## **GOVERNMENT OF INDIA** MINISTRY OF ELECTRONICS & INFORMATION TECHNOLOGY) **RAJYA SABHA**

### **STARRED QUESTION NO. \*19**

TO BE ANSWERED ON: 03.02.2017

#### SHORTAGE OF SKILLED MANPOWER IN IT SECTOR

#### \*19. DR. T. SUBBARAMI REDDY:

Will the Minister of ELECTRONICS AND INFORMATION TECHNOLOGY be pleased to state:

- (a) whether there is considerable shortage of skilled manpower in the Information Technology (IT) sector;
- (b) if so, the percentage thereof and the steps taken by Government to bridge the gap;
- (c) whether Government has made any assessment and planning for immediate requirement of manpower in the IT sector due to Digital India Programme and online transactions and advent of more software related programmes; and
- (d) if so, the details thereof and the skill development training proposed to be given to the educated youth in the country?

#### **ANSWER**

#### MINISTER OF ELECTRONICS AND INFORMATION TECHNOLOGY (SHRI RAVI SHANKAR PRASAD)

(a) to (d): A Statement is laid on the Table of the House.

# STATEMENT REFERRED IN REPLY TO RAJYA SABHA STARRED QUESTION NO. \*19 FOR 03.02.2017 REGARDING SHORTAGE OF SKILLED MANPOWER IN IT SECTOR

(a) to (d): According to National Association of Software and Services Companies (NASSCOM), presently there is a workforce of 3.7 million in IT-ITeS sector. This is projected to grow to 4.3 million by 2019. The training requirements of this workforce will be met by educational and training institutions including the IIT's, IIIT's, NIIT's and Engineering colleges as well as National Institute of Electronics and Information Technology (NIELIT), NASSCOM Sector Skill Council, private entities and Industry. Further, the IT and ITeS industry is providing on-the-job training to bridge the skill gaps, if any, due to the changing technological landscape.

Details of initiatives taken by the Ministry of Electronics and Information Technology for promotion of skilled manpower in the IT-ITeS sector are given at ANNEXURE.

ANNEXURE

The Skill Development activities of the Ministry are primarily being taken up by its two autonomous societies viz. National Institute of Electronics and Information Technology (NIELIT) and Centre for Development of Advanced Computing (C-DAC). In addition, various organizations / attached offices under the Ministry viz. ERNET India, Media Lab Asia, CSC E-Governance Services India Limited, STQC, NIC etc. are engaged in training of stakeholders.

#### National Institute of Electronics and Information Technology (NIELIT)

NIELIT is engaged both in Formal & Non-Formal education in the area of Information, Electronics and Communications Technology (IECT) besides development of industry oriented quality education and training programmes in the state-of-the-art areas. NIELIT has 35 offices and a network of about 800 institutes throughout the country. NIELIT offers courses in the IT-ITES domain ranging from 'O' Level (Foundation), 'A' Level (Advance

Diploma), 'B' Level (MCA equivalent), 'C' Level (M-Tech level), IT literacy courses such as CCC (Course on Computer Concept), BCC (Basic Computer Course) and long-term and short-term courses in the non formal sector such as courses on Information Security, ITeS-BPO(Customer Care/Banking), Computer Hardware Maintenance (CHM-O/A level), Bio-Informatics(BI-O/A/B level). At present, NIELIT is training and certifying around 4 lakh persons per year.

#### **Centre for Development of Advanced Computing (C-DAC)**

C-DAC undertakes R&D in IT, Electronics and associated areas. In addition, C-DAC is engaged in IT education and training. Presently C-DAC is training about 5000 persons per year in the areas of High Performance, Grid & Cloud Computing (HGC), Multilingual Computing, Professional Electronics including Embedded & VLSI, Cyber Security, Software Technologies and Health Informatics.

Apart from the above, various other skill development activities taken up by MeitY are as under:

#### I. Post Graduate and Doctorate Level:

**Visvesvaraya PhD Scheme:** The objective of the scheme is to generate 1500 (500 full time and 1000 part time) 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. So far, a total of 1160 PhD (970 Full Time + 190 Part Time) candidates have been enrolled under this Scheme.

#### II. Graduate level:

- (i) Scheme for setting up of Electronics & ICT Academies: Under the Scheme, 7 Electronics and ICT academies have been set up at NIT Warangal, IIITD&M Jabalpur, IIT Guwahati, NIT Patna, IIT Kanpur, IIT Roorkee, MNIT Jaipur. These Academies undertake faculty/mentor development in collaboration of States/Union Territories. So far, Faculty Development Programmes (FDPs) covering 4,310 participants have been conducted.
- (ii) Information Security Education and Awareness (ISEA) Phase II: The project aims at capacity building in the area of Information Security, training of Government personnel and creation of mass awareness on Information Security. The project is being implemented by 52 institutions. So far, 13,868 candidates have been trained in various formal/non-formal programs; 2,730 Government officials have been trained and 406 awareness workshops have been conducted covering 46,466 participants.

#### III. Vocational, Skill development level

- (i) Two Schemes for Skill Development in ESDM Sector are currently under implementation viz. (i) "Scheme for Financial Assistance to select States for Skill Development in Electronics System Design and Manufacturing (ESDM) sector" being implemented by the respective State Implementing Agencies (SIAs) of 8 States with a total target to skill 90,000 candidates upto March 2019. (ii) "Skill Development in ESDM for Digital India" being implemented in remaining States/UTs with a target to skill 3,28,000 candidates upto March 2019. So far, under both the Schemes, a total of 2,29,700 candidates have enrolled, out of which 1,81,316 have been trained.
- (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 NCPUL centres and trained faculty is being provided by NIELIT. So far 8869 candidates have been enrolled/trained.

#### IV. Skill development facilities in deprived areas through strengthening of NIELIT

- (i) **Development of North-Eastern Region by enhancing the Training/ Education capacity in the IECT area:** The project objective includes upgradation of the six existing NIELIT centres; setting up ten new Extension centres and upgradation the two existing extension centres to increase the training capacity from 3,080 per year to 14,400 per year from the 5th year. So far, 15 NIELIT Centres/extension Centres have been made operational under the project and 26,000 candidates trained in various Electronics & ICT courses. NIELIT is presently offering trainings courses from 17 locations in all the eight NE States covering two additional locations at Agartala and Kohima.
- (ii)Setting up/upgradation of NIELIT Centres at Srikakulam, Ladakh Region of Leh, Kolkata, Patna, Ranchi, and Ropar is underway V. Digital Literacy Schemes: Two Schemes namely National Digital Literacy Mission (NDLM) and Digital Saksharta Abhiyan(DISHA) have been implemented. Under these schemes, a total of 82.74 lakh beneficiaries (1 per household) have been covered.

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