisite budget support to enable them to accomplish this mandate.**

**19. With regard to having indigenous Set Top Boxes (STBs), during examination of the previous DFG (2014-15), the Committee were informed that M/s ByDesign India Pvt. Ltd, Bangalore, had been shortlisted for development and implementation of the India CAS in association with C-DAC. The Committee are given to understand that a Tripartite agreement had 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 and upon expression of satisfaction by a Project Review and Steering Group (PRSG), the first installment of DeitY's support amount has already been released as advance to M/s. ByDesign India Pvt. Ltd. The Committee also note with satisfaction that Indian CAS system is expected to be built, tested and would be ready for integration and deployment by November 2015. The Committee**

**further note that for promoting indigenous manufacturing of STBs, the Government have taken several fiscal initiatives which *inter-alia* include imposition of Basic Customs Duty (BCD) of 10% on import of Set Top Boxes, extending the facility of form 'C' to STBs manufacturers who had to pay CST equivalent to VAT rate (12.5%) and compulsory registration order for compliance to safety standards for curbing the inflow of sub-standard STBs. While appreciating the initiatives of DeitY, the Committee desire the Department to make all possible efforts to ensure that the timeline of November 2015 is adhered to and the roll-out of the Indian CAS system takes place without any further delay.**

**Electronic Materials Development Council and Centre for Materials for Electronics Technology (EMDC & C-MET)**

**20. The Committee note that the Electronic Materials Development Council (EMDC) Programme has been conceived to support research in the emerging areas of materials for electronics, Photonics and e-waste. The Centre for Materials for Electronics Technology (C-MET), an autonomous Scientific Society under DeitY, is dedicated to R&D in Electronic Materials, their processing, their know-how and to develop and establish small quantity production base for materials which are crucial for high technology projects for space, defence, atomic energy, IT and communication. The Committee understand that C-MET has three laboratories located in Pune, Hyderabad and Thrissur. For the year 2015-16, as against the proposed GBS of ₹ 60 crore, there has been an allocation of ₹ 10 crore each for both EMDC & C-MET. The Committee have been informed that achievement of the targeted objectives under these two Council/Society is subject to the availability of funds. In view of the fact that Council/Society are dedicated to R&D in the critical and emerging area of electronic material and its knowhow, the Committee recommend to the Department to ensure that the R&D carried out by EMDC &**

**C-MET should not suffer for want of requisite allocation, particularly in view of the Government's policy thrust on the 'Make in India' campaign. The Committee also recommend to the Department to take up their case with the Ministry of Finance for the required allocations, in the light of the achievements made by EMDC & C-MET.**

**New Delhi;**
**21 April, 2015**
**01 Vaisakha, 1937 (Saka)**

**ANURAG SINGH THAKUR,**
**Chairperson,**
**Standing Committee on Information Technology.**

**Appendix-I**

## MINUTES OF THE SIXTEENTH SITTING OF THE STANDING COMMITTEE ON INFORMATION TECHNOLOGY (2014-15) HELD ON 8th APRIL, 2015

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The Committee sat on Wednesday, the 8th April, 2015, from 1100 hours to 1310 hours in Committee Room 'D, Ground Floor, Parliament House Annexe, New Delhi.

**PRESENT**

**Shri Anurag Singh Thakur- Chairperson**

**MEMBERS**

***Lok Sabha***

2. Shri Prasun Banerjee
3. Dr. Sunil Baliram Gaikwad
4. Dr. K.C. Patel
5. Shri Hemant Tukaram Godse
6. Dr. Anupam Hazra
7. Shri P. Karunakaran
8. Shri Virender Kashyap
9. Shri Harinder Singh Khalsa
10. Shri Keshav Prasad Maurya
11. Dr. (Smt.) Bhartiben Dhirubhai Shiyal
12. Shri Abhishek Singh
13. Shri D. K. Suresh
14. Shri Ramdas C. Tadas

***Rajya Sabha***

15. Shri Salim Ansari
16. Smt. Jaya Bachchan
17. Dr. K. V. P. Ramachandra Rao
18. Mahant Shambhuprasadji Tundiya
19. Shri Meghraj Jain

***SECRETARIAT***

| | | | |
|---|---|---|---|
| 1. | Shri K. Vijayakrishnan | - | Additional Secretary |
| 2. | Shri J.M. Baisakh | - | Director |
| 3. | Dr. Sagarika Dash | - | Deputy Secretary |
| 4. | Shri Shangreiso Zimik | - | Under Secretary |

**Representatives of the Ministry of Communications and Information Technology (Department of Electronics and Information Technology)**

| Sl. No. | Name | Designation |
|---|---|---|
| 1. | Shri R.S. Sharma | Secretary |
| 2. | Shri Tapan Ray | Additional Secretary |
| 3. | Ms. Anuradha Mitra | Joint Secretary and Financial Adviser |
| 4. | Dr. Rajendra Kumar | Joint Secretary |
| 5. | Shri R.K. Goyal | Joint Secretary |
| 6. | Dr. Ajay Kumar | Joint Secretary & Director General (NIC) |
| 7. | Dr. M.R. Anand | Senior Advisor |
| 8. | Dr. Debashish Dutta | Scientist G and Group Coordinator & ED, C-MET |
| 9. | Shri B.J. Srinath | Director General, CERT-In |
| 10. | Prof. Rajat Moona | Director General, C-DAC |
| 11. | Dr. Neena Pahuja | Director General, ERNET |
| 12. | Dr. Ashwini Kumar Sharma | Managing Director, NIELIT |
| 13. | Dr. A.L. Das | Director, SAMEER |
| 14. | Dr. Omkar Rai | Director General, STPI |
| 15. | Smt. Mitali Chatterjee | Director General, STQC |
| 16. | Shri B. M. Baveja | Scientist G and Group Coordinator |
| 17. | Shri T A Khan | CCA |

2. At the outset, the Chairperson welcomed the Members to the sitting of the Committee. Thereafter, the representatives of the Ministry of Communications and Information Technology (Department of Electronics and Information Technology) were called in and the Committee took their evidence on the Demands for Grants of the Department for the year 2015-16.

3. The Department initially made a power-point presentation highlighting the financial and physical achievements of the Department during the year 2014-15, classification of Budget provisions for the Financial Year 2015-16, progress made in 'Digital India', Initiatives taken to promote IT and Electronics manufacturing sector, e-Governance, IT and IT enabled Services, fall-out of judicial pronouncement on the IT Act, 2000, constraints and challenges faced by the Department and major achievements/initiatives of DeitY like MyGov.in, Swachh Bharat Mission (SBM) Mobile Application, notification of Email Policy , Policy on adoption of Open Source Software, Beta release of Digital Locker system, eSign framework, Jeevan Pramaan portal, (GI Cloud), National Scholarship Portal, Human Resource Development, approval of NEBPS (North East BPO Promotion Scheme), R & D in IT and Electronics, E-Learning, launch of .BHARATH, etc. The queries raised by the Members were clarified by the representatives of the Department. With regard to certain points, which remained unanswered during discussion, the Chairperson asked the Department to submit written replies.

3. The Chairperson, then, thanked the representatives of the Department for deposing before the Committee.

The witnesses then withdrew

Verbatim proceedings of the sitting have been kept on record.

The Committee, then, adjourned.

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**Appendix-II**

## MINUTES OF THE EIGHTEENTH SITTING OF THE STANDING COMMITTEE ON INFORMATION TECHNOLOGY (2014-15) HELD ON 20th APRIL, 2015

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The Committee sat on Monday, the 20th April, 2015, from 1700 hours to 1730 hours in Committee Room 'B', Ground Floor, Parliament House Annexe, New Delhi.

**PRESENT**

**Shri Anurag Singh Thakur- Chairperson**

**MEMBERS**

***Lok Sabha***

2. Shri L. K. Advani
3. Dr. Sunil Baliram Gaikwad
4. Dr. K.C. Patel
5. Dr. Anupam Hazra
6. Dr. J. Jayavardhan
7. Shri P. Karunakaran
8. Shri Keshav Prasad Maurya
9. Dr. (Smt.) Bhartiben Dhirubhai Shiyal
10. Shri D. K. Suresh
11. Smt. R. Vanaroja

***Rajya Sabha***

12. Shri Salim Ansari
13. Shri Santiuse Kujur
14. Dr. K. V. P. Ramachandra Rao
15. Mahant Shambhuprasadji Tundiya
16. Shri Meghraj Jain

***SECRETARIAT***

| | | | |
|---|---|---|---|
| 1. | Shri K. Vijayakrishnan | - | Additional Secretary |
| 2. | Shri J.M. Baisakh | - | Director |
| 3. | Dr. Sagarika Dash | - | Deputy Secretary |
| 4. | Shri Shangreiso Zimik | - | Under Secretary |

2. At the outset, the Chairperson welcomed the Members to the sitting of the Committee convened to consider and adopt two Draft Reports on 'Demands for Grants (2015-16)' relating to the Ministry of Communications and Information Technology (…..xxxxx….. and Department of Electronics and Information Technology).

3. The Committee, thereafter, took up for consideration and adoption the two Draft Reports on 'Demands for Grants (2015-16)' relating to the …..xxxxx….. and Department of Electronics and Information Technology and adopted the same without any modification.

4. The Committee, then, authorized the Chairperson to finalize the draft Reports, incorporating therein changes arising out of factual verification, if any, by the Departments and present the Reports to the House during the current session of Parliament.

**The Committee, then, adjourned**

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xxxxx Matter not related to the Report.