

ANNUAL REPORT by the chairman of the STS Association in review of the period 19th May 2009 to 5th May 2010

1 Highlights for the year 2009/2010

- Bogus STS certified products legally challenged
- Publication of IEC 61968-9 standard.
- Informal liaison with IEC TC57 WG14 continues with STSA representation on WG14.
- Release of STS 501 series for certification testing
- Project for new KMS in progress
- New licence categories for sub-metering applications
- Website services interface upgrade

2 Legal and Constitutional

We had a case where uncertified vending systems were offered into the market place with false claims of these being certified and unlawfully using STS trademarks. The case was successfully challenged and the relevant membership has been terminated. This is an important landmark mark case for protecting the member interests having bona fide STS certified products.

This may serve as a reminder that a product is certified against the model and firmware version. If any of these attributes change then the product must be re-tested and certified. It has come to our attention that certain members are not adhering to this rule - this is under investigation for possible further action if required.

It has come to our attention that there are cases where the 66-bit STS token definitions have been extended to provide more functionality on products that have been STS certified. This is technically not allowed if these extensions cause any overlap or clash with the definitions found in IEC 62055-41, while at the same time the product claims to be or has been certified for STS compliancy.

3 Administration

There were 6 Management Board meetings held between 19th May 2009 and 5th May 2010 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:

Name	Portfolio
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
Thiru Chetty	Director elected for meter manufacturer class
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 19th May 2009 to 5th May 2010

1	ADD Production	Rep of Moldova	Current
2	Apator SA	Poland	Current
3	Arthur D Riley & Co. Ltd	New Zealand	Current
4	Blue Falcon	South Africa	Joined
5	Conlog	South Africa	Current
6	Contour Technology (Pty)Ltd	South Africa	Current
7	Daisy Technology Ltd	Bulgaria	Current
8	EDMI Ltd	Singapore	Current
9	Enbaya Trading cc	South Africa	Joined
10	Enermatics Energy Pty Ltd	South Africa	Current
11	Eskom	South Africa	Current
12	Excelec International S.A.S	Colombia	Joined
13	Genus Power Infrastructures Limited	India	Current
14	Grinpal Energy Management Pty Ltd	South Africa	Current
15	Hangzhou Pax Electronic Technology Co., Ltd	China	Current
16	Henan Star Hi-Tech Co., Ltd	China	Current

17	Hexing Electrical Co Ltd	China	Current
18	Holistic Systems	South Africa	Joined
19	Holley Metering Ltd	China	Current
20	HPL - Socomec Private Limited	India	Joined
21	Itron (Pty) Ltd	South Africa	Current
22	Landis + Gyr (Pty) Ltd	South Africa	Current
23	Landis+Gyr Equipamentos de Medicao Ltda	Brazil	Current
24	Lee Jong Electrical & Engineering SDN BHD	China	Current
25	netVendor cc	South Africa	Current
26	Novameric Pty Ltd	South Africa	Joined
27	Prepaid World	South Africa	Current
28	Prism Payment Technologies (Pty) Ltd	South Africa	Current
29	Protea Metering Pty Ltd	South Africa	Current
30	PT Mecoindo	Indonesia	Joined
31	PT Metbelosa	Indonesia	Joined
32	PT. Global Meter Industry	Indonesia	Joined
33	PT. Sistem Mikroelektronika Cerdas Co-Design	Indonesia	Joined
34	Quill Associates	South Africa	Current
35	Radio Surveillance Security Services SA Pty Ltd	South Africa	Current
36	Sebata Municipal Solution (Pty) Ltd	South Africa	Current
37	Sectional Title Support Services (Pty) Ltd	South Africa	Joined
38	Secure Meters Limited	India	Current
39	Shenzhen Inhemeter Co., Ltd	China	Joined
40	Shenzhen Star Instrument Co.,Ltd	China	Current
41	SIAME	Tunisia	Current
42	SMS Gabon	Gabon	Joined
43	Syntell (Pty) Ltd	South Africa	Current
44	TATS Electrical Services (Pty) Ltd	South Africa	Current
45	Trimarque Pty Ltd	South Africa	Joined

46	Unique Mbane SA Pty Ltd	South Africa	Current
47	Utiliflex LLC	Tunisia	Current
48	Wasion Group Limited	China	Current
49	ZESCO Limited	Zimbabwe	Current

Membership movement

current	35
joined	14
pending	4

6 Users, public relations and promotions

The website has recently gone live providing new user interface functions, which we hope will alleviate some of the help line functions and associated difficulties experience by members using the STS services etc.

A new category of licensee has been created for the sub-vending group of STS users in order to have better control over SGC allocation and ownership. This will be put into operation shortly with due notice to all members.

Revision of fee structures for key management services and product testing for certification is underway. We can expect these to be published and put into operation during the coming year.

7 Standardization work

The current status of activities is as follows:

Group	Convenor	Subject	Stage
WG1		Key Management Investigation	completed
WG2		STS Enhancement (STS2000)	completed
WG3		STS Enhancement (STS2)	completed
WG4	vacant	Intellectual Property Policy	4.2 Final edit
WG5		Key Management Infrastructure	completed

WG6	Jimmy O'Kennedy	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	Test Specification for product certification	
		STS 501-0 (quality plan)	3.4 CDV
		STS 501-1-1 (point of sale)	3.4 CDV
		STS 501-1-2 (point of sale)	3.4 CDV
		STS 501-2-1 (point of sale)	3.4 CDV
		STS 501-2-2 (point of sale)	3.4 CDV
		STS 501-3-1 (magnetic cards)	2.5 WG draft
		STS 501-3-2 (numeric tokens)	2.5 WG draft
		STS 501-4-1 (meter)	3.4 CDV
		STS 501-4-2 (meter)	4.1 FDS
		STS 501-5-1 (meter)	3.4 CDV
		STS 501-5-2 (meter)	4.1 FDS
		STS 501-6-1 (meter)	3.4 CDV
		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 WD
		IEC 61968-1-1 Enterprise Service Bus	WD
		IEC 61968-1-2 Naming & Design Rules	WD
		IEC 61968-9 CIM meter reading and control interface messages	ED-2 WD
		IEC 61968-11 CIM for distribution	FDIS
STANSA TC62 liaison	Don Taylor	SANS 1524-1 Edition 5: Prepayment meters	PUB

Progress has been slow in the WG activity arena due to lack of member interest and lack of resource sponsorship for WG participation.

WG1 has been discontinued

WG2 has been discontinued

WG3 has been discontinued due to lack of member interest. A WG will re-start when an STSA member submits a NWIP again.

WG4 has completed its work

WG5 has been discontinued.

WG6 no activity

WG7 has issued a CDV for trial use of the product certification test specification (CTS) STS501 series. It will be in a trial use stage until June for ironing out discrepancies, after which it will be published. At present it covers only the meter certification testing and it is anticipated to issue a CDV for the parts that cover the vending system by June.

NOTE: The table above reflects the status as of 1 June 2010

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

IEC TC57 WG14 liaison is informal at this stage with the main focus 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.

STANSA TC62 liaison is formal and the STSA attends the annual meeting during Q1 of each year. SANS 1524-1 Ed5 is in final stage of publication.

8 Other developments

8.1 Key management infrastructure

The management board went through the process of inviting proposals for an enhanced key management system. Basically this entails a distributed KMC architecture that aims to alleviate the constraints and bottlenecks experienced by users of our single KMC service currently operated by ESKOM.

Prism has been selected to develop phase 1 of the project, essentially a feasibility phase, in order to get a clearer understanding of exactly what such a system would look like and what the cost would be. If we proceed beyond phase 1, the objective would be to develop the system and make available the KMC units to members who wish to purchase and operate their own KMC.

Complementary to this development we will have to develop a KMC COP and certification specification for such new operators to follow. There is still a lot of work ahead before we get to production phase.

8.2 Product certification

The recently released STS 501 test specification is now in trial use and meter products are being tested against it.

Because the older test specification had a narrower scope, we do expect to find some anomalies in existing certified products and possibly also during the transitioning phase of products currently under development.

To clarify any apprehensions and misconceptions I wish to point out the following:

- The requirements for meters have not changed. These are still IEC 62055-41 and IEC 62055-51 as has been the case for the last number of years since publication. The only difference is the method of testing is now more thorough than before.
- This means that in theory all existing certified products should pass if they were to be retested against the 501 specification. However, we are aware that there are likely to be discrepancies in terms of interpretation of the 62055-41 and -51 standards.
- Where discrepancies are found during testing, these will be clarified and resolved with the particular manufacturer on a case by case basis. Corrections and clarifications will be made to the standards if required in order to iron out the gaps for future users.
- Existing certified meters will not be required to be retested at this stage. This will be reconsidered at a later stage if there is sufficient reason to motivate such an exercise.
- Existing meters will be required to be retested in the case where software design changes are made and products need to be recertified anyway. If failures are then found, these will need to be fixed. It is recognised that certain fixes may not necessarily be able to be affected immediately and special consideration will be given on a case by case basis so as not to be unreasonable.

The parts of STS 501 series for testing vending systems will be put into trial use by June if all goes according to plan. As soon as this step is taken, the present NRS009 series will be withdrawn completely and hence forth all products (meters and vending systems) will receive only IEC 62055-41 and -51 references on their test certificates.

It must be understood that this is not a mark certification for IEC, but purely a type test certificate that certifies the product had been tested against the relevant IEC standards and were found to comply with those. It does not give authorisation to put the IEC logo on the product.

As far as the STS part of the certification goes, the situation is slightly different. The STS logo may be put onto the product so as to bear witness that it conforms to the STS Association codes of practice and rules relating to membership and licence agreements over and above the compliance to IEC 62055 suite of standards.

Below is a list of the STS 501 series. 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 for TCT = 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

There is an initiative by the South African Bureau of Standards to bring the IEC 62055-31 type test for payment meters into the IEC conformance scheme. Once this is in place, it means that products could be certified under this scheme as being 62055-31 compliant and would be allowed to bear the corresponding markings on the label. Certification could be done by any standards laboratory appropriately accredited by IEC anywhere in the world. The advantage of the IEC conformance scheme is that it ensures that test laboratories follow standard codes of practice when it comes to interpretation of test results for example, thus ensuring a level playing field world-wide.

The STSA is contemplating to follow suit with IEC 62055-41, 55-51 and 55-52 together with IEC versions of STS 501 series. This will then mean that STS certification would technically be possible by accredited standards laboratories world-wide. However the time horizon for this step is probably a few years from now.

Don Taylor

4th May 2010