

## RegioPKI<sup>©</sup> and Governikus<sup>™</sup> to turn the Regions to the digital era 10 B 27, 10/10/2007 at 14:30 – 16:30

JDE53, CoR

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### About Tietokartano Oy and Cence Ltd, Finland

- Tietokartano Oy and its daughter company Cence Ltd, are owned by four Eastern Finnish municipalities
- The companies offer technical and operational IT services for several communities as well as enterprises
- Since 2007 the strategy is to strongly develop digital activities and services for the public sector



# **Efficiency in eGovernment Services**

#### **Conclusions of the BIT Consultants research in Germany (2007)**



## Initially the main focus of eGovernment efficiency should be on local administrations themselves rather than on the citizens



# The Vision

- The goal is to expedite eGovernment services from the users point of view
- Since there is a lack of end-user experience and evidence to prove the concept, the target is to gather data in order to analyze the efficiency, interoperability and usability of electronic regional services
- The cross-border showcase is aimed towards Eastern–Finnish regions and other European Regions. It aims to compare the existing way of workings with a new PKI based service model
- The special characteristics of the Eastern-Finnish regions demands that the equality, privacy and confidentiality issues of all citizens has to be taken under special consideration



# The RegioPKI® System

### The *Regio*PKI<sup>®</sup> System is a comprehensive solution & service package for setting up secure globally interoperable eServices on a regional level

"Closer to the user, closer to user needs"

#### **The** *Regio*PKI<sup>®</sup> **System consists of:**

- Complete PKI, with directory services and identity management
- Client, middleware and back-office solutions enabling eServices, including smart cards, tokens, readers etc.
- Consulting, implementation and support services
- Ready interfaces to all industry leading IT-security and other client solutions

A regional approach for achieving local services with global interoperability and reach





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## **RegioPKI® Card Management System**



Support for contactless
RFID, Mobile PCMCIA,
Mobile/Wireless PKI,
USB tokens, USB OTP,
OATH, EMV OTP, Java
Cards, EMV Cards, eID
Cards, native cards ...









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## RegioPKI<sup>®</sup> Certificate Management Platform



**DPEN** 



### • Complete PKI system

Open Source, Microsoft, others

### • Identity Management

- Strong authentication
- Role based access rights
- Single sign on

### • Digital signatures and certificates

- Token & software certificates for all purposes
- Qualified signatures from Trust Centres for legal compliance



# **RegioPKI® eServices**



- Secure online communications (OSCI)
  - Official German secure communications protocol,
  - Interoperability roadmap with French "Presto"

#### Governikus™ system

- Middleware that implements OSCI
- Provides digital signatures and security

### • A "PKI enabler"

- Governikus makes any business application and process PKI-enabled
- Low implementation cost and effort
- Technical independence & interoperability (totally standards based)



## **Introduction to Governikus™ and OSCI**

- OSCI is to the Internet and interactive, digital paperless processes, what pneumatic post was to standard post!
- OSCI is a secure, dedicated infrastructure to enable PKI-based communications



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# **OSCI Components**

### • Part A: Secure Transport

- Integrity & authenticity: electronic signatures
- Confidentiality: encryption
- Non-Repudiation: signed receipt

### • Part B: Message Formats

- Domain specific, task oriented
- Specified by government users
- "Content Form"







# **OSCI Provides Security**

### • Authenticity / Integrity of content

- Signatures from authors, all signature levels

### • Confidentiality of content

Encryption for readers / message receivers

### Non-Repudiation

- Signatures, signed acknowledgements, timestamps from intermediary
- Authenticity of communication partners (sender/receiver)
  - Challenge / Response using certificates (eID)
- Authenticity / Integrity of messages
  - Signatures from sender, encryption for receiver



# **Governikus™ key points**

- Governikus is a security infrastructure that enables secure communications according
- Business applications can be secured without changes to the systems
- Security and digital signatures are provided as a service
- Governikus does not substitute or replace existing IT-security infrastructures, it only adds an uniformly enforced security layer to communication confidentiality, integrity and non-repudiation.
- Integration is done through:
  - Client API (all client connections)
  - Business Connectors to ERP, CRM, Web...
- Governikus is the back-bone secure messaging system of the Award-winning German eGov eService DVDV (Lisbon, Sept. 2007)



# **Governikus™ key benefits**

### Security

- OSCI provides highest level of communications security
- It is PKI based: ends the use of PW based solutions
- Governikus unifies key-management for encryption and certificate management for system integrity signing, no need to implement various system/application specific key/certificate management schemes

### **Enabling capacities**

- High communications confidentiality enlarges the scope of eServices delivery: no more privacy concerns
- Powerful client tools offer easy to use interfaces to secured resources

### **ROI & TCO**

- One system to enable PKI-services throughout the eServices domain
- No need to develop PKI-support for existing applications
- Flexible user/certificate/transaction based licensing model: very advantageous financing models for the public sector
- No need for Ad-Hoc security implementations: one platform performs all security related functions



## **RegioPKI® Common Services**



- Directory & Repository Services
- Security Services
- Technical services
- Identity Management
- Management Services

### • Consulting:

- Identity management roadmap
- Digital signature interoperability
- eGovernment service interoperability on European level



# **Key Points and Challenges**

### The RegioPKI system addresses several challenges:

- IT investment and ROI
- Generic IT security objectives such as Identity Management, strong user authentication, digital signatures
- Regional technological competitiveness

### **RegioPKI provides the key for:**

- Interoperable secure eServices provisioning with a capability to combine bespoke and off-the-shelf solutions with high volume advantages
- **Real return on IT investment** through complete paperless workflows
- Long term strategic eService provisioning and development (good investment protection)
- **Knowledge transfer to local enterprises,** new business and eBusiness networking opportunities



## **RegioPKI® Complete Solution**





#### **Further information and contacts:**

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