

Interoperability of PKI in Denmark

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PKI Status in Denmark

Some facts about Denmark

Population: 5.4 million

High technological penetration (political focus)

Main PKI player: OCES

Net-ID (electronic identification)

OCES: Certificate policies (public standard)

General open, scalable and transparent PKI

Public private partnership

The CP is state-owned, but open and free to use

Registration and distribution is outsourced

EU Tender (project competition)

Business models, fast penetration and usage of existing services

6.7 million EUR

TDC / Consortium (PBS, KMD and DMdata)

Contract with TDC (6 February 2003)

Public usage paid upfront for 2003-2007

Secure e-mail in the public sector (1 Feb 2005)

OCES Certificate Policy

Not a “qualified certificate”

Software-based with password usage

No presence

Linked to official geographical address (activation code)

Technology sent by e-mail

The receiver pays for the usage

May be used for:

Web-logon, e-mail encryption, digital signature for e-mail and web-docs

Issued as personal, employee or business

Net-ID

Launched 1 June 2004 by PBS

Major differences

Linked to net-banking

>2.000.000 net-bank users

No special software

Only issued to private persons

Based on presence (money laundry regulation)

No e-mail encryption

Not a personal digital signature (e-identification)

Interoperability

Component-level interoperability

Int. standards (X.509, RSA / SHA-1, PKCS#7+10)

Application-level interoperability

“Easy” to implement

Compatible with Mozilla and MS mail/web (FLEX)

Applications with dual support (OCES / Net-ID)

OCES root-certificate in Mozilla and MS

Inter-domain interoperability

TDC is only OCES-CA

No requirement of cross-certification if more CAs

Status (May 2005)

OCES: >365.000 certificates / >265 services

Net-ID: >2 million (potential) / 4 services

No cooperation between OCES and Net-ID

Dual support adopted by 3 organizations

Supported by pay per use

Skandiabanken opens for OCES (Sep 2004)

OCES certificate through netbank logon

Electronic access to customers' tax-information

Nykredit (credit institute) adopts Net-ID

Easy access to bank-customers

Thank you for your attention!

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