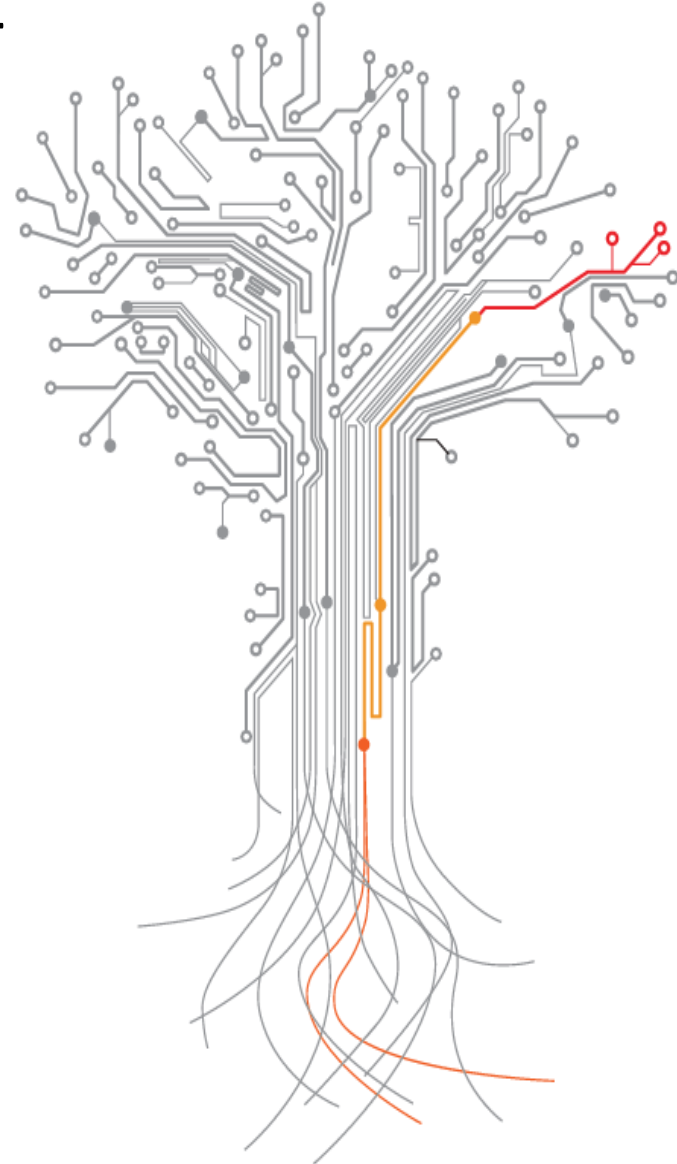


**4<sup>th</sup> Meeting of BRICS Solid State Lighting  
Collaboration Working Group.  
Hangzhou China (19-24 June 2017)**

**SABS**

## CONTENT

- 1 **SABS Mandate**
- 2 **Mission | Vision | Values**
- 3 **Affiliation with DTI**
- 4 **SABS Value Chain**
- 5 **Standards Development**
- 6 **Certification**
- 7 **Testing**
- 8 **Questions**



The South African Bureau of Standards (SABS) is a statutory body that was established in 1945 in accordance with the Standards Act, 1945 (Act No.24 of 1945) and continues to operate under the mandate as given in the Standards Act, 2008 (Act 8 of 2008) as the national standardisation institution in South Africa



## **Develop, promote and maintain South African National Standards**

- To promote access to markets
- To advance socio-economic wellbeing of SA in a global economy



## **Promote quality in connection with commodities , products & services**

- Localisation of production in support of government's Industrial Policy Action Plan (IPAP)



## **Render conformity assessment services and assist in matters connected therewith**

- Facilitate access of markets for SA industries – improving their competitiveness in global environment

**MISSION**

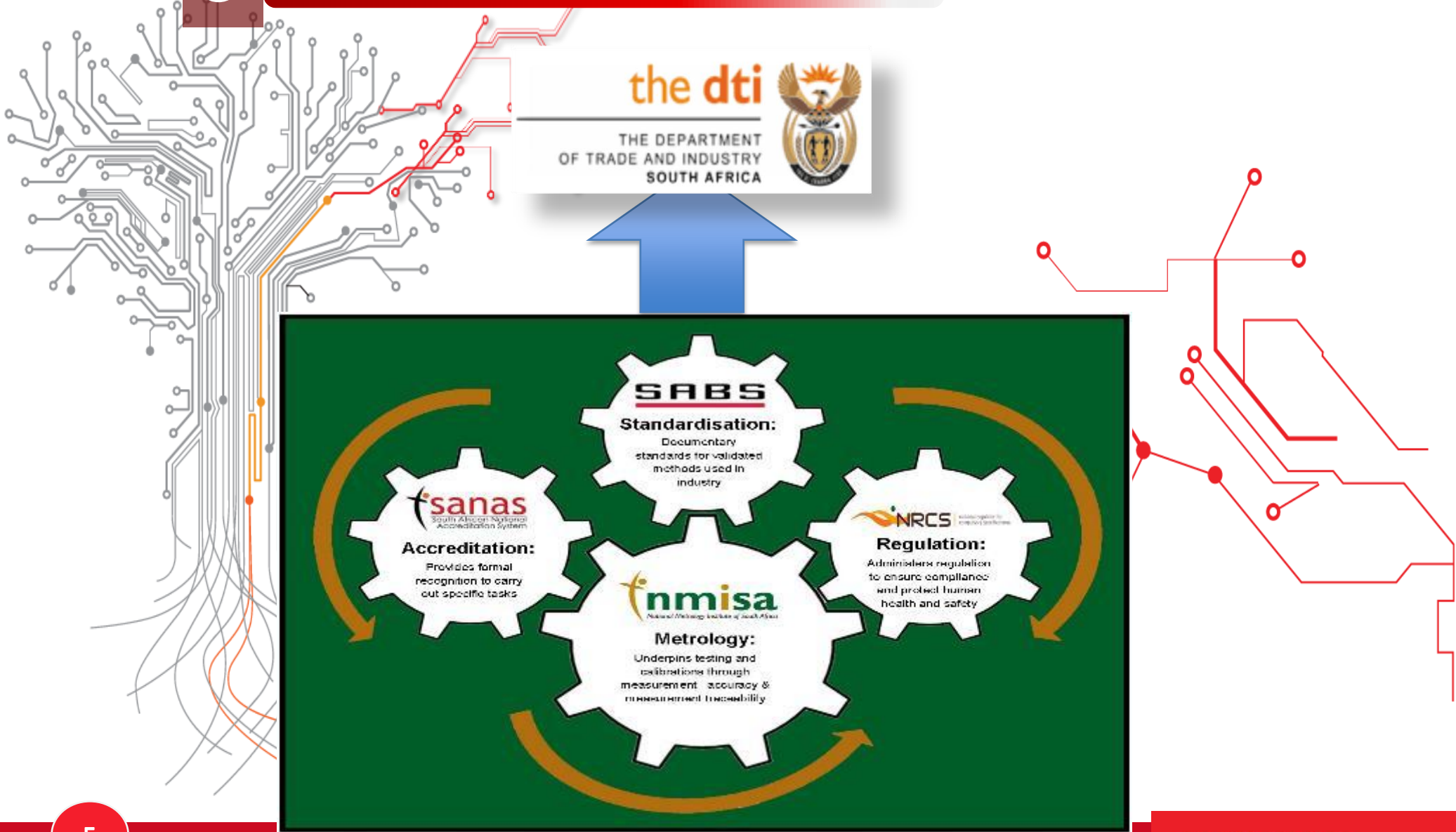
- SABS provides standards and conformity assessment services to enable the efficient functioning of the economy.

**VISION**

- To be the trusted standardization and quality assurance provider of choice.

**CORE VALUES**

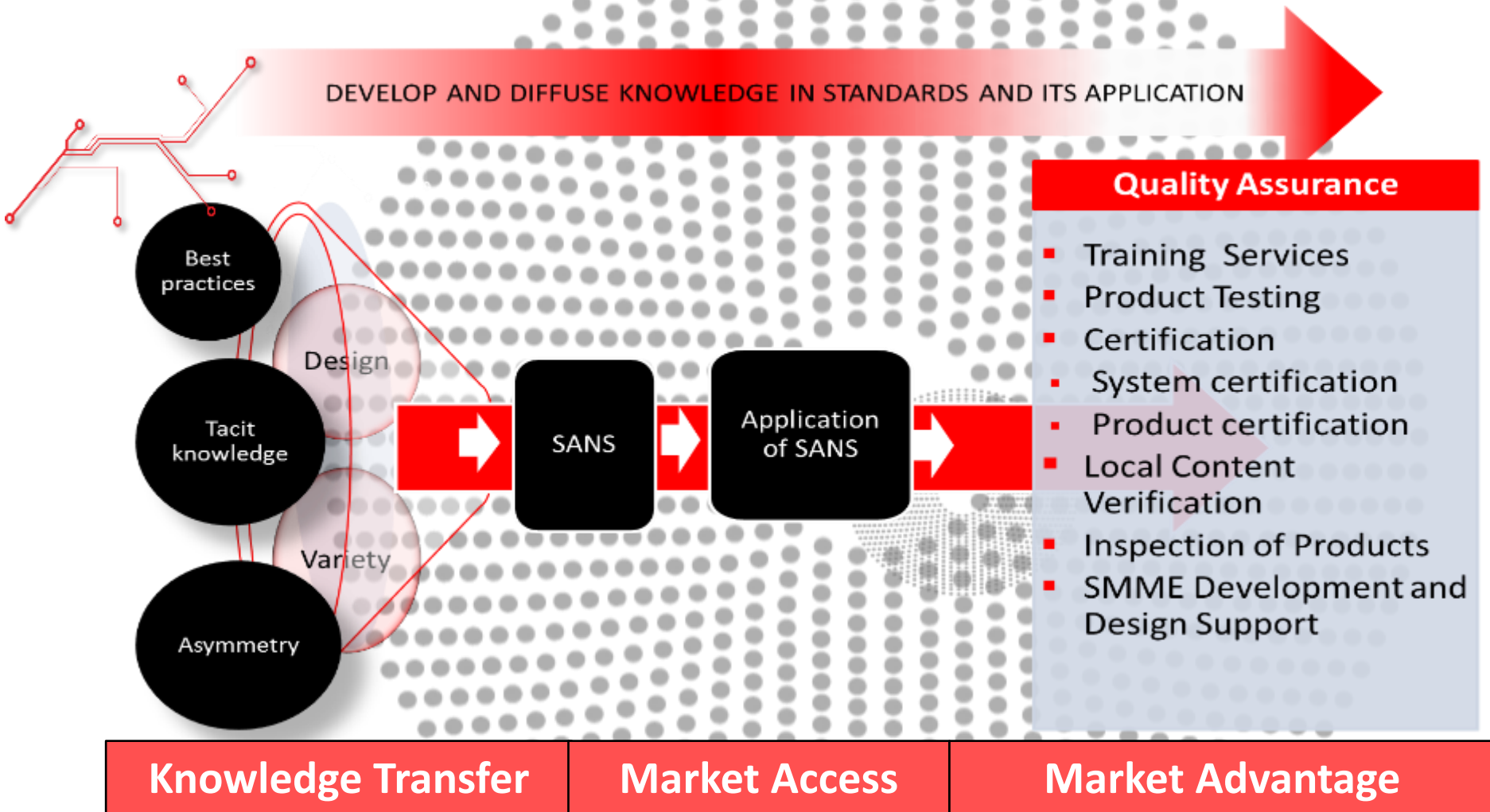
- Impartiality
- Innovation
- Accountability
- Integrity
- Quality
- Customer Centricity

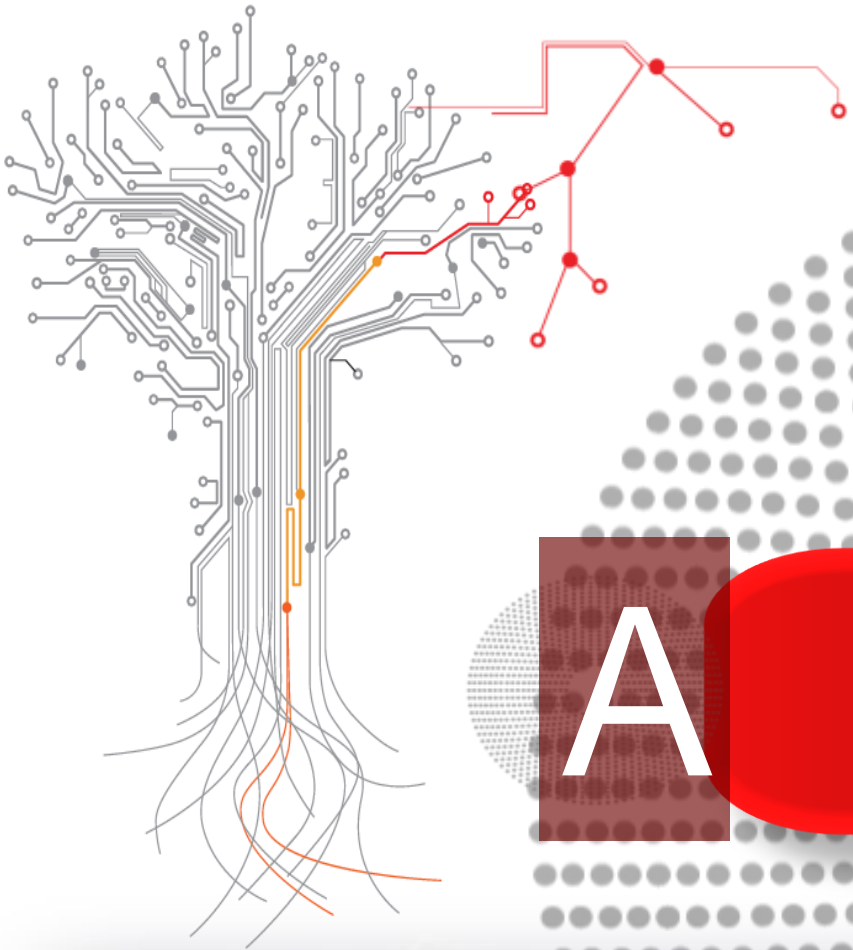




## 4

# SABS Value Chain





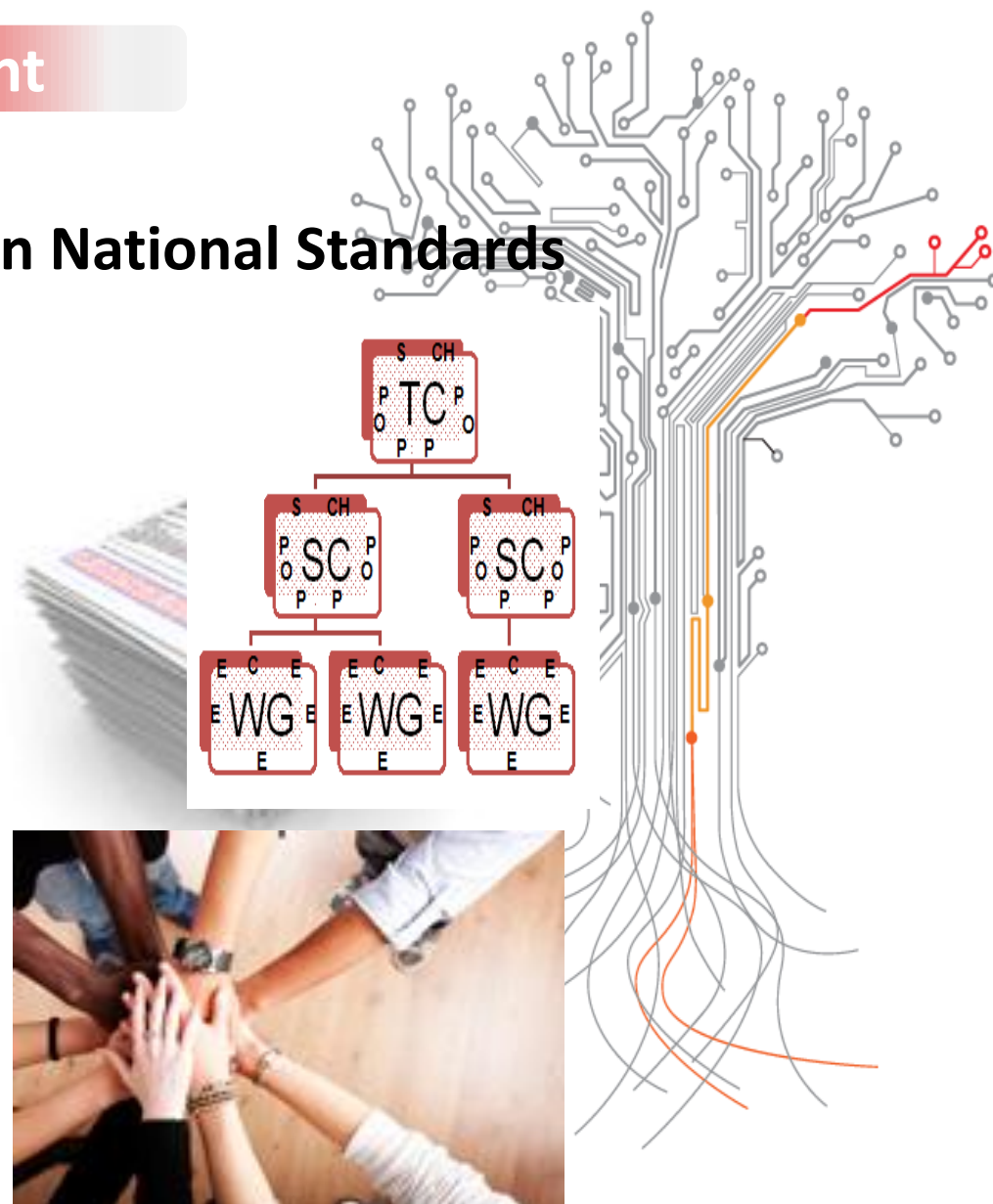
A

## STANDARDS DEVELOPMENT

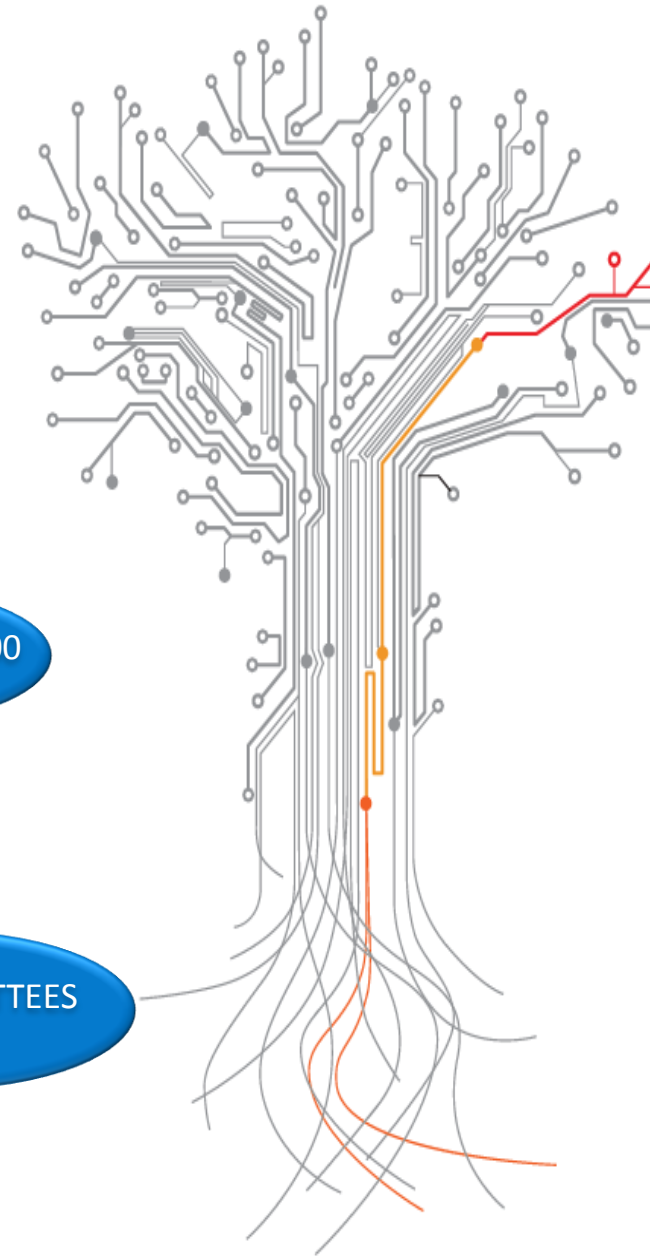
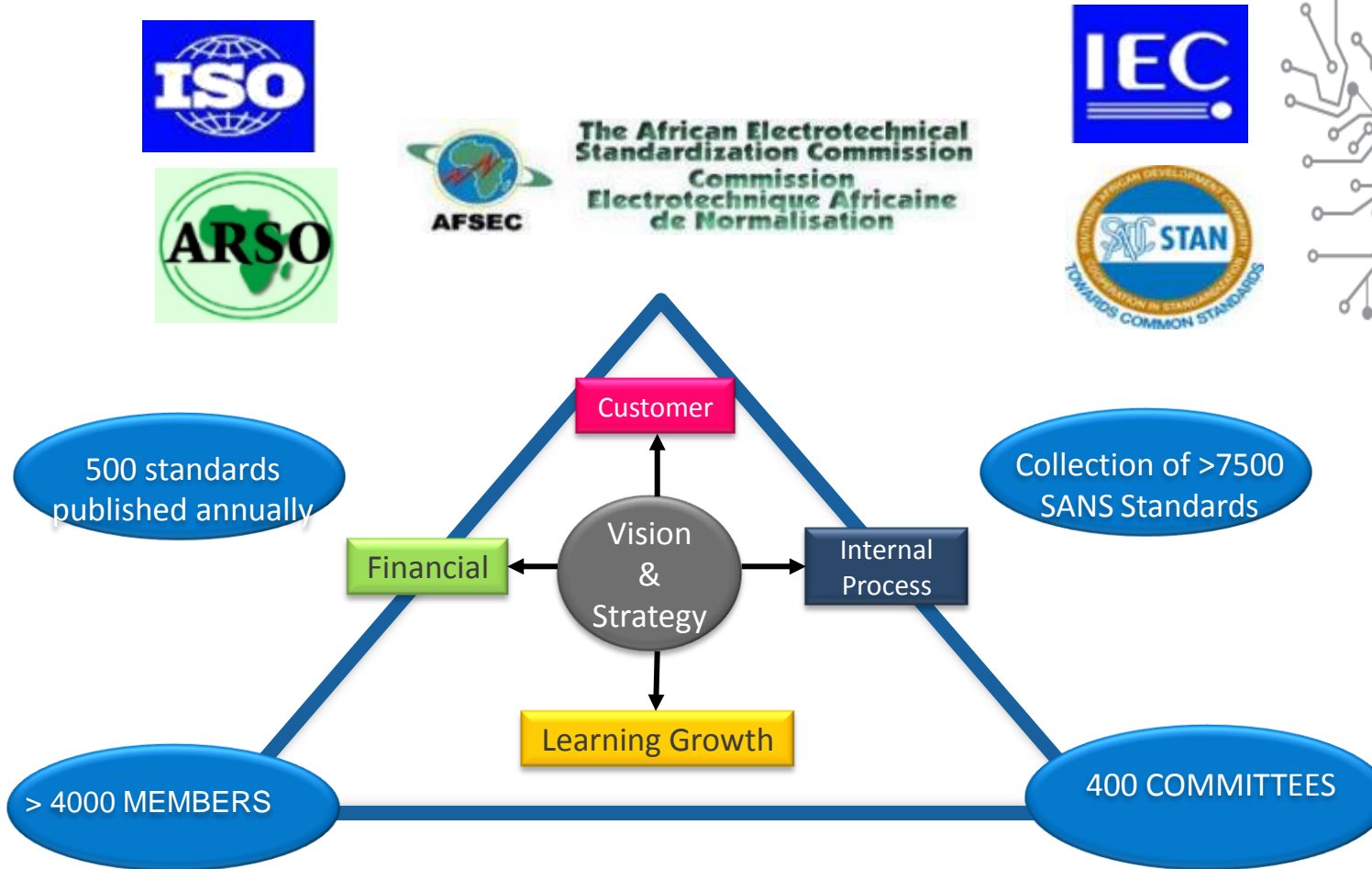


## Develop, Promote and Maintain National Standards

- Stakeholder driven process
- Governance process
- Alignment to ISO and IEC programme (
- Periodic Reviews
  - Reaffirmations
  - Withdrawal
  - Amendments
  - Revisions



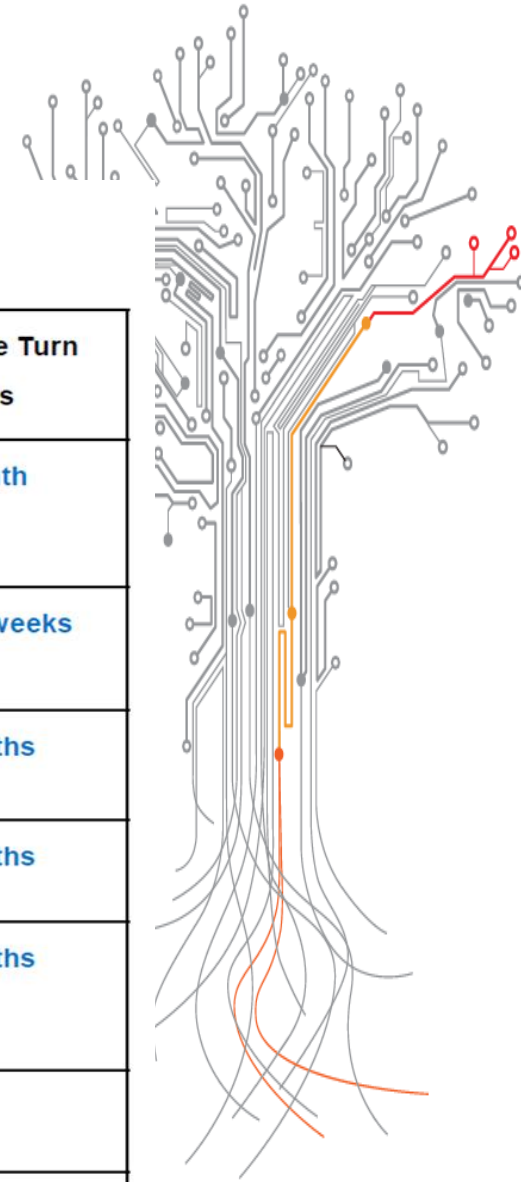




*\* explicit principles for the “development of international standards, guides and recommendations with relation to articles 2, 5 and Annex 3 of the WTO/TBT agreement”*

## STANDARDS DEVELOPMENT PROCESS

	Project stage	Name of document	Action required by P-member	Approximate Turn around times
Step 1	Preliminary stage	Preliminary work item (potential new work)	Maybe comment	1 month
Step 2	Proposal stage	New work item proposal	Vote & Comment	3 plus 2 weeks
Step 3	Preparatory stage	Working draft (s) (WD)	Comment	6 months
Step 4	Committee stage	Committee draft (CD)	Vote & Comment	6 months
Step 5	Public enquiry stage	Draft South African Standard (DSS)	For public commenting	3 months
Step 6	Ratification stage	Draft for ratification		
Step 7	Publication stage	South African Standard		



### MAINTENANCE OF PUBLICATIONS

- Committee

- Constant review of stakeholder representation
- Review of policy statement/business plan

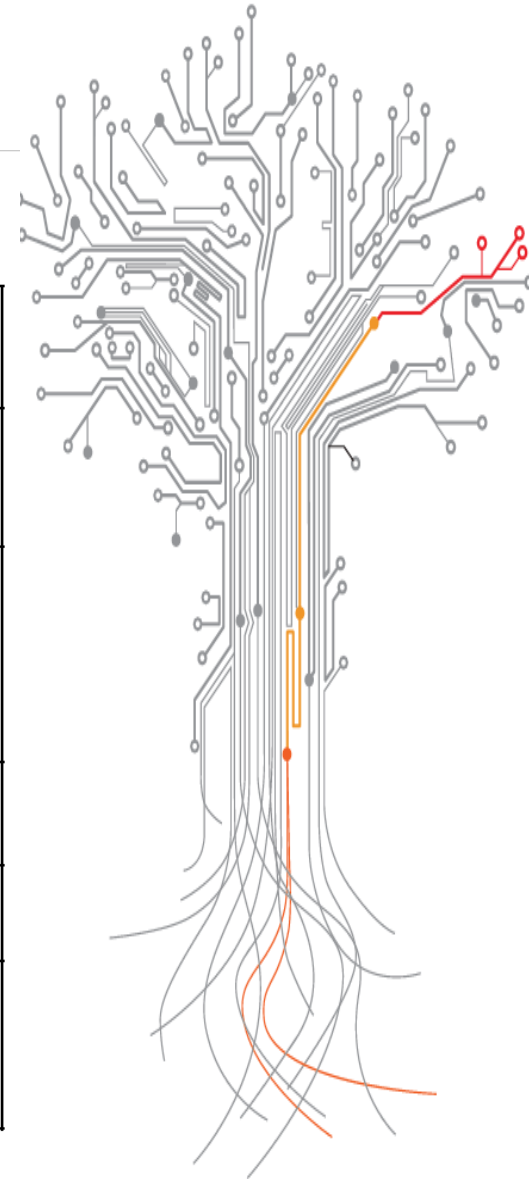
- Standards

- Periodic reviews
  - Reaffirmation
  - Withdrawal
- Amendments
- Revisions



## NATIONAL COMMITTEE

Committee Number	SABS TC 064	SABS TC 064-01	SABS TC 064-02	Total
Title	Lighting and Optics	Lamps/Light Sources and auxiliaries	Luminaires	
Liaisons	IEC TC 3 4 ISO TC 145 / SC 2	IEC SC 34A-Lamps SC34B-Lampholders SC34 C-Auxiliaries	IEC TC 34D-Luminaires CIE(Divisions)	
Total	12	101	44	157
Home-grown	11	16	18	45
International/ Regional	1 (ISO)	1 (EN) 83 (IEC)	2 (CIE) 25 (IEC)	112



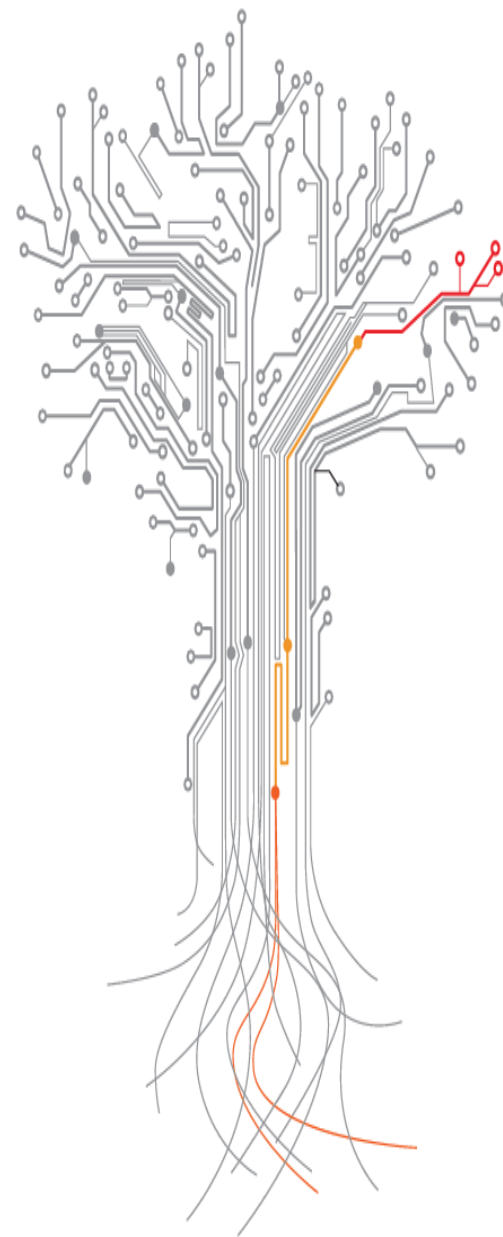


## 5

## Standards Development (Cont)..

AVAILABLE STANDARDS AND INTERNATIONAL  
RELATEDNESS

Document	South Africa standard	International standard	Title	Relatedness
60598 series	SANS 60598 series and SANS 1464-22	All parts except IEC 60598-2-22	Luminaires	Identical except IEC 60598-2-22
61347 series	SANS 61347 standards Identical to IEC	IEC 61347 series	Controlgear	Identical
10114	SANS 10114-1 and 2	None	Artificial Interior and emergency	Home-grown
SANS 1706 ARP 0110	Technical specification Recommended Practice	None	UVGI	Home-grown
DALI series	SANS 62386 series	IEC 62386 series	Digital addressable lighting interface	identical



## NATIONAL STANDARDS

### SABS TC 064 Lighting and optics-IEC TC 34

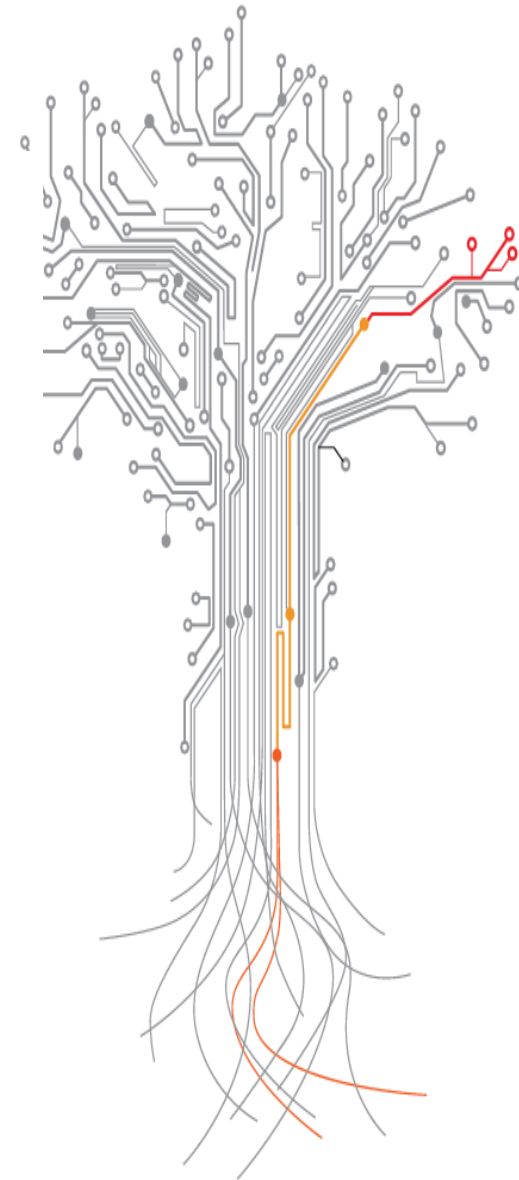
- SANS 1459-Traffic lights

### SABS TC 064-01 Lamps/Light sources and auxiliaries-IEC SC34 A and C

- Control gear– SANS 61347-series
- SATS 17576-LED performance requirement
- SANS 1662 Self-ballast LED tubular, safety requirement
- SANS 62612 Self-ballast LED lamps, safety requirement
- SANS 62560-Self-ballasted LED-lamps for general lighting services by voltage > 50 V - Safety specification.
- SANS 62504 General lighting - Light emitting diode (LED) products and related equipment - Terms and definitions

### SABS TC 064-02 Luminaires-IEC 34 SC D

- SANS 60598-series-Luminaires
- SATS 1706-UVGI Luminaires, safety and performance
- ARP 0110 Installation and maintenance of UVGI
- SANS 10114-1-Artificial lighting of interior
- SANS 10114-2-Interior emergently lighting
- ARP 032 guideline for modification tubular retro-fit LED tubular



### NATIONAL STANDARDS

#### LED LAMP (Bulbs)

##### Safety Requirements : SANS 62560

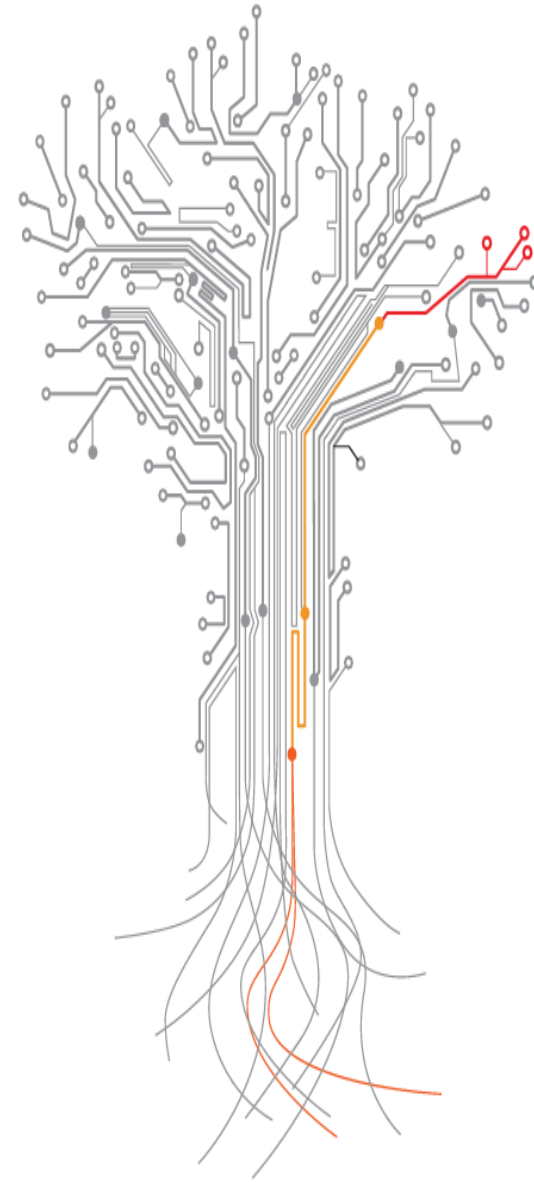
- Self-ballasted LED-lamps for general lighting services by voltage >50V- Safety specification

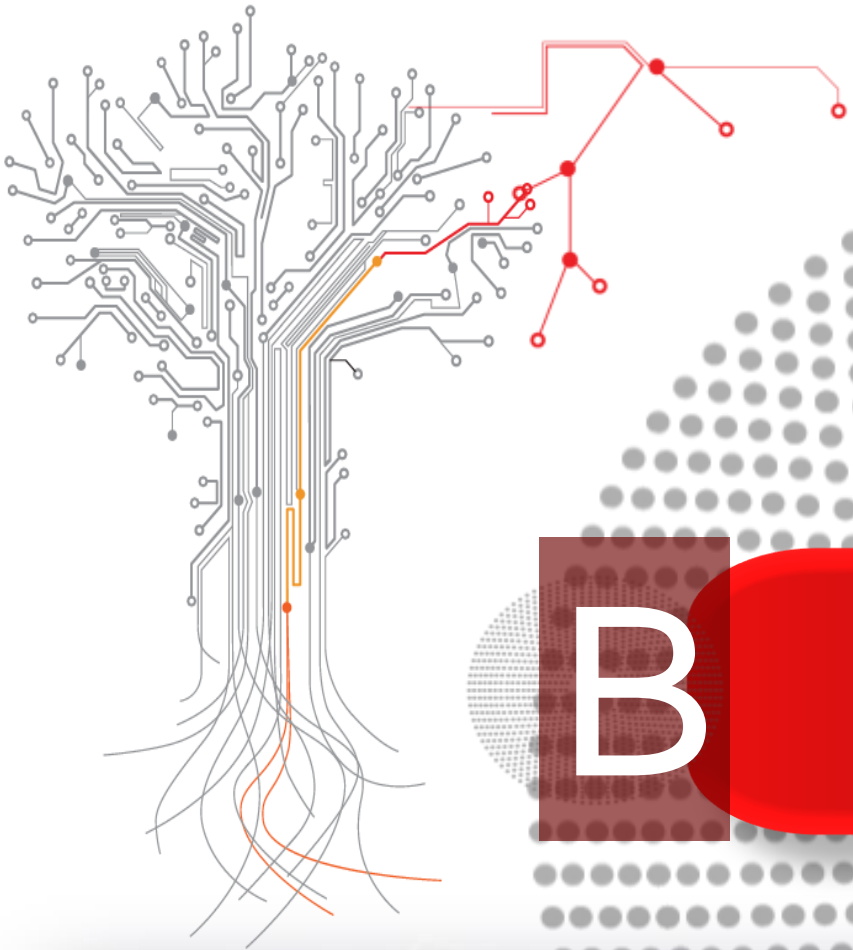
##### Performance Requirements: SANS 62612

- Self-ballasted LED lamps for general lighting services with supply voltages > 50V-Performance requirements
- **SATS 17576**: Light emitting diode products for interior lighting, streetlighting and floodlighting- Performance requirements

Neither of the above are regulated by NRCS

No VC published and no LoA required





B

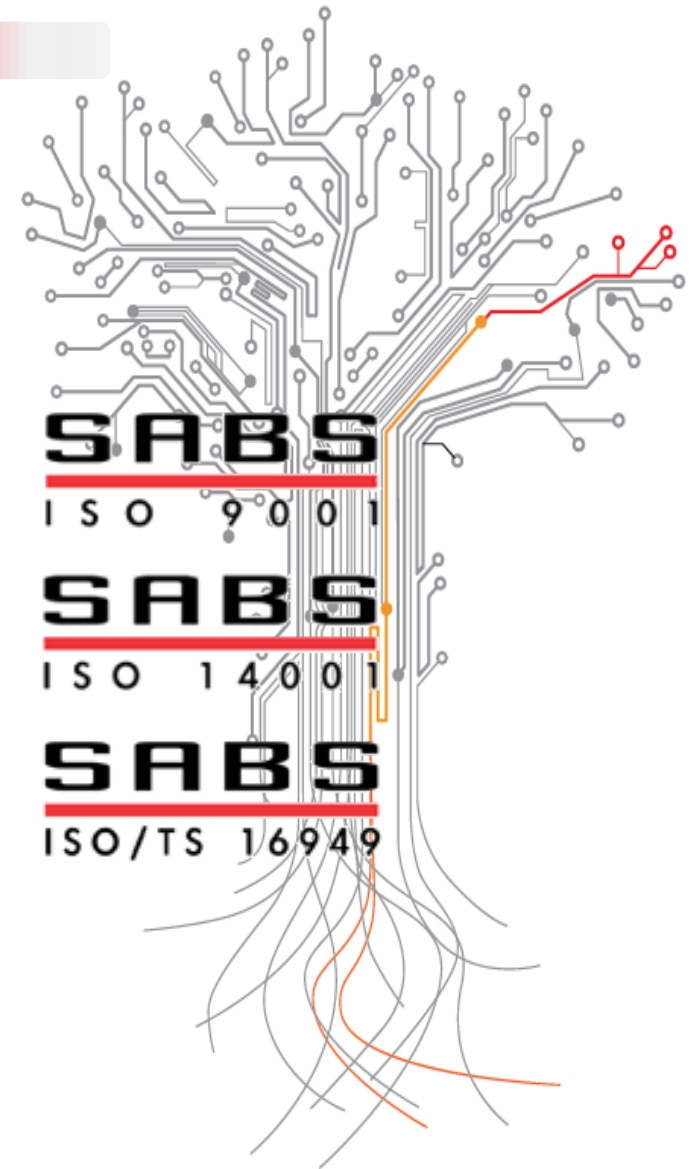
## SABS CERTIFICATION



## Management Systems Certification

Provides assurance on the effectiveness and validity of a clients management system in terms of quality, safety and good governance

- ISO 9001 – Quality Management Systems
- ISO 14001 – Environmental Management Systems
- OHSAS 18001 – Occupational, Health and Safety Management Systems
- ISO 50001 – Energy Management System
- ISO/TS 16949 – Automotive Quality Management Systems
- ISO 22001 – Food Management Systems
- ISO 27001 – IT Management Systems



## SABS Product Certification

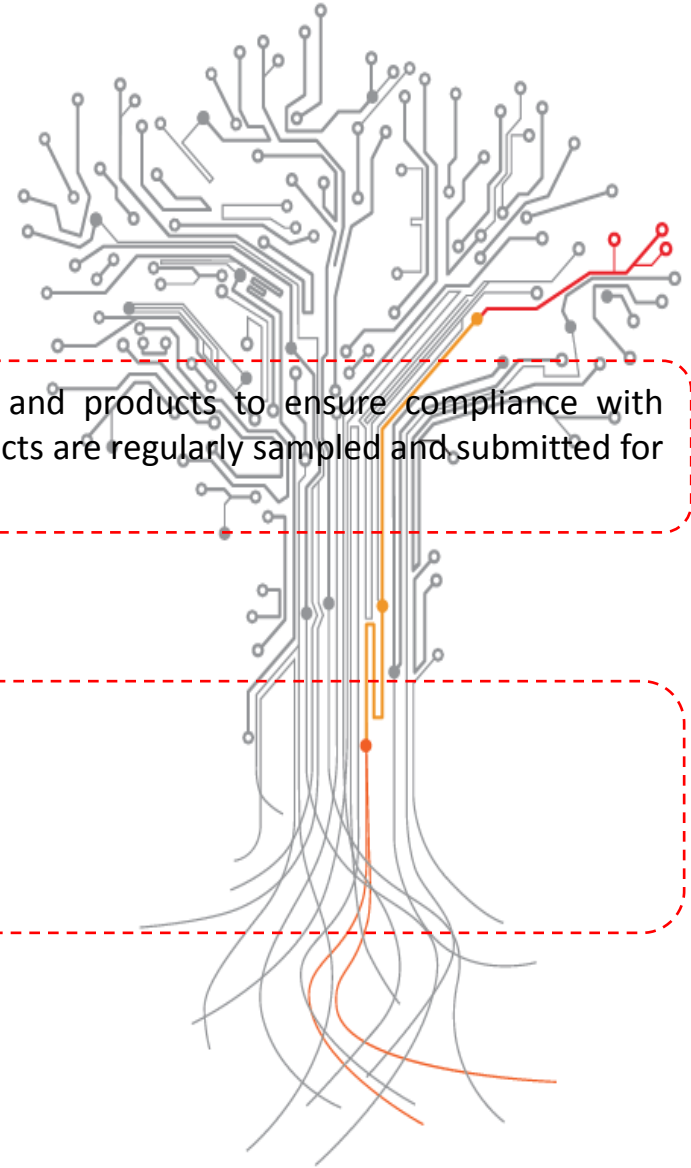


SABS attests and audits client's processes and products to ensure compliance with predetermined product specifications. Products are regularly sampled and submitted for compliance testing against the standards.

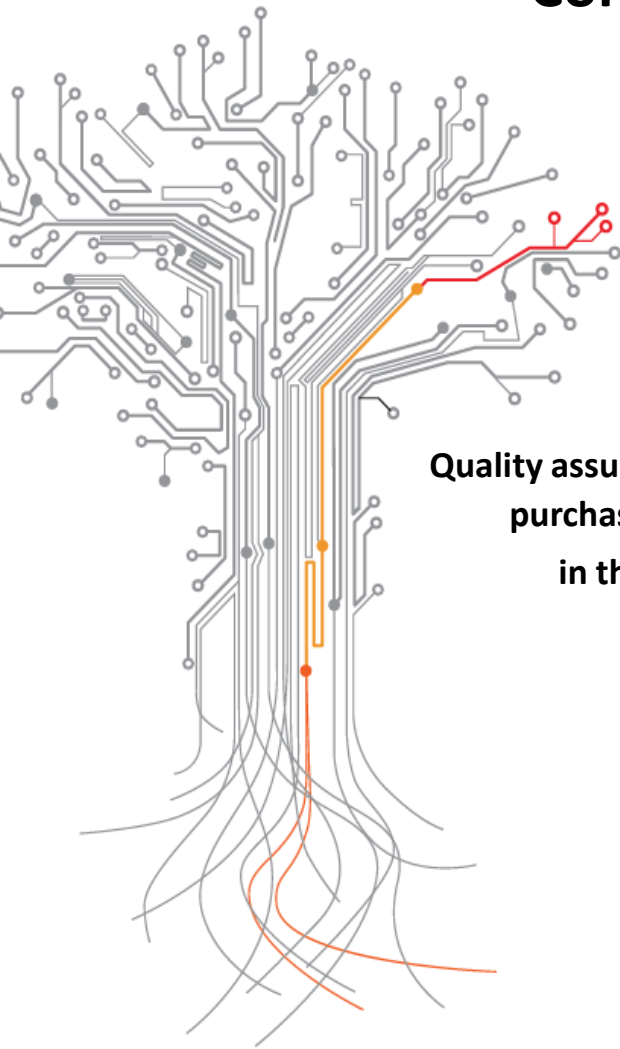


### The SABS Mark means the following:

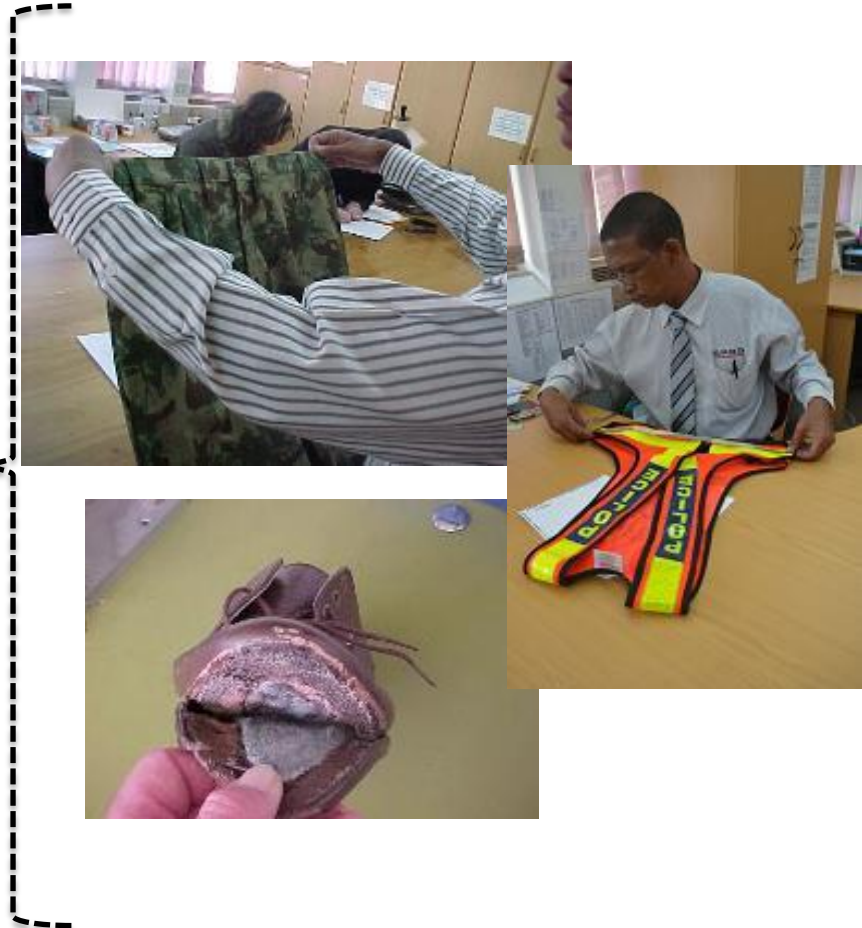
- Fit for purpose
- Redress
- Safe for use



## Consignment Inspection



**Quality assurance service provided to external purchasing bodies (Government) to assist in the procurement of goods.**



## Local Content Verification

1

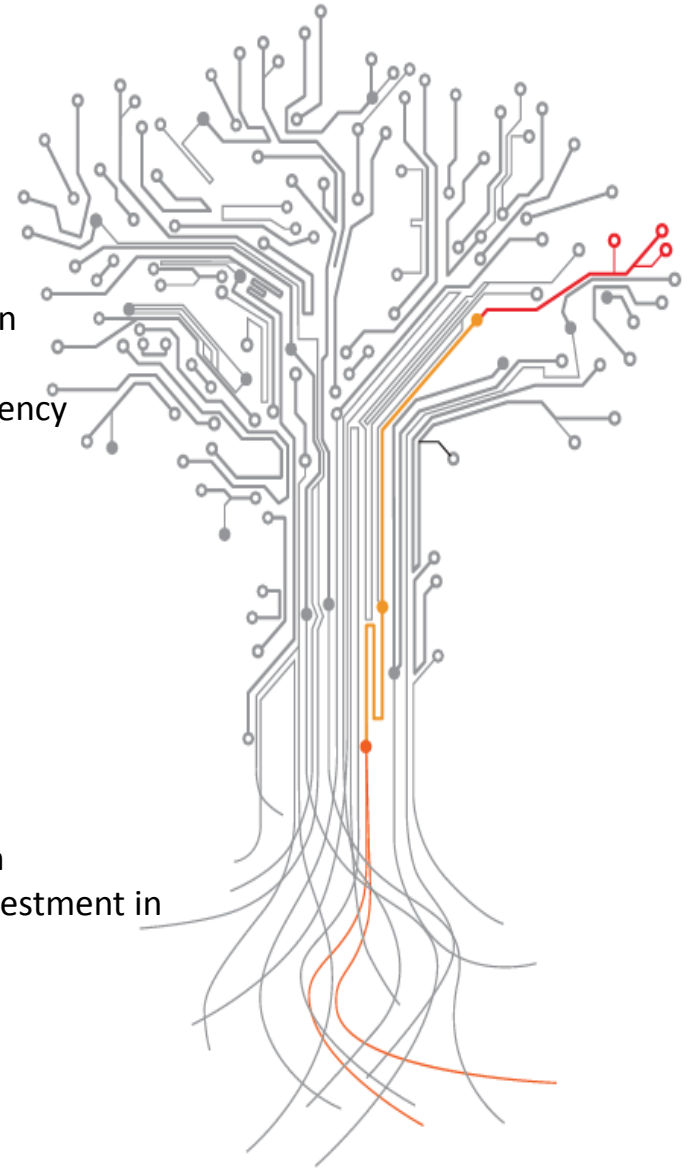
### Background

- Local content technical specification approved in 2011 (SATS 1286)
- SABS appointed as local content verification agency by **the dti** in September 2012
- Local Content Verification office established in capacitated in 2013

2

### Objectives

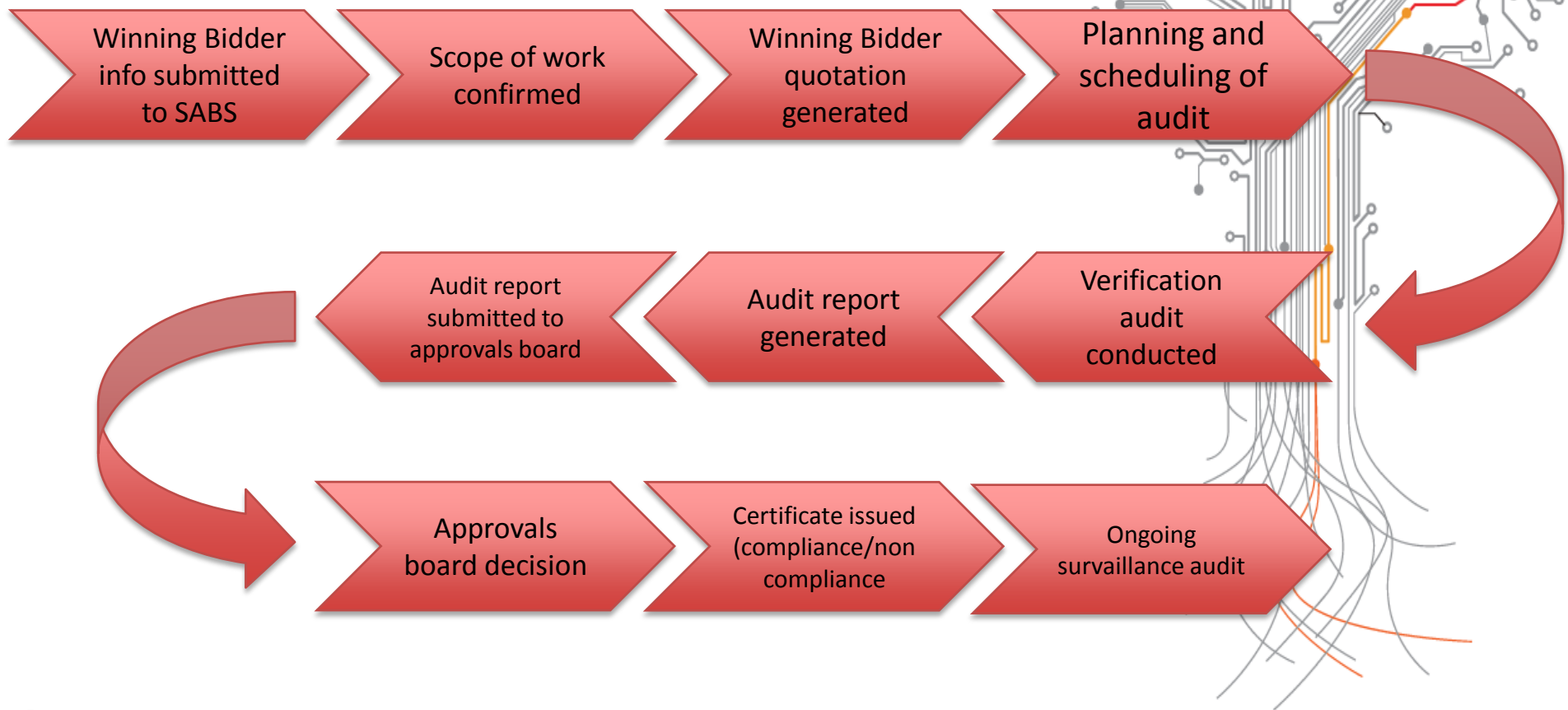
- Supporting economic growth and job creation
- Attracting new investments, foreign direct investment in particular
- Leveraging public expenditure



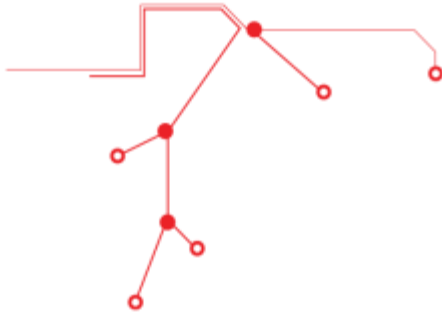


## 3

## Local Content verification (Process Flow)



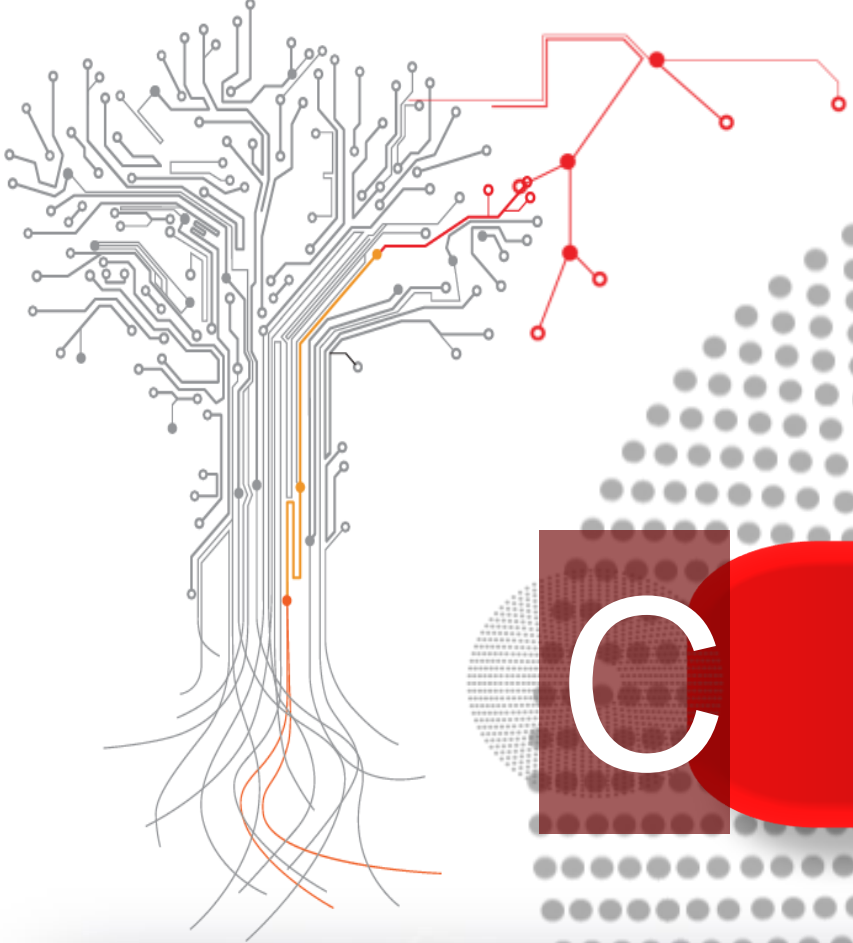
## Local Content Verification



4

Local Content Verification  
Done so far

- Solar water heaters via DoE, for 20 organisations
- Communication cables via Telkom, for 1 organisation
- Buses via City of Jo'burg, for 1 organisation
- National Lotteries via National Lotteries Board
- Concluding verifications for Eskom – ICT Project



C

## SABS TESTING

## SABS Testing Services



Testing services are offered by > 80 Laboratories spread over a number of clusters:

- Automotive and Mechanical Engineering
- Chemical & Bio (Food)
- Electro-technical Engineering
- Mining & Minerals

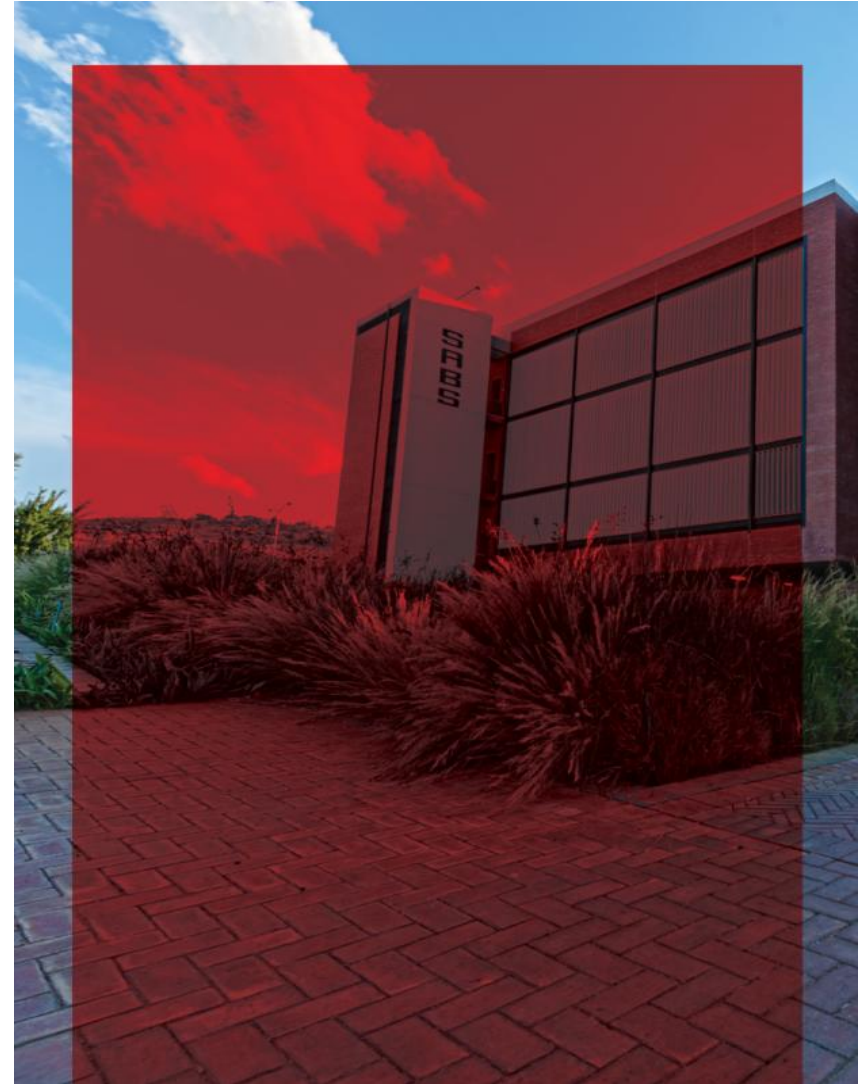


# Testing (SABS Laboratories)

- Performance
- Safety
- Health
- Environment
- Endurance
- Calibrations



- Metrology
- Vehicle Components Lab
- COP Laboratory
- Battery Technology
- Alternative Energy & Fluid Technology
- Building Construction & Packaging



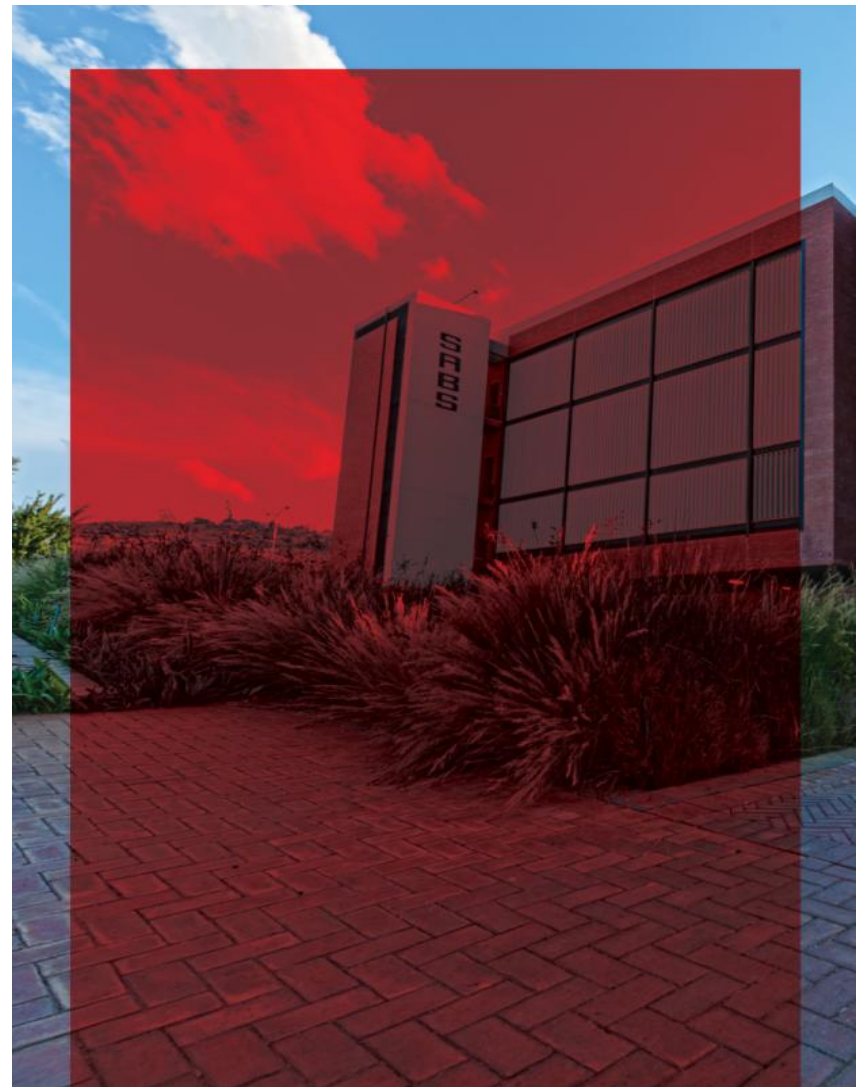


7

## SABS Automotive and Mechanical



- Industrial Chemistry & Petrochemicals
- Rubber Plastics Paints Sealants
- Food & Water Chemistry Dept
- Pharmaceutical Chemistry
- Chromatographic Services
- Pesticide Trials
- Food Microbiology
- Radiation Protection Services
- Condom Test Lab
- Fibre & Polymers









Electronics

Appliances

STB Project

Lighting Laboratory

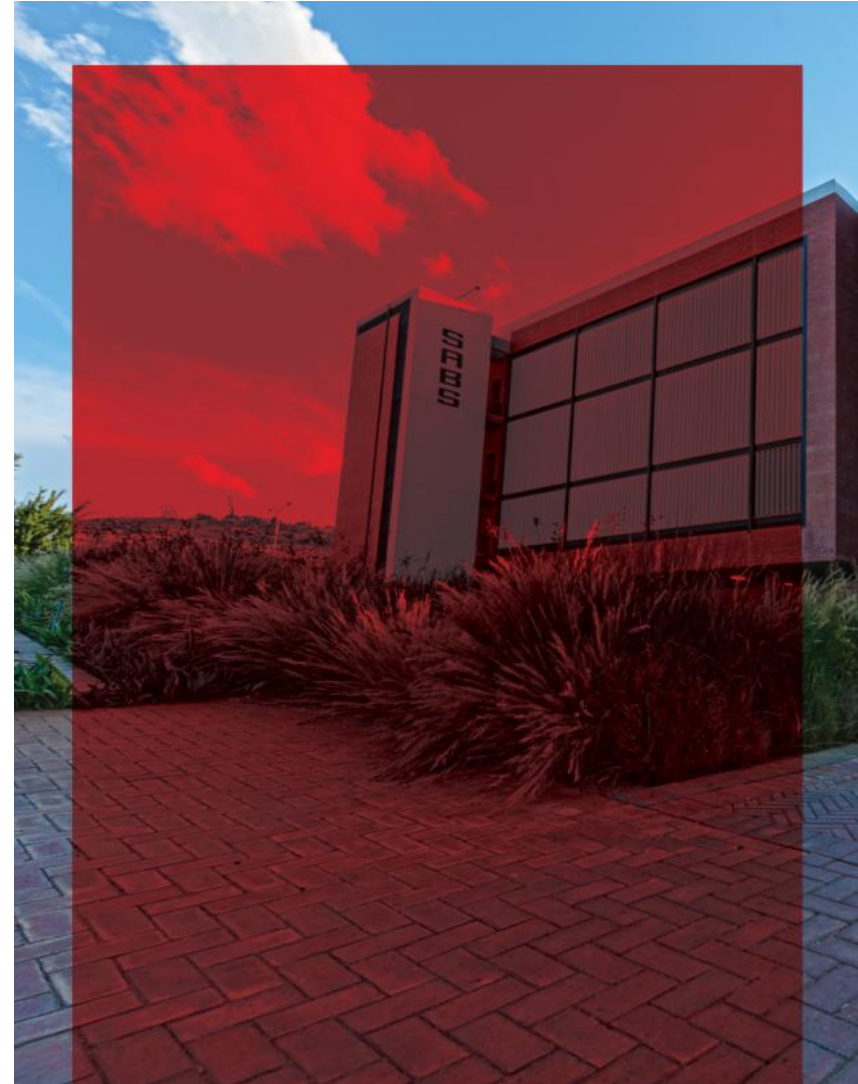
Explosion Prevention Tech & Rotating  
Machines

NETFA: Short Circuit Laboratory

NETFA: High Voltage

NETFA: Materials & Installations Lab

NETFA: Distribution Technology



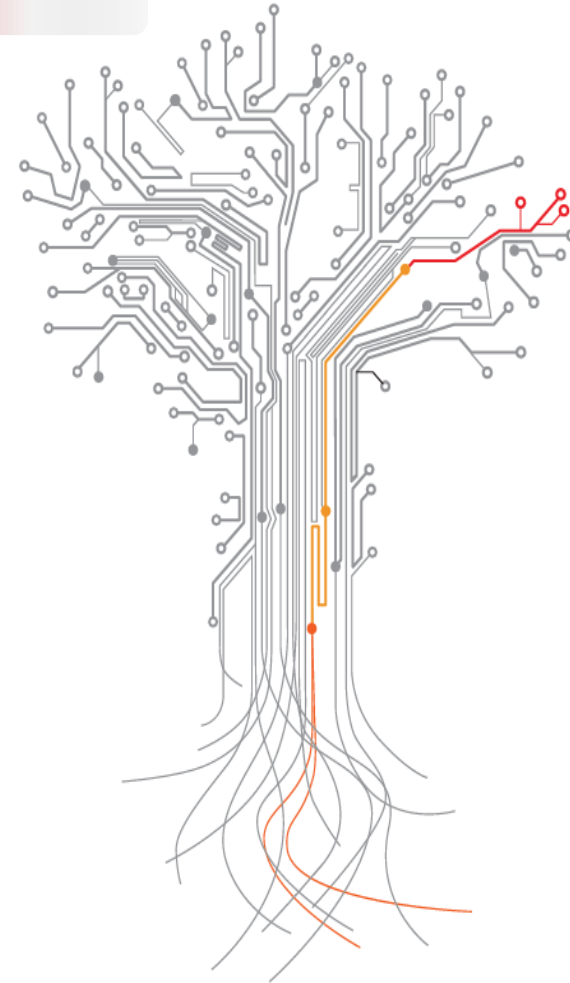
Document	South Africa standard	International standard	Title	Relatedness
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61347 series	SANS 61347 standards Identical to IEC	IEC 61347 series	Controlgear	Identical

Automation of testing and report issuance in progress.

Additional equipment in process of being procured.

For LED requirement – Request IEC reports (Mainly for components)

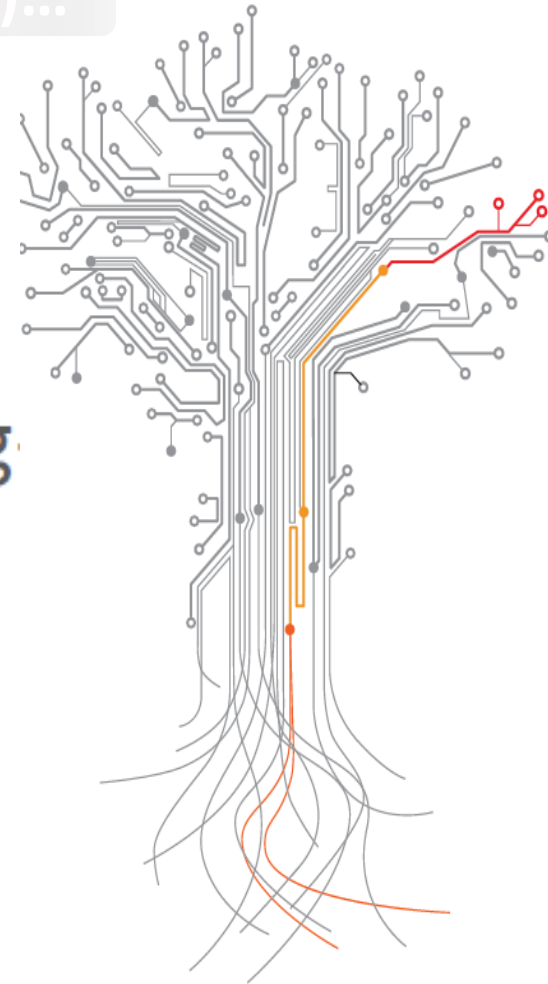
Participates in the EEL Project for the DoE



Safety testing -SANS 62560

Electromagnetic compatibility testing

- IEC 55015 (CISPR15)
- IEC 61000-3-2
- IEC 61000-3-3
- IEC 61547

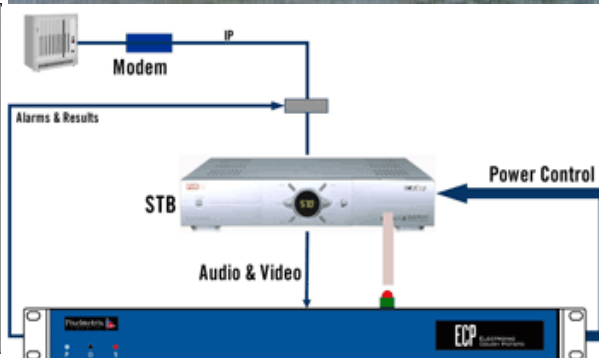
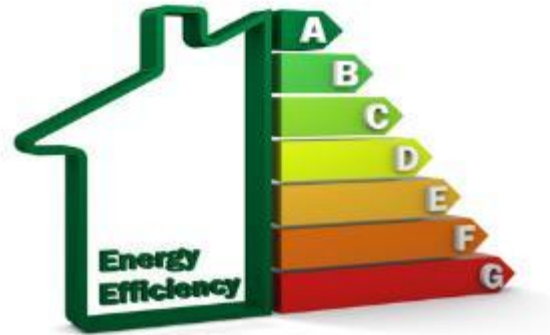


# 7

## SABS Electro-technical Scope











## Q & A time

**Presenter:** Lucas Monyai

**Date:** 19 June 2017

**Event:** 4<sup>th</sup> (BRICS SSL WG)

**Email:** [lucas.monyai@sabs.co.za](mailto:lucas.monyai@sabs.co.za)

