



The current status of Esi TC and the future of electronic signatures

The ETSI Esi TC structure

□ TC ESI is responsible for Electronic Signatures and Infrastructures standardization. There are currently 4 Special Task Forces assisting in this activity:

- STF 288 - International harmonisation of ETSI Electronic Signature Standards
- STF 289 - Joint ESI-W3C WG on XML Advanced Electronic Signatures
- STF 290 - Relying Party Access to TSP Status List
- STF298 - Profiles for ETSI TS 101 733 and TS 101 903 Electronic Signatures Formats

Current status of the Workshop: recent publications



TS 101 733 V1.6.3	September 2005	Electronic Signatures and Infrastructures (ESI); CMS Advanced Electronic Signatures (CAAdES)
TS 102 176-1	July 2005	Electronic Signatures and Infrastructures (ESI); Algorithms and Parameters for Secure Electronic Signatures; Part 1: Hash functions and asymmetric algorithms
TS 102 176-2	July 2005	Electronic Signatures and Infrastructures (ESI); Algorithms and Parameters for Secure Electronic Signatures; Part 2: Secure channel protocols and algorithms for signature creation devices
TR 102 040 v1.3.1	March 2005	International Harmonization of Policy Requirements for CAs issuing Certificates
TR 102 047 v1.2.1	March 2005	International Harmonization of Electronic Signature Formats
TR 102 317 v1.1.1	June 2004	Process and tool for maintenance of ETSI deliverables
TS 101 903 v1.2.2	April 2004	XML Advanced Electronic Signatures (XAdES)
TS 101 862 v1.3.1	March 2004	Qualified Certificate Profile
TS 102 280	March 2004	X.509 V.3 Certificate Profile for Certificates Issued to Natural Persons
TR 102 040 v1.2.1	February 2004	International Harmonization of Policy Requirements for CAs issuing Certificates



Liaisons with other fora

- **CEN/ISSS European Committee for Standardisation - Information Society Standardisation System**
- **ebXML Electronic Business XML Initiative**
- **ECBS European Committee for Banking Standards**
- **EMVCo Europay/MasterCard/Visa Consortium**
- **EPF Electronic Payments Forum**
- **HR-XML Consortium HR-XML Consortium**
- **ICTSB Information and Communications Technologies Standards Board**
- **IFIP International Federation for Information Processing**
- **ILPF Internet Law and Policy Forum**
- **ISOC Internet Society**
- **MeT Mobile Electronic Transactions**
- **mSign Mobile Electronic Signature Consortium**
- **OBI Open Buying on the Internet**
- **OPA Online Privacy Alliance**
- **Open Group Security Forum The Open Group's Security Forum**
- **PKI Forum Public-Key Infrastructure Forum**
- **Radicchio Radicchio**
- **RosettaNet RosettaNet**
- **SETCo Secure Electronic Transaction LLC**
- **TFPC Telecommunications Fraud Prevention Committee**
- **XIWT Cross-Industry Working Team**

International cooperation

FOLLOWING FORA HAVE PRODUCED OWN SPECIFICATIONS ON THE BASIS OF ETSI ESI SPECIFICATIONS OR HAVE WORKED ON THE MAPPING AND REVERSE MAPPING OF THEIR SPECIFICATIONS WITH ESI SPECIFICATIONS

- ASIA PKI FORUM
- APEC
- Federal US PKI
- IETF

FOR QUALIFIED SIGNATURES (I.E. LEGALLY BINDING SIGNATURES) THE ETSI-ESI SPECIFICATIONS ARE THE MOST REFERENCED AND CONSIDERED WORLDWIDE



Open Issues

Interoperability

- European co-ordination of Supervision
- European Accreditation Schemes
- European Root Authority
- Sustainable Business Models

EESSI Standards have been a first important step towards the solution of Open Issues!

Italy's experience

- ❑ In Italy more than 2.000.000 of SSCDs
- ❑ Utilisation within electronic e-government (not for signing contracts)
- ❑ Access and modification of public registrars, digital tax declaration and...
 - NEW! Digital accounting, e-Invoicing, Registered email
- ❑ SSCDs are used only if mandatory or significantly cheaper than other options...

Rest of Europe experience

- ❑ In each State some thousands or ten-thousands of SSCDs issued
- ❑ Missing successful business models
- ❑ Great opportunities:
 - e-Invoicing Directive
 - Registered email
 - Digital Accounting (Digital Protocol)

The future?

❑ e-Invoicing...

- Greater companies do 90% of invoicing with partner or controlled companies
- The production (print + storage) of paper invoices is currently made only for compliance
- The overall cost of a printed invoice varies from €2 up to €10 per invoice
- The overall cost of an e-Invoice is less than €0,2

❑ Registered Email...

- Origin authentication
- Proof of delivery
- Long term availability

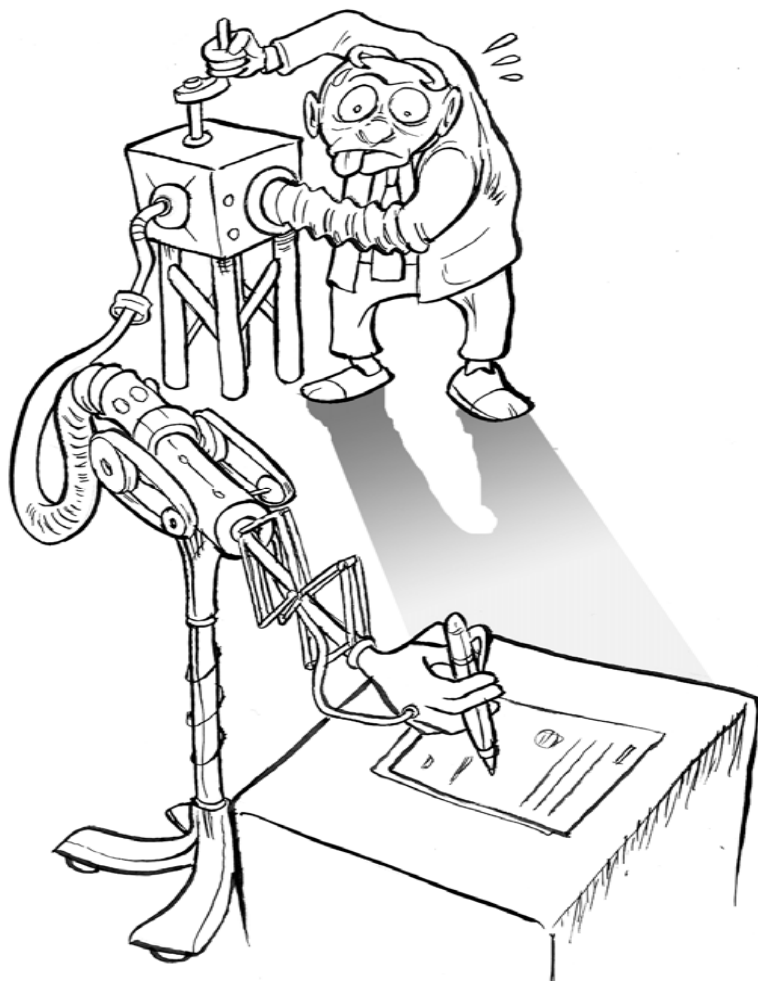
❑ Digital Accounting

- Paper based accounting is currently made only for compliance to fiscal regulation: even in SMEs Enterprises the accounting is software-based
- Paper was ineffective in all major accounting frauds
- Digital accounting supported by a Trusted Third

New activities in ESI TC ...

- ❑ Policies and Procedures for Issuance and Storage of Digital Accounting Documents....
- ❑ Policies and Procedures for registered electronic mail services...
- ❑ Joint standardisation with W3C (if IPR issues can be solved)

Conclusions



- ❑ There is no WYSIWYS
- ❑ Technology is clumsy
- ❑ The social acceptance is low: use only if mandated
- ❑ There are wrong expectations on what the QES can do....

Only success story: data origin authentication!!!!!!

*Thank you
for your attention!*

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