

**Minutes of the Meeting held on Tuesday, the 23<sup>rd</sup> September, 2014 at 5:00 P.M. in the newly constructed Seminar Hall of Board of Practical Training (Eastern Region), Kolkata.**

At the very outset Shri S.M. Ejaz Ahmed, Director, BOPT (ER), Kolkata welcomed all the delegates and proceeded towards the newly constructed Seminar Hall. Shri H.K. Jha, Chairman, BOPT(ER) Kolkata inaugurated the newly constructed Seminar Hall of BOPT by unfurling the screen and by cutting the inaugural ribbon marking the birth of New seminar Hall. All the delegates appreciated the ambience and the facilities available in the seminar hall.

Shri H.K. Jha, Chairman, BOPT(ER), Kolkata in his speech stated that the large organizations could develop a strategic training program and train the fresher's utilizing the resources available with them. But Small Scale Industries who does not have training facilities cannot provide training. Hence, the Assessment and Certification process will largely help the small industries to identify the required trained manpower for offering employment.

In his welcome address Shri S.M. Ejaz Ahmed, Director, BOPT (ER), Kolkata stated the purpose of organizing the consultation meeting with the establishment representatives, academicians as well as other stake holders of Apprenticeship Training and Skill Development. He stressed upon the fact that the todays Apprenticeship Training Scheme of Govt. of India is required to be demand driven wherein the learning of the skill set during the course of training by the apprentices must be enhanced to the extent that once they acquire such skills, they are highly demanded by the industries. In order to do so, the standardization of the existing training program is the prime important step to be taken up. The standardization of the training program had always been a challenging task in the past. However, with the recent development of setting-up of Sector Skill Councils (SSCs) under the guidelines of National Skill Development Corporation (NSDC) of Govt. of India, the standardization of training program is practically achievable. Once, the training program for the apprentices are standardized in each training establishment and an apprentice is made aware of the Qualification Packs (QPs) as well as the National Occupation Standards (NOS) in which they acquire quality skill sets during the course of apprenticeship training, their skills can be assessed in a systematic manner by involving the concerned SSC. The SSCs are the bodies of the establishments in the respective sectors and hence, the assessment made by the SSCs would be well acceptable across the different establishments of that sector. Finally a proposed model for developing methodology for assessment and certification for Graduate, Technician and Technician (Vocational) apprentices was presented before the invitees for deliberations, discussions and making suitable resolutions.

Shri C. Raja Rao, Dy. Director of Training BOPT(ER), Kolkata presented the proposal on methodology for Assessment and Certification for Graduate/ Technician and Technician (Vocational) Apprentices through a power point presentation to the delegates.

Shri S.K. Mehta, Director BOAT(NR) stressed upon the necessity of certification and also impressed upon the fact that the assessment process of the Apprenticeship Training Scheme during the last 40 years remained more of a formality. Hence it is high time to take up the standardization of training program and implement methodology for Assessment and Certification of Apprentices for the benefit of the Establishment and Apprentices as well.

Shri N.N. Vadode, Assistant Director, BOAT(WR) in his speech requested all the establishments to actively participate in finalizing the process of Assessment and Certification of Apprentices. He also informed the delegates that only 19 SSCs are existing which are not sufficient to cover entire range of industrial Houses. Hence industries must be active enough to identify their respective SSCs.

Shri R.N. Lahiri, Member BOG, BOPT(ER), Kolkata insisted that the fresh Graduate engineers needed to improve the technical skill along with soft skill and he also pointed out that all Graduate Engineers are required to undergo an additional training so that they can be job ready.

Dr. C. Saha, Member, BOG, BOPT(ER), Kolkata appreciated the efforts made by BOPT in initiating the process of Assessment and Certification of apprentices. He requested the industries to provide their valuable inputs in standardizing the training program for better Assessment and Certification and he also stated that it would require review time to time as the technology is changing at very fast pace.

During the interactive session, the participants were allowed a time slot of about five minutes each to put forward their views and suggestions in respect of the presented model for assessment and certification for apprenticeship training. All the invitees actively participated during the interactive session and provided valuable inputs and suggestions largely appreciating the advantages of the proposed models which was felt as an emergent need to improve the quality of apprenticeship training and thus developing a brand image of the Apprenticeship Training Scheme aiming at securing immediate employment.

After interaction session, following points were emerged out of discussion.

1. The efforts made by BOPT(ER) Kolkata for standardizing the apprenticeship training program for better assessment and certification methodology for Graduate/ Diploma/ 10+2 Vocational Apprentices was appreciated.
2. A well-developed certification and assessment system is also not available in other models such as German model etc.
3. It was agreed upon that through standardized training program and assessment and certification system at national level, it is very essential to identify the right talents.
4. It was also agreed upon, that the establishments would map the existing training programs with the QPs/NOS developed by the Sector Skill Council under NSDC.
5. It was also opined that the proposed model has enough of stability in present circumstances. Further requirement may be incorporated at suitable time.
6. The Skill Grade Point/ Skill Quotient and Proficiency Certificate issued after the assessment must be given its due weightage by the employer.
7. It was opined that a comprehensive list of NOS covering the industries of all sectors to be developed.
8. The Industries would develop more number of QPs in consultation with their respective SSCs, if they feel so.
9. It was also opined that General QPs covering the soft skills and behavioral skills must be a part of the Apprenticeship training.

Vote of thanks presented by Smt. Sushmita Ghosh, Asst. Director of Training, BOPTER Kolkata at the end of the meeting.

The List of Delegates attended the Attended of the Meeting

Sl. No.	Name & Designation	Name of the Organization
1	Mr. Ankit Sharma (Asst. Personnel Officer)	Mecon Ltd.
2	Mr. Sanjay Mandal, Workshop Manager	Cynosure Manik's Auto Centre
3	Mr. Palash Sarkar, (Service Advisor)	Cynosure Manik's Auto Centre
4	Mr. Sourav Gangopadhyay, (HR Executive)	Raja Udyog Pvt. Ltd.
5	Ms. Parama Biswas, (Mgr. HR)	Linde India Ltd.
6	Mr. Subhrata Sarkar, (Mgr. HR)	Outsource Biz India Pvt. Ltd.
7	Major K. Satyanarayan, (Sr. Mgr, Training)	Tata Steel Ltd. Kalinganagar
8	Mr. P.D.Sharma, (Manager, Trg)	Tata Steel Ltd. Jamshedpur
9	Mr. Rajesh Bhattacharya, (C.E.O.)	System Solutions
10	Mr. Arnab Mukherjee, (Manager HR)	System Solutions
11	Mr. S.G. Majumdar, (Sr. Manager, Trg.)	Tata Motors Ltd. Jamshedpur
12	Mr. Pradip Halder, (Manager-Finance)	Objectsol Technologies Pvt. Ltd.
13	Mr. L. Sriram, (Manager HR)	Larsen & Toubro Ltd.
14	Ms. Rupashri Ghosh, (Executive)	Indo-German Chamber of Commerce
15	Mr. Chirag Roy, (Manager HR)	Bhandari Automobiles Pvt. Ltd
16	Mr. Avejit Chatterjee, (Training Incharge)	Bhandari Automobiles Pvt. Ltd
17	Mr. Manoj Kr. Tejan, (Asstt. Secretary, Mktg)	L.I.C of India, (Eastern Zonal Office)
18	Mr. P. Naha, (Head-HR/IR)	Keventer Agro Ltd.
19	Ms. Poulami Banerjee, (Asst. Mgr-HR)	Keventer Agro Ltd.
20	Mr. Harcharan Singh, (GM-Trng.)	Usha Martin Training Institute
21	Mr. Vivek Kr. Sharma Jr. Executive(HR)	Airports Authority of India
22	Mr. Satish Sinha, Officer	UltraTech Cement Ltd.
23	Mr. Indranil Aich, Managing Director	Aich Appraisers Auctioners & Valuers
24	Mr. Benudhar Routray, Div. Manager (HR) Est.	Tata Hitachi Construction Machinery Co. Ltd.
25	Mr. S. Mukherjee, Scientist	Electronics Regional Test Engg. (East)
26	Ms. Susmita Nayak, Head- HR & Admin.	Aich Group of Companies
27	Mr. Tapan Chackraborty, Asst. General Manager (P&A)	Bengal Chemicals & Pharmaceuticals Ltd.
28	Mr. Harbir Singh, Jt. General Manager (HR)	Airports Authority of India
29	Mr. Rajesh Chawla, Asst. G.M (HR)	Airports Authority of India
30	Mr. K. Babaji, Asst. Manager (HR & ES)	Hindusthan Paper Corporation Ltd.
31	Mr. Joy Das, HR Manager	IBM India Pvt. Ltd.
32	Mr. Dibyendu Mukherjee, Head – HR	BilTech Building Elements Ltd.
33	Mr. N.C. De DGM (HRD)	Texmaco Ltd.
34	Mr. Abhijit Chatterjee, Engineer	CDAC, Kolkata
35	Mr. Barun Roy, Asst. Manager	Bennett Coleman & Co. Ltd.
36	Mr. Prantik Biswas, Manager, HR	Stewart & Lloya
37	Mr. N.K. Halder, Sr. Manager	G.R.S.E Ltd.
38	Ms. Anamika Sahay	ITC Infotech
39	Mr. Akhilesh Kr. Singh, Manager (MIN)	BCCL

**Approval of the Minutes of the consultative meeting held on 23.09.2014 by the BOG, BOPT (ER) in its 122<sup>nd</sup> meeting held on 17.10.2014**

The minutes of the consultative meeting held on 23.09.2014 at 5:00 PM in the Seminar Hall of BOPT (ER), Kolkata was discussed in detail by the members of the BOG in its 122<sup>nd</sup> meeting held on 17.10.2014. While discussing the same, it was resolved that -

“Development of model for assessment and certification as placed in the BOG is very much needed to make the existing system more objective oriented. Subsequently, the members had a detailed discussion on the issue of providing credit system for Apprenticeship Training as a mark of lateral entry for apprentices at M.Tech, Graduate and Diploma Level. After discussion, it was resolved that the Board approved the model for assessment and certification as perused by the members excluding the provisions made for lateral entry at the level of Masters/Graduate/Diploma in Engineering & Technology, which the Board after discussion did not find enough of justification in its support in today’s system of technical education and skill development. The issue of providing credit system for Apprenticeship Training needed more discussion which may be taken up in subsequent meetings.”

Accordingly, the assessment and certification model for apprenticeship training duly approved by the BOG is now ready for implementation. However, it is also important that before the implementation of the said model at large scale throughout the country as well as across all the 126 subject fields pertaining to Graduate and Technician as well as 128 subject fields pertaining to Technician (Vocational) apprentices, a pilot project is conducted to understand the ease or difficulties in implementing the same in the field. For this purpose, BOPT (ER), Kolkata has selected the following two Sectors for conducting pilot project:-

- Automotive Sector covering all subject fields for Graduate and Technician apprentices as per approved list of subject fields by Central Apprenticeship Council (refer approved list).
- IT & ITES Sector covering all subject fields for Graduate and Technician apprentices as per approved list of subject fields by Central Apprenticeship Council (refer approved list).

The present project will exclude the subject field pertaining to 10(+2) Vocational apprentices.

The various stake holders of Apprenticeship Training Scheme, academicians as well as Government and Non-Government organizations directly or indirectly involved in the Skill Development Mission of Govt. of India are welcome to provide their suggestions within five working days to consider the same for inclusion in its action plan. BOPT (ER), Kolkata would be initiating the pilot project w.e.f. 15.01.2015, expected period of which is 12-14 months.

Help and cooperation is always welcome to make this initiative of BOPT (ER), Kolkata a Great Success.

# Approved Methodology for Training , Assessment and Certification of Skill for Graduate/Diploma/10+2 Vocational Apprentices



**Board of Practical Training (Eastern Region)**

**Block- EA, Sector- I (Opposite Labony Estate), Salt Lake City, Kolkata- 700064**

# The one year Apprenticeship Training

- The one year Apprenticeship training (Stipendiary) is under the Apprentices Act 1961 as amended in 1973 & 1986.
- This training is precisely on-job training.

<b>Sl. No</b>	<b>Category of Apprentices</b>	<b>Minimum Educational Qualification</b>
<b>1</b>	<b>Graduate Apprentices</b>	<b>A Degree in Engineering or Technology</b>
<b>2</b>	<b>Technician Apprentices</b>	<b>A Diploma in Engineering or Technology</b>
<b>3</b>	<b>Technician (Voc) Apprentices</b>	<b>10+2 Vocational Certificate Holder.</b>



# Implementing Authorities

## Board Of Apprenticeship Training Northern Region, Kanpur

### States Covered

Uttar Pradesh, Uttrakhand, Haryana, Punjab, Jammu & Kashmir, Himachal Pradesh, Rajasthan, DELHI & Chandigarh

### Address:

16, Block 1-A, Lakhanpur, Kanpur-24 U.P.

Tel: 0512 - 2584056, 2584057

Fax: 0512 - 2581504, 2584052

Email: [admin@boatnr.org](mailto:admin@boatnr.org)

Website: [www.boatnr.org](http://www.boatnr.org)

## IMPLEMENTING

## Board Of Apprenticeship Training Western Region, Mumbai

States Covered Madhya Pradesh, Maharashtra, Goa, Gujarat, Daman & Diu, Chattisgarh, Dadra & Nagar Haveli.

### Address:

ATI Campus, V.N. Purav Marg, Sion, Mumbai.-400022

Phone No : 022-24055635,24053682. Fax : 022-24055923

Email-id : [boatwr@vsnl.com](mailto:boatwr@vsnl.com)

Website: [www.apprentice-engineer.com](http://www.apprentice-engineer.com)



## Board Of Practical Training, Kolkata

States Covered Orissa, Assam, Bihar, Jharkhand, West Bengal, Manipur, Meghalaya, Mizoram, Nagaland, Tripura, Sikkim, Arunachal Pradesh, Andaman & Nicobar Islands.

### Address:

CGO Complex, DF Block, E Wing, 1st Floor, Salt Lake, KOLKATA - 700064

Tel: 033 - 23210331

Fax: 033 - 23210322

Email: [boptr@gmail.com](mailto:boptr@gmail.com)

Website: [www.boptr.gov.in](http://www.boptr.gov.in)

## AUTHORITIES

## Board Of Apprenticeship Training Southern Region, Chennai

States Covered Karnataka, Andhra Pradesh, Kerala, Tamil Nadu, Pondicherry & Lakshdweep Islands.

### Address:

CIT Campus, Taramani, Chennai.- 600113

Phone No: 044 - 22542703 / 22541359

Fax No:044 - 22541563

Email-id : [boat\\_sr@vsnl.net](mailto:boat_sr@vsnl.net)

Website: [www.boatsr-apprentice.tn.nic.in](http://www.boatsr-apprentice.tn.nic.in)

# Existing Structure of Training Program

- The training programs followed during the training and the skill sets which are primarily developed during training are industry specific.
- The Training is imparted as per the pre-defined training program (essentially need based) of different establishments.



# Existing Structure of Training Program

- **To bring certain uniformity, the Boards ensure that the training programs being followed by different establishments are as per structured format provided by the Boards namely Basic Constituent Of Training Programme- General Guidelines for preparation of Training Program in line with.**

# The Existing Assessment Method

- After successful completion of one year Apprenticeship Training the assessment of Skill Development is done by the establishment for each Apprentice and the grade is awarded as,
  - Excellent
  - Very Good
  - Good
  - Unfit

# The Challenge

- **The establishments are unable to ensure the competency level in the absence of the nationally accepted standards across various industries in the same sector.**
- **Hence the other establishments do not have much attraction towards such trained apprentices by an establishment.**
- **The trained apprentices also do not find adequate opportunities for employment.**

## **To move ahead,**

- **It is proposed to revisit/update the existing practices/ operating procedures.**
- **This certainly calls for creation of ‘Brand Image for Apprenticeship Training Scheme’.**

# NSDC/SSC Initiatives in Standardization of Training for Skill Development



**N · S · D · C**  
National  
Skill Development  
Corporation

- **National Skill Development Corporation developed certain Industry Specific Qualification Packs (QP) with the Help of Various Sector Skill Councils (SSC) where the major industries are members.**

**Please Visit**

**[www.nsdcindia.org](http://www.nsdcindia.org)**

Click on the Link: **National Occupation standards**

# National Occupation Standards

- **NOS specify the standard of performance, an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently.**

# National Occupation Standards

- **NOS defines one key function in a job role.**
- **NOS is a concise and readable document,.**
- **NOS describe functions, standards of performance and knowledge/ understanding.**
- **NOS are benchmarks of good practice.**
- **NOS are laid down by employers (through their respective SSCs).**



# Qualification Pack

- **A set of National Occupation Standards (NOS), aligned to a job role, called Qualification Pack (QP), together with the educational, training and other criteria required to perform a job role.**

# Telecom Sector

<b>Sub Sector</b>	<b>Qualification Pack</b>	<b>NOS Code</b>	<b>National Occupation Standards (NOS)</b>
<b>Network Managed Services</b>	<b>Installation Engineer - SDH &amp; DWDM</b>	<b>TEL/N6300</b>	<b>Installation of SDH, DWDM/ L2, L3 equipment</b>
		<b>TEL /N6301</b>	<b>Acceptance Testing of SDH, DWDM equipment</b>
		<b>TEL /N6302</b>	<b>Commissioning of SDH, DWDM equipment</b>
<b>Network Managed Services</b>	<b>Installation Engineer - L2 &amp; L3</b>	<b>TEL/N6300</b>	<b>Installation of SDH, DWDM/L2, L3 equipment</b>
		<b>TEL /N6303</b>	<b>Undertake Acceptance Testing of L2 &amp; L3 equipment</b>
		<b>TEL /N6304</b>	<b>Commissioning of L2 &amp; L3 equipment</b>

## **Sub Sectors:**

1. Handset, 2. Handset(Terminal Applications), 3. Network Managed Services,
4. Passive Infra Segment, 5. Service Provider

# Automobile Sector

Sub sector	Qualification Pack	NOS Code	National Occupation Standards (NOS)
Manufacturing	Industrial Engineer (Workstation Design)	ASC/N6404	Acquire information about process, equipments , manpower and identify the constraints
		ASC/N6405	Design the model workstation layout for the process
		ASC/N6406	Validate the layout through simulation and implement
		ASC/N0002	Work effectively in a team
		ASC/N0006	Maintain a safe , secure and clean working environment
Manufacturing	Industrial Engineer (Layout Design)	ASC/N6407	Analyze the flow of men, machine, material and information in the process
		ASC/N6408	Design the model layout for the process and validate
		ASC/N6409	Plan for shifting of resources and implement the layout for the process
		ASC/N0002	Work effectively in a team
		ASC/N0006	Maintain a safe , secure and clean working environment

# Proposed Training Model

- **The training establishments are required to align their existing training program with the Qualification Packs (QPs) designed by Sector Skill Councils (SSC) under the guidance of National Skill Development Council (NSDC).**

# Proposed Training Model

- **The revised training program containing different QPs to be mapped by the training establishments should be based on the scope of training in their establishments.**

# Proposed Training Model

- **The QPs as per the training program should be mentioned in the Apprenticeship Contract Registration Card (ACRC) of each apprentice.**
- **The report on the progress of the training (APP6) are to be suitably revised to reflect the progress of the training in respect of each QPs.**

# Assessment and Certification Model

- **Skill Assessment Test (SAT) to be conducted in the 12<sup>th</sup> month of the Apprenticeship training.**
- **The Proposed SAT to be conducted Online.**
- **Skill Proficiency Certificate (APC) are to be issued online for SAT Qualified candidates.**



# Assessment and Certification Model

- **All candidates after completion of the training may be allowed to sit for SAT (with the recommendation of the training establishments) for assessment of skill development in different Qualification Packs.**
- **The online result to be displayed to the candidates immediately after completion of online testing process.**

## Assessment and Certification Model

- **A proficiency certificate containing result of the SAT including credit points (if any) would be automatically generated and available for download to each candidate.**

# **PROCESS FOR ASSESSMENT AND CERTIFICATION APPRENTICES**

- **Trainees to submit a Certificate from training establishment stating the NOS/QPs in which training was imparted.**
- **Trainees are required to enrol on-line for taking Skill Assessment Test (SAT) mentioning the respective National Occupation Standard (NOS) / Qualification Packs (QPs).**

- **The eligible trainees would be called to appear in SAT at a centralised location.**
- **The on-line test once scheduled for a particular trainee will pop-up skill based questions of maximum marks 100 (say) for each NOS on their computer screen for solving within a pre-defined time.**
- **The candidates would be required to answer the MCQ type questions within a stipulated time frame to be counted through on-line timer.**

- **Once the attempt of the questions are completed, the trainees would be allowed to submit the answer within the stipulated time limit or, once the time limit expires, it would be auto submitted on-line.**

- **The result of the SAT through on-line evaluation of the answer would be displayed instantly for the candidates to know their result. Those securing more than 50% marks would be declared ‘Successful’ and he would not be allowed to re-appear in the SAT for the respective NOS.**

- **The candidates would be able to download on-line certificate to that effect mentioning the marks secured on 1-10 scale in respect of each NOS.**
- **The candidates would be allowed to appear in SAT for any number of NOS subject to fulfilling their eligibility as mentioned under 1 above.**



- **For the un-successful candidates in SAT (those securing less than 50% marks), they would be allowed to re-enrol/re-appear in SAT after undertaking re-training course in the concerned NOS and furnish training employer certificate to that effect.**
- **The question bank for SAT would be prepared involving respective Sector Skill Councils (SSCs) and Subject Matter Experts (SMEs).**

- **Skill Grade Points (SGP) would be calculated for successful candidates by following formula:-**

$$\text{SGP} = \frac{1}{10} \times (\% \text{ of Marks Obtained in a NOS})$$

- **The certificate for the successful candidates against each NOS would contain the Skill Grade Point (SGP).**

- **The candidates who would be declared ‘Successful’ against a combination of NOS which forms a part of a particular QP would be awarded a Certificate of Proficiency.**
- **Against acquiring Proficiency Certificate in different QPs, a credit marks of 5 would be added to the Skill Quotient (SQ) of the candidate which will be the ultimate parameter of the skill level of a candidate.**

- **Involvement of other stake holders such as CII, SSCs, SMEs and organizations expert in conducting such type of tests is necessary for making the assessment and certification model successful.**

# Missing Links

- **The number of active Sector Skill Councils are 19 (Nineteen) in numbers as on date, will grow further to cover large number of Industries.**
- **The number of Qualification Packs presently defined by different SSCs are less.**
- **Industries may closely interact with respective SSCs and help to develop more QPs.**

# Missing Links

- **For example, while mapping the Qualification Packs in the Automotive Sectors, the number of Qualification Packs at entry level for Graduate and Diploma apprentices are about 15 (Fifteen) in numbers.**
- **The required figures in respect of these are certainly much more.**

# Outcome of the Consultative Meeting held on 23/09/2014

- **Item No.1:** To increase awareness among the establishments to structure their existing training program for Graduate and Diploma engineers mapped with the standard QPs/OS.
- **Item No.2:** To define more number of QPs/OS to add on the existing list of QPs/OS in association with respective SSCs.
- **Item No.3:** To develop model for assessment and certification of apprentices on completion of their training.