France Telecom R&D initiatives for Liberty in Europe

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Why European initiatives

- Nov 2003: France Telecom Executive Committee to go Liberty (ID-FF) for the whole group

- Launch of 2 R&D programmes at FTR&D
  - Liberty Anticipation to address technical matters
  - Liberty Deployment to support Business Units

- A European programme, within Liberty Anticipation,
  - to launch sponsored European cooperative R&D projects
  - with privileged partners: telcos and industry
  - with academia, particularly for the privacy matters
  - with public authorities
  - to contribute to a Liberty favourable context in Europe
  - to influence regulation and standardization
Three layers of R&D sponsored programmes

- **Research**
  - EU VIth FP
  - EUREKA
  - Medea – Itea Celtic
- **Application**
  - IDA
  - E CONTENT
  - E-TEN
- **Support**
  - I.A.P.
  - E EUROPE
  - MEDIA +

France Telecom
Corporate Function Technology and Innovation
A Eurescom strategic study

ID-A3

ID management enabling AAA Services within a Liberty scheme

2004
http://www.eurescom.de/

Eurescom
- European association of telcos
- R&D coordination
- Funding for Short Studies
- Selection by PAC
- Participation offer by partners
A short study: IDM enabling AAA Services within a Liberty scheme

- DT (Study Leader), Telenor, France Telecom, Elisa, in 2004
- Potentials of ‘http level’ Id Mgt with ‘network level’ authentication
- What are the dangers to carrier’s customer relationship through online-enabled identity providers?
- How can telcos become IdP on the basis of existing AAA infra?
- Can carrier’s services like accounting and billing be adopted to work in an Id Mgt environment?
IdM / AAA inter working within a Liberty Scheme
Telcos assets to go IDPs

- Convergent Services
  - Telcos have a central role and experience
  - Can map between different technos & IDs
- Provide everything from "one desk"
- Trusted reputation of global telcos
- Already existing large customer base
  - Easier to establish an IdM relationship

Services

Primitives

Access

Identification / authentication

Mobiles: GSM/GPRS/...UMTS

Fix services

Convergent services

Internet services

Broadband Internet

Fix access network

Technological reachability

Presence

Contacts

Payment
Threats to Telco's business

S Competition in the network providers market
  Q Ubiquitous connectivity

S Competition in the Identity and Attribute Providers market
  Q Knowing how to reach a person, needed to ensure …
  Q Knowing a person credibility for financial transactions
  Q Knowing data specific to the business

S Potentially increased liability issues

S Before setting a COT, telcos should launch:
  Q Risk analysis for different SP, AP and IdP responsibility and liability.
  Q Financial risk evaluation (solvability)
  Q Risk of reputation lost estimation

S The ultimate risk: to become a bit carrier only
A Eureka-Celtic proof of concept

FIDELITY-PROJECT
Federated identity management based on Liberty

2005 - 2006
European association of 34 states
R&D coordination at the level of Ministries
Funding by the governments in line with national decisions
Eureka Calls for proposals, every year
Technical development oriented
Three main initiatives dealing with telecoms:
- Medea: Micro-Electronics Development for European applications
- Itea: Information Technology for European Advancement
- Celtic: Cooperation for a sustained European Leadership in telecom
CELTIC (2004-2008): a 5-year Eureka “cluster” project

- Second call, 1st quarter 2004
- Purple Book, 10 domains of activity
  
  **Services and applications**
  Management of services and networks
  Multimedia
  Customer premises equipments, networks & terminals
  Broadband access networks
  Mobile & wireless, Broadband transport networks
  Components and **Security**
Global objectives

- To demonstrate technical viability of Liberty approach in a pan-European context
- To demonstrate interoperability of ID feature exchanges between IdP and SP (ID-FF and ID-WSF)
- To set 4 Circles of trust with telcos as IDPs (Fin, Nor, Fra, Spa)
- To test use cases including
  - Non HTTP services,
  - Mobile services
  - Smart cards

Consortium

- 11 organisations (4 Telcos, 3 Industries, 3 SMEs, 1 Univ.)
- 800 Men-Months, 9.5 Million Euros for 2 years (2005/2006)
FIDELITY-PROJECT: 4 COTs

Norway Circle of Trust
- Norwegian Internet provider (IDP/DS)
- Norwegian Attribute providers
- Norwegian Service provider

Finland Circle of Trust
- Finnish mobile provider (IDP/DS)
- Finnish Attribute providers

France Circle of Trust
- French Internet provider (IDP/DS)
- French Attribute providers
- French Service providers

Spain Circle of Trust
- Spanish Internet provider (IDP/DS)
- Spanish Attribute providers
- Spanish Service providers

Liberty Alliance protocols
On-card implementation of ID-FF/ID-WSF

France Telecom
Corporate Function Technology and Innovation
Workpackage structure

- **WP1 Requirements**
- **WP2 Specifications**
- **WP3 Implementation**
- **WP4 Evaluation**
- **WP5 Security and privacy**
- **WP6 Dissemination & standardisation**
- **WP7 Management**

Advisory Board
Advisory Board

Up to 10 members, country per country, under the guidance of the Telco, with privileged partners (Customers, SPs, Security SMEs…)

Global objectives

- Make the link with users and partners
- Get an external view to the project.

Specific objectives

- AB participates to the requirements and the use cases
- Telcos present the benefit of the LA approach for IDM
- Consortium shares the IDM vision with service providers

A confidentiality agreement
A memorandum of understanding.
An IST proposal
(Information Society Technologies – E.U. R&D programme)

FRIENDS
(Fostering trust in e-government authentication and id management systems)

2006/2007/2008
Information Society Technologies, EU sponsored with 3,6 B€
6th Framework programme, 2002-2007,
March 2005 : 4th Call (with approx 800 Meuros)
5th Call open (Closed in September)
2/3 of the budget dedicated to the new research instruments
Integrated projects
Network of Excellence
1/3 to the traditional instruments
Specific Targeted Research Projects (Classical projects)
Work programme, call text, Information package, etc.
FRIENDS-PROPOSAL

- In complementarity with the FIDELITY-PROJECT
- A strong focus on Liberty IDM for e-gov. services
- Objective 249 of IST 4th call: ICT for innovative e-government services.
- A consortium of 15 partners from 7 countries:
  - Telcos
  - Industry: hardware and software, smart cards
  - Universities
  - SMES
- A three year project, with 900 Men/Months and a budget of 11 Meuros.
FRIENDS-PROPOSAL

FRIENDS will deliver:

S Specifications on five major functionalities, required for identity management (IDM) in an EU context and which are not (or not sufficiently) addressed in the Liberty frameworks.

S Proofs of concepts and demonstrations of these specifications.

S Technical contributions about the five major functionalities,

  QTo be submitted to the standardisation bodies.

  QAs part of a European strategy for the standardisation of these key components.
FRIENDS Overview

Liberty IDM framework (SAML v2 & ID-WSF)

Identity provision
Federation
SSO
Attribute Sharing

WP 11 Requirements

Privacy & security
Roles & multiple identities
Seamless access
Authentication systems
Accounting systems

Advisory Board

European E-Gov Services

V.A.T
Procurement
Income & Taxes
Town-Hall
Health

FRIENDS Overview

France Telecom
Corporate Function Technology and Innovation
A conclusion on FT initiatives

- To promote the Liberty approach in Europe, with our cooperation schemes
- To create a European community around the Liberty standards
- To promote the Liberty standards into the European bodies (ETSI and CEN-ISSS)
- To think of what can be done in such European frameworks
  - QPASR programme
  - QFuture Security sub-programme in the 7th EU FP
  - QE-TEN
  - QOther actions
EU Commission's conclusion

Concerning e-gov., the EC’s communication, i2010, notes that:

- “much remains to be done to demonstrate economic impact and social acceptance” of e-government.
- “there is still a need to develop common interfaces, portability of identity from one system to another and authentication systems”.

A lot of opportunities for further cooperation in Europe.

Thank you for your attention

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