

## Security and prevention

**Common Criteria (CC) – global criteria catalogue for IT security, variously in the fields of Smart Grid, Smart Meter, Secure Elements**

In order to ensure a high level of security in information technology, the international community agreed to the *Common Criteria for Information Technology Security Evaluation*. This catalogue of criteria serves internationally as a unified measure for the testing and evaluation of the security of information technology systems, products and applications. Common Criteria are complemented by an internationally-uniform evaluation methodology that defines agreed methods for the CC evaluation.

### achelos services for Common Criteria evaluation

- Analysis of existing security requirements
- Definition of security objective, protection profiles, security requirement and security level.
- Testing the security requirements by product
- CC compliant documentation and reports about successful tests of the security requirements
- CC certification and evaluation processes.
- Product development based upon the security requirements Implementation support and support in development
- Coordination of the complete process between you and the test authority

### 3D Secure generates secure authentication in an online

Record Internet turnovers cause great excitement for those trading there, but the failure rate with credit card payments is enormous. With 3D Secure, these dynamic developments can be brought into dynamic equilibrium and the number of misuse cases in online shopping can be significantly reduced. Traders that introduce this new process to their online shop are given a type of "payment guarantee" which applies to each payment transaction by credit card. Within the context of the liability shift, returned debit notes are debited to the bank issuing the card.

3D Secure is realised by the installation of a further server on the Internet that carries out authentication of the card holder prior to the classic authorisation of a payment transaction.

### The services that achelos and syngenio provide for you:

achelos supports you in the smooth implementation of the database from system level through to the marketing concept, so that the introduction of 3D Secure is successful for you. This includes:

- Location definition (business case consideration)
- Definition of the requirements profile (special registration and authentication processes)
- Project management
- Selection and introduction of the application
- Integration into your systems environment
- Adaptations of technology and specialist processes.
- Organisation of functional and commissioning approval by the card organisation
- Communication and marketing concept

# Processing Mobile Payment 3GPP Smart Metering Smart Grid

## PCI-DSS – secure standard for credit card data

The PCI-DSS defines the unified procedure in the implementation of security requirements for the secure storage and administration of credit card data. The PCI data protection standards together summarise the testing requirements of VISA programs (Account Information Security - AIS) and MasterCard (Site Data Protection - SDP). Because of the common unified standards, traders or payment service providers (PSPs) can concurrently perform the certification for both card systems.

## What achelos can provide for all aspects of PCI-DSS

- Security evaluation of computer networks based upon the PCI-DSS requirements
- Preparation of security concepts for the conversion of computer networks in compliance with PCI-DSS
- Implementation of the security concepts
  - Secure identification of authorised users
  - Protection of saved credit card owners' data using suitable encryption processes.
  - Encrypted transmission of credit card owners' data into public networks
  - Access protection mechanisms for limiting access to credit card owners' data
  - Logging of all access to network resources and credit card owners' data
  - Preparation of company directives with rules for the information security of employees and contractual partners
  - Quality assurance
  - Project management
- General consulting about PCI-DSS aspects

## More IT security: do not give data piracy a chance

Most of all working and business processes are based upon IT solutions. The interplay between the security, reliability and availability of information and communications technology, as well as the confidential handling of information, is becoming ever more important. Sabotage, hacking attacks, viruses, trojans, configuration errors or the improper handling of data are on the agenda and represent an enormous risk for IT security. A leak in information management can lead to neo-disaster for some institutions.

## When thinking about IT security, you should ask the following questions:

- How is my IT protected against external and internal threats?
- Does the IT security level correspond to the state-of-the-art and to the requirements of my business partners?
- What current security standards are there and how are they observed?
- How are the quality and security standards demonstrably documented?
- What risks exist and what damage can arise in my organisation from inadequate IT security?

## Security is scalable

It is not a question of utilising security standards to an extreme level, but rather much more a case of developing practicable and appropriate security solutions for the respective project. achelos can support you here as a mentor and attaches importance to high usability.

## Our services for you:

### Security management

- IT security policy, strategies and directives
- IT security concepts
- Definition of security requirements
- IT security architectures
- IT security organisation and processes
- Risk analyses
- Backup concept
- Emergency concept
- Support for CC evaluation and CC certification
- Compliant documentation

### Special security technologies

- Public Key Infrastructure (PKI)
- Single Sign On (SSO)
- Chip cards
- Security tokens

### System and application security of

- Chip card and chip card terminals
- High-security modules
- Mobile end devices
- Web-server infrastructures
- Client/server systems

## Basic technology in the implementation

