

Presentation to AFSEC

Capacity building workshop – 5 to 9 Sept, Nairobi

IEC TC13 Overview

Roland Hill

Chairman:
SANC IEC TC13

IEC TC13 – Scope of Activity

- ▶ **From the 1920's, TC13 has been responsible for;**
 - ▶ electrical energy measurement
 - ▶ electricity tariffs and load control
- ▶ **TC13 standards are used to measure and control electrical energy (kWh) and demand (kW);**
 - ▶ in power stations
 - ▶ along the transmission, distribution and supply networks
 - ▶ at industrial, commercial and residential customers
- ▶ **TC13 metering systems provide data for;**
 - ▶ revenue billing, market and network operation
 - ▶ energy management and customer education

IEC TC13 – Working Groups

- ▶ **WG 11: Electricity metering equipment**
 - ▶ Type testing of meters (IEC 62053 series)
 - ▶ Acceptance testing (IEC 62058 series)
 - ▶ Product safety (IEC 62052-32)
- ▶ **WG 13: Dependability** of metering equipment ('059)
- ▶ **WG 14: Data** exchange for meter reading, tariff
and load control
 - ▶ Data models and communication protocols (IEC 62056)
- ▶ **WG 15: Electricity metering, payment systems**
 - ▶ Type test of meters & systems (IEC 62055 series)

IEC TC13 – Representation in Africa

IEC TC13 Voting Members	IEC TC13 Voting Members	IEC TC13 Observer Members	Interim AFSEC TC13 Committee Members
Australia	Korea, Republic of	Albania	Cote d'Ivoire (2)
Austria	Netherlands	Bulgaria	EAPP
Belgium	Norway	Croatia	Egypt (2)
Brazil	Pakistan	Greece	Ghana
China	Poland	Indonesia	Kenya (2)
Colombia	Portugal	Iran	Rwanda
Czech Republic	Romania	Ireland	South Africa
Denmark	Russian Federation	Israel	
Finland	Serbia	Malaysia	
France	Slovenia	New Zealand	
Germany	South Africa	Oman	
Hungary	Spain	Slovakia	
India	Sweden	Turkey	
Italy	Switzerland	Ukraine	
Japan	United Kingdom		

IEC TC13 - Africa's contribution

Done

Busy

	1985	1990	1995	2000	2005	2010	2015	Year
	1	2	4	8	16	42	~64	Quantity of Standards
Metrology Standards	IEC 1036	IEC 61036	IEC 62052-21 IEC 61358	IEC 62052-11, 62053-21/23 IEC 62055-21/31/41/51/52	IEC 62058 parts 11/21/31 IEC 62059-31-1 IEC 62059-32-1	DR/DSM/DER/EV	~64	Metrology requirements
								Prepayment functionality
								Tariff and load control
								Acceptance test req's
								Dependability (ALT)
								Ageing of metrology
								Safety requirements
								Reactive energy
								Multi-part prepayment
Communication Standards	IEC 1107	IEC 61107	IEC 61334-5-1/2	IEC 62056-21	DLMS/Cosem EN 50065-1 STS 101-1 and STS 201-15.1.0 STS 501 Series (15 parts) IEC 61968-1 IEC 61968-9	IDIS package 1&2 IEC 62056-8-3 EMC compliance IEC 62488-1 Cosem Prepay IECEE CB scheme	~64	Data exchange
								Narrowband PLC
								LV signalling on mains
								Planning of PLC systems
								Virtual token interface
								Conformance test suite
								CIM reference architecture
								Enterprise service bus
								Naming & design rules
								Meter reading & control
CIM for distribution								

Note: Includes standards developed with IEC TC13 liaisons

AFSEC TC13 - Objective

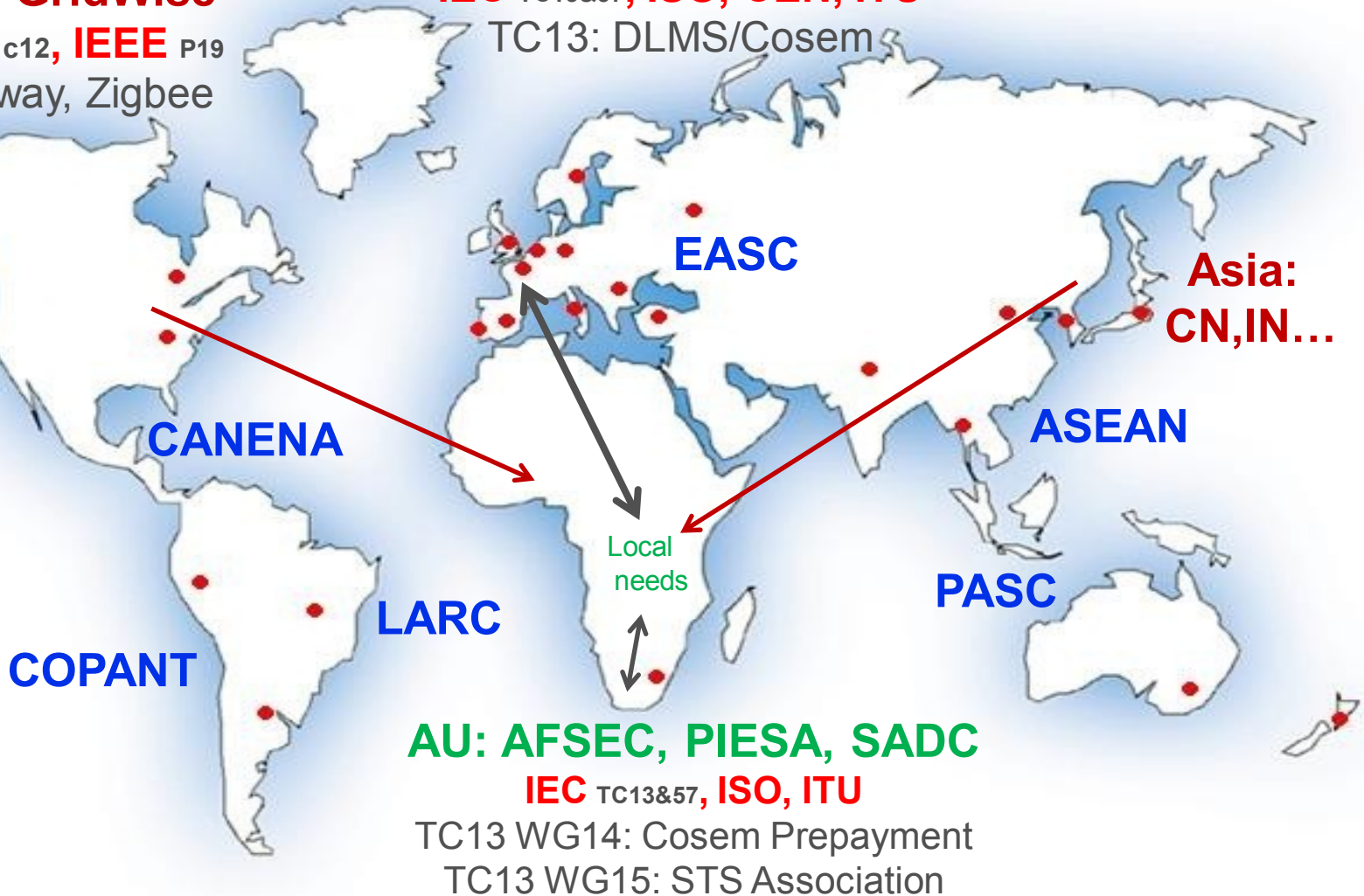
US: EPRI, GridWise
NIST, ANSI c12, IEEE P19
 C12: Openway, Zigbee

EU: MID, SM-CG, IDIS

IEC TC13&57, ISO, CEN, ITU

TC13: DLMS/Cosem

Asia: CN, IN...



AU: AFSEC, PIESA, SADC

IEC TC13&57, ISO, ITU

TC13 WG14: Cosem Prepayment

TC13 WG15: STS Association

Thank you for your attention

Roland Hill

**Chairman:
SANC IEC TC13**