



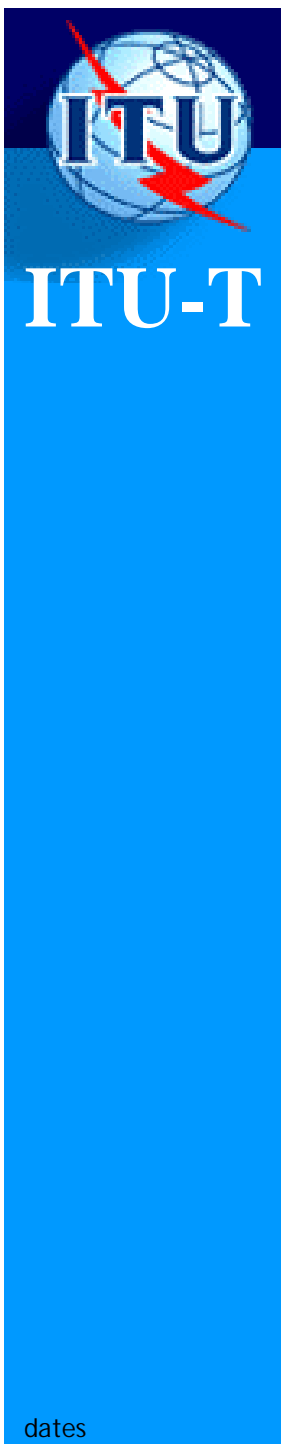
International Telecommunication Union

Securing banking and financial systems

Alexander Pogudin

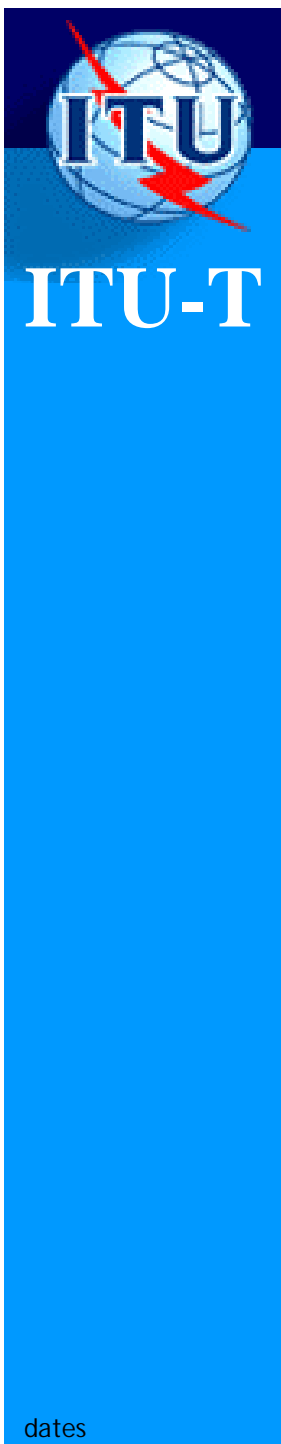
CEO

Center of Financial Technologies



Hands-on experience in security solutions for financial industry

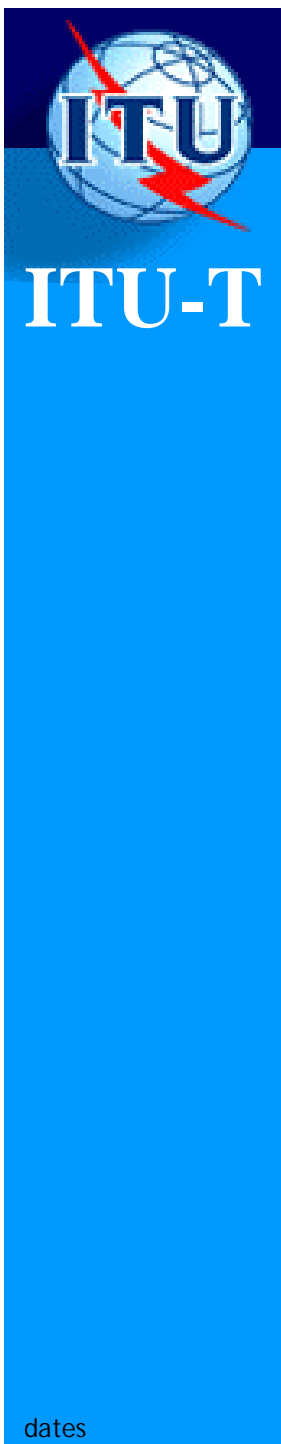
- Security means in integrated core banking systems
- Client authentication during direct (in-office) and remote client servicing
- Fraud prevention in card payment systems
- Securing mobile (GSM) commerce solutions
- PKI solutions to protect financial operations
- Business process management (outsourcing) for financial industry



Hands-on experience in security solutions for financial industry

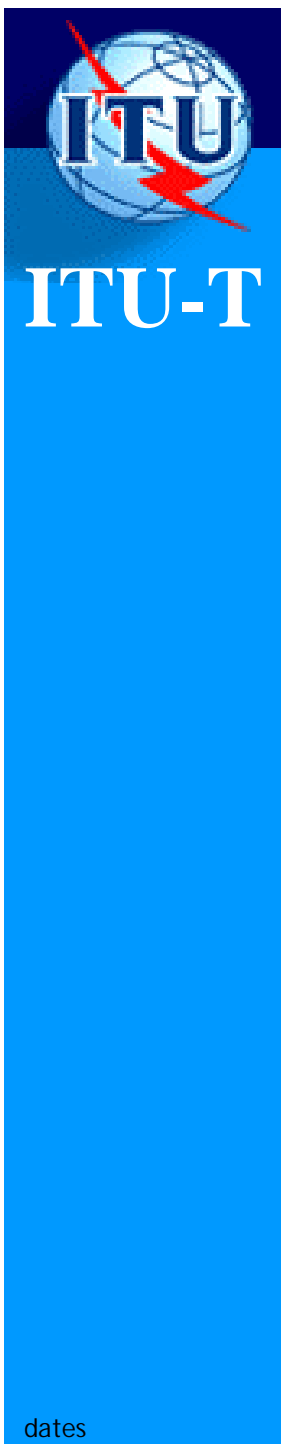
- o Integration of all applications in a secure object-oriented core banking platform
- o Hierarchical access control
- o Active audit of system events
- o Securing remote distribution channels
- o Using Digital Signature to protect internal bank documents
- o Supporting a variety of cryptographic products
- o 300 banks (The Savings Bank of Russian Federation, Vnesheconombank, URALSIB...)

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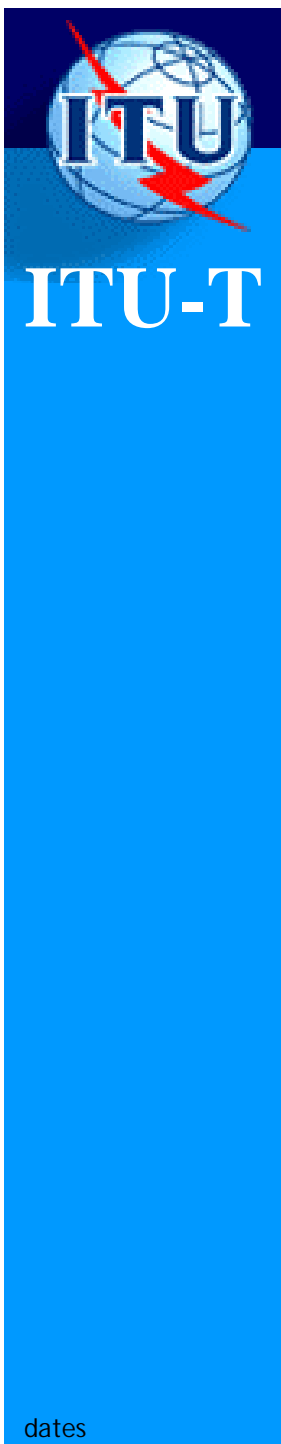
Client authentication during direct (in-office) and remote client servicing

- 1992 - an automated electronic payment solution
- 1996 - a document management system based on Digital Certificate technology
- 1999 - Protected Identification cards (banking)
- 2000 - PKI compliant solutions
- 2005 - Protected Identification cards (universal)



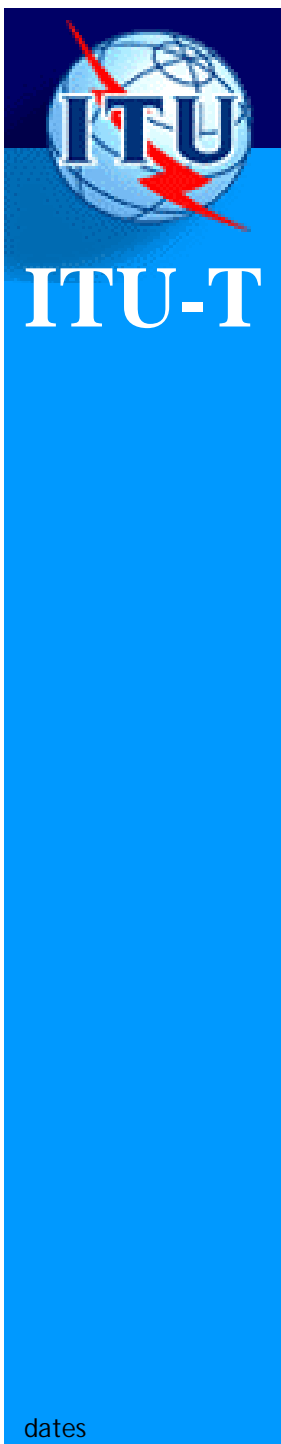
Fraud prevention in card payment systems

- o A smart-card as a main security tool
- o Dynamic authentication
- o A set of cumulative and one-time off-line limits
- o Flexible on-line authorization
- o Parametrizable black list (fraud list)
- o Active events audit
- o 5 years of fraudless operation in 5 independent payment systems
- o “Zolotaya Korona” - 204 banks, 75 regions, 2 200 000 cards



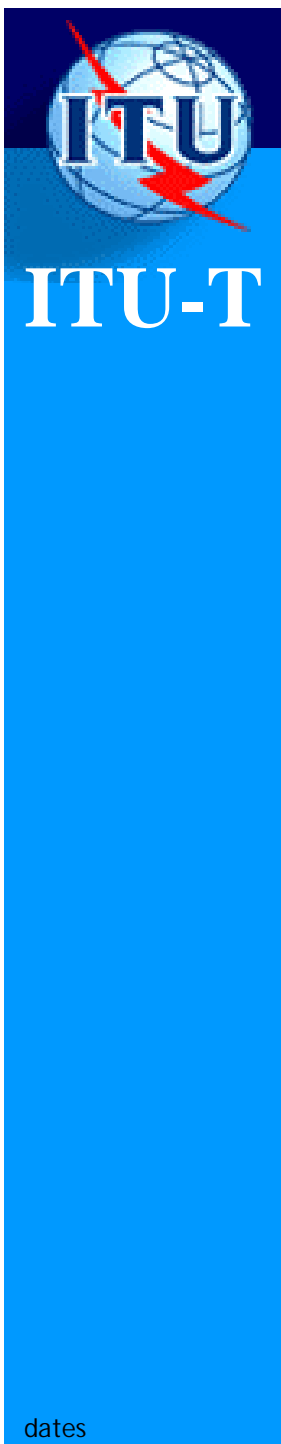
Securing mobile (GSM) commerce operations

- An independent SIM card financial application (apart from GSM application)
- Using Electronic Signature to verify requests
- Three-level key derivation (system - bank - card - request)
- Performing “display request - enter PIN - sign request” sequence as a single non-interruptable process
- Protection from bill fraud
- SimMP - a mobile (GSM) commerce network - 92 banks, 21 GSM operator
- SberMP system - a customized solution for The Savings Bank of RF



Experience of using PKI technology to secure financial operations

- PKI infrastructure: Certification Authority, more than 100 Registration Authorities country-wide, more than 10 000 clients
- An Document Security Engine (XML)
- PKI compatible applications
- Corporate information systems for:
 - Banks
 - Brokerage companies
 - Interbank systems and financial networks



Business process management (outsourcing) for financial industry

- Transaction processing in “Zolotaya Korona” and MasterCard payment systems
- “Gorod” - a mass payments system - 131 banks, 46 cities
- Faktura.ru - an interbank transaction processing system - 150 banks, 44 regions
- An interbank network of financial and information services “StranaExpress”



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Thank you!

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A.Pogudin@cft.ru

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