

## CHAIRMAN'S REPORT

in review of the period 15 May 2018 to 12 May 2019

Final

### 1 High-lights

- The STSA TID rollover campaign is now in full swing, which aims to alert all STS product users that the 2024 TID rollover date is not too far off and to encourage them to start the process of the special TID rollover key change of all STS meters as soon as possible.
  - The TID rollover interactive website is up and running and can be found on url [www.tidrollover.com](http://www.tidrollover.com) where guidance is provided to all STS product users regarding the TID rollover process.
  - A special task team is available for technical guidance on the TID rollover process and can be reached on [tid@sts.org.za](mailto:tid@sts.org.za).
  - All STSA members are urgently requested to take on the responsibility of contacting their respective customers regarding the TID rollover issue and to assist them with the necessary upgrade of their vending systems to STS Edition 2 as soon as possible so that the TID rollover process can start.
  - There is a particular concern regarding meters that were certified prior to 2014. There is a small risk that some of these meters may not have implemented the TID rollover key change function correctly, so the STSA will assist in identifying these meters and perform a test in order to validate this functionality. The test is done free of charge.
- As from 1<sup>st</sup> June 2019 new products will only be certified for STS Edition 2 compliance. All certificates for meters certified before this date will continue to be valid, but certificates for vending systems will expire on 31<sup>st</sup> May 2019.
- Product certification test specifications (CTS) have kept pace with STS Edition 2 developments and are up to date.
- The requirements and API standards for hardware security modules, STS 600-8-6 and STS 600-10-1, have been published and we expect more suppliers to offer HSM products in the market in the near future. This will mitigate the risk of having a single-source of supply.

## 2 STSA publications

A complete list of published documents is shown in the table below.

The **yellow** high-lights indicate those documents that changed or those that were newly added during the past year.

<u>Doc No</u>	<u>Ed</u>	<u>Stage</u>	<u>Description</u>
STS 101-1	1	PUB	Physical layer for virtual token carrier
STS 101-2	1.4	PUB	Physical layer for STS over DLMS/COSEM
STS 200-1	1.1	PUB	Generic classes for meter function objects
STS 201-15.1.0	1	withdrawn	Meter function object: RegisterTable
STS 201-15.1.1	1.1	withdrawn	Meter function object: RegisterTable
STS 201-15.1.2	1	withdrawn	Meter function object: RegisterTable
STS 201-1	1	PUB	Meter function object: RegisterTable
STS 202-1	2.4	withdrawn	Currency token
STS 202-2	1.2	withdrawn	Group coded tokens for 2 and 4 digit man codes
STS 202-3	1.6	withdrawn	Addendum to IEC 62055-41 Ed 2
STS 202-4	1	PUB	Addendum to IEC 62055-52 Ed 1
STS 202-5	1	CD	Addendum to IEC 62055-41 Ed 2
STS 202-6	1.1	PUB	Addendum to IEC 62055-41 Ed 2
STS203-1	1	PUB	Addendum to IEC 62055-41 Ed 2
STS 401-1	1.2	PUB	COP for the Allocation of Supply Group Codes
STS 401-2	1	PUB	COP for the registration of new members
STS 402-1	1.1	PUB	COP for the Management of Token ID Rollover
STS 403-1	1.1	PUB	COP for the Issuance of Manufacturer Codes
STS 404-1	1.1	PUB	COP for the Issuance STS tables
STS 405-1	1.2	PUB	COP for the Management of Key-changes for Sub Vendors
STS 406-1	1	PUB	COP for the Management of risk within the STS Association
STS 406-2-1	1	PUB	COP for KMC risk analysis
STS 406-3	1	CD	COP for the management of secure modules
STS 501 suite	1	withdrawn	Compliance test specification suite for electricity
STS 502 suite	1	withdrawn	Compliance test specification suite for water
STS 503 suite	1	withdrawn	Compliance test specification suite for gas
STS 521 suite	1	withdrawn	Compliance test specification suite for electricity 4 digit codes

STS 522 suite	1	withdrawn	Compliance test specification suite for water 4 digit codes
STS 523 suite	1	withdrawn	Compliance test specification suite for gas 4 digit codes
STS 531-0	1.9.1	CDV	Compliance test specification - Quality plan
STS 531-1-0-02	1.9.1	CDV	Compliance test specification - Entity type A for EA07
STS 531-1-0-04	1.9.1	CDV	Compliance test specification - Entity type A for EA11
STS 531-2-1	1.9.1	CDV	Compliance test specification - Entity type B
STS 531-3	1.9.1	CDV	Compliance test specification - Entity type C
STS 531-4	1.9.1	CDV	Compliance test specification - Entity type D
STS 531-5-0	1.9.1	CDV	Compliance test specification - Entity type E
STS 531-6-1-07	1.9.1	CDV	Compliance test specification - Entity type F for EA07
STS 531-6-1-11	1.9.1	CDV	Compliance test specification - Entity type F for EA11
STS 531-8-1	1.8.1	withdrawn	Compliance test specification - Entity type H
STS 531-8-2	1.9.1	CDV	Compliance test specification - Entity type H for DKGA04 and EA11
STS 531-10-02	1.9.1	CDV	Compliance test specification - Entity type H1
STS 531-10-04	1.9.1	CDV	Compliance test specification - Entity type H1
STS 600-4-1	1.1	withdrawn	Distributed Key Management System – initial specifications
STS 600-4-2	1.1	PUB	Distributed Key Management System
STS 600-7	1	PUB	Key load file specification
STS 600-8-1	1	PUB	Secure module API specification
STS 600-8-2	1	PUB	Secure module API specification
STS 600-8-3	1	PUB	Secure module API specification
STS 600-8-4	1	PUB	Secure module API specification
STS 600-8-5	1	PUB	Secure module API specification
STS 600-8-6	1.4	PUB	Secure module API specification
STS 600-9-1	1	PUB	Key agreement scheme worked example
STS 600-10-1	1	PUB	Functional and security requirements for HSMs
STS 600-15-1	1.4	PUB	KMC capture form specification
STS 600-15-2	1.5	PUB	KMC capture form specification
STS 600-15-3	1.7	PUB	KMC capture form specification
STS 600-15-4	1.5	PUB	KMC capture form specification
STS 600-15-5	1.6	PUB	KMC capture form specification

STS 600-15-6	1.1	PUB	KMC capture form specification
STS 600-15-7	1.1	PUB	KMC capture form specification
STS 1700-0	1	PUB	Working group charter
STS 1800-1-1	4	PUB	Handbook for members
STS 1800-1-2	5.1	PUB	Brochure - English
STS 1800-1-2-2	1	PUB	Brochure - French
STS 1800-1-2-3	1	PUB	Brochure - Portuguese
STS 1800-1-2-4	1	PUB	Brochure - Spanish
STS 1800-1-3	2	PUB	STS Synopsis
STS 1800-1-4	1	PUB	Explanatory notes for IEC 62055-41 Ed2
STS 1800-5	1	PUB	Disaster recovery procedure
STS 1800-6	1	PUB	KMC forms guidelines
STS 1900-1-1	1	withdrawn	Articles of Association (replaced by STS 1900-1-3)
STS 1900-1-2	1	withdrawn	Memorandum of Association (replaced by STS 1900-1-3)
STS 1900-1-3	1.1	PUB	Memorandum of Incorporation
STS 1900-2-1	1	PUB	License & Membership Agreement
STS 2000-1	1.3	PUB	Intellectual Property Rights
STS 2001-1	1	PUB	Competition law policy
STS 2002-1	1.3	PUB	Conflict of interest policy
STS 2003-1	1	PUB	Logo usage policy
STS 2100-1	1	PUB	Procedure for the development of standards and codes of practice
STS 2100-3	1.6	PUB	Procedure for STS Product Certification
STS 2100-4	2	PUB	Membership and Licence Holder processes

### 3 IEC TC13 liaison report

#### 3.1 General

The STS Association is the Registration Authority on behalf of the IEC in support of the IEC 62055 STS suite of standards.

Informal liaison with IEC TC13 on smart metering standards is facilitated by Don Taylor who is a ZA expert on WG14, WG15 and JWG16.

**Yellow high-light**s indicate latest changes.

### 3.2 Metrology IEC 62052 and IEC 62053 series

<u>Doc No</u>	<u>Ed</u>	<u>Stage</u>	<u>Description</u>
IEC 62052-11	2	CDV	General requirements - metering equipment
IEC 62052-21	1 A1	pub	General requirements - tariff and load control equipment
IEC 62052-31	2	RR	General requirements - Safety requirements

<u>Doc No</u>	<u>Ed</u>	<u>Stage</u>	<u>Description</u>
IEC 62053-11	1 A1	pub	Particular requirements - electro mechanical class 0.5, 1 , 2
IEC 62053-21	2	CDV	Particular requirements - static active class 1, 2
IEC 62053-22	2	CDV	Particular requirements - static active class 0.2S, 0.5S
IEC 62053-23	2	CDV	Particular requirements - static reactive class 1, 2
IEC 62053-24	2	CDV	Particular requirements - static reactive class 0.5S, 1S, 1
IEC 62053-41	1	CD	Particular requirements - static DC class 0.5, 1 , 2

### 3.3 Ripple control and time switches IEC 62054 series

<u>Doc No</u>	<u>Ed</u>	<u>Stage</u>	<u>Description</u>
IEC 62054-11	1 A1	pub	Particular requirements - ripple control receivers
IEC 62054-21	1 A1	pub	Particular requirements - time switches

### 3.4 Payment metering systems IEC 62055 series

<u>Doc No</u>	<u>Ed</u>	<u>Stage</u>	<u>Description</u>
IEC 62055-1-0	1	draft	Interoperability framework for smart metering functions and processes
IEC 62055-21	1	pub	Standardization framework for payment systems
IEC 62055-31	2	draft	Type test for payment metering functions
IEC 62055-41	3	pub	STS application layer
IEC 62055-51	1	pub	STS physical layer for numeric and magnetic tokens
IEC 62055-52	2	draft	STS physical layer for virtual token carrier
IEC 62055-53	1	draft	STS physical layer for STS over DLMS/COSEM
IEC 62055-61	1	draft	Business functions for payment systems
IEC 62055-71	1	draft	Business processes for payment systems

### 3.5 Smart metering communications IEC 62056 series

<u>Doc No</u>	<u>Ed</u>	<u>Stage</u>	<u>Description</u>
IEC 62056-1-0	1	pub	Smart metering framework
IEC 62056-1-1	1	pub	Profile template
IEC 62056-3-1	2	CD	Use of local area networks on twisted pair with carrier signalling
IEC 62056-3-2	1	NP	Local interface using twisted pair with carrier signalling
IEC 62056-4-7	2	pub	Transport layer for IPV4 networks
IEC 62056-5-3	3	pub	DLMS/COSEM application layer
IEC 62056-5-3-8	1	NP	Smart Message Language SML
IEC 62056-6-1	3	pub	DLMS/COSEM OBIS codes
IEC 62056-6-2	3	pub	DLMS/COSEM interface classes
IEC 62056-6-9	1	pub	CIM/DLMS/COSEM mapping
IEC 62056-7-3	1	pub	MBUS profile
IEC 62056-7-5	1	pub	Direct local data exchange (LDTI - one way comms)
IEC 62056-7-6	1	pub	Profile for HDLC networks
IEC 62056-8-3	1	pub	Profile for S-FSK PLC networks
IEC 62056-8-4	1	pub	Profile for narrow-band OFDM PLC PRIME
IEC 62056-8-5	1	pub	Profile for narrow-band OFDM G3-PLC
IEC 62056-8-6	1	pub	Profile for high speed PLC
IEC 62056-8-8	1	CDV	Profile for ISO/IEC 14908 series networks
IEC 62056-8-20	1	pub	Profile for mesh networks
IEC/TS 62056-9-1	1	pub	Profile for web-services
IEC/TS 62056-9-7	1	pub	Profile for TCP-UDP/IP networks
<u>Doc No</u>	<u>Ed</u>	<u>Stage</u>	<u>Description</u>
IEC 62056-46		pub	DLL HDLC protocol
IEC 62056-42		pub	PHY connection orientated exchange
IEC 62056-21		pub	PHY direct local data exchange

## 4 IEC TC57 liaison report

Informal liaison with IEC TC57 on smart grid standards is facilitated by Don Taylor who is a ZA expert on WG14.

The following standards are of interest to parties wishing to integrate metering

systems with ERP level systems or with 3<sup>rd</sup> party systems.

**Yellow high-light**s indicate latest changes.

<b><u>Doc No</u></b>	<b><u>Ed</u></b>	<b><u>Stage</u></b>	<b><u>Description</u></b>
IEC 61850-80-4	1	PUB	DLMS/COSEM mapping to 61850 data models
IEC 61970-301	6	PUB	CIM base model
IEC 61968-1	3	<b>CDV</b>	Interface architecture
IEC 61968-2	2	PUB	Glossary
IEC 61968-3	2	PUB	Network operations
IEC 61968-4	2	<b>PUB</b>	Asset management
IEC 61968-5	1	<b>FDIS</b>	Distributed energy optimisation
IEC 61968-6	1	PUB	Maintenance + construction
IEC 61968-8	1	PUB	Customer support
IEC 61968-9	2	PUB	Meter reading + control
IEC 61968-900	1	PUB	Getting started with IEC 61968-9
IEC 61968-11	3	CDV	CIM for distribution
IEC 61968-13	2	CD	Model exchange
IEC 61968-14	1	PUB	CIM/Multispeak mapping
IEC 61968-100	1	PUB	Implementation profiles

## **5 DLMS User Association liaison report**

The current list of DLMS/COSEM specifications published by the DLMS User Association are listed below.

**Yellow high-light**s indicate latest changes.

<b><u>Doc No</u></b>	<b><u>Ed</u></b>	<b><u>Stage</u></b>	<b><u>Description</u></b>
1000-1	<b>12.2</b>	PUB	Blue Book: Interface classes and OBIS identification system
1000-2	<b>8.3</b>	PUB	Green Book: Architecture and Protocols
1001-1	5	PUB	Yellow Book: DLMS/COSEM conformance testing process
1002	1	PUB	White Book: Glossary of terms

## 6 Administration

There were 6 Management Board meetings held to manage the operations of the STSA. The travel and time cost of these meetings and the time spent on STSA business is still being borne by the office bearers, except for those of the Secretariat, Technical Consultant and independent co-opted director.

### The management team for the past year:

<b>Name</b>	<b>Representing</b>
Andy Stoner	Co-opted independent director
Dave Tarr	Landis + Gyr
Deon van Rooi	Eskom
Don Taylor	Itron
Franco Pucci	Technical Consultant
Mohammad Manoucherhi	Meter manufacturers
Jean Venter	Secretariat
Kobus van den Berg	Association of Municipal Electricity Utilities (AMEU)
Lance Hawkins-Dady	Conlog
Lebina Tsepe	Vending system manufacturers
Richard Mccurrach	Eskom (alternative for Eskom)
Shawn O'Neill	HSM manufacturers
Vally Padayachee	Alternative for AMEU

We thank all the officers for their valuable services during the past year.

## 7 Legal and Constitutional

The escrow agreement with Prism for access to the hardware secure module and KMC software IP is still not in place. We expect this to be completed in due course.

The MOU with Eskom for the key management services is still not in place. We expect this to be completed in due course.

## 8 Financial

An audited financial report is tabled at the AGM.

## 9 Membership status

(As at 12<sup>th</sup> May 2019 in alphabetical order)

<b>Voting members</b>	<b>Country</b>
1 Afrika Smart Utilities	South Africa
2 Apator SA	Poland
3 Aqua-Loc SA (Pty) Ltd	South Africa
4 Beijing Xiaocheng Technology Stock Co.,Ltd	China
5 Bizswitch Services	Mauritius
6 CJSK "Energomera"	Russia
7 Conlog (Pty) Ltd	South Africa
8 Crown Interactive Limited	Nigeria
9 Dakshinanchal Vidyut Vitran Migam Limited	India
10 DaroMix (Pty) Ltd t/a Shanghai Xielin Sa (Pty) Ltd	South Africa
11 EDMI Ltd	Singapore



12	Egyptian Smart Meters Company	Egypt
13	Elsewedy Electrometer Egypt	Egypt
14	Eskom Holdings SOC Limited	South Africa
15	Excelec International S.A.S	Colombia
16	Flecto Sense	South Africa
17	Fluentgrid Limited	India
18	Ganz Meter Company Ltd. (Itron Hungary)	Hungary
19	Genus Power Infrastructures Limited	India
20	Guangzhou Sunrise Electronics Development Co., Ltd	China
21	Hangzhou Laison Technology Co., Ltd	China
22	Hangzhou Sunrise Technology Co., Ltd	China
23	Hangzhou Xili Intelligent Technology Co., Ltd.	China
24	Hexing Electrical Co., Ltd.	China
25	Hexing Electrical SA Pty Ltd	South Africa
26	Hodi Technologies Limited Company	China
27	Holley Technology Ltd	China
28	Home-Grown Business Int cc	South Africa
29	HPL Electric and Power Ltd	India
30	Ice-Cloud Virtual Products Logistics (Pty) Ltd	South Africa
31	Incotex Systems Ltd	Bulgaria
32	Inhemeter Co., Ltd	China
33	iPay Pty Ltd	South Africa
34	Iskraemeco Energy Measurement	Egypt
35	Itron Measurements and System (Pty) Ltd	South Africa
36	Janz Contadores de Energia SA	Portugal
37	Jiangsu Suyuan Jierui Ammeter Co., Ltd	China
38	Kamstrup	South Africa
39	Keahile Communications cc	South Africa
40	Landis + Gyr	South Africa
41	Lee Jong Electrical Co. Sdn. Bhd.	Brunei Darussalam
42	Longshine Technology Limited Company	China
43	Madhyanchal Vidyut Vitran Nigam Limited	India
44	MA-MWE (Eau et Electricite des Comores	Comores
45	Meter Mate Prepaid Electric Meters (Pty) Ltd	South Africa
46	Metering Solutions Manufacturing Services Limited (MSMSL)	Nigeria
47	Microstar Electric Company Limited	China
48	Middle-South Meter Co., Ltd	China
49	Mojec International Limited	Nigeria
50	Ningbo Sanxing Smart Electric Co., Ltd	China
51	Nyamezela Metering	South Africa
52	ONTEC SYSTEMS Pty Ltd	South Africa
53	Paschimanchal Vidyut Vitran Nigam Limited	India
54	Pivot Access	Rwanda
55	Prism Payment Technologies (Pty) Ltd	South Africa
56	PT Chalista Sekawan Abadi	Indonesia
57	PT Hexing Technology	Indonesia
58	PT Industri Telekomunikasi Indonesia	Indonesia
59	PT Mandiri Solusindo Perkasa	Indonesia
60	PT Mecoindo - Itron	Indonesia
61	PT Melcoinda	Indonesia
62	PT PLN (Persero)	Indonesia
63	PT. EDMI Indonesia	Indonesia
64	PT. Fuji Dharma Electric	Indonesia
65	PT. Panggung Electric Citrabuana	Indonesia
66	PT. Smart Meter Indonesia	Indonesia
67	Purvanchal Vidyut Vitran Nigam Limited	India
68	Qingdao Topscomm Communication Co., Ltd	China
69	Quill Associates	South Africa
70	SABRUD Consortium Nig. Ltd	Nigeria
71	Sagemcon Energy & Telecom SAS	France
72	Sebata Municipal Solution (Pty) Ltd	South Africa
73	Sectional Title Support Services (Pty) Ltd	South Africa
74	Shenzhen Calinmeter Co., Ltd	China

75	Shenzhen Clou Electronics Co., Ltd	China
76	Shenzhen Constant Electronics Co., LTD	China
77	Shenzhen Donsun Technology Co., Ltd	China
78	Shenzhen Londian Electrics Co., Ltd	China
79	Shijiazhuang Kelin Electric Co., Ltd	China
80	SIAME	Tunisia
81	Sudanese Electricity Distribution Co. Ltd	Sudan
82	Syntell (Pty) Ltd	South Africa
83	Unistar Hi-Tech Systems Limited	Nigeria
84	Universal Microelectronics Co., Ltd	Taiwan
85	Wasion Group Limited	China
86	XJ Metering Co., Ltd	China
87	Yantai Dongfang Wisdom Electric Co., Ltd	China
88	Zhangzhou Keneng Electrical Equipement Co., Ltd	China
89	Zhejiang Chint Instrument & Meter Co., Ltd	China
90	Zhejiang Hengye Electronics Co., Ltd	China
91	Zhejiang Joy Electronic Technology Co., Ltd	China
92	Zhejiang Reallin Electron Co., Ltd	China
93	Zhejiang Risesun Science and Technology Co., Ltd	China
94	Zhejiang Wellsun Intelligent Technology Co.,Ltd.	China
95	Zhejiang Yongtailong Electronic Co., Ltd	China
96	ZTE Corporation	China
<b>Non-voting members</b>		<b>Country</b>
1	Abuja Electricity Distribution Company	Nigeria
2	Actom Protection and Control	South Africa
3	Africa Utility Solutions	South Africa
4	Allied Engineering Works Pvt Ltd	India
5	Arthur D Riley & Co. Ltd	New Zealand
6	Avon Meters Pvt Ltd	India
7	Baylan Ölçü Aletleri San. Tic. Ltd. Sti.	Turkey
8	Beijing Banner Electric Co., Ltd.	China
9	Cashpower Sudamericana S.A	Argentina
10	Chengdu Qinchuan IoT Technology Co., Ltd.	China
11	Chinasoft International Technology Services Ltd	China
12	CITIQ Meter Solutions	South Africa
13	Contact Energy Ltd	New Zealand
14	Contour Technology (Pty)Ltd	South Africa
15	Cuculus GmbH	Germany
16	Daesung Measuring	Korea
17	EDMI Shenzhen Co., Ltd	China
18	e-GEE	France
19	Electricité de Madagascar	Magagascar
20	EMS Invirotel Energy Management (PTY) LTD	South Africa
21	Enbaya Prepaid Meters (Pty) Ltd	South Africa
22	ENEL d.o.o.Beograd	Serbia
23	Energy Management Systems Co., Ltd	Taiwan
24	Enlight Energy Solutions (Pty) Ltd	South Africa
25	ENT Korea	Korea
26	e-Solutions (Pvt.)Ltd	Zimbabwe
27	Genus Innovation Ltd	India
28	Giertsen Energy Solutions AS	Norway
29	Global Evolution Lighting	Tunisia
30	Hangzhou Meteronic Technology Co., Ltd	China
31	Hangzhou Shanergy Metering Co., Ltd	China
32	Hangzhou Unenergy Co., Ltd	China
33	Hexing Technology Company Limited	Kenya
34	Holistic Technologies Pty Ltd	South Africa
35	Honeywell Smart Energy, LE Elster Kent Metering (Pty) Ltd	South Africa
36	Huaihua Jiannan Machinery Factory Co., Ltd	China
37	Hydro Ingenierie Etudes Et Realisations	Madagascar
38	ID2 Infastructure Systems Pty Ltd	South Africa
39	IMS Electrical	South Africa

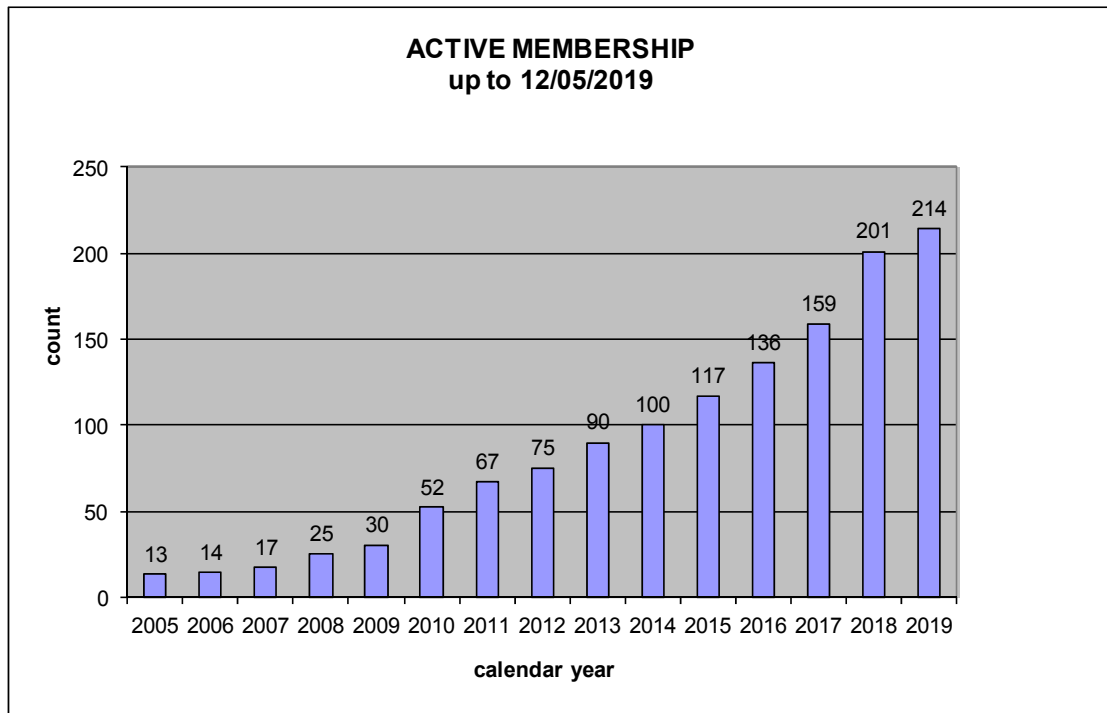
40	INDRA SOLUCIONES TECNOLOGÍAS DE LA INFORMACION S.L.U	Spain
41	Inhemeter Africa Company Limited	Kenya
42	Intelligent Metering and Energy Solutions Limited Ghana	Ghana
43	iSmart Meters Co., Ltd	China
44	Jager Pty Ltd	South Africa
45	Jiangsu Linyang Energy Co., Ltd	China
46	Jiangyin Changyi Group Co., Ltd	China
47	Jiaxing Xinghao Instrument Co., Ltd	China
48	Kani Smart Works (Pty) Ltd	South Africa
49	Kepid Amstech Co Ltd	Korea
50	Larsen & Toubro Limited	India
51	Lesira-Manufacturing (Pty) Ltd	South Africa
52	Lilongwe Water Board	Malawi
53	LL Energy cc	South Africa
54	Luna Elektrik Elektronik San. Tic. A.S	Turkey
55	MBH Power and Gas Limited	Ghana
56	Metsec Cables Ltd	Kenya
57	Neat Prepaid Limited	Mauritius
58	netVendor cc	South Africa
59	NG Electrometer	France
60	Ningbo Aimei Meter Manufacture Co., Ltd	China
61	Ningbo Jianan Electronics Co., Ltd	China
62	Ningxia LGG Instrument Co., Ltd	Indonesia
63	North Smart Equipment Co., Ltd	China
64	Ntlangani Group of Companies	South Africa
65	Nuri Telecom Co., Ltd	Korea
66	OMNISYSTEM CO., LTD.	Korea
67	Pak Elektrik Limited	Pakistan
68	People Electric Appliance Group Co., Ltd	China
69	PowerCom Metering Africa (Pty) Ltd	South Africa
70	Prepaid Gateway Pty Ltd	South Africa
71	Prepaid World	South Africa
72	Protea Metering Pty Ltd	South Africa
73	PT Indonesia Comnets Plus	Indonesia
74	PT. Cannet Elektrik Indonesia	Indonesia
75	Qingdao iTechene Technologies Co., Ltd.	China
76	Remote Metering Solutions (Pty) Ltd	Ghana
77	Renesas Electronics Singapore Pte Ltd	Singapore
78	Shenzhen Hemei Group Co., Ltd	China -Shenzhen
79	Shenzhen Hexcell Electronics Technology Co., Ltd	China
80	Shenzhen Kaifa Technology (Chengdu) Co., Ltd	China
81	Shenzhen Star Instrument Co.,Ltd	China
82	Shenzhen Techrise Electronics Co., Ltd	China
83	Sidi SpA	Italy
84	SKYRUN ELECTRIC SMART METERING SYSTEMS AND SOLUTIONS(NIG.)LTD	Nigeria
85	Spectrum Utility Management (Pty) Ltd	South Africa
86	TBEA Nanjing Intelligent Electric Co., Ltd	China
87	Telbit	South Africa
88	Texas Instruments Incorporated	United States
89	Utiliflex LLC	USA
90	Utility Systems	South Africa
91	Vega Meter Company Limited	
92	Zhejiang Chaorong Electric Technology Co., Ltd	China
93	Zhejiang Gomelong Meter Co., Ltd	China
94	Zhejiang Xintuo New Energy Co., Ltd	China
95	Zhuhai Yujian Science and Technology Co., Ltd	China
	<b>Pending members</b>	<b>Country</b>
1	Andrea Informatique	France
2	Bentec Lighting LLP	India
3	Bhoully Dhaigou Kouramangui	West Africa
4	Blantyre Water Board	Malawi

5	Capital Power Systems Ltd	India
6	CapsKey Solutions Limited	India
7	Central Power Electronic Measurement Equipment Manufacturing Company	Vietnam
8	CWJ Componentes SA	Portugal
9	DotNet e-Business Associates and Consulting	Nigeria
10	Electronics Corporation of India Limited	India
11	Empresa Nacional de Hidrocarbonetos	Mozambique
12	ERA (Energie Rurale Africaine)	Senegal
13	Guangdong Xinfei Zhike Industrial Co., Ltd	China
14	KEA Tech Consulting Pty Ltd	South Africa
15	Modern Transformers Pvt.Ltd	India
16	MSM Co., Ltd	Korea
17	Onduk Consulting Services	
18	Port Harcourt Electricity Distribution PLC	Nigeria
19	Unimet Systems Pty Ltd	South Africa
20	Utilities World Pty Ltd	India
21	Velankani Electronics Private Limited	India
22	winAMR Systems Private Limited	India
23	ZenMeter Solutions Pty Ltd	Indonesia

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**214 TOTAL MEMBERS**

**Membership growth**



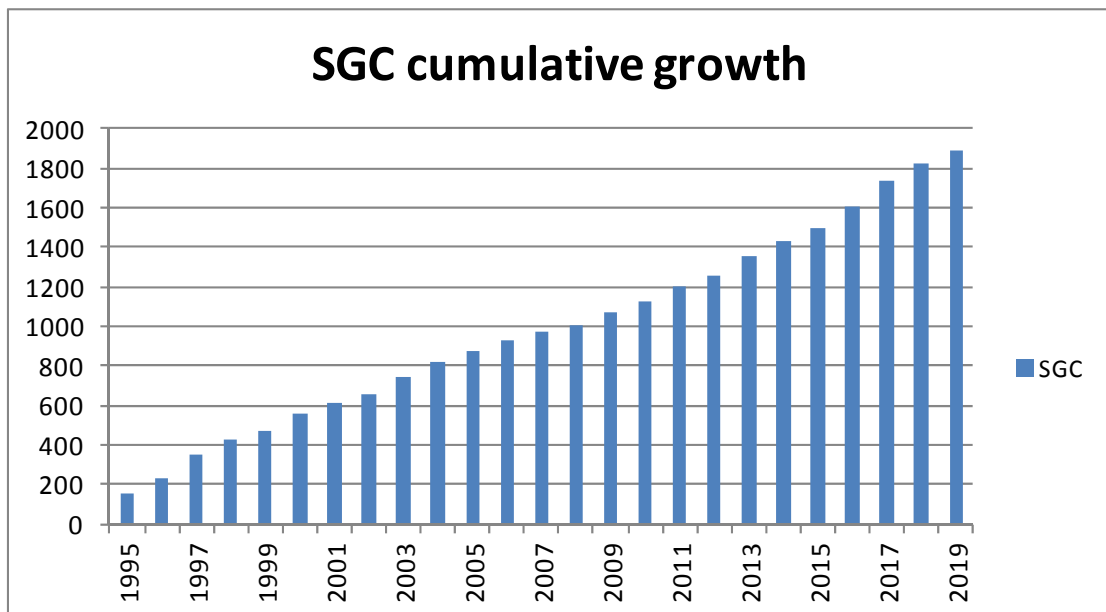
**Membership by country as on 12 May 2019**

(Ordered by weight)

1	China	61
2	South Africa	48
3	India	19
4	Indonesia	15
5	Nigeria	9
6	Korea	6

7	France	4
8	Egypt	3
9	Ghana	3
10	Kenya	3
11	Malawi	2
12	Mauritius	2
13	New Zealand	2
14	Portugal	2
15	Singapore	2
16	Taiwan	2
18	Tunisia	2
19	Turkey	2
20	United States	2
21	Argentina	1
22	Brunei Darussalam	1
23	Bulgaria	1
24	Colombia	1
25	Comores	1
26	Germany	1
27	Hungary	1
28	Italy	1
29	Madagascar	1
30	Mozambique	1
31	Norway	1
32	Pakistan	1
33	Poland	1
34	Russia	1
35	Rwanda	1
36	Senegal	1
37	Serbia	1
38	Spain	1
39	Sudan	1
40	Vietnam	1
41	West Africa	1
42	Zimbabwe	1

### 10 STS deployment



- 1895 SGC keys hosted by the KMC;
- 98 countries are using STS products;
- 35 out of 86 IEC countries are using STS products;
- 840 products are STS certified;
- 187 manufacturing codes have been allocated.

**- End of report -**

Don Taylor  
Chairman ,STS Association  
20<sup>th</sup> May 2019.