

ETSI Security Standards

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Adrian Scrase
ETSI CTO

adrian.scrase@etsi.org



Welcome to ETSI

ETSI is

- ❑ A European standards organization
- ❑ Active in all areas of ICT
- ❑ Setting globally-applicable standards for
 - telecommunications
 - radiocommunications
 - broadcasting
 - related topics
- ❑ Independent, not-for-profit organization, created in 1988
- ❑ ISO 9001:2000 certified
- ❑ Offering direct participation
- ❑ We have more than 16 000 publications - freely available!



<http://www.etsi.org>

<http://portal.etsi.org>

ETSI is not ...

- ❑ a **REGULATORY** body, but...
 - we provide technical specifications to support regulation
- ❑ a **CERTIFICATION** body, but...
 - we provide specifications and other tools to assist certification
- ❑ a **FREQUENCY ALLOCATION** body, but...
 - we collect, co-ordinate and contribute frequency requirements for the ICT community
- ❑ part of the **European Commission**, nor part of **CEPT**, but...
 - we work closely with these and many other organisations

ETSI



ESO: European Standards Organization: standardization for European needs

GSP: Global Standards Producer: standardization for the global level

SPO: Service Providing Organization: services such as interoperability testing, forum management etc.

ETSI – producing global standards!

□ Remember GSM ?

- Developed (by ETSI) for Europe
- Now a worldwide success story!
 - More than 1.5 billion users in over 200 countries
 - One million new users EVERY DAY!



Just some examples...

□ ETSI's Lawful Interception handover standard

- Being deployed in Europe...
- But also in USA and Australia, where the laws are being developed to comply with the ETSI Standard

□ DVB system specifications

- Based on DVB Project proposals
- Services available on every continent

□ TETRA

- More that 600 contracts in 70 countries

□ Radio microphones and cordless audio equipment

- Global agreement on common standards

...through global membership !

- ❑ ETSI was established as a European body and retains European responsibilities. But...
- ❑ ...many of ETSI's Members are global players...
- ❑ ...so ETSI seeks to have its standards adopted worldwide
- ❑ Over 100 of ETSI's Members (about 20% of the total) have no established operations in Europe
- ❑ Many of the other 80% are headquartered outside Europe



ETSI branding

- ❑ The ETSI name is well-respected in the industry, world-wide
- ❑ ETSI's neutrality is also well-respected



Some of our latest activities...

- Next Generation Networks (NGN)
- Ultra wideband (UWB)
- Bandsharing
- Grid
- RFID
- Low Power Devices
- Emergency alerting, e-call
- GSM on aircraft
- Communications for Public Safety



What's next?

YOU decide!

Emerging Technologies

- ❑ New technologies bring new security challenges
- ❑ New technologies require new security mechanisms and features
- ❑ Technology is becoming more powerful
 - So attackers take advantage of new technologies and become more powerful too
- ❑ Adoption of new services and take-up of new technologies are materially affected by Security
 - Trust, Privacy, Reliability are all key factors for success
- ❑ Security failures are no longer just an embarrassment!
 - they directly affect the stock value of companies
 - And the market success of new products and services

Security and algorithms

- ❑ ETSI is a world leader in creating cryptographic algorithms and protocols to prevent fraud and unauthorised access to ICT and broadcast networks, and to protect customers' privacy
- ❑ They include:
 - algorithms used to protect GPRS, GSM and 3GPP communications
 - Extremely robust in real-life situations
 - Dual-Tone Multi-Frequency (DTMF) receiver algorithm for PBX and Central Office applications
 - used around the world, outperforming all traditional solutions
 - Conditional Access for TV etc

Security and algorithms

□ Lawful Interception

- ETSI's European LI handover specification has been adopted by carriers and regulatory bodies around the world, notably USA and Australia
- other LI standards in preparation (including for WLAN)

□ Smart cards

- GSM SIM card standards for security, authentication etc
- The work has extended the USIM and UICC for 3G and other applications, including access control to WLANs and for PC security functions

□ Electronic signatures

- supporting the development of a European electronic signature infrastructure

Objectives of this Workshop

- ❑ To assess what has been done so far
- ❑ To identify the gaps and/or duplication
- ❑ To indicate and propose the areas for future work to be performed

But: ETSI cannot, and does not, work in isolation

- ❑ *Also necessary to maintain and strengthen collaboration with other bodies that are active in security standardization*

Have a successful workshop!

“The only truly secure system is one that is powered off, cast in a block of concrete and sealed in a lead-lined room with armed guards.”

(Gene Spafford)

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