



DIGITAL SIGNATURES IN DENMARK

NB8 seminar in Vilnius, Lithuania
18 September 2012



DIGITALISERINGSSTYRELSEN

Agenda

- National egov strategy
- Danish national infrastructure
- Danish esignature setup – NemID infrastructure
- eIAS proposal and NemID

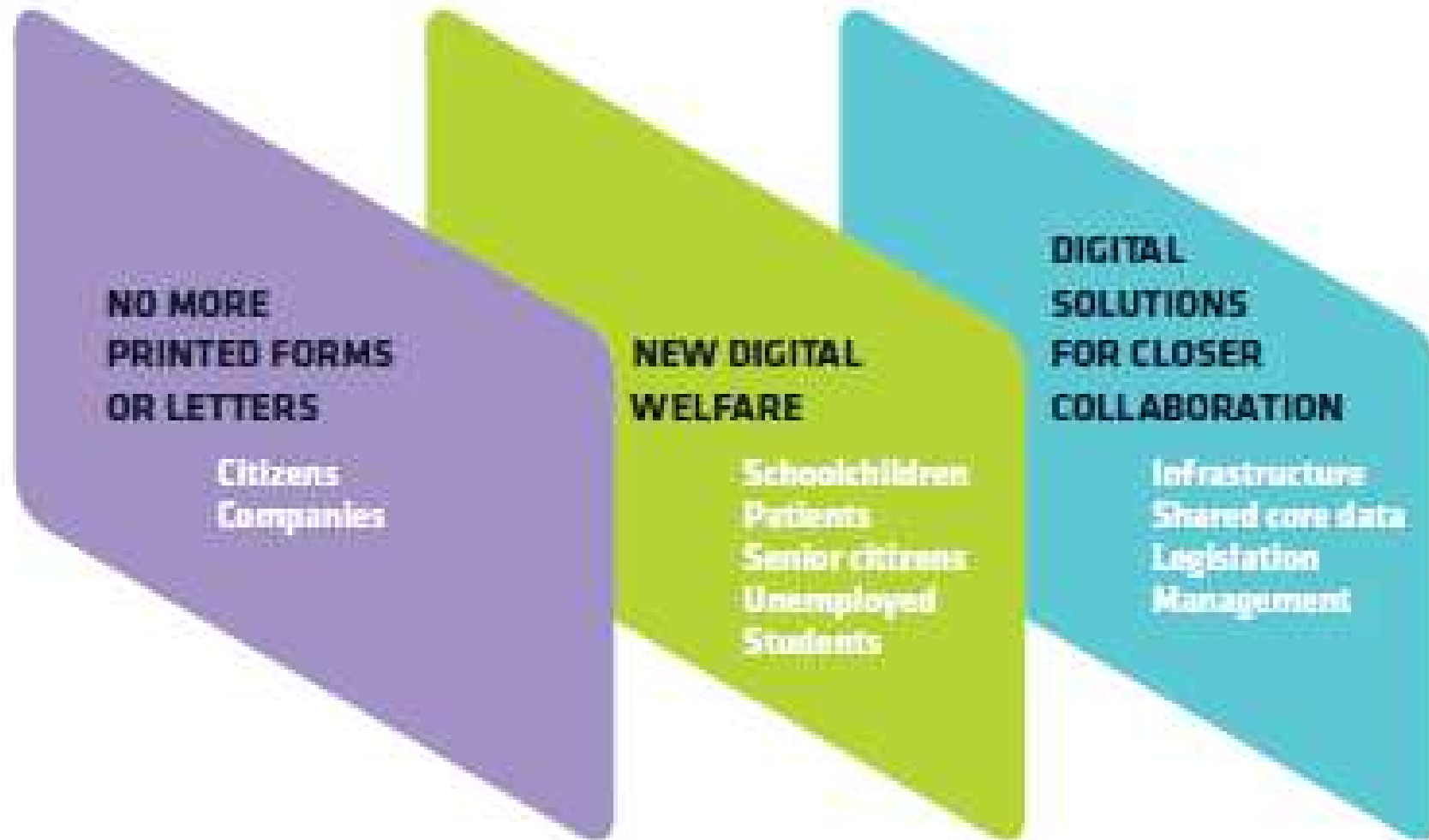


National eGov Strategy

- Ambitious strategy for 2011-2015
- Transition toward mandatory self-service for communications between citizens/companies and the public sector
- 80% of all correspondence digital form by 2015
- Presupposes NemID (digital signature)
- Improved public online self-services
- Mandatory digital post (2014)
- Legislative initiatives



STRATEGIC FOCUS 2011-2015: THREE TRACKS, VARIOUS AREAS

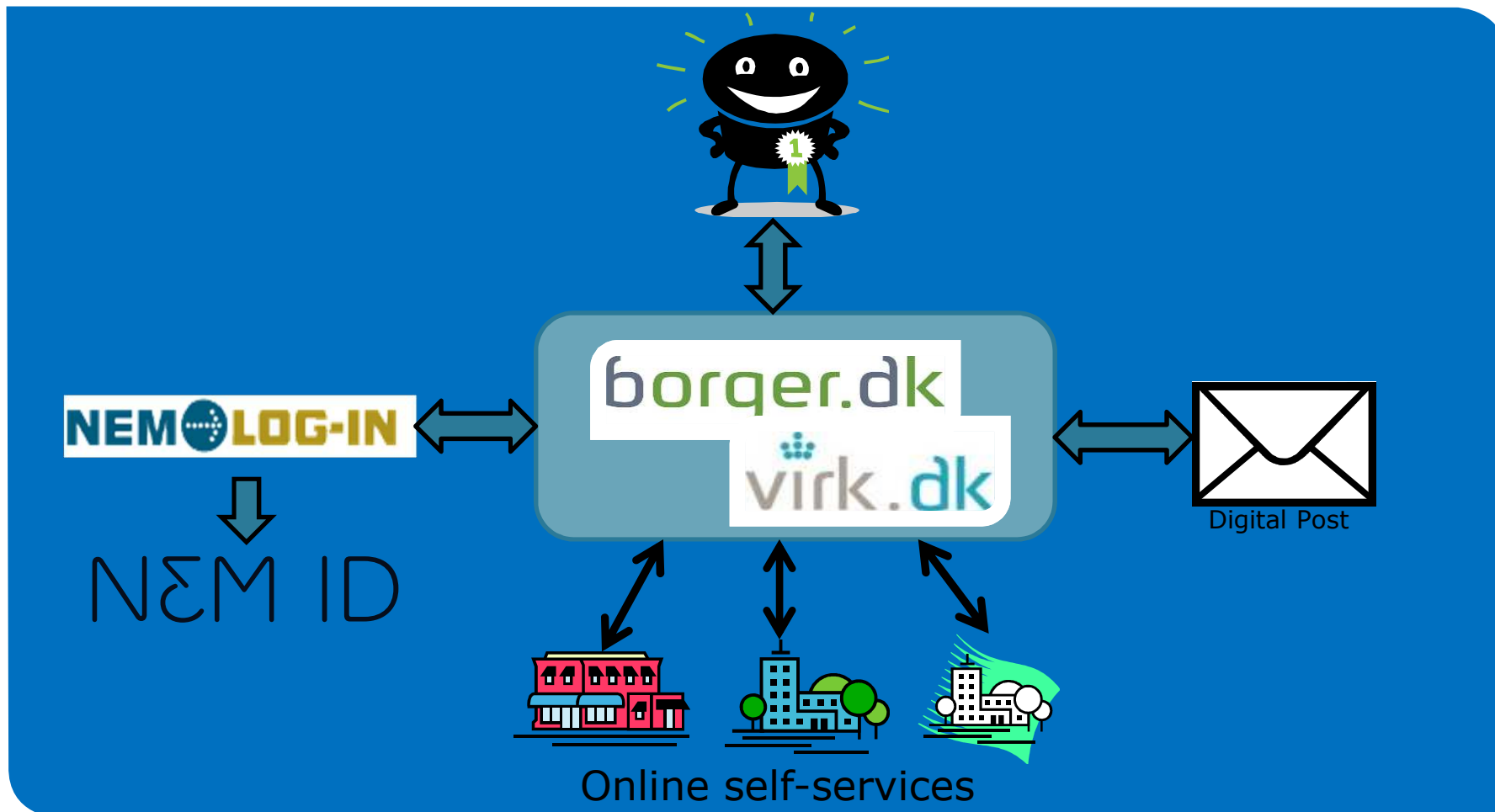


eGov Infrastructure

- NemLogin (= EasyLogin)
 - allows SSO across public online services
 - NemID used as credential
- Portals for citizens (Borger.dk) and businesses (Virk.dk)
 - Glass plate portals with SSO for public online services offered by different authorities
 - NemID used as credential
- Digital Post
 - Mandatory mailbox for all Danish citizens and residents
 - All public correspondance delivered to mailbox
 - NemID used as credential



Illustration of eGov infrastructure



Danish eSignature setup

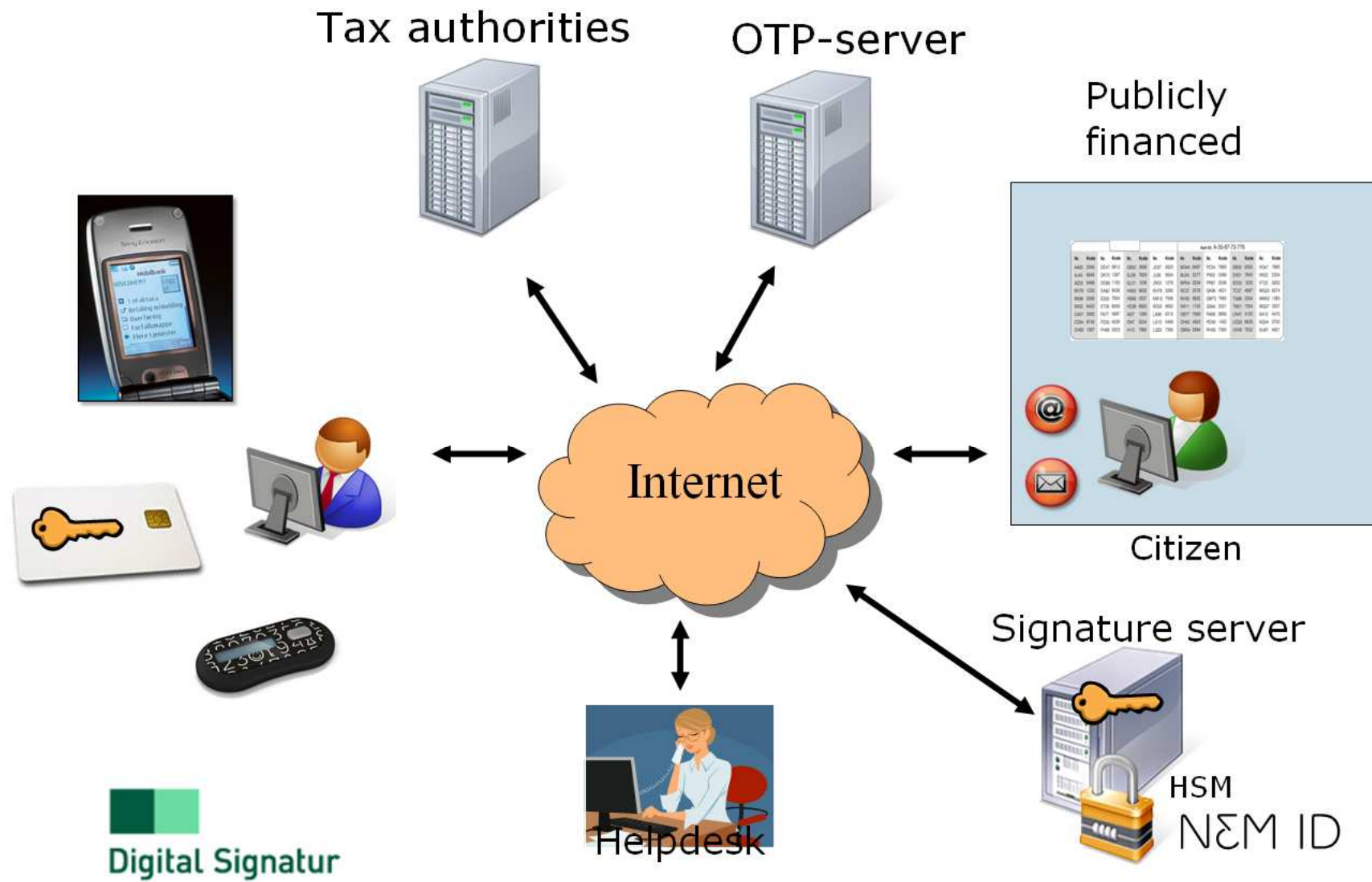
- NemID (= EasyID) for
 - ✓ Physical persons
 - ✓ Organisations, Employees, Devices
- Based on Danish National standard for public certificates (OCES)
- Operated by private company (Nets DanID) based on EU-tender
- Centrally stored keys for private persons
- Access with 2-factor authentication independant of pc



Danish eSignature setup

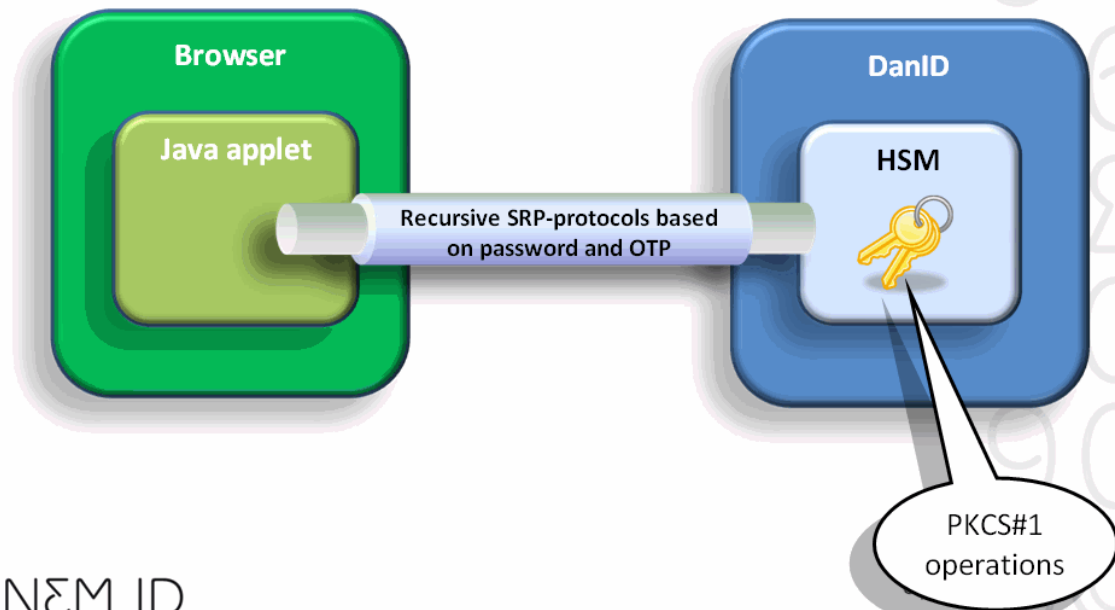
- Access to a large number of public services
- Private service providers use NemID
- Non QC – advanced electronic signatures
- Free for all Danish citizens and residents
- Free support for citizens
- Validation CRL's and OCSP
- Public services free validation





Secure tunnel from user to private key

Centrally Stored Private Keys



NEM ID

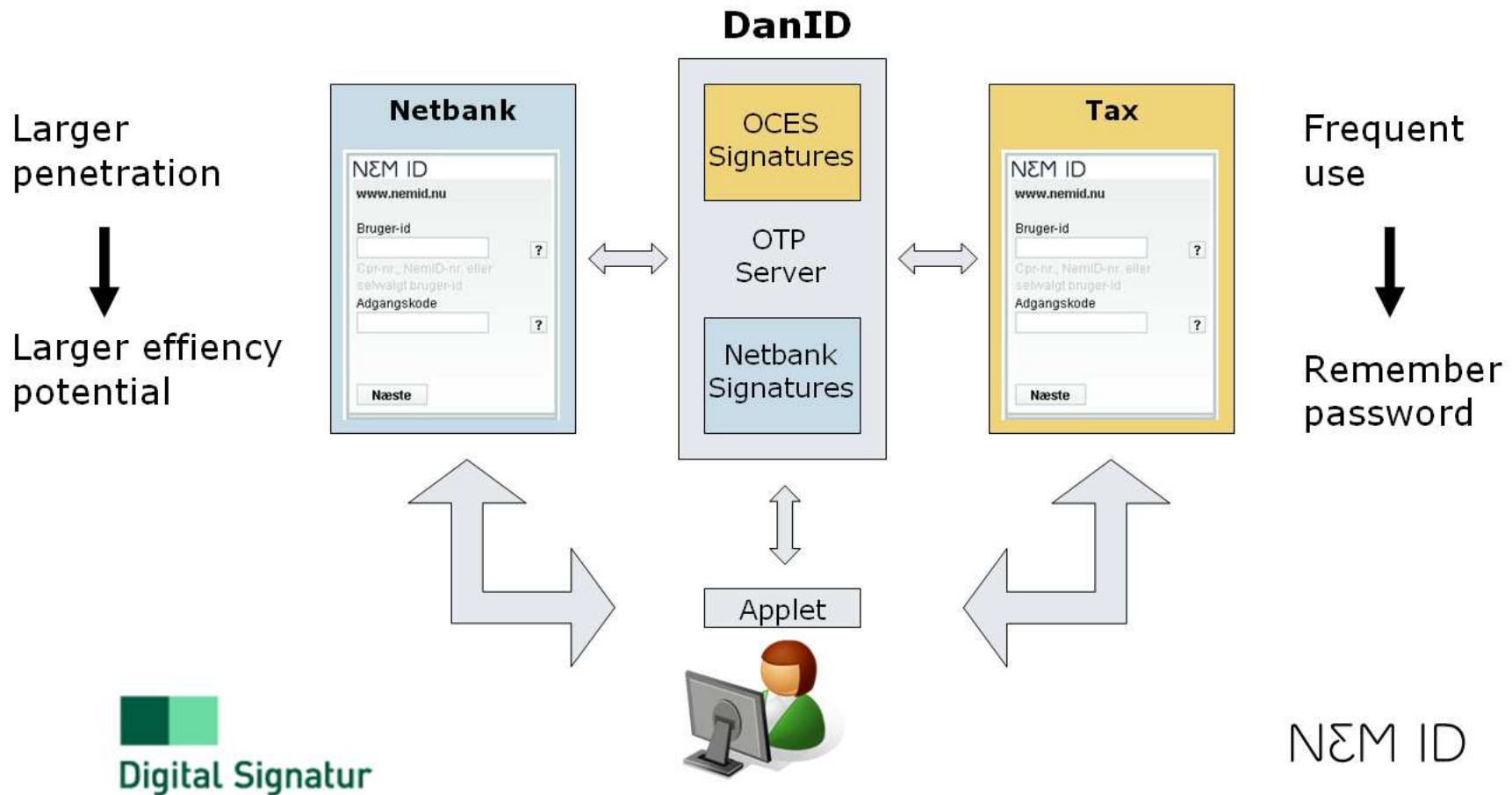


Danish eSignature setup

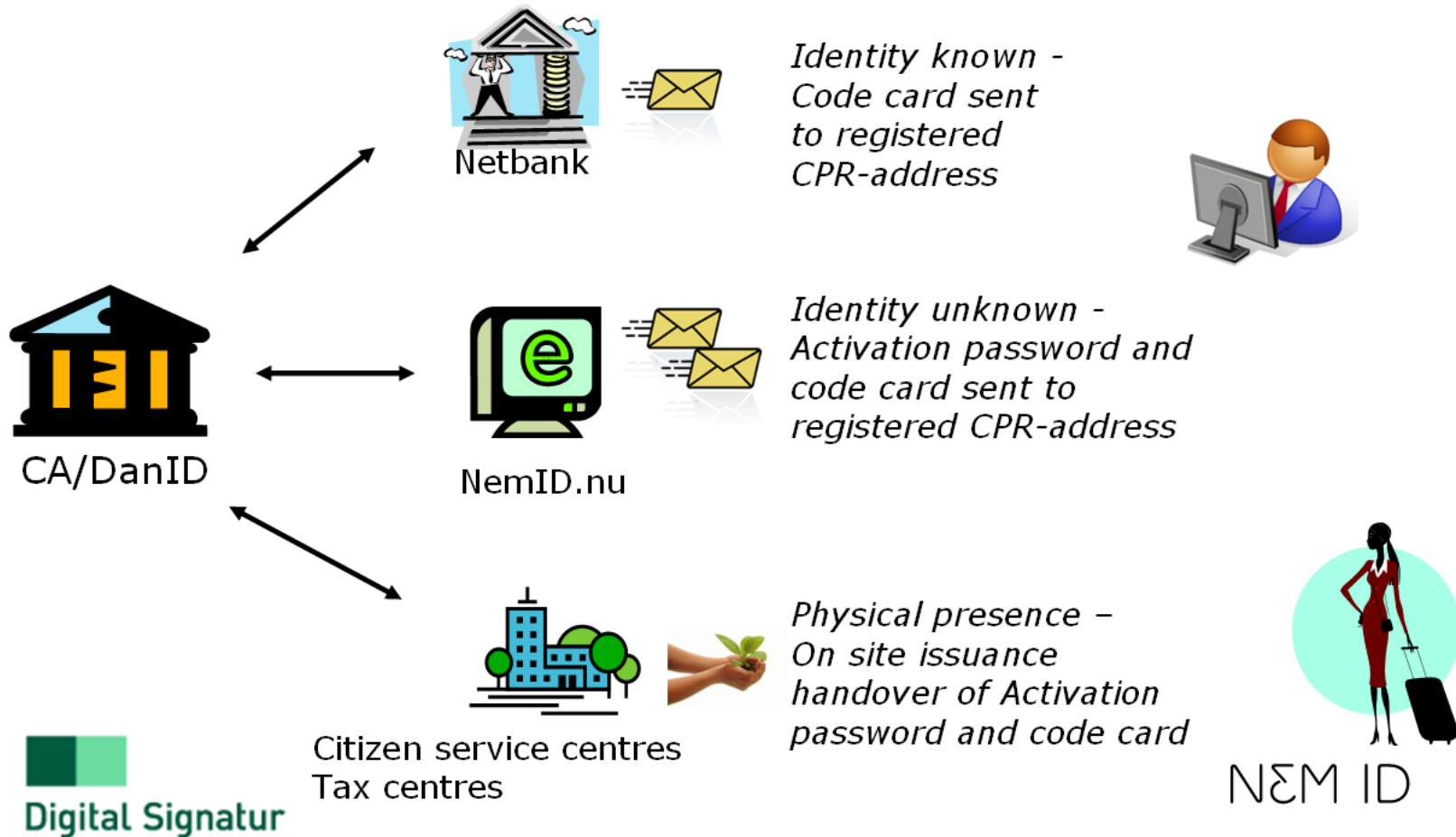
- Public/private partnership - common security infrastructure with banks
- 3.7 million NemID issued today
- Around 45 million transactions per month
- More than 400 public and private services
- Latest survey shows 97% of respondents have NemID, 96% favourable rating and 100% awareness



Common use of infrastructure



End user registration – based on requirements from law on money laundry and terror funding



eIAS Proposal and Danish esignature setup

- Extended scope - NemID - both eID and esignature
- NemID fulfills most requirements for notification
- Fits well with current Danish setup
 - ✓ Physical persons, Organisations, Employees, Devices
 - ✓ Centrally stored keys an option for QC
 - ✓ No limitations on transaction values in certificates
- Accessible for users with disabilities – already considered



eIAS Proposal and Danish esignature setup

- Free validation without technical requirements
 - ✓ Requires change of Danish business model
 - ✓ No technical requirements a challenge
- Mandatory acceptance - challenge needs clarification
- Technical uncertainties – need further specification
- Danish legislation direct transposition of directive – probably new legislation
- NemID pt not QC – in the future maybe QC



FURTHER INFORMATION

- NemID:
 - ❖ https://www.nemid.nu/om_nemid/about_nemid/
 - ❖ <http://www.digst.dk/ServiceMenu/English/Digitisation/Digital-Signature>
- NemLogin:
 - ❖ <http://www.digst.dk/ServiceMenu/English/Digitisation/NemLogin>
- Danish eGov Strategy:
 - ❖ <http://www.digst.dk/da/ServiceMenu/English/Policy-and-Strategy/eGOV-strategy>
- Danish Agency for Digitisation:
 - ❖ <http://www.digst.dk/da/ServiceMenu/English>

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