Lighting Standards Development Process and Status in Sri Lanka and Other South Asian Countries

Ramani Nissanka
Director, Regional Centre for Lighting

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IEC in South Asia

India and Pakistan, full members

Sri Lanka, associate member

Afghanistan, Bangladesh, Bhutan, Nepal participate in the affiliate country program

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Common Factors

- Growing energy demand
- Need of providing energy access (lighting as a priority) to its citizens
- Power shortages and / or high electricity prices

Implement / plan Energy Efficient Lighting Programs

Therefore it is very important to have proper standards for lamps, and other associated equipment to achieve desired results

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Standards in Sri Lanka

- 1964 - Establishment of the Bureau of Ceylon Standards (BCS)
- 1984 – Renamed as Sri Lanka Standards Institution with wider powers

National Electrotechnical Committee of Sri Lanka (NECSL) has been established to participate in the work of International Electrotechnical Commission (IEC). This Committee is called the National Committee by IEC.

Now IEC standards are widely being referred to in developing new national standards as well as in preparation of specifications by utilities and other organizations for engineering/technical practices and procuring goods and equipment

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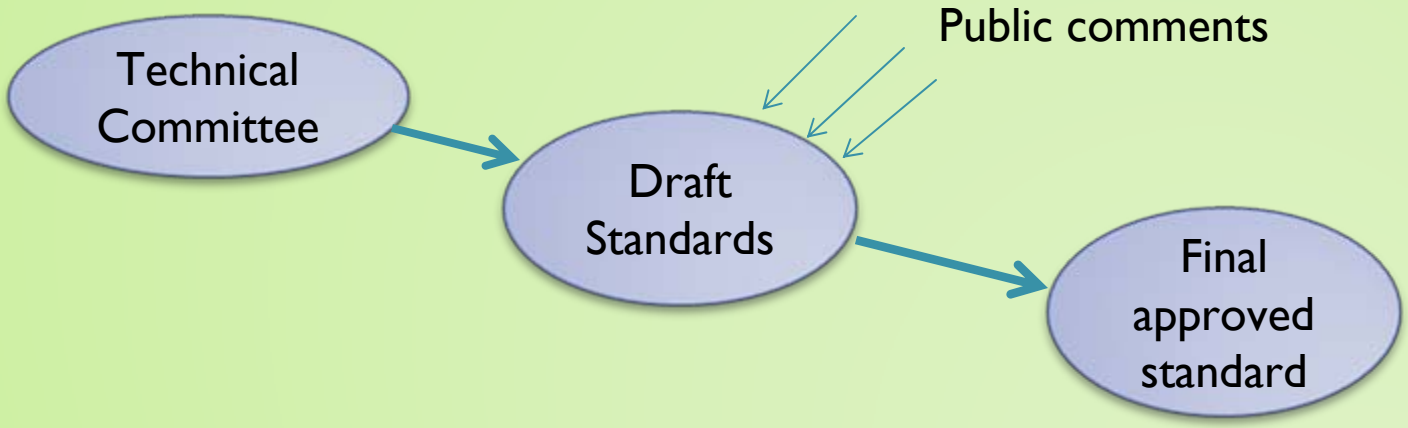
Standards Development Process

The National Standards formulated by the SLSI are developed through a committee process and a consultative process with the voluntary involvement and the co-operative effort of all interested parties representing consumers, producers, users, public institutions and independent technical organizations.



In the formulation of National Standard, the policy of the SLSI is to be in line with the International Standards and practices as far as practicable. To this effect International Standards are adopted as Sri Lanka Standards, wherever feasible.

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Standards Development Process contd.

Public comments

- Professional bodies
- Non-governmental Organizations / Civil Society
- Industry players (users, traders, manufacturers)
- Interested individuals

Professional bodies, NGOs act as catalysts to initiate standard setting process

For standards in the fields of Energy Efficiency and Lighting,
the initiative has come from,

- Demand Side Management (DSM) Branch of Ceylon Electricity Board
- Energy Conservation Fund
- Sri Lanka Sustainable Energy Authority

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Other countries in South Asia

Bangladesh Standards of Testing Institution (BTSI)

Maldives Standards and Metrology Centre (MSMU)

Nepal Council for Standards (NCS)

Standards and Quality Control Authority (SQCA), Bhutan

Pakistan Standards & Quality Control Authority (PSQCA)

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Nepal

- Nepal Council for Standards (NCS) is the governing body for Quality, Standards, Testing and Metrology (QSTM) activities in Nepal.
- Nepal Bureau of Standards and Metrology (NBSM) acts as the secretariat to this council.

Standards Development Process

As the secretariat to NCS, Nepal Bureau of Standards and Metrology prepares a preliminary draft standard for an identified subject to be discussed in the technical committee meeting. The technical committees are generally constituted of technical personnel, experts, and representatives from concerned public and private organizations along with consumer forums. Detailed discussions take place in this committee and as a result, a final draft standard is prepared in consensus. Comments are also sought from concerned authorities and are included in the draft. The final draft standard, so prepared, is put forward to National Council for Standards. The draft standard is discussed upon and is approved with amendments if any. The approved standard is published as National Standard.

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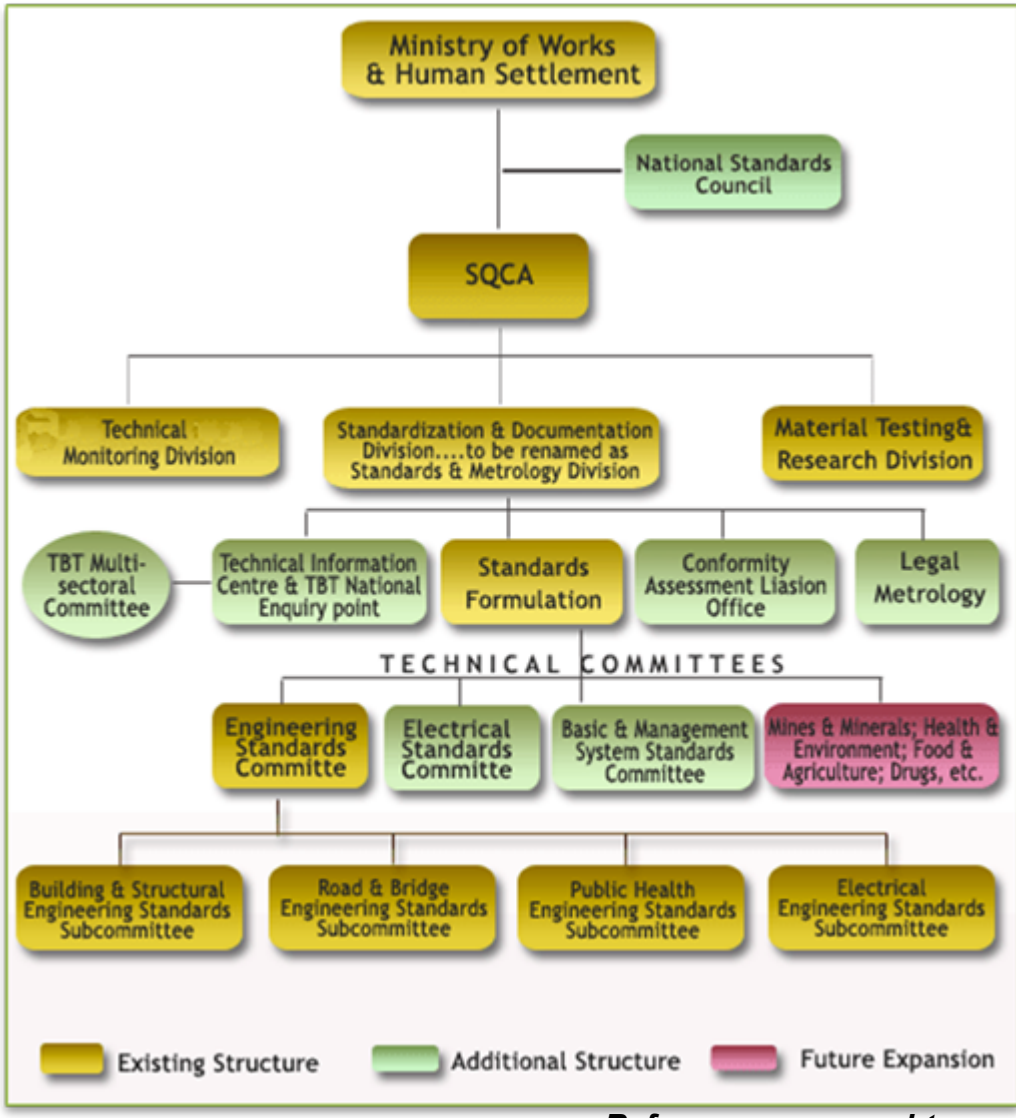
Bhutan

- Standards and Quality Control Authority (SQCA)



Ref. www.sqca.gov.bt

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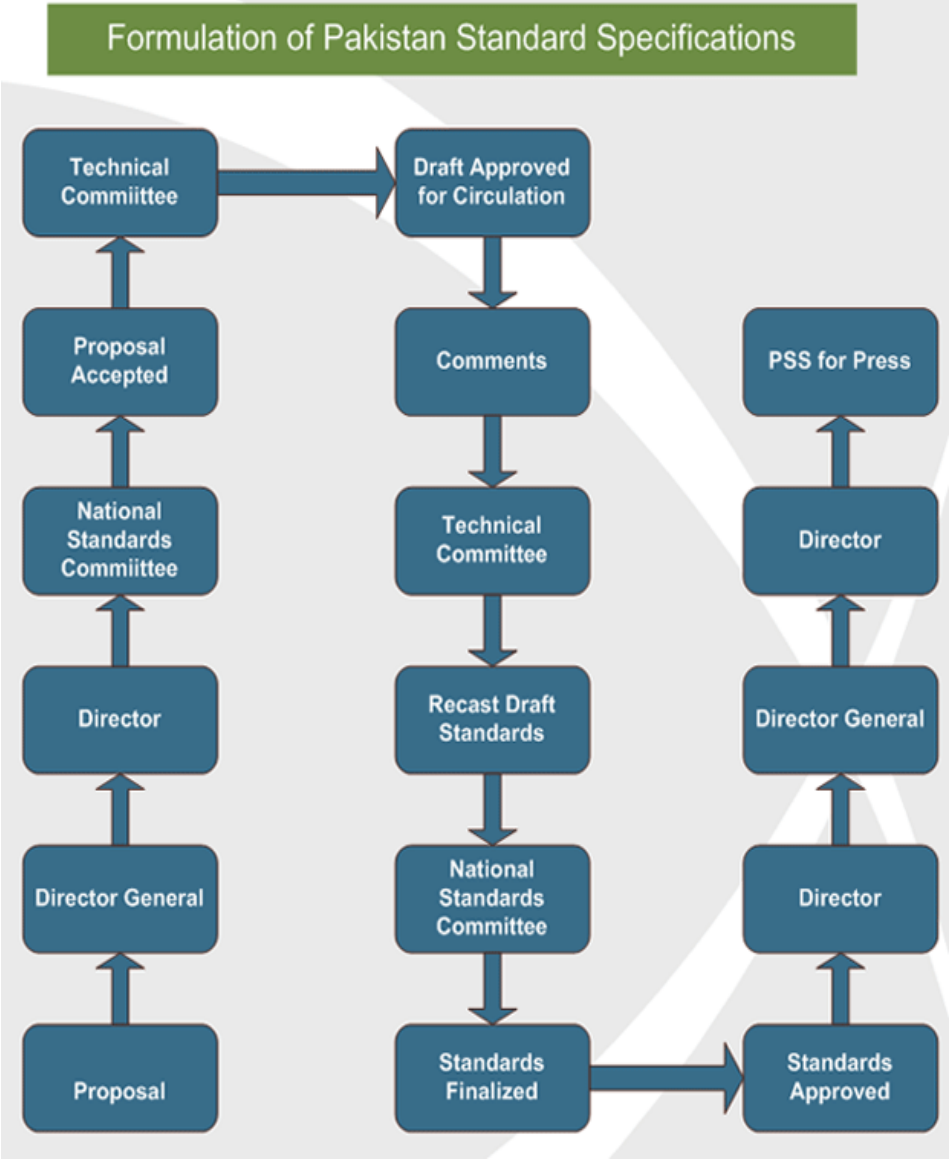
Pakistan

- Pakistan Standards & Quality Control Authority (PSQCA)

  full member of IEC



Ref. www.psqca.com.pk

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SL Standard	Tittle	Year	Remarks
SLS 566	Tubular fluorescent lamps (First Revision)	1996	Referred to IEC 81 and IEC 61 in developing SL standard
SLS 1150-1	Ballasts for tubular fluorescent lamps Part 1: general and safety requirements	1997	IEC 920:1990
SLS 1150-2	Ballasts for tubular fluorescent lamps Part 2: performance requirements	1997	ISO 921:1988
SLS 1200	Energy efficiency rating - fluorescent lamp ballasts	2001	For electronic ballasts, five star rating is offered if they are in conformity with IEC 928 / IEC 929
SLS 1225	Energy efficiency rating for self-ballasted lamps (Integral type compact fluorescent lamps)	2002	Used IEC 969: 1988 in developing the SL standard
SLS 1231-1	Self-ballasted lamps (Integral type compact fluorescent lamps) for general lighting services. Part 1: performance requirements	2002	Used IEC 969: 1988 in developing the SL standard
SLS 1231-2	Self-ballasted lamps (Integral type compact fluorescent lamps) for general lighting services. Part 2: Safety requirements	2002	Direct adoptation of IEC 968

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Pak Standard	Tittle	Year	Remarks
PS 17	Tungsten Filament Lamps for domestic and similar general lighting purposes. Performance requirements (4th Revision)	2000	
PS 497-1	Ballasts for tubular fluorescent lamps General and safety requirements.	1997	
PS 292	Tubular fluorescent lamps for general lighting service (5th Revision) (Withdrawn & superceded by PS:IEC-60081)	1996	IEC-60081
PS 497-2	Ballasts for tubular fluorescent lamps – Performance requirements	1997	
PS 687	Starter for tubular fluorescent lamps (2nd Revision).	1987	
PS 951	Edison Screw lamp-holders (2nd Revision) (Withdrawn & superceded by PS: IEC 60238/2002).	1989	IEC 60238
PS 1519	Luminaries for tubular fluorescent lamps (Superceded by PS:1601)	1981	
PS 1663	High-pressure mercury vapour lamps – Performance specifications.	1985	
PS 2177	Heat test source (H.T.S.) lamps for carrying out heating Tests on luminaires.	1989	
PS 4402	A.C. Supplied electronic ballasts for tubular fluorescent lamps –performance requirements	1999	
PS 4640	Auxiliaries for lamps – A.C. supplied electronic ballast for tubular fluorescent lamps – General & Safety Requirements	2000	
PS 4694	Self-ballasted lamps for general lighting services – Safety requirements.	2001	
PS 4695	Self-ballasted lamps for general lighting services – Performance requirements.	2001	

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SARI / Energy

SLSEA
Sri Lanka Sustainable Energy Authority

Lighting Research Center at Rensselaer

Objectives

- increase the awareness and affordability of energy efficient, reliable and clean lighting technologies and their applications to reduce the electricity demanded by lighting
- catalyse regional manufacturing of energy efficient lighting products to improve the economy of the region and to make lighting affordable to many underprivileged citizens
- train and educate the necessary workforce in the region to create sustainable lighting in south Asia

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www.rclsa.net

ramani@rclsa.net

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