

Payment meter standards from Africa for Africa

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STANDARD TRANSFER
SPECIFICATION

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Evolution of meter type test standards



- Proprietary phase
- Industry phase
- National phase
- International phase

Evolution of Standard Transfer Specification



- Proprietary phase
- Industry phase
- International phase

- **Membership**
 - 12 countries
 - 27 manufacturers
 - 2 utilities
 - 1 representative from AMEU

STS Association standards

- **7 working groups**

- STS enhancements
- Key management
- STS numbering
- Conformance test specification

- **Standards under development**

- STS 101-1 Companion specification – Serial port VTC
- STS 200-1 Companion specification – MeterFunctionObject classes
- STS 201-15.1.0 Companion specification – RegisterTable
- STS 401-1 Code of practice for allocation of supply group codes
- STS 501-1 Certification test specification for products
- STSE – suite Advanced functionality (2-way + tariff + clock)

- **WG 15: Payment metering systems**
 - IEC 62055-21 Payment metering systems – framework for standardization
 - IEC 62055-31 Particular requirements – payment meter type test
- **STS publications**
 - IEC 62055-41 (STS) Application layer protocol for one-way token carrier systems
 - IEC 62055-51 (STS) Physical layer protocol – numeric + magnetic card
 - IEC 62055-52 (STS) Physical layer protocol – virtual token carrier

- **WG13: Energy management system application program interface**
 - IEC 61970-301 Common information model (CIM)
- **WG14: System interfaces for distribution management**
 - IEC 61968 (parts 1 – 14) CIM interfaces
 - IEC 61968-9 Interface to meter reading and control systems
 - IEC 61968-11 CIM extensions in distribution networks
 - IEC 61968-12 Use cases for distribution management

STS Association services

- **Key management centre**
- **Product certification centre**
- **Utility users**
 - 32 countries
 - 400 utilities
 - 700 vending keys
 - 8 million meters
- **Manufacturer users**
 - 4 countries
 - 12 manufacturers
 - 14 vending products
 - 86 meter products

STS open standards

Why?

Benefits for the utility?

Impact on the manufacturer?

Utility benefits

- **Future-proof investment – assures continued service and product availability**
- **Avoids product or supplier lock-in – multi supplier sourcing**
- **Product interoperability – international open standard**
- **Unified operational processes for all product brands**
- **Experience-sharing amongst utilities**
- **One-stop-shop service from STS Association**
- **Key management services – trusted and secure revenue protection**
- **Quality assurance – sustained product certification test procedures**

Manufacturer impact

- **Upside**
 - Easier market entry – but widens supply base (more competition)
 - Easier market expansion – increase size of the cake
- **Downside**
 - Competitive bid – sharpen pencil
 - Differentiate on quality of products and value-add services
 - Optimization of price v/s performance

Conclusion

- Utility has a lot to gain
- Manufacturer placed under pressure
- Promotes balanced market forces

Open standards - the way to go

Thank you !



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