Lighting Standards and Labelling in India

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CLASP’s APPROACH

• CLASP's primary objective is to identify and respond to the assistance needs of S&L practitioners in targeted countries and regions while making the highest quality technical information on S&L best practice available globally.

• CLASP is currently collaborating with and providing services to national and regional governments and agencies on major S&L programs, including:
  • Bureau of Energy Efficiency (India)
  • China National Institute of Standards
  • European Commission
  • US Department of Energy
  • National Commission on Energy Efficiency (Mexico)
FUNCTIONS OF NATIONAL STANDARDS BODY (BIS)

- Preparation and promulgation of national standards
- Promotion of the implementation of standards
- Certification of products
- Provision of information on standards and related technical matters, with regard to both national and international standards
- Country representation in international activities and at forums that deal with standards
NATIONAL COMMITTEE STRUCTURE

- Manufacturers
- Laboratories/R&D institutions
- Govt./Regulatory Bodies
- Consumer/User Organisations
- Industry Associations
- Public Sector Units
- Consulting firms
- Professional Bodies
- Academic Institution
NATIONAL COMMITTEE STRUCTURE

- To cover all interest
- Balance of interest
- Neutral Chairman
- Size of committee
NATIONAL COMMITTEE FOR LAMPS, CONTROLGEAR AND LAMP CAPS/HOLDERS

- Electric Lamps and their Auxiliaries Sectional committee (National mirror committee of IEC TC 34/34A/34B/34C)
- Members – 32
- Industry/Industry Association – 11
- Laboratory – 4
- Utility – 4
- Consumer Organization – 2
- University/Institution – 2
- Government/Regulatory bodies – 7
- Professional Body – 1 (ISLE)
STANDARDS ON LAMPS, CONTROLGEARS AND LAMP CAPS/HOLDERS

- Total number of Standards – 60
- Lamps – 29
- Controlgears – 17
- Method of Tests – 4
- Caps and Gauges – 5
- Terminology – 2
- Miscellaneous – 3
- Harmonized standard with IEC – 52
- Standards for domestic and commercial sectors - 52
IMPORTANT STANDARDS ON LAMPS, CONTROL GEARS, LAMP CAPS/HOLDERS

- Incandescent lamps
- Tubular Fluorescent Lamps (under revision)
- HPMV
- HPSV
- Halogen Lamps
- CFL
- LED
- LED linear retrofit lamp (under preparation)
- Metal Halide (under preparation)
NATIONAL COMMITTEE ON LUMINAIRE AND ILLUMINATION ENGINEERING

- Illumination Engineering and Luminaires Sectional Committee (National mirror committee of IEC SC/34D)
- Total number of Members – 29
  - Industry – 8
  - Industry Association – 2
  - Government/Regulatory bodies – 8
  - Utility – 2
  - Laboratory – 3
  - Consumer Organization – 1
  - University/Institution – 3
  - Professional Body – 1 (ISLE)
STANDARDS ON LUMINAIRE AND ILLUMINATION ENGINEERING

- Total number of Standards – 52
- Luminaire – 26
- Code of Practice – 14
- Traffic Signal – 1
- Emergency Light – 1
- Terminology – 1
- Controlgear – 2
- Day Lighting – 2
- Method of Tests – 4
- Harmonized standard – 10
- Standards for domestic and commercial sectors
IMPORTANT STANDARDS

- National Lighting Code
- Street Light Luminaire
- General Purpose Luminaire
- Road Traffic Signal
- Aviation Lighting
- Interior Illumination
- Road Lighting
- LED street lighting luminaire (under preparation)
RECENT DEVELOPMENT ON ENERGY AND ENVIRONMENT

- Incandescent lamp (ICL) wattage restricted up to 100 W
- 75 W rating ICL incorporated in the standard
- Mercury content limit for CFL restricted up to 5 mg. Proposal to reduce the level up to 3.0 mg
- CFL beyond 26 W up to and including 85 W under process
- T5 has been incorporated in TFL standard
- LED road traffic signal standard under development
- National lighting code (NLC) published
- NLC addresses energy conservation in all areas of lighting
IMMEDIATE PLAN

- Use of performance tiers developed by IEA SSL Annex for 4E for national standards
- Pilot project by utilities on the use of street lighting tool developed by DOE
- Integrating street lighting tool in national standards on street lighting
IEC PARTICIPATION

- IEC/TC 34 Lamps and related equipment
- IEC/SC 34A Lamps
- IEC/SC 34B Lamps caps and holders
- IEC/SC 34C Auxiliaries for lamps
- IEC/SC 34 D Luminaires
CHALLENGES IN THE DEVELOPMENT OF NATIONAL STANDARDS

- Improvements in economic and physical infrastructure, advances in information technology, manufacturing techniques, automation, transportation and changes in numerous other aspects that affect trade and industry have led to dramatic increases in the volume of trade within and between countries.
CHALLENGES IN THE DEVELOPMENT OF NATIONAL STANDARDS

- A national standards body exists to meet the standardization needs of the country concerned.
- While the needs of the population for consumer protection and fit-for-purpose goods and services are essentially the same as those of people in more industrialized countries, there are constraints to the implementation of standards in a developing country.
- Realities and priorities in developing countries are different from those that pertain to the developed world.
- The industrial infrastructure might be insufficient to produce local goods of the required quality.
CHALLENGES IN THE DEVELOPMENT OF NATIONAL STANDARDS

- Governmental technical regulations are often insufficient to adequately protect the environment or to prevent the importation or dumping of lower quality or unsafe products.

- Consumer awareness and passion for good quality may be absent or exist only at a low level.

- Lack of participation both at national and international standards development process.

- Resources (technical and financial) constraints with small and tiny industries who plays an important role in standards making.

- Lack of availability of data on technology, manufacturing, test facilities, material and product performance.
REGULATORY STATUS IN INDIA

- Incandescent lamp (ICL) under mandatory certification
- CFL under mandatory certification
- All other light sources are under voluntary certification
- Strong information mechanism
THANK YOU