

**F.No.5(6)/2012-HRD**  
**Government of India**  
**Ministry of Communications and IT**  
**Department of Electronics and Information Technology**

**Minutes of the first Brainstorming Workshop for Setting up of Sector Skill Council in Electronics System Design and Manufacturing (ESDM)**

A brain storming workshop to discuss various issues and challenges in setting up of Sector Skill Council in Electronics System Design and Manufacturing (ESDM) was held in DeitY on 26.04.2012 under Chairmanship of Dr. Ajay Kumar, Joint Secretary, DeitY.

List of participants is at annexure.

2. Chairman welcomed all the participants and mentioned that National Skill Development Corporation (NSDC) is in the process of setting up of Sector Skill Councils in various sectors which includes IT/ITES and Electronics, IT Hardware and Manufacturing Sectors. These Sector Skill Councils are to standardize curriculum, streamline the certification framework, accreditation of sector specific and related courses and develop training delivery mechanism. These Sector Skill Councils are to be set up by the respective industries/industry associations as not for profit organizations.

3. The Chairman mentioned that the Electronics System Design and Manufacturing (ESDM) sector includes several verticals: IT and Office Automation, Telecom, Broadcasting, Consumer Electronics, LEDs, Avionics, Automotive Electronics, Solar Photovoltaics, to mention a few. Besides, there are horizontal industries in electronics which cut across sectoral verticals like semiconductors, passive components, PCB, EMS etc. He added that ESDM industries represent a complex matrix of vertical domains with horizontal cross sections.. He opined that in order to realize the objectives of Sector Skill Council is suitably served in the ESDM sector, a close coordination is required among all the stake holders in the stated verticals and horizontals. He mentioned that there is a need to operationalize the Sector Skill Councils at the earliest so that necessary human resource capabilities are created in sync with the policy initiatives being developed/already announced. This calls for a clear road map for operationalizing the Sector Skill Councils in a time bound manner. He further mentioned that efforts should be made to take up Sector Skill Council in ESDM sector for which DeitY would provide necessary support. He mentioned that DeitY has recently approved a project for capacity building in the area of Electronics Product Designed Production Technology being implemented by NIELITs Aurangabad, Chennai and CDAC Hyderabad. The aim of the project is to develop human resources at various levels from certificate to post-graduate level and to promote affordable Electronics Design & Technology. He added that Department has initiated special manpower developed programme in 'VLSI and Embedded System'. And the next phase is in the planning stage.

4. Smt. Ranjani Vaidyanathan made a presentation on NSDC and role of Sector Skill Councils. She informed that NSDC is a Public Private Partnership created by the Ministry of Finance with 51% stake by the industry & 49% stake by the Government of India. She mentioned that NSDC is approving projects in the Electronics & IT Hardware. She mentioned that the industry – led task force has estimated employment in ESDM sector closed to 27.8 million by 2020 as compared to the current 4.4 million. ESDM's manufacturing domain HR requirement would be close to 15 million till 2022.

5. She mentioned that for HR capacity building DeitY may work closely with private sectors, universities and other institutions of learning and to design programmes to ensure that adequate trained and skill manpower is available to the industry. DeitY may support creation of capacities within academic institutions to enhance the production of adequate number of PhD. And Post Graduates for supporting the growth of chip-design and embedded software and board/ hardware design industry in the country. She emphasized need of gap- analysis between the demand and supply of work force for the identified roles, both in terms of quality and competency standards. In the first phase skill Gap Analysis could be taken up for Automotive Electronics, Mobile Handsets, Solar Photovoltaic, Consumer Electronics, Telecom Equipments etc. She mentioned that course and curriculum design etc. should be need based and comprehensive, the quality training delivery mechanism keeping in view of lab, equipments, faculty, etc. and assessment and certification should be standardized and acceptable by industry. She added that a proposal to set up Sector Skill Council for ESDM sector already have been approved by NSDC. The IT/ITES sector skill council has recently been set up by NASSCOM.

6. Shri Rajiv Jain (ISA) presented role of Electronics Sector Skill Council. He mentioned that a proposal has been submitted to NSDC by the consortium of ISA, ELCINA, MAIT, CEAMA and IPCA to set up a SSC for Electronics and IT hardware (ESSC). He mentioned that ESSC would work closely with each industry body to analyze the specific requirement of each segment of electronics sector. The focus of ESSC would be on Accreditation and affiliation of its supplementation partners, certifications trained manpower and training to the trainers. He mentioned that under the pilot period around 5000 work force would be imparted skill and certificates in the area of production, service support and Design & R&D. Under long term plan the trained numbers would be around 6.5 lakh persons yearly by 2020. On a cumulative base 2 million workforce proposed to be trained and certified by 2020. Total 28 trades proposed to be covered in the skill development plan.

7. Shri R L Singh mentioned that National level courses and certification are conducted by NCVT which they are now proposing as autonomous body for getting approval. He mentioned that SSC in ESDM sector should work as professional body not an execution body for Accreditation.

8. Dr. Tripathi from NIELIT mentioned there is a need to Standardize the courses develop curriculum for skill development this could be done by SSC so that the Industrial Acceptance could be ensured. A dedicated agency could be entrusted for testing, certification so that conflict of interests could be avoided.

9. Shri Ramesh, Intex Technology suggested to follow Eastern countries (like China, Japan and Taiwan) in pushing Electronics Hardware Sector instead of UK model. He indicated that there should be distinction between Electronics Hardware and IT Hardware.

10. Dr. Sandhya Chintala, NASSCOM mentioned that there is need to set up standards for all the courses with flexibility required from low end to high end. In this SSC and Industry has a crucial role to play.

11. Mr. Prerit Rana mentioned that DeitY has issued a EoI for Competency levels Mapping in about 10 verticals. The out put of this study could be useful for the SSC in ESDM sector.

12. Smt. Ranjani clarified that the competency mapping/standards is only one input to the occupational standards.

13. After detailed discussions, the following further course of action was agreed:

- (i) Electronic Sector Skill Council should be operationalized at the earliest. The term sheet signing and formation of SPV for ESSC is proposed to be completed by June 30, 2012.

**[Action: NSDC & ESSC]**

- (ii) NSDC may keep DeitY informed regarding the progress of operationalisation of ESSC and other SSCs including that related to IT/ITES and Telecom. If required, a representative of DeitY could be associated with the process with the objective of facilitating the process of setting up of SSCs on the sector and getting them started.

**[Action: NSDC]**

- (iii) DeitY is in process of carrying out a study regarding competency standards for identified job roles in electronics sector. A discussion may be held with NSDCs and ESSC so that the effort of the study could be suitably aligned with the operationalisation of ESSC.

**[Action: DeitY]**

- (iv) NIELIT would develop its O/A/B/C certification courses for electronics.

**[Action: NIELIT]**

- (v) A follow up workshop would be held in July 2012.

**[Action: DeitY]**

The meeting ended with vote of thanks to the Chair.

## Annexure

Sr. No.	Name	Designation	Institution/ Organization
1.	Dr. Ajay Kumar	Joint Secretary	DeitY
2.	Dr B.K Murthy	Sr. Director	DeitY
3.	Shri A.K Pipal	Additional Director	DeitY
4.	Shri S.K Vyas	Sci 'D'	HRD DeitY
5.	Shri P.Victor Albuquerque	SO(HRD)	DeitY
6.	Shri Shanker Das	Sci 'B'	DeitY
7.	Shri V.M Gupta	Sci 'D'	NKN DeitY
8.	Shri Prerit Rana	Consultant HRD	DeitY
9.	Shri Gaurav Dave	JS	NMCC
10.	Shri R.L Singh	DDG(T)	DG E&T
11.	Shri Ripunjay Singh	Scientist-C	NIELIT
12.	Dr. M.M Tripathi	Joint Director	NIELIT
13.	Dr. Sandhaya Chintala	Executive Director	IT-ITES SSC NASSCOM
14.	Shri Dipra Mukhopadhyay	Analyst Programme Development	NSDC
15.	Ms. Ranjani Vaidyanathan	Standards QA	NSDC
16.	Dr.B.Chandrasekar	Vice President	IL&FS Education
17.	Shri Sanjeev Khosla	Chairman, Sanarti Group Chairman(N) LEDMA	Sanarti Group LEDMA
18.	Shri NK Goyal	CMAI President	CMAI
19.	Shri D.P Choudhary	President	SEMI India
20.	Shri Sabyasachi Patra	Executive Director	MAIT
21.	Shri Rajoo Goel	Secretary General	ELCINA
22.	Shri Arun Goyal		Indian Cellular Association
23.	Shri Siva Kotthapalli	Director & center head Amdocs	Amdocs
24.	Shri Aswini K Aggarwal	Director	Applied Materials
25.	Shri Arif Shamshad	Senior Vice President	Career Launcher
26.	Shri Sunil Vachani	CMD	Company Dixon Technologies
27.	Shri Ramesh Vaswani	Executive Vice Chairman	Intex Technologies
28.	Dr R.C Chopra	Sr. Advisor	CII
29.	Shri Rajiv Jain	Associate Director –Govt Affairs	India Semiconductor Association
30.	Shri P.V.G Menon	President	India Semiconductor Association
31.	Shri Rajat Khawas	Principal Consultant	Manipal City and Guide
32.	Dr. Vidya Mulky	Principal Industry Research	Latitude Adutech Consulting Pvt. Ltd
33.	Ms. Pratibha Jha	Technical Researcher	MSAI
34.	Shri C.K Pathak	Vice President	MSAI
35.	Shri Praveen Kaushik	Govt Affairs	Applied Materials