

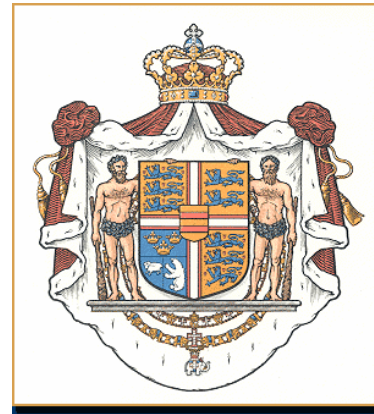


IT- og Telestyrelsen  
Ministeriet for Videnskab  
Teknologi og Udvikling

# Federation in e-Government

## Case: Denmark

IT Architecture Office  
National IT and Telecom Agency  
Danish Ministry of Science, Technology and Innovation



June, 2006 – Søren Peter Nielsen – spn@itst.dk



## Agenda

- A Few Facts about Denmark
- The Danish Reference Model
- Requirements for Federation in Phase 1
- Reference Architecture for SSO
- Criteria for Choosing Federation Standard
- Next Steps in Denmark



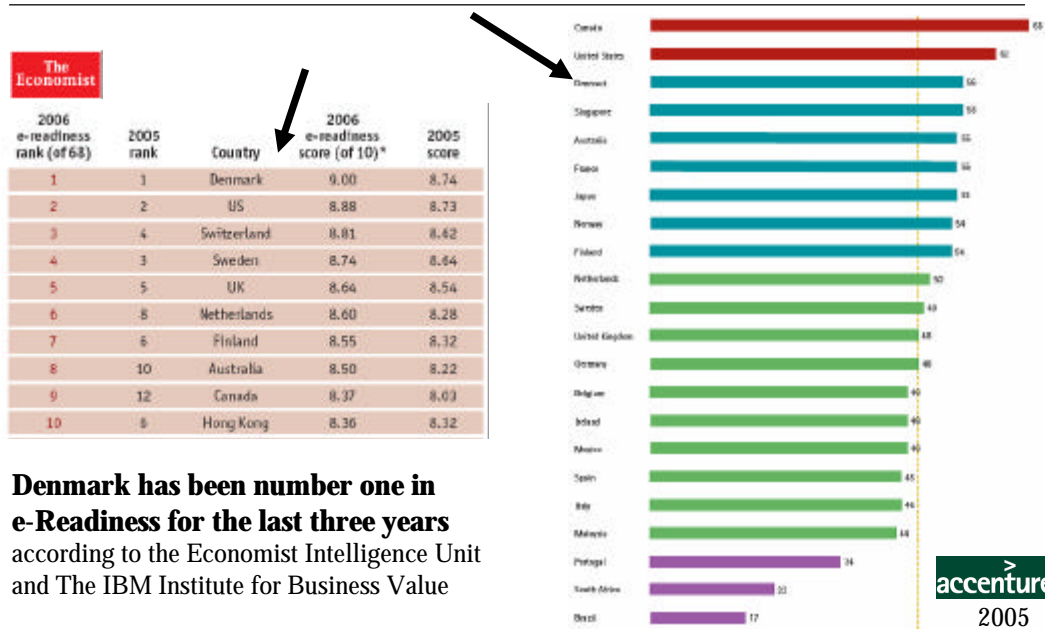
## Denmark - the Fundamentals



- 5.5 mill. inhabitants and one of the richest and most equal countries in the world
- Four levels of government with divided responsibility for tasks – both horizontal and vertical (EU, central government, counties (14), municipalities (268))
- Ongoing major structural reform – fewer regions, larger municipalities
- Public sector makes up 1/3 of workforce
- Consensus culture in a multiparty system



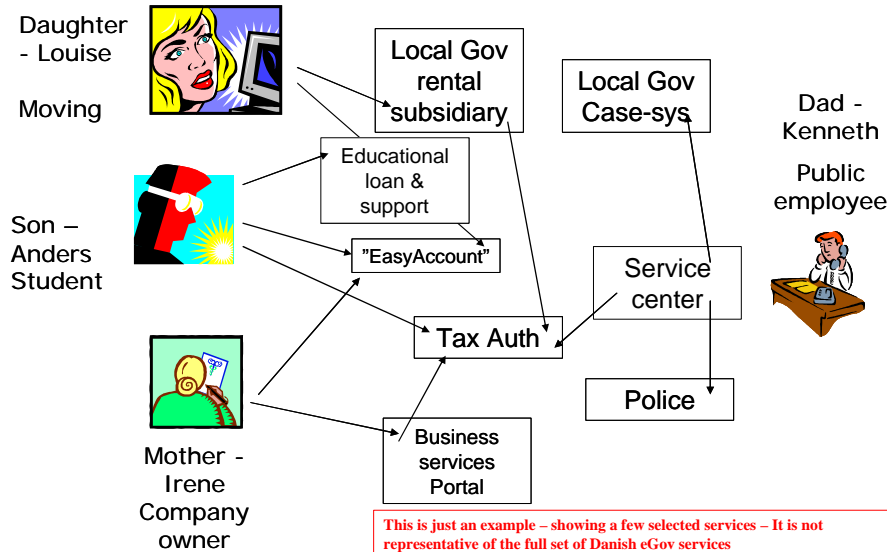
## Danish e-Government Maturity





## Danish e-Government so far has been through a Decentralized Approach

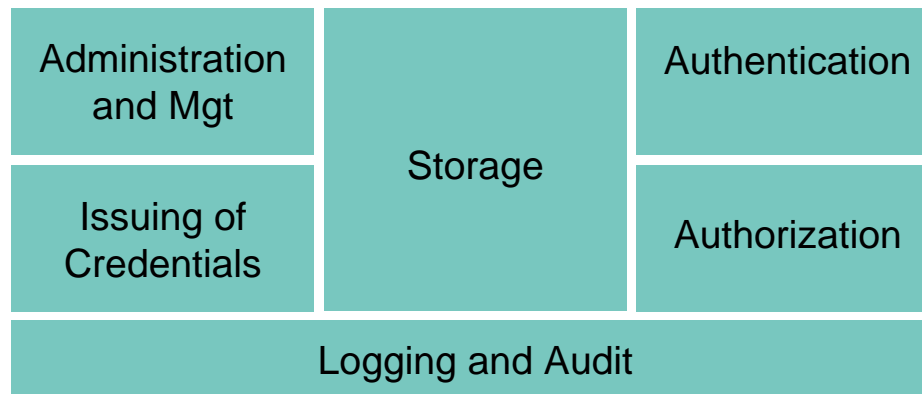
A "common" Danish family on a "common" day



*E-Government services are delivered by many different organizations*



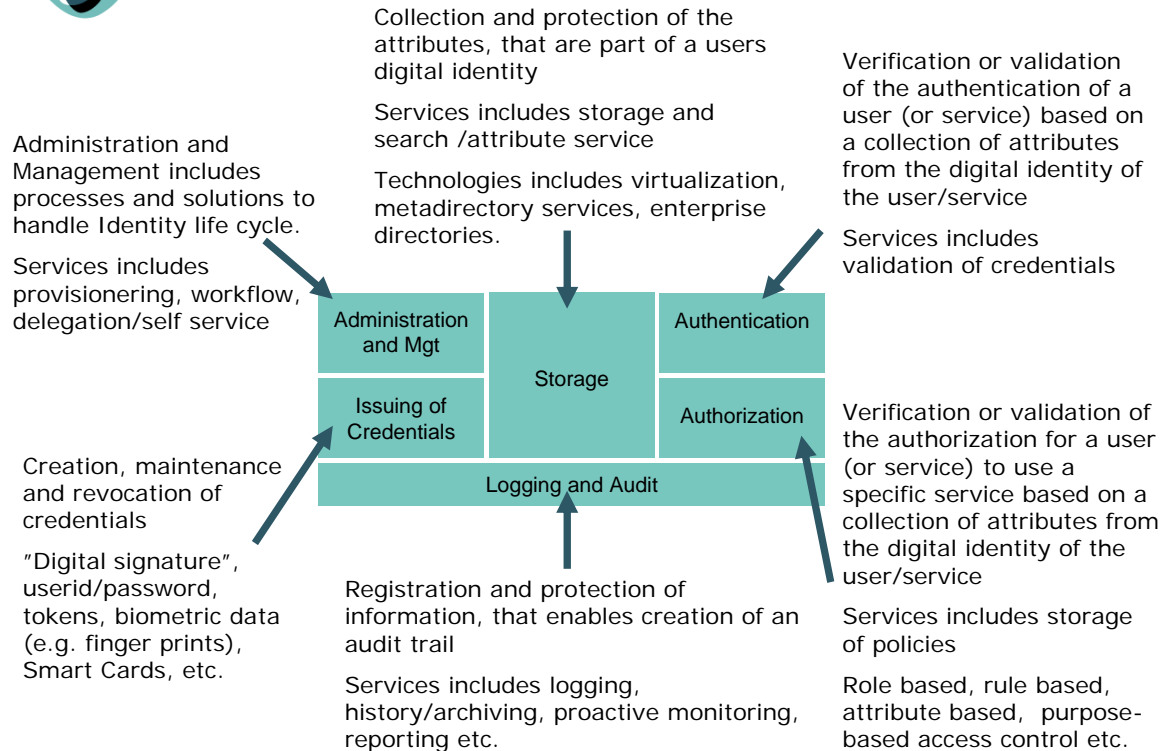
## The High Level Reference Model for Identity and Access Management



*The Reference model is to be used as a tool for thinking through, creating and sharing processes, services, & technologies for Identity and Access Mgt*



## High level reference model for Identity and Access Management



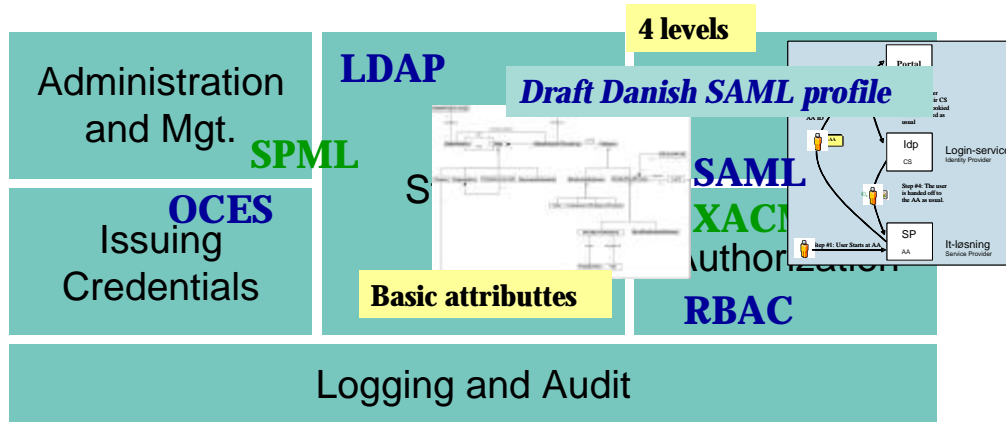
The model is inspired by a model from Booz Allen Hamilton



# Deliverables under the Umbrella of the Reference Model Includes

*Business case for shared login svc*

*Recommendations to local Gov*



Policies, Reference architectures, Information mdl, Standards, Profiles, Reference implementations, Pilots, etc.

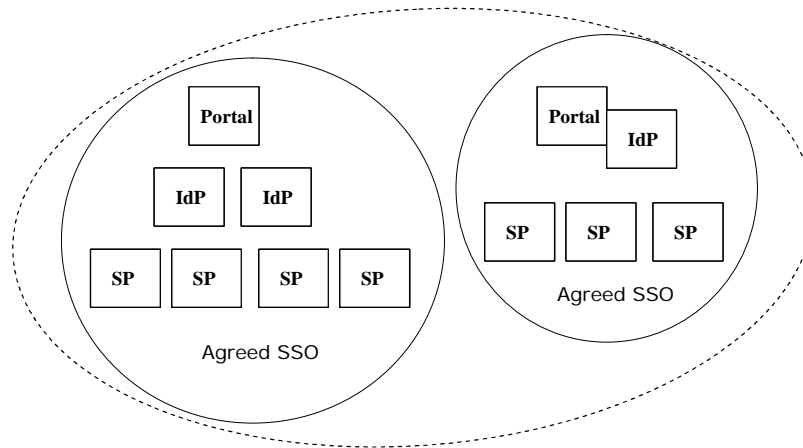


## Important Goals in the First Phase of the Work

- Support the ability of different authorities to use a shared login-service
- Single Sign-On (SSO)
- Establish a structure that can be the basis for exchanging authorisation information between independent organisations
- Embrace the use of different mechanisms for - and levels of - authentication

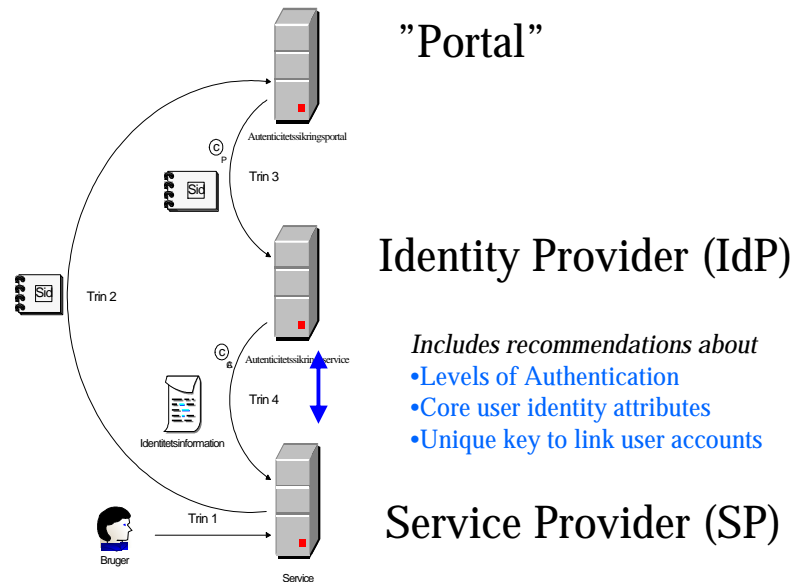


*It was also a goal to define an architecture with associated standards that allows for a decentralized approach where several smaller federations over time can grow into larger coherent federations without having to make changes to foundational policies and standards*





## Reference Architecture for Cross-organizational Single Sign On



*Conceptual Architecture is adopted from US Federal e-Authentication initiative*

*SAML 2.0 is the recommended federation standard*



## Basis for Recommending SAML 2.0

Based on an evaluation of

- Functionality according to requirements
- Support for the standard in commercially available products
- Usage of SAML in other public sector solutions
- Statements from research and analyst companies
- Ratified open standard
- "Composability" with other ratified standards like XACML and SPML
- Future development of the standard
- Availability of 3rd party Interop Testing/Certification



## Next Steps in Denmark

- Creating shared services for federation
  - Authentication
  - Catalog of common roles
    - Primarily for authentication by proxy
- Discussion paper about the Agreements and Structures required to create scalable Trust between many organizations
  - Including Privacy considerations

While supporting and making the initial deliverables operational with profiling, detailed specifications, pilots etc



## Additional Info

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Also watch the following as we update it:

<http://www.oio.dk/arkitektur/brugerstyring/english>