



# **Role of Bureau of Indian Standards – An Overview**

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# BUREAU OF INDIAN STANDARDS



**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?

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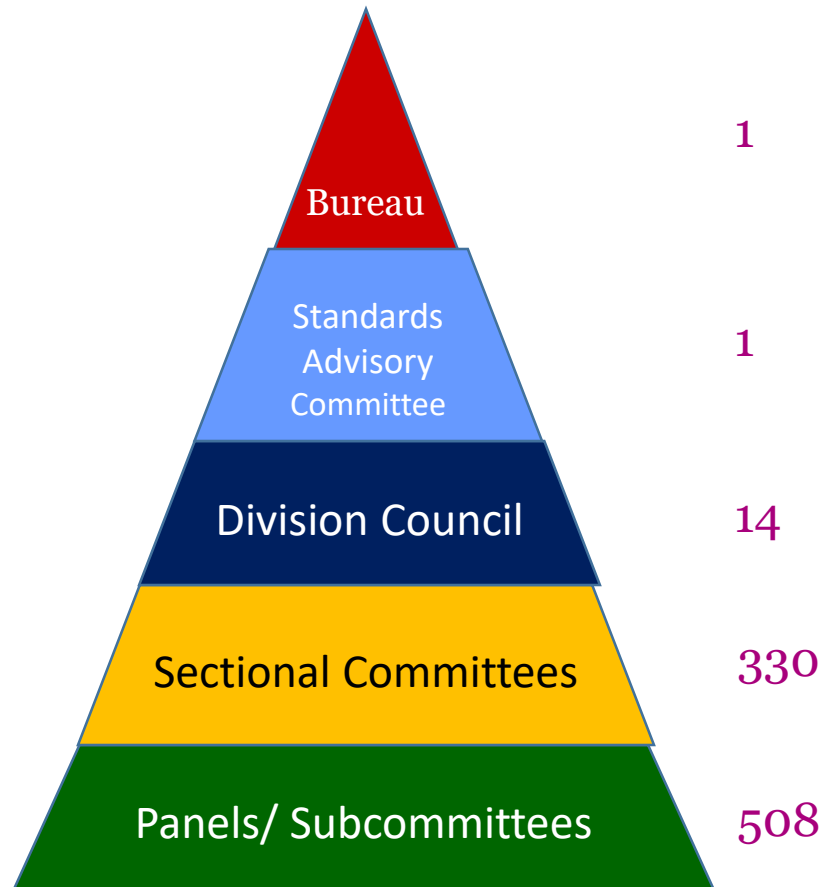


- ❖ BIS, erstwhile ISI, works under the aegis of Ministry of Consumer Affairs, Food and Public Distribution, Govt. of India.
- ❖ It is governed by Bureau of Indian Standards Act, 1986 and Rules and Regulations framed there under.
- ❖ BIS has been entrusted the job of formulation of National Standards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



# **Process of Standards Formulation**

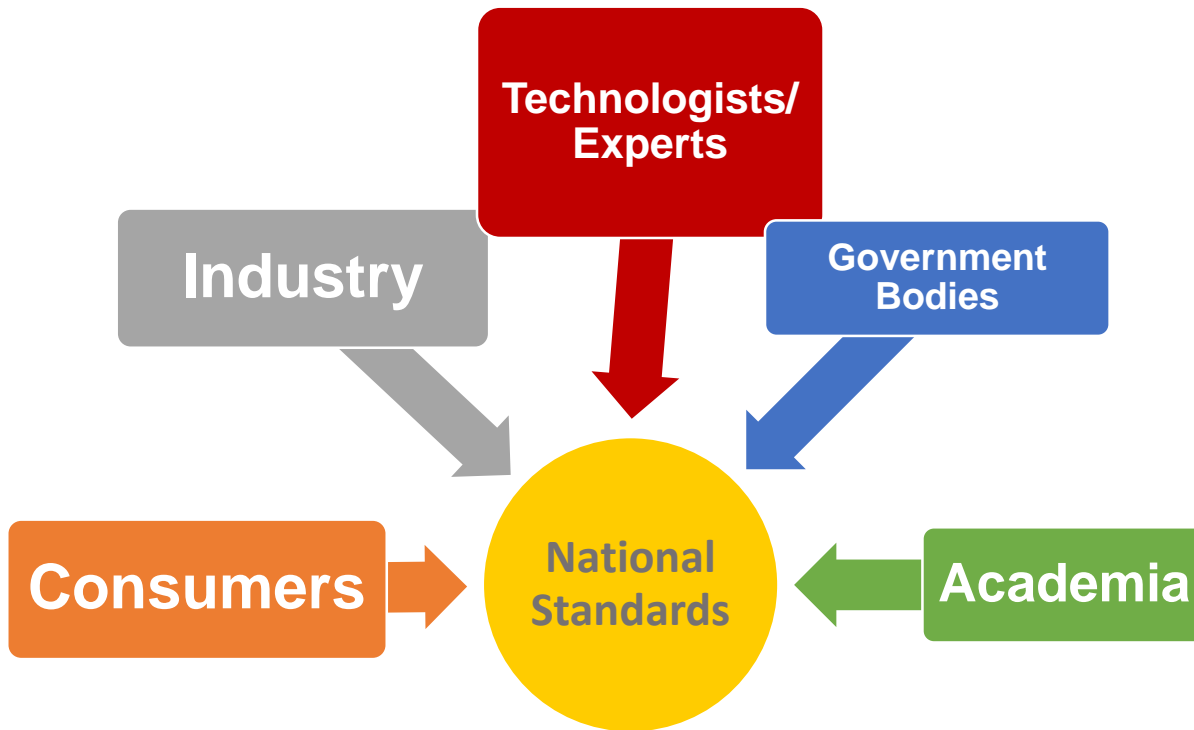
**Standards are formulated through a process of consultation, using consensus principle, involving**

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

**(BIS officer acts as Member Secretary)**



# National Standards Development

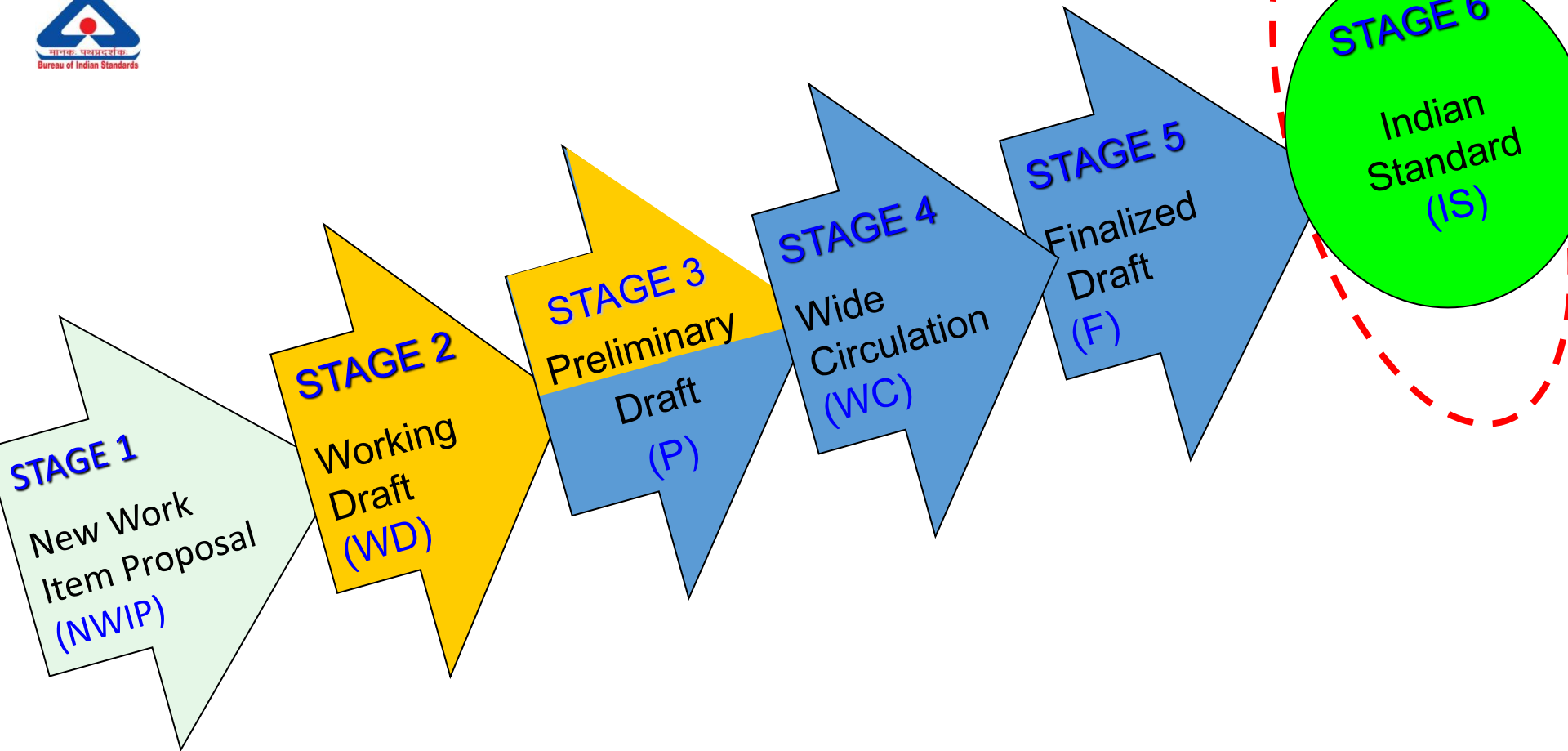


Divisional Councils	14
Sectional Committees	330
Panels, Sub-Committees	508
Total Experts	>10000

**BIS provides secretariat for standards formulation**



# Process of Standards Formulation



Stage 2-3: Building consensus among panel/ committee members

Stage 3-5: Building national consensus

# STANDARDS FORMULATION AT BIS

## Technical Departments

### At a Glance

1) Chemical Engineering	<b>Standards in force</b>	<b>19099</b>
2) Civil Engineering		
3) Electronics & Information Technology	<b>Harmonized with</b>	<b>ISO/IEC Standards</b>
4) Electro-technical Engineering		
5) Food and Agriculture	<b>5177</b>	
6) Management and Systems		
7) Mechanical Engineering	<b>Division Councils</b>	<b>14</b>
8) Medical Equipment & Hospital Planning		
9) Metallurgical Engineering	<b>Sectional Committees</b>	<b>330</b>
10) Petrochemical, Coal & Related Products		
11) Production and General Engineering		
12) Textile Engineering		
13) Transport Engineering		
14) Water Resources		

# 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]
- ❑ Criteria for Earthquake Resistant Design of Structures Part 4 Industrial Structures Including Stack – Like Structures [IS 1893 Part-4:2015]
- ❑ 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

# STANDARD FORMULATION

**Contd...**

## **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

# International Standards



International  
Organization for  
Standardization



International  
Electrotechnical  
Commission



International  
Telecommunication  
Union

**The three together constitute World  
Standards Co-operation(WSC)**

BIS  
MEMBER

of

ISO & IEC

# INTERNATIONAL ACTIVITY

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

- **Membership of ISO/IEC Committees**

	<u>ISO</u>	<u>IEC</u>
<b>Participating (P)</b>	<b>441</b>	<b>87</b>
<b>Observer (O)</b>	<b>218</b>	<b>73</b>

- **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**

# *Management & Leadership Standards*

- 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

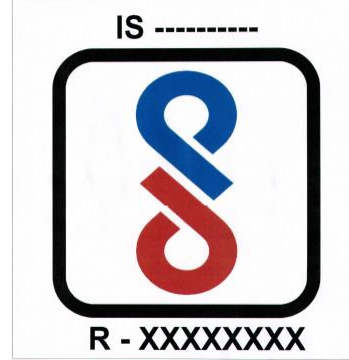
**916 = 22 C**

**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

