#### BIS/DGO (458)/2020

#### **BUREAU OF INDIAN STANDARDS** (POLICY, RESEARCH & TRAINING DEPARTMENT)

25 Feb 2020

#### **OFFICE ORDER**

Subject: Bureau of Indian Standards Training Policy

The Training Policy of the Bureau as approved by DG, BIS is enclosed for information of all concern departments. This supersedes the earlier DGO No. BIS/ DGO (424)/2014 dated 29 Dec 2014.

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Head (PRTD)

Ref: PRTD/2:2

Circulated to: All Departments at HQ/ROs/BOs/Labs & NITS through BIS Intranet

बीआईएस/डीजीओ(458)/2020

### भारतीय मानक ब्यूरो (नीति, अनुसंधान एवं प्रशिक्षण विभाग)

25 फरवरी 2020

#### <u>कार्यालय आदेश</u>

विषयः भारतीय मानक ब्यूरो प्रशिक्षण नीति

महानिदेशक, बीआईएस द्वारा यथा अनुमोदित प्रशिक्षण नीति सभी संबंधित विभागों के सूचनार्थ संलग्न है। यह दिनांक 29 दिसम्बर 2014 के पूर्व आदेश डीजीओ सं. बीआईएस/डीजीओ (424)2014 का अधिक्रमण है।

> (साई कुमार वेदुला) वैज्ञानिक- सी,पीआरटीडी

प्रमुख (पीआरटीडी) संदर्भः पीआरटीडी/2:2

परिचालित सेवा में : बीआईएस इंट्रानेट के माध्यम से मुख्यालय/क्षेत्रीय कार्यालय/शाखा कार्यालय/ प्रयोगशाला एवं निट्स के सभी विभाग



# **TRAINING POLICY**

## **Bureau of Indian Standards** 9 B S Zafar Marg, New Delhi – 110002

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#### 1. PREAMBLE

- **1.1** Bureau of Indian Standards, the National Standards Body, catalyses the growth of national economy and contributes towards robust quality ecosystem through its activities of Standards Formulation and various Conformity Assessment Schemes, duly supported by pan-India Laboratory infrastructure. Human resource is an important component of any organization for delivering services in effective and efficient manner. Equally important is level of awareness of the recipients (of goods & services) and, associated stakeholders for deriving maximum advantage from the services being offered and gradually improving the quality. Training is proven to be an effective tool for capacity building of providers and recipients of goods & services.
- **1.2** The above applies to the employees of BIS, the personnel working for/on-behalf of BIS and, all associated stakeholders. It is our organization's endeavour to make learning one of the fundamental values of the organization, encompassing the entire ecosystem. This could be achieved through on-the-job training(s), focus training(s) (on aspects directly related to efficient discharge of duties) and, also general training(s) for enabling overall personality development. With the dynamic environment of technological advancements and, exponential increase in expectations of consumers, there is a definite need for training and, re-training to continue to remain relevant, more so in view of the enactment of the BIS Act 2016, which has substantially changed the roles & responsibilities of our organization vis-a`- vis our stakeholders like Industries (including Industry Associations), Central/State Govt. Bodies (including associated Departments), Research Institutes, Academia and, Consumers (including Consumer Groups/NGOs/RWAs etc).
- **1.3** The Ministry of Commerce and Industry has developed the Indian National Strategy for Standardization (INSS) acknowledging capacity building as crucial to establishing a robust "Quality Ecosystem" in India. In pursuance of the strategic considerations envisaged in INSS, BIS has brought out a "Standards National Action Plan (SNAP)", under which one of the objectives is to increase awareness and enhance implementation of Standards.

#### 2. WHAT FUTURE HOLDS

- **2.1** As new technologies, such as Artificial Intelligence, IoT, Block chain, New Renewable Energy etc., are emerging, there is a need for expansion of domain expertise diversification of the standard formulation mechanism. BIS has to enrich the technical competence within and outside the organisation for its Sectional Committees and personnel involved with Standards Formulation to help them keep abreast of the challenges of the changing times. There is a felt need for broad-basing the standardization activities through creation of Standardization Cells in Ministries/ Departments and Industry Associations. This is intended to facilitate identification of new subjects, and active participation of the stakeholders in the standards formulation and revision process.
- **2.2** It is proposed to upscale the involvement of domain area experts in the functioning of Technical Committees. Interaction/engagement with academic institutions is also growing through MoUs with IITs and other eminent institutions for creation of Chairs on Standardization and introduction of academic curriculum on Standardization. All the above require a dynamic system for exchange of knowledge and information through multiple vertical and horizontal channels. BIS needs to interact with innovation centres in academic institutions to support innovation and promote/fund R&D work for the purpose of standards development.

- **2.3** Adoption of standards by industry and trade bodies is not at a satisfactory level, but with government emphasis on strengthening the non-trade barriers and positioning standards as the key drivers of the economic activity & international trade, the scenario is expected to undergo major transformation. This will entail close and unbroken knowledge-sharing arrangements with the industry. Since MSME sector is a key stakeholder and do not have the same resources to invest in internal capacity-building exercises, a robust mechanism will be required for professional support to this sector.
- **2.4** As far as BIS is concerned, consumer is the king, and the ultimate test of all our efforts in the fields of standardization and certification is the availability of quality products and services to the consumer. Traditional methods, such as face-to-face meetings, field level engagement and campaigns have their limitations. The use of social media and latest technological innovations in the field of mass communication would need to be explored to reach out to the maximum number of consumers both for generating demand for the quality and ensuring community oversight on deviant behaviour.
- **2.5** The role of State Government in the standardization process is important as they have the responsibility to implement major government schemes and programmes, and as they are closely involved with the consumers and they are in a better position to protect and promote consumer interests by ensuring availability and procurement of products and services conforming to Indian Standards. It is important to engage with Central & State Govt. Departments/ Regulators/ procurement agencies for apprising them of the perils of sub-standard products and processes and guiding them in the use of Indian standards in govt. policies/ procurements/ regulations. INSS envisages that standards building process should become a multi-layered activity with inputs from States and district levels for improvement in the existing Indian Standards.
- **2.6** Conformity Assessment Systems have to be world class and with the growing chasm between the volume of work and availability of manpower resources, there is a need to explore unconventional approaches to factory and market surveillance. This will entail engagement of outside agencies for surveillance and pose a fresh challenge for ensuring quality surveillance by these agencies.
- 2.7 Identification of 12 Champion service sectors for development of Standards has its own demands as the concept of service is very different from that of product. A totally new set of Technical Committees and Technical Committee members/ Consultants/ experts would join the intellectual workforce of BIS. Their knowledge up-gradation and constant enrichment will assume greater importance.
- **2.8** Capacity-building of testing laboratory personnel would be required due to diversification of testing activities and expansion of Conformity Assessment Schemes. Number of private labs recognised for the product testing is expected to rise significantly.
- **2.9** BIS has to introduce the scheme for Accreditation / Recognition of SDOs in India. It will be needed to hold regular meetings with them and conduct trainings on Good Standardization Practices to ensure uniformity in standardization process.
- **2.10** BIS is in the process of digitalization of its activities through various e-governance initiatives. In order to build capacity of its employees for working in the emerging digital environment, effectively & efficiently, training and refresher courses are to be imparted. Simultaneously, the recipients of services of BIS will also need to be trained to maximize the gains from BIS activities.

#### 3. TARGET GROUPS FOR TRAINING

- a) Employees of BIS
- b) Contractual Personnel working for BIS (Young Professionals, GET, Interns etc.,)
- c) Industry (Products and Services)
- d) Central and State Government Ministries/Departments
- e) Testing Laboratories
- f) Standards Developing Organizations (SDOs)
- g) Members of Technical Committees engaged in Standards Formulation
- h) Sub-contractors and agencies providing service to BIS
- i) International participants from developing countries
- j) Other stakeholders

#### 4. **OBJECTIVES**

The objectives of the training policy are as follows:

- a) Identifying training needs including gap analysis
- b) Providing training to
  - i) Employees of BIS at entry level, and periodically during their service period;
  - ii) Employees on contract; and
  - iii) Other associated stakeholders.
- c) Providing need-based, skill based or specialized trainings
- d) Providing opportunities for updating knowledge & skills for undertaking current and future responsibilities;
- e) Providing training to Quality Control personnel for ensuring proper implementation of BIS Schemes by the Industry through skill upgradation
- f) Developing training modules for various training programme, including online programs and courses
- g) Conducting Diploma/ Certificate courses on Standardization, Conformity Assessment and Hallmarking
- h) Creating a pool of Faculty/Resource for conducting training programmes
- i) Developing mechanisms for evaluation of effective training;
- j) Assessing efficacy of training and/or training modules based on feedback.

#### 5. APPROACH & METHODOLOGY

Training policy would be implemented through a three-pronged methodology and a systematic approach catering to the needs of all stakeholders, as elaborated in subsequent paragraphs.

#### 5.1 Face-to-face Training Programmes:

- a) National Institute of Training for Standardization (NITS): Annual Training Calendar shall be developed every year by NITS, based on identification of training needs of each employee & departments and, at HQ as per policy decision(s). Annual Calendar may include, but not be limited to, the following mandatory training programmes:
  - i) Induction programmes for new recruits.
  - ii) Refresher courses for all employees, once in every 4/5 years for keeping them abreast with the latest development in their respective activity.
  - iii) Preparedness training for scientific cadre officers as and when there is a change in activity for the officers.
  - iv) Leadership training for employees at the level of 'Head' and above. Providing training for leadership skills will help them discharge their supervisory role in an efficient and productive manner

- v) For employees of scientific cadre up to the level of Scientist E, a healthy mix of training initiatives to help acquire functional and conceptual skills.
- vi) Training(s) for Group B & C employees for imparting hands-on functional skills to help them efficiently execute their present and, future assignments.
- vii) Preparedness training at the level where employee moves from one group to another (Group C to B or Group B to A). The focus of training initiatives would be to help impart skills and competence for facilitating shouldering of higher responsibilities in their new role.
- viii) Soft skill training of employee's w.r.t e-BIS and for achieving the goal of a paperless office.
- ix) Training for contractual employees (Young professionals GET, Interns etc.,) for mutual benefit.
- **b)** Other Training Institutes: Identify other training institutes (besides NITS) such as ISTM, ASCI etc., for conducting training programmes and ensuring enhanced coordination with them for focus trainings.
- c) On-site Training Programmes: Customized training programmes to specific target groups (PSUs/Industries etc.,)
- **5.2 e-Learning:** e-learning provides unparalleled opportunities for meeting the training needs for stakeholders across the country in different cities, towns and villages. Technology provides the means to make a vast resource of learning material, online courses and webinars, etc., available readily, providing individuals with enormous choice & flexibility in learning. BIS needs to take the lead for ensuring that training institutions make training courses/material available online through an e-Learning platform. BIS should also build up its database of training resources such as training facilities at different institutions, pool of faculty, etc.
- **5.3 Blended Learning Approach:** Blended learning is an approach that combines online learning including virtual classrooms, with traditional place-based classroom methods through opportunities for interaction(s) online. Audio-visual educational material may be developed by BIS for blended learning.

#### 6. DEVELOPMENT OF COURSE MATERIAL

All course materials, including short-duration customized courses on Standardization, Conformity Assessment and Laboratory activities, needs to be designed for industry and trade. There is a need for professionalism in development of the course material for content as well as presentation. BIS proposes to engage leading agencies/experts for developing training courses and, modules for both classroom and online training.

#### 7. DEVELOPMENT OF CASE STUDIES/ANECDOTES

Explaining concepts through case studies, anecdotes, real life scenarios etc., are proven to be more effective and engaging. Through Research & Action Research, BIS intends to document their outcomes in the form of case studies, etc., which could form an important part of the training. This would make learning interesting and comprehensible.

#### 8. RESEARCH & ACTION RESEARCH

Training & Research are integrated activities. Aspects related to Research and Action Research will be covered in Research Policy. Action Research may be undertaken by BIS officers, Technical Committee members, Academia (Students/faculties of colleges). Outcomes of Research & Action Research would be a useful tool for imparting training.

#### 9. NETWORKING WITH REPUTED INSTITUTIONS

Scientific cadre officers of BIS may be deputed for one/two weeks to IITs/IIMs and other eminent institutions for various training programmes. BIS could also partner with such institutions for providing training on Standardization and Conformity Assessment.

#### **10. EXPOSURE VISITS**

Scientific cadre officers of BIS may be deputed for one/two weeks to national/international locations for exposure/study visits.

#### 11. OUTREACH PROGRAMMES

A focus on outreach program is also critically imperative for involvement of stakeholders in Standards Formulation, facilitate adoption of Standards by all concerned and also enhancing BIS's public image:

- i) Conduct outreach programmes with Central & State Govt. Departments/ Regulators/ Procurement agencies, for guiding them in use of Standards in govt. policies/ procurements/ regulations.
- ii) Conduct product specific training programmes for industry on implementation of Standards and relevant methods of test.
- iii) Organise regular training programmes for technical committee members/ experts on standardization processes.
- iv) Conduct training(s) on good Standardization practices for other Standard Development Organizations (SDOs) in India
- v) Imparting training to licensees, manufacturers, laboratories and industry associations based on training needs identified through regular interactions with them.
- vi) Providing skill-upgradation to QC personnel for ensuring effective implementation of BIS Schemes, Quality Control Orders by the Industry.
- vii) BIS in association with Ministry of MSME will identify the needs of the medium & small scale industries and will impart customized training to suit the requirements of MSME units.
- viii) International training programmes for developing countries of Asia, Africa, Europe, Latin & South America etc.
- ix) Creation of Standardization cells in Central/State Governments.
- x) Creation of Standardization cells in Industry Associations.

#### **12. TRAINING ADVISORY COMMITTEE**

Training Advisory Committee has been established under the Bureau of Indian Standards (Advisory Committees) Regulations, 2018. The Committee is headed by DG, BIS and has representations from eminent organizations engaged in training and related activities. The Committee advises BIS on policy matters relating to training of BIS employees and other stakeholders, on matters pertaining to collaboration with organizations/institutions within the country & abroad and, on matters relating to training & capacity building.

#### **13. TRAINING MODALITIES**

- a) The trainings would normally be conducted in National Institute of Training for Standardization (NITS).
- b) IITs, IIMs, The Institute of Secretariat Training and Management (ISTM), or any other agency as identified by the Bureau or on the advice of Training Advisory Committee, would be utilized for external training.

- c) Faculty from IITs, NITs and other Engineering Institutes especially in the area of Engineering (related to training on products and their certification), may be engaged specially for training programs on Certified Quality Control Personnel, Certified Quality Engineers and also in induction and refreshers training for BIS officers.
- d) Faculty from IIMs and other Management Institutes, specifically in the area of management systems, general management topics, financial management, communication skills, leadership, HR/Establishment related training may be engaged.
- e) Guest faculty (Star Personalities) from leading institutes, corporate bodies, government bodies may be invited to deliver knowledge enhancement sessions on regular basis to senior and middle management.
- f) BIS would develop a pool of trainers by identifying experts from various sectors and impart them special training on effective communication.
- g) Training calendar shall be finalized every year in the month of March by the Internal Committee comprising of Activity Heads of Standardization, Certification, Laboratory, and Policy Research & Training (PRT).
- h) Employees who have attended training programmes shall normally share their learning with their peers and BIS shall provide such knowledge sharing platforms.
- i) Employees who have attended specialized training programmes to be posted in specified departments.

#### 14. TRAINING EVALUATION

The objective of training evaluation is to enhance value addition through training programmes by building on the strengths, by removing the shortcomings (if any), and measuring the effectiveness of training programmes through performance at work/examination or other appropriate means. The training module (including faculty) shall be reviewed based on feedback mechanism.

#### 15. TRAINING MANAGEMENT — e-BIS

A fully integrated IT Management system is planned to be deployed with interface/dashboard for faculty and all stakeholders, including BIS employees (training aspirants), with a database of information related training imparted. This IT enabled system will also include training evaluation and assessment of effectiveness of training by BIS Top management and trainee organizations.

#### **16. TRAINING BUDGET**

BIS would allocate adequate funds to training & development activities for meeting the stipulated training requirement. BIS as a progressive organization and model employer accepts and appreciates that "*Expenditure is not what it costs to train, but what it costs not to train*". Thus, the financial commitment towards realization of tenets of training plan shall be treated as investment rather than expenditure.