

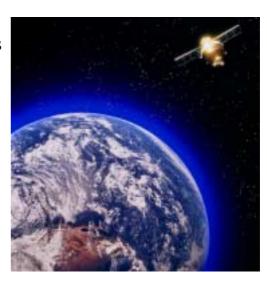
SMG9 SIM Aspects

SMG9 "SIM Aspects"

Every SIM with every mobile in every network - worldwide

Born in 1988, still going strong

- Custodian of the SIM and its interfaces
 - > maintenance of specifications
 - ➤ Phase 2+ enhancements
- User Identity Module for UMTS
- Generic issues for all ETSI IC cards
- The committee
 - > 70+ delegates from 15+ countries
 - five Working Parties: UMTS, API, Toolkit Security, Testing, Generic Issues
 - Chairman Dr. Klaus Vedder, G&D





The SIM - A Removable Security Module

- Secure device under issuer control
 - issuer specific security mechanisms
 - > secure key management
- Universal plastic roaming
 - > keeping your identity when changing terminal or technology
- Issuer independent terminal
 - terminal does not contain any subscription data
 - > global market versus local market ecomomy of scales
 - bigger choice for the customer through more competition



Complete Set of Specifications

- SIM ME Interface
 - > electrical (incl. low voltage), mechanical, logical
- SIM Application Toolkit
 - ➤ toolbox for card issuers to create *terminal independent* applications for issuer differentiation
 - ➤ Application Protocol Interface for secure (over-the-air) loading of *manufacturer independent* SW
 - ⇒JAVATM API in co-operation with the JAVATM Card Forum
 - ⇒co-operation with VISA on the integration of the VISA Open Platform
- Set of Test Standards



SIM Application Toolkit

The basis for issuer differentiation

- Secure Over-the-Air administration
 - downloading data and applications
- SIM as basis for Value Added Services
 - > end-to-end communication (SIM VAS platform)
 - > applications independent of handset (manufacturer)
- Typical applications
 - > mobile banking (secure money transfer)
 - ➤ loading of electronic purses over-the-air
 - user-friendly information services
 - > services based on locality (e.g. taxis, hotels, call charges,...)
 - > part of the VHE (Virtual Home Environment)



SIM Application Toolkit

Toolbox for issuer specific SIM applications

- Standardised mechanisms, commands and functions
- Some functions and features provided
 - > configuration of handset menus, control of display
 - > icons / diagrams; timer; 2nd card interface
 - > use of local information
- Utilisation of SIM inherent security features
- Incorporate issuer specific (end-to-end) security functions



Conclusion

The SIM is an essential element for security, universal roaming and service differentiation



