Workshop for Skills Gap Identification & Curriculum Finalization in ESDM Sector

Organized by
ICT Skills Development Society, Department of IT, BT and S&T, Govt. of Karnataka
In association with
NIELIT, DeitY, Government of India

Date: 2nd August 2014, Saturday **Venue:** Hotel Lalit Ashok Kumara Krupa Road, Bangalore

Proceedings

A workshop for "Skill Gap Identification & Curriculum Finalization in ESDM Sector" was organized by Dept. of IT, BT and S&T, Govt of Karnataka in association with NIELIT and Deity, Ministry of Communication & Information Technology, Government of India on 2nd August 2014 at Hotel Lalit Ashok, Kumara Krupa Road, Bangalore.

The workshop was attended by Officers from Dept of IT, BT and S&T, Govt of Karnataka, NIELIT Hq, NIELIT Centers Calicut, Chennai, Srinagar, Gorakhpur and Chandigarh along with other representatives from State Implementing Agencies in Andhra Pradesh, Kerala and UP, where the ESDM Scheme is being implemented besides the representatives of ESSCI, TSSC, Industry houses in Bangalore and academia.

The Workshop was primarily divided into three parts- the inaugural session, session for discussion and sharing of views by the industry in the Electronics, Telecom and LED, Solar & Photovoltaic sector and the interaction session of the representatives of the State Implementing Agencies with the officers from NIELIT, ESSCI and TSSC headed by Dr Ajay Kumar, JS, Deity. The minute-to-minute program is attached for details (Annexure 1)

1. **Inaugural Session:**

    Dignitaries on the dais:
    Dr Ajay Kumar IAS - JS, Deity
    Dr Ashwini Kumar Sharma - MD NIELIT
    Ms Tanusree Deb Barma IAS - Director ITBT
    Mr Pradeep Doshi - VP ESSCI
    Mr D.P. Nair - TSSC
    Dr. A. Maulishree - CEO, ICT Skills Development Society

    1.1   The Inaugural session began with the lighting of the lamp by the dignitaries present on the dais after the welcome address by the Director ITBT, Ms Tanusree Deb Barma, IAS. This was followed by a presentation by Mr Pradeep Doshi, ESSCI, wherein he gave a brief

on the work that ESSCI has done in the last one year of its existence. He shared that NOS for 14 subsectors have been finalized and 139 Qualification packs under 25 job roles are ready for implementation. ESSCI has identified 17 training partners and are ready for the roll-out of the ESDM Scheme. Mr Doshi emphasized that after an extensive market survey they have identified that maximum demand is in the IT Hardware and consumer electronics sectors.

1.2   Mr. D P Nair from TSSC, in his presentation gave an overview of the activities of TSSC. He shared that they have worked actively on the training of women in the Telecom sector and have tied up with banks too so that loan can be easily made available to women entrepreneurs which will help them establish into their professional life easily. TSSC has a well designed portal to map the profile of the trainees. 26 occupational standards have been identified and are being implemented with well laid out plans and close monitoring. TSSC has signed 131 MoUs with Telecom Industry and have 151 training partners and 4 assessment bodies.

1.3   Dr Ashwini Kumar Sharma, MD NIELIT, in his presentation apprised every one of the vast network of NIELIT centers and the grid of the affiliated partners across the country. He shared with the illustrious audience the pioneering work done by NIELIT in the field of Computer literacy in the entire country. Those present were made aware of the examination, assessment and certification tasks that various private and government agencies have entrusted NIELIT with. He shared that NIELIT has been involved in training of IT and ESDM sector since long and they have 52 well designed courses in ESDM under 9 verticals. The NIELIT centers have close links with industry and are fully capable of bringing complete synergy with industry in the courses under ESDM Scheme. As the organization has been involved in examination and certification, therefore, the mechanism of online examination and certification is already well in place. NIELIT is working in the direction of being declared as an Institute of National Importance.

1.4   Dr Ajay Kumar, JS, Deity, expressed his views regarding the scope of ESDM in the current and future market and stated that since the Electronics market is expanding so servicing in this sector must be put in place. Under the ESDM Scheme NIELIT, ESSCI and TSSC or their affiliated partners have been entrusted with training. The training should be such that the students clearing the examination should be ready for absorption in the industry and this will address the HR cost of the industry. Therefore in order to work for mutual benefit the industry must partner and specify their needs so that courses can be tailor-made. JS shared that 42 new investment proposals in Electronics have been finalized and all these units will need manpower. The upcoming green field clusters in Mysore and Electronic city which has been approved in principle by GoI will also provide a lot of employment opportunity in ESDM sector. Dr Ajay Kumar emphasized that industry should choose from existing courses or suggest their own so that curriculum can be customized and specific courses can be offered to students for making them

ready for immediate absorption. He also stated that if a State exhausts its quota of 15,000 trainees it could be allocated more, depending on the performance of other states from where the numbers could be transferred to better performing States.

1.5   The session concluded with a summary of the session and vote of thanks delivered by Dr. A. Maulishree – CEO, IT Skills Development Society. After this there were three sessions by Telecom sector, Electronics Sector and LED, Solar & Photovoltaic Sector.

2. Session: Telecom Sector and Employability

Panelists:
Mr. DP Nair, TSSC - **Moderator**
Mr. Ajay Krishnan - CISCO
Mr. T C Sudhir - Gionee
Mr. Srinivasa Raju - UTL Group
Mr. Bhudeb Mukherjee - Huawei
Mr. Jagannatha Rao - Empower Pragathi
Mr. S. Gopu - ITI Limited

2.1   Power of telecom sector was emphasized and that telecom and networking has become the backbone for the growth. India has 238 million internet subscribers and internet access from the mobile is more. Areas like Cloud computing, E-learning, E-Health, Global services, Citizen centric services were being made easy by mobile networking. Panel said that the need was to create modules by collaborating with universities and bridging the gap between the industries and the universities by holding the workshop inviting skills and resources from industries. The workshops could focus on areas like: Ultra-modern labs for PCB manufacturing, Practical training in networking etc. The training delivery should be in a manner that the students must acquire the knowledge, skills, competencies, personal changes, awareness with a professional touch.

2.2   The session also focused on identifying the potential in industry with a direct link to skill gap and employability. The emphasis to solve the problem by focusing into the requirements and by modifying academic syllabus based on the industrial need was reiterated. It was emphasized that technology and its potential was not meant to replace but meant to supplement the quality of teaching aids. There were key area with missing tools to skill the manpower. It was called upon the industry to use technology for skilling the people in niche areas with high quality and precision. To bridge the language gap, vernacular language should be as a medium of communication. Power of mobile device and the computing for ordinary man could be further expanded to employability. Panel opined that mobile was replacing many technologies with passing

time. The panel stressed on developing job-based courses in (a) Smart phone trends (b) Software-Hardware inter-phase (c) Features phones and its hardware.

3. **Session: Electronics Sector and Employability**

   Panelists:
   Mr. Pradeep Doshi, ESSC - **Moderator**
   Mr. Rajendra Naik - GE
   Mr. Sanjeev Keskar - PMC-SIERRA
   Mr. Nayan Das - ACER
   Mr. Panduranga Rao - BOSCH
   Dr. M P Pillai - Director, NIELIT Calicut

   The session focussed on bringing out the diverse nature of the Electronics sector. Panellists opined that ESSC constituted of all the premier trade body representing the Indian Electronic System Design and Manufacturing (ESDM) industry with both domestic and multinational enterprises as members of the trade bodies that constitute the Sector Skill council. The industry reiterated its commitment towards building global awareness for the Indian ESDM industry and supporting its growth through focused initiatives in developing the ecosystem. The primary objective of the discussion was to act as a catalyst for the growth of the ESDM industry in India. The workshops like the one organized were to create an enabling ecosystem that catalyses industry growth and leadership. Foster active collaboration between industry and universities to further expand the available world-class semiconductor talent pool. Challenges would be to get right skilled engineers to support the new devices and at the same time new opportunity for employment. A requirement of high degree of productivity for automobile sector to compete globally was reiterated. A strong need for skilled people in this sector was emphasised. The panellists also called upon industry in this sector to actively participate in the initiative towards skilling leading to employment. They also reiterated that the approach needs to be systematic and the society needs to approach the industry subsector-wise.

4. **Session: Solar, Photovoltaic and LED Sector and Employability**

   Panelists:
   Mr. GV Balram, MD - KREDL **- Moderator**
   Mr. Rajesh Bhat - JUWI
   Dr. Sharath Rao - CSTEP
   Mr. Priya Rajan Mishra - Philips
   Mr. Varun Manwani - Sahasra Electronics

Recently announced Karnataka state's Solar Policy to achieve 2000MW of solar energy by 2021 was the key stone for the session. The panellists reiterated on potential of employability in the sector. Discussion also was taken up on policy decisions taken by the government to promote new and renewable energy from biomass and wind. The sector brought its strengths with potential to develop the skill in rural areas and to provide employment and hence avoid the migration to urban areas. With the observed depletion in the energy system the panellists laid stress on a serious effort to take this sector forward and develop the programs in skill development. An innovative solution in Solar energy with innovative ideas in PV modelling, simulation etc could synergize the economy. Promotion of maximizing usage of solar energy in rural areas like solar home lighting, silicon model, decentralised forms of solar panels could be promoted with a spinoff of employment and rural economy. Following questions were put forward by the panel (a) How could skills be developed in a manner to complement the education? (b) How to have an understanding of what is required and how do we engineer it? (c) What would be the correct way to share the existing infrastructure with students and train them. (d) Could the state explore to export manpower? (e) Could there be a systemic approach to have solar installers and use of the potential of this sector?

5. **Close door meeting with PIA & PMU:**

   Agenda: Experience sharing and way ahead

   Participants:
   > Dr Ajay Kumar IAS - JS, Deity **- Chairman**
   > PMU: NIELIT ESSCI TSSC
   > State Implementing Agencies

This session was exclusively kept for the interaction of the representatives of the State Implementing Agencies, ESSCI, TSSC NIELIT and NIELIT-PMU with Dr Ajay Kumar. During this session the implementation plan and future actions required for the Scheme was discussed.

   5.1 Curriculum Finalization and Vetting by Industry:

   > In this session, Dr. Anil Kumar JS Deity- GoI welcomed everyone and after congratulating the IT Skills Development Society, Govt of Karnataka for a successful workshop shared that it was roll-out time for ESDM scheme. In order to start the Scheme it was most important to have the courses/curriculum in place. For this the market survey of requirement in Electronics should be done and based on that courses have to be redesigned. These courses should be put before the Expert Committee for vetting. He emphasized that the Expert Committee meeting should be called at the earliest, preferably before 15th August.

5.2 Implementation & Monitoring plan:

Chairman opined that a Central Monitoring Committee under chairmanship of MD-NIELIT be created. This committee to have members from all the State Implementing Agencies, ESSCI & TSSC. The Committee will review the progress of the Scheme implementation on a bi-monthly basis initially for first one year and then on a quarterly basis from second year onward. Similarly, a State level Steering Committees under the respective of Secretary IT in the State should be formed. This would have members from NIELIT, Stake holders and training partners and review progress on a monthly basis. This Committee should closely monitor the ESDM Scheme in each of the implementing States. On the same lines District Level committees can be formed for close coordination and implementation.

5.3 Conduction of similar workshops in other States:

Dr. Ajay Kumar, JS and Chairman of the meeting emphasized that the 'Skill Gap Identification Workshop' should be held in each of the implementing State. The workshops should be held in the months of September 2014 so that the initial awareness in each state is created and the scheme is rolled out with much fanfare and hope.

5.4 Web Portal of ESDM:

In order to disseminate the information about the Scheme and for various registrations at different levels of stake holders the Chairman stressed on putting in place the web portal for ESDM. He shared that all the relevant information along with dash boards for final outcomes and analysis should be in place in the portal. The portal should give the details of the course curriculum too besides the industry linkages and job opportunities available. It was also put forth that the mechanism of dissemination of information should be institutionalized. In order to do so JS said that whenever a new course or training partner is added the same should be sent as an SMS alert to the concerned students in the region. The involvement of local Employment Exchanges was highlighted.

5.5 Training Partners:

Chairman was of the view that the success of the scheme largely depended on the selection of training partners. This was crucial factor because the training partners are the grass root level for mobilization of the students to enroll under the scheme. Their contacts with industry would determine the placement of students completing training in ESDM.

5.6 Industry Participation:

The involvement of the Industry as faculty and as practical training partner was once again discussed. Chairman was of the opinion that without industry participation the success of the Scheme might be not as bright.

5.7 Incentive for placement:

In order to motivate the training partners some National Level award could be institutionalized. Any training partner achieving 100% placement should be felicitated in an appropriate forum. The Central Monitoring Committee under MD-NIELIT was advised to take it further.

5.8 Academy of Electronics:

Dr. Ajay Kumar also announced that the better performing state under this Scheme might have brighter chances of getting the Academy of Electronics in its territory.

The meeting ended with a congratulatory note from the Chairman to all those present for the completion of a successful ESDM workshop.

Chairman IT Skills Dev. Soc.
Department of ITBT and S&T