



## **eID technology perspectives**

Understanding and Using eID – A European Challenge

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# eID --- PREVENTIVE HEALTHCARE FOR ICT



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### Tax website shut down as memory stick with secret personal data of 12million is found in a pub car park

By DANIEL BOFFEY

Last updated at 3:05 PM on 02nd November 2008

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Ministers have been forced to order an emergency shutdown of a key Government computer system to protect millions of people's private details.

The action was taken after a memory stick was found in a pub car park containing confidential passcodes to the online Government Gateway system, which covers everything from tax returns to parking tickets.

An urgent investigation is now under way into how the stick, belonging to the company which runs the flagship system, came to be lost.



## eID :: SIMPLE SOLUTIONS EASILY BROKEN

Spammers create accounts at free mail services like Yahoo Mail or Gmail, but to make the process more efficient, they need to automatize it. The major challenge is that most web mail providers use [CAPTCHAs](#) ("Completely Automated Public Turing test to tell Computers and Humans Apart") and they are difficult to solve automatically. Last month, [Websense Security Labs](#) discovered that spammers managed to create bots that automatically sign up for new Gmail accounts with a success rate of 20%.

<http://googlesystem.blogspot.com/2008/03/more-spam-originating-from-gmail.html>







[http://webspamprotect.com/captcha\\_service.php](http://webspamprotect.com/captcha_service.php)



# ATTACKS ARE A BUSINESS

## Soloway case reveals big business behind spam

By Nancy Gohring , IDG News Service , 07/15/2008

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Selling the tools used by spammers is easy money, at least until you get caught. Just ask Adam Sweaney, a man charged with computer fraud who took the stand at the sentencing hearing in Seattle for Robert Soloway, the so-called spam king.

Sweaney said he earned about US\$2,500 a month for a couple of years selling botnets that could be used for a variety of activities including sending spam e-mails. He didn't even write them himself, but he traded or bought them in online forums, he said.

<http://www.networkworld.com/news/2008/071508-soloway-case-reveals-big-business.html>

Security threats are changing. However there is not sign that the overall security and security perception is improving.

## eID :: KEEPING THE FOCUS



By 2010 all European citizens, businesses and administrations shall benefit from secure means of electronic identification (eID) that maximise user convenience while respecting data protection regulations. Such means shall be made available under the responsibility by Member States but be recognised across the EU.

By 2010 Member States will have agreed a framework for reference to, and use of, authenticated electronic documents across the EU.



## eID :: ALL NEED TO UNDERSTAND THE DIFFERENCE



- travel documents and biometry
  - too often misunderstood in its purpose important but out of scope for the internet
- identification + authentication
  - e.g. banking :: eID by itself is not a willful act concerning the content
- **identification for the internet**
  - **security privacy**



## eID :: COPING WITH TECHNOLOGY „TRENDS“

- **CONTACTLESS**
  - it is not only a technology challenge
  - physical disconnection needs new paradigms
- **MOBILE AND MULTICHANNEL**
  - it is on the table since long
  - the challenge has not yet been met
    - TECHNOLOGY
    - BUSINESS CASE
- **THE USER AND THE SERVICE RESIDES IN THE CLOUD**
  - shared services
  - cloud computing
  - INFO CARD, LIBERTY ALLIANCE, DK,DE,FR,NZ,AT .. eID DOMAINS



# MISSING QUALITY eID HAS SEVERE CONSEQUENCES

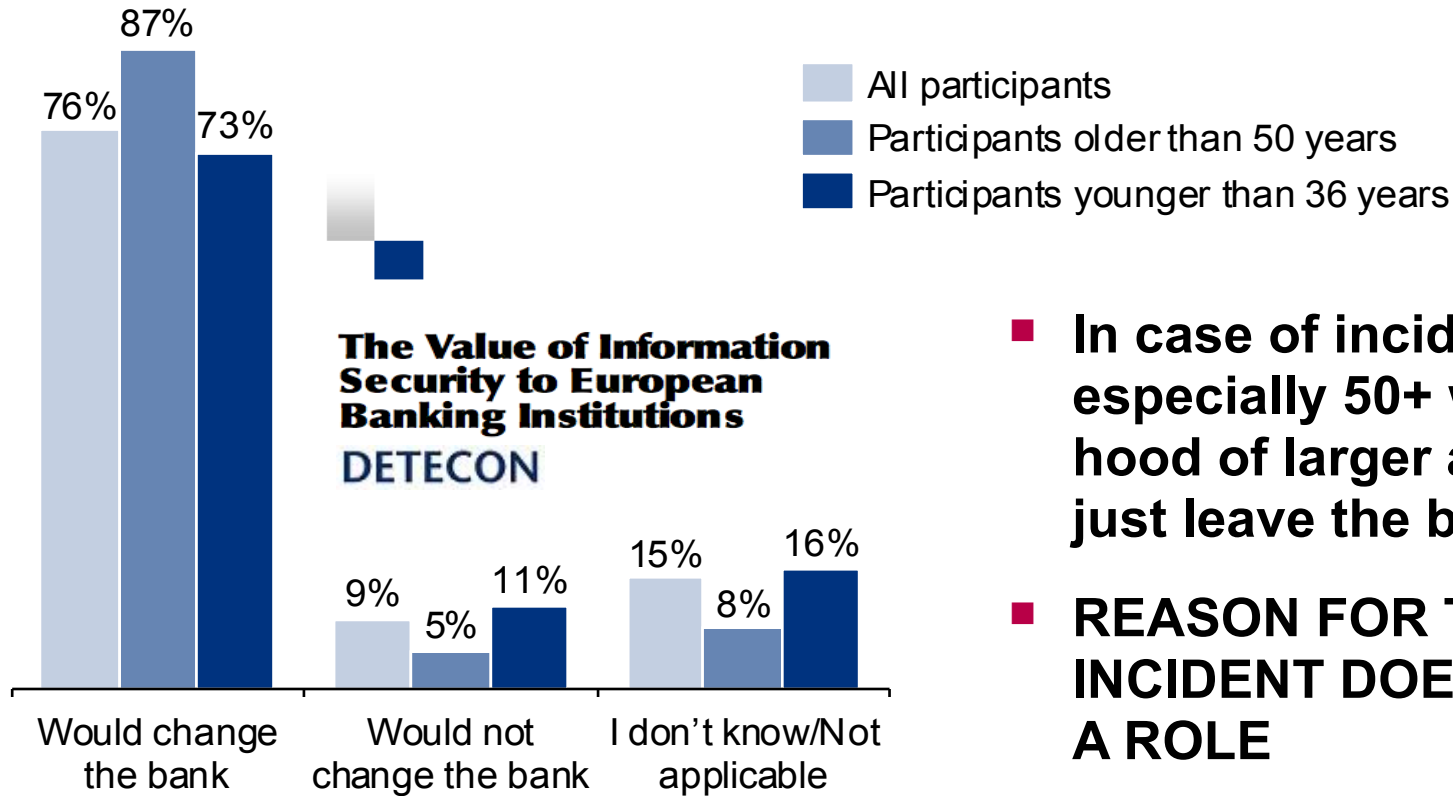


Figure 8: Intention of changing the bank in cases of security breaches (lacking confidentiality).

- In case of incidents users – especially 50+ with likelihood of larger accounts will just leave the bank
- **REASON FOR THE INCIDENT DOES NOT PLAY A ROLE**

**BANKS WILL NEED TO OFFER SECURE METHODS TO KEEP THEIR CLIENTS.**





## HOW Can eID WORK

### ■ WHAT I HAVE + WHAT I KNOW

- personal token
- personal secret

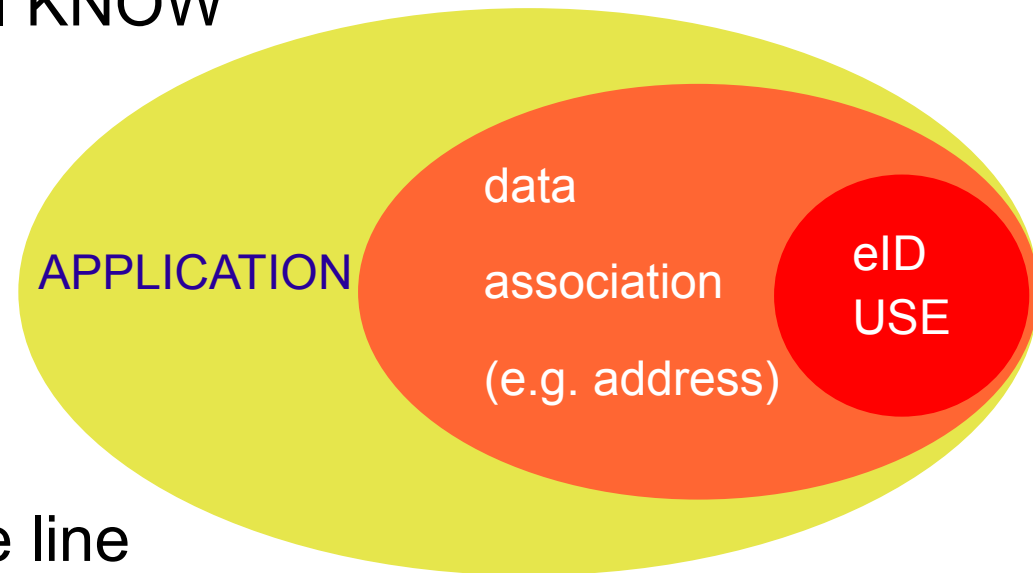
### ■ NO TOKEN?

- exposed to phishing
- exposed to tapping the line

### ■ NO PERSONAL SECRET?

- exposed to token loss
- biometric features not assumed to be secrets

### ■ BOTH FEATURES NEEDED FOR SUSTAINABLE eID





## WHAT DO WE NEED TO PREVENT FROM

- **abuse by the owner**
  - passing on knowledge and token
  - might be breaching of law / contract in some cases but unlike with ID-documents this is not a real abuse
  
- **abuse by third party**
  - **without knowledge / consent of the owner**
  - **CRITICAL eID RISK**



# STORK = A MAJOR STEP

	Description	LEADER
WP1	Project Management	Atos
<b>DEFINITION</b>		
WP2	eID inventory, trust and application groups	NL MOI
WP3	eID and upcoming technologies	AT TUG
<b>ARCHITECTURE</b>		
WP4	eID process flows	UK IPS
WP5	eID and common specifications	BE FEDICT ES MAP
<b>IMPLEMENTATION</b>		
WP6	Pilots (specification – definition – implementation - evaluation)	
WP7	Communication and Sustainability	Gov2U





# THE PILOTS = A PRIME NEED

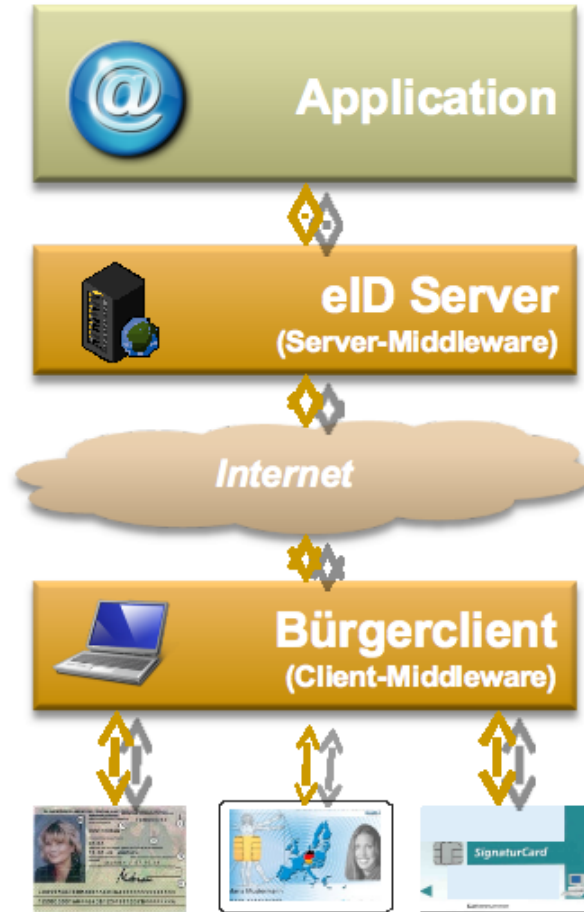
	<b>Pilot description</b>	<b>LEADER</b>
<b>PILOT 1</b>	Cross-border authentication platform for electronic services	<b>UK IPS</b>
<b>PILOT 2</b>	SaferChat	<b>IS MOF</b>
<b>PILOT 3</b>	eID Student mobility	<b>ES CRUE</b>
<b>PILOT 4</b>	eID Electronic delivery	<b>AT TUG</b>
<b>PILOT 5</b>	Change of address	<b>PT AMA</b>
	Evaluation and feedback	<b>NL MOI</b>



# STORK = INTEROPERABILITY



## AT-DE eID synergies



## A2A INTEROPERABILITY



- **STORK to integrate into ECAS enabling eID for access to services of the EU for Member states. The goal is to access CIRCA, IMI and such like services.**
- **FIRST TRIAL IMPLEMENTATION TO BE IN OPERATION BY END OF 2009**
  - BE
  - UK
  - AT



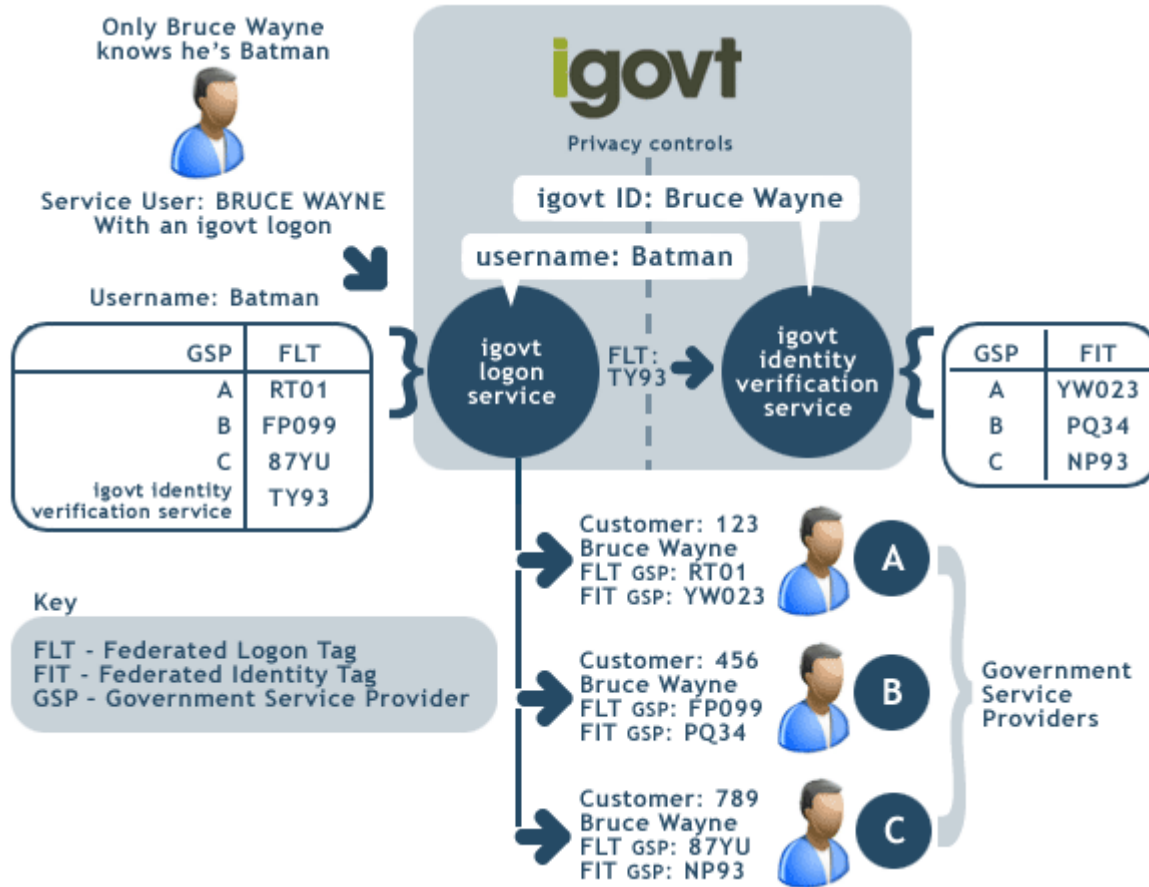
## eID WHOM TO IDENTIFY

- natural persons
  - in the interest of individual, business and government (Manchester declaration)
- non-natural persons
  - eID/mandates in the interest of governments (companies)
- services
  - today not efficiently done
  - in the interest of the individual / privacy etc.

WITH THE VERY DIFFERENT SCENARIOS (BUSINESS, GOVERNMENT, SOCIAL NETWORKS,..) WE FACE A VARIETY OF DIVERGING INTERESTS, DEMANDS AND DRIVING FORCE IN THE FIELD OF eID



# INCREASING DATA PROTECTION NEEDS



- NOT ONLY IN EUROPE (EXAMPLE NZ)
- EUROPE
- DK
- DE
- AT
- enabling cross domain activities
- enabling business use

**DIVERSIFICATION OF IDENTIFIERS**  
**EU2009.CZ**



# STEADY TECHNOLOGY CHALLENGE



MOBILITY

SECURITY

INSTANT USE  
ZERO FOOTPRINT

## Valimo Provides Telenor Sweden With Mobile ID Service

Telenor Sweden is the third largest mobile operator in Sweden based on number of subscribers, with a market share of 18 percent and 1.8 million mobile subscribers. Telenor Sweden will run a pilot in the next phase of Mobile ID service powered by Valimo during 2009.

The need for new authentication solutions like Mobile ID is rapidly growing in the Nordic region, as governments, the public sector and financial institutions are looking for ways to access online and mobile channels for accessing their services. These new services require more secure and user-friendly authentication methods such as Valimo Mobile ID.

Operators are recognizing the unique opportunities that mobile authentication and signature technology enable. New services are quickly being made available across Europe and Sweden leads the way in the Nordic region. For further information, Telenor

**COMMERCIAL MESSAGE**



## WE NEED A BETTER UNDERSTANDING OF eID

- NEED TO UNDERSTAND ➔ a Metaframework
- common understanding of goals
- common understanding of needs
- compliance classes and certification?
- THE AVENUE TO GET THERE
- interoperability
- bilateral / multilateral interworking
- WE WILL PROBABLY NOT YIELD A STANDARD
  - BUT A SET OF STANDARDS EVERYONE UNDERSTANDS
  - COMPARABLE TO WEB AND BROWSERS

# POSSIBLE FUTURE DIRECTIONS

## EUROPEAN CITIZEN CARD



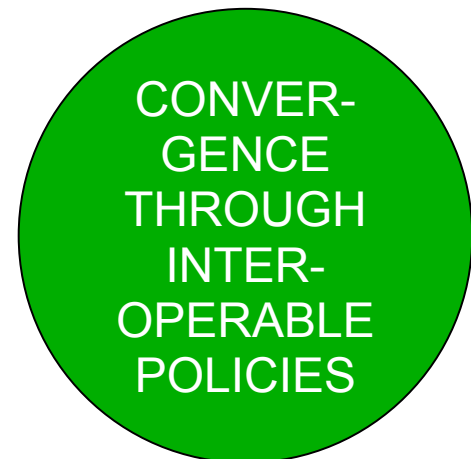
are we ready for this  
level of detail?



## USER-CENTRIC eID METASYSTEMS



principles with a focus on  
the user, his/her rights and  
benefits need to play the  
central role



CONVERGENCE BY  
MEANS OF STANDARDS

**THANK YOU FOR LISTENING**