Role of
Bureau of Indian Standards
– An Overview

-- Deepak Jain
Head (SPPD)
BIS – Locations

HQs - Delhi

05 Regional Offices

33 Branch Offices in 28 locations

08 Labs

01 Training Institute (NITS)
Structure of BIS

- The Bureau is a Body Corporate consisting of 25 members
- **President** - Union Minister of Consumer Affairs, Food and Public Distribution
- **Vice-President** - Minister of State for Consumer Affairs, Food and Public Distribution
- **Members representing** -
  - Central and State Governments,
  - Members of Parliament,
  - Industry,
  - Scientific and Research Institutions,
  - Consumer organizations and
  - Professional bodies
CORE ACTIVITIES

➢ Standards Formulation and International Standardization activity
➢ Conformity Assessment
➢ Hallmarking of Jewellery & artefacts
➢ Management Systems Certification
➢ Testing
➢ Training
Who sets National Standards?

- BIS, erstwhile ISI, works under the aegis of Ministry of Consumer Affairs, Food and Public Distribution, Govt. of India.
- It is governed by Bureau of Indian Standards Act, 1986 and Rules and Regulations framed there under.
- BIS has been entrusted the job of formulation of National Standards under an Act of Parliament.
Objectives of Standardization

• Harmonious development of activities of standardization, marking and quality certification

• To provide new thrust to standardization and quality control

• To evolve a national strategy for according recognition to standards and integrating them with growth and development of industrial production and exports
Standardization at BIS

- Panels/Subcommittees
- Sectional Committees
- Division Council
- Standards Advisory Committee
- Bureau

Numbers:
- 1
- 1
- 14
- 330
- 508
Process of Standards Formulation

Standards are formulated through a process of consultation, using consensus principle, involving

- Consumers
- Regulatory & other Govt. Departments
- Industry
- Scientists
- Technologists
- Testing organizations

(BIS officer acts as Member Secretary)
National Standards Development

Technologists/Experts

Industry

Government Bodies

Consumers

National Standards

Academia

BIS provides secretariat for standards formulation

<table>
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<tr>
<th>Divisional Councils</th>
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<td>Sectional Committees</td>
<td>330</td>
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<td>Panels, Sub-Committees</td>
<td>508</td>
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<td>Total Experts</td>
<td>&gt;10000</td>
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Stage 2-3: Building consensus among panel/committee members

Stage 3-5: Building national consensus

Process of Standards Formulation

STAGE 1
New Work Item Proposal (NWIP)

STAGE 2
Working Draft (WD)

STAGE 3
Preliminary Draft (P)

STAGE 4
Wide Circulation (WC)

STAGE 5
Finalized Draft (F)

STAGE 6
Indian Standard (IS)
STANDARDS FORMULATION AT BIS

Technical Departments

1) Chemical Engineering
2) Civil Engineering
3) Electronics & Information Technology
4) Electro-technical Engineering
5) Food and Agriculture
6) Management and Systems
7) Mechanical Engineering
8) Medical Equipment & Hospital Planning
9) Metallurgical Engineering
10) Petrochemical, Coal & Related Products
11) Production and General Engineering
12) Textile Engineering
13) Transport Engineering
14) Water Resources

At a Glance

Standards in force 19099
Harmonized with ISO/IEC Standards 5177
Division Councils 14
Sectional Committees 330
STANDARD FORMULATION

Important New Standards Formulated/Revised:

- Composite Cement [IS 16415:2015]

- **Organic Production** System and Labelling of Organically Produced Products [IS 16550 Part-1:2016]


- Vegetable (HPMC) Capsule Shells (IS 16414:2015)

- Revision of **IS/ISO 9001:2015** (QMS) and **IS/ISO 14001:2015** (EMS) in **15 days** only
STANDARD FORMULATION

New subjects taken up for standard formulation in line with priority missions of the Govt.:

i) Make in India:

- Renewable energy (Solar panels, Photovoltaic cells)
- Biofuels (IS 15607:2016)
- Auto components
- Electric machinery
- Construction
- Electronic system
- Textiles
ii. Swachh Bharat Abhiyaan:

- Solid waste management (IS 16557:2016)
- Plastic waste management (IS 14534:2016)
- Municipal Solid Waste Compost – Manure Grade (IS 16556:2016)
- Street food vendors (IS 16066)
- Coarse and Fine Aggregates for Concrete (IS 383:2016)

iii. Smart Cities

- Smart city indicators
The three together constitute World Standards Co-operation (WSC)
INTERNATIONAL ACTIVITY

- India (BIS) is a member of International Organization for Standardization (ISO) and International Electro-technical Commission (IEC)

- Membership of ISO/IEC Committees

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<th>ISO</th>
<th>IEC</th>
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<td>Participating (P)</td>
<td>441</td>
<td>87</td>
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<td>Observer (O)</td>
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<td>73</td>
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- Secretariat responsibilities held for 8 ISO Committees (2 Technical Committees & 6 Sub-Committees)
Conformity Assessment at BIS

• Product Certification - More than 33000 Licences

• Management System Certification – 1225 Licences
  ➢ Quality Management System Certification (QMS)
  ➢ Environmental Management System Certification (EMS)
  ➢ Occupational Health and Safety Management System (OHSAS)
  ➢ Food Safety Management System (FSMS)
  ➢ Hazard Analysis and Critical Control Points (HACCP)
  ➢ Service Quality Management Systems (SQMS)
  ➢ Energy Management Systems (EnMS)

• Hallmarking of Gold & Silver Jewellery – >21000 Licences

• Certification schemes for Foreign Manufacturers & Indian Importers – 600 Licences
Product Certification

• Started in 1955 under ISI Certification Marks Act, 1952

• Basically voluntary in nature except for 109 items under mandatory certification.

• Operated through a network of 05 Regional, 33 Branch throughout India with Headquarters at New Delhi.

• More than 33000 licences in operation
Mandatory BIS Certification

• In public interest GOI has notified 109 Products for mandatory conformance to the relevant Indian Standard.
  • Automobiles Accessories: Automotive Tyres & Tubes
  • Cement
  • Diesel Engines
  • Food & related products: Packaged Drinking Water, Packaged Natural Mineral Water Infant Milk Substitutes, Milk Powders, Infant Foods
  • Household Electrical goods: Circuit Breakers, Energy meters, Cables, Lamps, CFL, Switches, Electric Iron, Room Heaters, Immersion water Heater, Electric Stoves
  • Medical Equipment: Clinical Thermometers
  • Oil Pressure Stoves
  • Steel Cylinders, Valves and Regulators
  • Steel Products
• ISO 9001 : Quality
• ISO 14001 : Environmental
• IS 15700 : Service
• IS 15171 : 5-S
• IS 18001 : Occupational Health & Safety (SA 8000)
• ISO 22000 : Food Safety
• ISO/IEC 17025: Laboratory
• ISO/IEC 27001: Information Security
• ISO 26000 : Social Responsibility
• ISO 31000 : Risk
• ISO 50001 : Energy
CERTIFICATION

Hall Marking

- More than 21000 Jeweller licences for hallmarking of Gold and Silver
- 475 Assaying and Hallmarking Centres recognized by BIS
- Provided full support to the Deptt. of Economic Affairs in launching Indian Gold Coin and Gold Monetization Schemes
- Standard operating procedures and policies w.r.t. the above schemes worked out, within the stipulated time frame
Components of BIS Hallmark

- BIS mark
- Purity /Fineness Mark 916
- Centre’s Mark (example) MMTC
- Jeweller’s Mark (example) TBZ

Fineness (in ppt) of gold vis-a-vis caratage

- 916 = 22 C
- 750 = 18 C
- 585 = 14 C
CERTIFICATION

Compulsory Registration Scheme (CRS)

- 30 Electronic products under CRS
- More than 9600 registrations granted under CRS

Initiatives:

- Simplification of forms for applying/renewal of registration
- New and simplified guidelines for appointment of Authorized Indian Representatives of foreign manufacturers
- Infrastructure and work force augmented
- New standard mark for CRS
- Simplified guidelines for labelling requirements
- Proposal for amending BIS Rules sent to DoCA
LABORATORY TESTING

- Eight BIS labs and 195 outside recognized labs

- Time bound plan for Modernization and up gradation of BIS Labs at a cost of Rs. 10.27 crore

- Two new labs being set up – one for LED products at Bangalore and one for IT products at Hyderabad

- Existing sample management system which was one of the reasons for delay in grant of licences has been changed based on feedback of ROs/BOs
Other Activities

• WTO-TBT Enquiry Point
• Rajiv Gandhi National Quality Awards
• Sales of Publications
• Library
• Standards Promotion
• Publicity
RAJIV GANDHI NATIONAL QUALITY AWARD

Malcolm Baldrige Award in USA
Deming Prize in Japan
European Quality Award.

Fundamental Concepts of Excellence

Leadership & Constancy of Purpose
Management by Processes & Facts
People Development & Involvement
Continuous Learning, Innovation & Improvement
Partnership Development
Corporate Social Responsibility
Results Orientation
Customer Focus
THANKS