

**ANNUAL REPORT** by the chairman of the STS Association in review of the period 5<sup>th</sup> May 2010 to 14<sup>th</sup> March 2011

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## **1 Highlights for the year 2010/2011**

- A special welcome to all our new members that have joined during the last year.
- In particular we also welcome PT PLN (Persero) as a member in the category for utilities. PLN is the national electricity utility for Indonesia and have decided on STS as the national standard for prepayment. By the time they have met their installation targets, this will be the largest single installation of STS compliant prepayment meters in the world.
- A new virtual token carrier is under development. DLMS UA is developing a COSEM object for prepayment and for a token gateway. This means that a prepayment meter can now have a remote credit transfer capability over a DLMS connection, an STS token transfer capability over a DLMS connection, a traditional STS keypad, a magnetic card token carrier interface and a local virtual token carrier. These will be possible in any combination.
- A new high speed secure module TSM500 is in final stages of testing and certification. The TSM500 is intended to replace the TSM410. More information can be obtained from the supplier Prism Payment Technologies.
- The STS501 test and certification suite is in production in the test house.
- A self certification scheme is being put into place – members will be notified about details in due course.
- KMC service fees and product testing for certification have been revised.
- A contractual agreement is in final stages of negotiation with Prism to develop the new distributed KMC system. Field trials are targeted for end of 2011.
- A very successful presentation and training course was held for PIESA.
- Financial year end has been changed from February to December - that means the membership cycle is from January to December.

## **2 Legal and Constitutional**

No activity in this category took place, thus there is nothing to report.

## **3 Administration**

There were 6 Management Board meetings held between 5<sup>th</sup> May 2010 and 14<sup>th</sup> March 2011 to manage the business 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 function.

The team for the past year:

<b>Name</b>	<b>Portfolio</b>
Franco Pucci	Legal and finance
Deon van Rooi	Standards and operations
Don Taylor	Marketing and public relations
Kobus van den Berg	Marketing and public relations
Andy Stoner	Technical and development
Dennis Ellerman	Director elected for vending manufacturer class
Jean Venter	Secretariat, admin and treasury
Paul van Niekerk	Technical consultant, help desk

**4 Financial**

An audited financial report will be tabled at the AGM.

**5 Member and licensee status**

For the period 5<sup>th</sup> May 2010 to 14<sup>th</sup> March 2011 in alphabetical order

1	ADD Production	Moldova	Current
2	Apator SA	Poland	Current
3	Arthur D Riley & Co. Ltd	New Zealand	Current
4	Beijing Zhenyu Group Wen Zhou Zhongan Technology Co., Ltd	China	Joined
5	Blue Falcon	South Africa	Current
6	Boiero SA	Argentina	Current
7	Burmain Property Admin & Sales	South Africa	Joined
8	Cashpower Sudamericana S.A	Argentina	Pending
9	CITIQ Meter Solutions	South Africa	Joined
10	Conlog (Pty) Ltd	South Africa	Current
11	Contour Technology (Pty)Ltd	South Africa	Current
12	Daisy Technology Ltd	Bulgaria	Current
13	EDMI Ltd	Singapore	Current
14	EDMI Shenzhen Co., Ltd	China	Joined

15	Enbaya Trading cc	South Africa	Current
16	Enermatics Energy Pty Ltd	South Africa	Current
17	Eskom	South Africa	Current
18	Excelec International S.A.S	Colombia	Current
19	Fuji Electric Systems Co., Ltd	Japan	Current
20	Genus Power Infrastructures Limited	India	Current
21	Grinpal Energy Management Pty Ltd	South Africa	Current
22	Hangzhou Pax Electronic Technology Co., Ltd	China	Current
23	Hexing Electrical Co Ltd	China	Current
24	Hodi Technologies Limited Company	China	Joined
25	Holistic Systems	South Africa	Current
26	Holley Metering Ltd	China	Current
27	HPL - Socomec Private Limited	India	Current
28	Huizhou Zhongcheng Electronic Technology Co., Ltd	China	Pending
29	IBE Electronics Co., Ltd	China	Pending
30	Incotex Systems Ltd	Bulgeria	Joined
31	Intelligent Metering Systems	South Africa	Current
32	Iskraemeco Energy Measurement	Egypt	Current
33	Itron	South Africa	Current
34	Landis + Gyr	South Africa	Current
35	Landis+Gyr Equipamentos de Medicao Ltda	Brazil	Current
36	Momas Systems Nigeria Limited	Nigeria	Joined
37	Neat Prepaid Limited	Mauritius	Joined
38	netVendor cc	South Africa	Current
39	Ningbo Sanxing Electrix Co., Ltd	China	Joined
40	Novameric Pty Ltd	South Africa	Current
41	Power Meter Technics Pty Ltd	South Africa	Current
42	Powercom Ltd	South Africa	Current
43	Prepaid World	South Africa	Current

44	Prism Payment Technologies (Pty) Ltd	South Africa	Current
45	Professional Sub Metering	South Africa	Joined
46	Protea Metering Pty Ltd	South Africa	Current
47	PT Honoris Industry	Indonesia	Joined
48	PT Industri Telekomunikasi Indonesia	Indonesia	Current
49	PT Len Industri (Persero)	Indonesia	Joined
50	PT Mecoindo	Indonesia	Current
51	PT Melcoinda	Indonesia	Joined
52	PT Mepcon Integra Nusa	Indonesia	Pending
53	PT Metbelosa	Indonesia	Current
54	PT PLN (Persero)	Indonesia	Pending
55	PT. Fuji Dharma Electric	Indonesia	Joined
56	PT. Global Meter Industry	Indonesia	Current
57	PT. Hariff Daya Tunggal Engineering	Indonesia	Current
58	PT. Limaputra Vilindo	Indonesia	Joined
59	PT. Panggung Electric Citrabuana	Indonesia	Joined
60	PT. Sistem Mikroelektronika Cerdas Co-Design	Indonesia	Current
61	PT. Smart Meter Indonesia	Indonesia	Joined
62	Quill Associates	South Africa	Current
63	Radio Surveillance Security Services SA Pty Ltd	South Africa	Current
64	Rwanda Electricity Corporation	Rwanda	Pending
65	Sectional Title Support Services (Pty) Ltd	South Africa	Current
66	Secure Meters Limited	India	Current
67	Shenzhen Clou Electronics Co., Ltd	China	Current
68	Shenzhen Holley South Electronic Technology Co., Ltd	China	Current
69	Shenzhen Inhemeter Co., Ltd	China	Current
70	Shenzhen Kaifa Technology Co., Ltd	China	Joined
71	Shenzhen Londian Electrics Co., Ltd	China	Joined
72	Shenzhen Star Instrument Co.,Ltd	China	Current

73	Shenzhen Tchrise Electronics Co., Ltd	China	Pending
74	SIAME	Tunisia	Current
75	Syntell (Pty) Ltd	South Africa	Current
76	TATS Electrical Services (Pty) Ltd	South Africa	Current
77	The Meter Man	South Africa	Joined
78	Trimarque Pty Ltd	South Africa	Current
79	Unique Mbane SA Pty Ltd	South Africa	Current
80	Utiliflex LLC	Tennessee	Current
81	Utility Systems	South Africa	Joined
82	Wasion Group Limited	China	Current
83	Yolycom Tele Co., Ltd	China	Joined
84	Zhejiang Gettone Electron & Technology Co., Ltd	China	Pending
85	Zhejiang Yongtailong Electronic Co., Ltd	China	Joined
86	ZhuHai SEZ Calintech Electric Co., Ltd	China	Joined

#### Membership movement

current	54
joined	24
pending	8
countries	20

**Comment:** the increase of membership movement appears to be largely due to the prepayment project activity in Indonesia.

## **6 Users, public relations and promotions**

Revised fee structures for key management services and product testing for certification has been implemented by the KMC and testing house.

## **7 Standardization work**

The current status of activities is as follows:

<b>Group</b>	<b>Convenor</b>	<b>Subject</b>	<b>Stage</b>
WG1		Key Management Investigation	completed

WG2		STS Enhancement (STS2000)	completed
WG3		STS Enhancement (STS2)	completed
WG4		Intellectual Property Policy	completed
WG5		Key Management Infrastructure	completed
WG6	Vacant	STS Numbering systems	2.4 WG draft
		STS 101-1 Physical layer VTC	2.5 WG draft
		STS 200-1 Generic classes	2.5 WG draft
		STS 201-15.1.0 Register table	2.5 WG draft
WG7	Paul Johnson	Certification and Test Specification	
		STS 501-0 (quality plan)	4.1 FDS
		STS 501-1-1 (point of sale)	4.1 FDS
		STS 501-1-2 (point of sale)	4.1 FDS
		STS 501-2-1 (point of sale)	4.1 FDS
		STS 501-2-2 (point of sale)	4.1 FDS
		STS 501-3-1 (magnetic cards)	4.1 FDS
		STS 501-3-2 (numeric tokens)	2.5 WG draft
		STS 501-4-1 (meter)	4.1 FDS
		STS 501-4-2 (meter)	4.1 FDS
		STS 501-5-1 (meter)	4.1 FDS
		STS 501-5-2 (meter)	4.1 FDS
		STS 501-6-1 (meter)	4.1 FDS
		STS 501-6-2 (meter)	4.1 FDS
IEC TC13 WG15 liaison		No activity	

IEC TC57 WG14 liaison	Don Taylor	IEC 61968-1 CIM interface architecture	Ed-2 MCR
		IEC 61968-1-1 Enterprise Service Bus	CD
		IEC 61968-1-2 Web Services	CD
		IEC 62361-100 Naming & Design Rules	CD
		IEC 61968-9 CIM meter reading and control interface messages	ED-2 CDV .
		IEC 61968-11 CIM for distribution	PUB
DLMS UA collaboration	Don Taylor	COSEM for Prepayment	WD
		COSEM token gateway	WD
STANSA TC62 liaison	Don Taylor	SANS 1524-1 Edition 5: Prepayment meters	PUB

*It must be noted that WG activity is completely on a voluntary basis and is entirely dependent on availability of participating members.*

**WG1, 2, 3, 4 and 5** have completed their work and have been discontinued.

**WG6** no activity

**WG7** the product certification test specification (CTS), the STS501 series, has been released for production and is available on the STSA website. Remaining work items testing and certification of a Key Management Centre and for Secure Module. These will be developed in parallel with the development of the new distributed KMS.

*NOTE: The table above reflects the status as of 10 March 2011*

**IEC TC13 WG15 liaison** had no activity during the past year.

**IEC TC57 WG14 liaison** is informal at this stage with the main focus is on maintaining harmony between the STS (existing and developing work) and the developing CIM standards in TC57. The indicated documents above are of current interest to STSA.

**DLMS UA collaboration** is informal and the STSA is participating in the current development of a COSEM object for prepayment and a COSEM object for a token gateway. Expected completion is by mid 2011.

**STANSA TC62 liaison** is formal and the STSA attends the annual meeting during Q1 of each year. SANS 1524-1 Ed5 has been published.

## 8 Other developments

### 8.1 Key management infrastructure

The contractual agreements with Prism is nearing final stages and we expect Phase 1 of the KMS project to commence shortly. Phase1 is a proposal and evaluation stage, at the end of which we expect to be in a position to give the go-ahead. The target date for a field trial is by end of 2011.

As a parallel activity the STS501-7 and STS501-8 will be developed, which will enable testing and certification of a KMC and a Secure Module.

### 8.2 Product certification

Products are now being tested and certified against STS501 suite. This is a much longer process and members are encouraged to do pre-evaluation testing at their own premises before sending products to the test house. This will reduce the time of certification cycle if issues can be sorted out beforehand.

Below is a list of the STS 501 series. A full document set can be accessed via the website.

STS 501-0	Quality plan	for compliance testing of electricity payment meters and point of sale equipment
STS 501-1-1	EntityType A	POSToTokenCarrierInterface application layer protocol for TCT=01
STS 501-1-2	EntityType A	POSToTokenCarrierInterface application layer protocol for TCT = 02
STS 501-2-1	EntityType B	POSToTokenCarrierInterface physical layer protocol for TCT = 01
STS 501-2-2	EntityType B	POSToTokenCarrierInterface physical layer protocol for TCT = 02
STS 501-3-1	EntityType C	Token carrier: Magnetic card token carrier for TCT = 01
STS 501-3-2	EntityType C	Token carrier: Numeric token carrier forTCT = 02
STS 501-4-1	EntityType D	TokenCarriertoMeterInterface physical layer protocol for TCT = 01
STS 501-4-2	EntityType D	TokenCarriertoMeterInterface physical layer protocol for TCT = 02
STS 501-5-1	EntityType E	TokenCarriertoMeterInterface application layer protocol for TCT=01
STS 501-5-2	EntityType E	TokenCarriertoMeterInterface application layer protocol for TCT=02
STS 501-6-1	EntityType F	MeterApplicationProcess for TCT=01
STS 501-6-2	EntityType F	MeterApplicationProcess for TCT=02
STS 501-7	EntityType G	KeyManagementSystem
STS 501-8	EntityType H	Security Module

### **8.3 IEC conformance scheme**

It is intended for the STS501 series to be taken to the IEC for conversion into a standard to be used for certification against IEC 62055 series for STS. It is anticipated that this work will find a place in the IEC conformance scheme.

A realistic time window for this is probably looking at 2012/2014.

### **8.4 Self certification**

We are introducing a facility whereby members can certify products themselves on the basis of existing certified products that have had minor changes done, but where the intrinsic STS functionality has not been altered. More about this will be communicated in due course.

Best wishes for the coming year.

Don Taylor

Chairman STS Association

11<sup>th</sup> March 2011.