

eID Observatory

29 September 2009

European Large Scale Action on Electronic Identity Infrastructure

Raising the Game: Implementation of A Strategy for ICT R&D and Innovation in Europe

Aniyan Varghese, European Commission





Objectives of strategy

- Establish Europe's industrial and technological **leadership**
- Facilitate the **emergence & growth** of new markets and businesses
- Increase Europe's **attractiveness** to investments and skills
 - **Seizing new opportunities & reinforcing current strengths**
 - New opportunities for leadership
 - Europe is well-positioned





Two main barriers to growth: Underinvestment & Fragmentation

- Fragmentation of markets
 - No single European market
 - Fragmented public demand
 - Weak cross-portfolio interaction in the public and private sector
- Fragmentation of R&D and innovation investments
 - Few world-recognised poles of excellence
 - Lack of common visions, targets, approaches
 - Lack of coordination across the knowledge triangle





Raising the Game

additional to collaboration on driving innovation
and to capacities building: infrastructures & skills

- Actions to address both *supply & demand*
 - Address Europe's socio-economic challenges
 - Open new markets and new business
- Closer articulation of *EU & MS & regional* actions
 - Shared by the different stakeholders
 - Implemented in variable configurations at different levels
 - EU-level actions must continue to build on, leverage and add value to national and regional initiatives
- Policy to *cover a range of activities*
 - From R&D and stimulation of technology uptake to procurement and deployment of solutions
 - Cutting across 'Knowledge Triangle' (research, innovation, education) & other EU policies





Strengthen investments

- Strengthen *public* investments
 - Grants to projects: **increased commitments in FP, ICT-PSP.. MS programmes to match this ...**
 - Pre-commercial procurements:
 - Cohesion/structural funds policy funds:
 - **Attract *private* investments**
 - Public-Private Partnerships:
 - Private equity funds, loans:
 - Cluster policies, support to innovative SMEs ...: **targeted innovation infrastructures, business expertise support, ...**
- *Monitor & benchmark:*





Strengthen collaboration, concentrate & specialise resources

- Shared visions, strategies and policies
 - National ICT Research Directors Forum ... ICT Advisory Group ... European Technology Platforms ... other policy areas ...
- Pooling of resources and common roadmaps
 - Public-Private Partnerships ... PPP in R&D, Joint Technology Initiatives, Joint Research Programmes., ICT-PSP Large Scale Pilot
 - Research and innovation clusters
 - planning, implementing, sharing R&D infrastructures
 - ICT as a priority area for EIT KICs (European Institute of Innovation – Knowledge and Innovation Communities)
- International cooperation
 - Global partnerships to tackle S&T and socio-economic 'grand challenges' ... defining priority areas together ...





Open new EU-wide markets for innovation

- Piloting and showcasing innovations in real-world settings
 - Pan-European pilots in Competitiveness & Innovation Programme ...
 - Innovation pilots at national, regional and local levels ...
- Eliminating the barriers for development of EU-wide markets for innovation
 - Certification, standardisation, regulation, public procurements ...
- More intense collaborations
 - Between users and producers ...
 - To define and implement public demand for innovation ...





Support projects cutting across research, innovation and deployment

- Aim is for a limited set of *project cases* that cut across the innovation chain
- Each project focused on *specific characteristics* of a pan-European service infrastructures addressing a *specific societal goal*
- To speed up the achievement of results there is a need to *orchestrate efforts across* research, innovation and deployment
 - e.g. multi-financed large-scale initiatives in FP and CIP and national and regional actions including procurement of R&D and innovation





Example project: cutting across research, innovation and deployment

- Pan-European electronic identity (eID) management and service infrastructure
 - *Specific societal goal*: access to and provision of all services to citizens and businesses ...
 - *Specific characteristics*: multi-faceted, trustworthy, interoperable ... with simple authentication ... respecting privacy ...



An electronic identity management (eIDM) infrastructure

for trustworthy services in
e-Government and e-Commerce
in the European Union

A Long-Term Vision – 'Beyond STORK'

Chief characteristics:

- a world of *unlimited bandwidth, permanent access, pervasive connectivity, and semantically seamless interactions*
- an information society where users and services are safely, effortlessly matched and linked together
- citizens, business retain complete control over their identities: empowered to manage & protect their data effectively, with both accountability AND anonymity

Q: What different views are there of a long-term vision ?

Q: What should be a medium term target?



Transformational nature of Ubiquitous Deployment of eIDM

- Automation & streamlining of business processes, enhancing provision of Public Services
- Simplify / streamline transactions
- Empower Citizens to manage and protect their data with accountability & anonymity:
 - strong privacy protection while enabling anonymity revocation on disputes or prosecution.
- Greatly enhanced security and trust
- Eliminate/reduce: unwanted disclosure, difficulty of use, fragmentation of solutions, barriers between entities due to lack of trust, etc.



eID model, technology, mobility

Ubiquitous deployment is a key requirement. Citizens and Businesses are autonomous, dynamic entities in constant motion. Electronic identities will have to accompany them

- Q: What is the nature of electronic identity itself?
- Q: What paradigm is to be followed (usage scenarios, trust model, architecture)?
- Q: What infrastructure elements needed to support eID, including mobile eID?



Public/Private partnership

A significant part of the eID infrastructure installed, owned and operated by private entities/businesses; Private sector & Public Administrations need to work together.

The future infrastructure has to be sufficiently aligned with the long-term vision, including sustainability

Q: What elements of the infrastructure must remain in government hands / under government control?

Q: What is the proper legal basis for cooperation and consultation, incl. codification of obligations of private entities handling eID-based transactions?



eIDM-Regulation considerations?

- Identification of legal barriers to cross-border infrastructure & trust
- Reinforcement of privacy protection
- Definition of the responsibilities of different parties : liability limitations, protection of transactional traces, etc.
- Definition of responsibilities of the parties responsible to operate & manage different parts of eIDM infrastructure, e.g., SLA's (Service level agreement)
- Specification of convergence targets & other elements of a harmonized approach :. standardization, monitoring/reporting, etc.

Q: What is the best way to tackle this large set of problems ?



eIDM- Study & Research Areas

- Extrapolation of Technology Trends
- Reaching high Interoperability objectives
- Developing a broad perspective of entire ICT ecosystem
- The societal perspective
- Privacy by design
- Evolution of Legal context
- Raising awareness
- Understanding the market
- The eGovernment perspective
- Organising the convergence



eIDM-Leveraging experience & knowledge from the private sector

Banks, financial institutions; have decades of experience in dealing with eID (e.g., VISA), have invaluable knowledge and experience of:

- legal liability
- usage scenarios
- commercial deployment

Q: How can we Identify strategic stakeholders from private eID providers, exchange views and incorporate their inputs?



Growing the eID community

To develop the broad, diverse and active eID community:

- Enhance the possibilities for sharing, reuse & collaboration
- Achieve high levels of buy-in from the public
- Assemble, organise, disseminate, educate all types of information related to eID
- Support eID community through :
 - Awareness campaigns
 - Active support for online communities (www.eid-stork.eu, ePractices.eu, etc.)
 - One-stop-shop for information about eID & research
 - Other communication means, instruments to link stakeholders

Q: What should the EC role be in this? How can EC be most effective?



eIDM-Action Areas

Key Questions (1)

- How should policy change where there is potential impact? What are the appropriate instruments, etc.
- How will the infrastructure be operated and maintained on a continuous basis?
- How about evolutionary/legacy aspects?
- What are the models to be considered/adopted?
- How to maintain a pragmatic vision (long term combined with short and medium clear targets)?
- What Financial Supports are needed, over time?
- What is the optimum division of responsibilities Public/Private?
- How to use state of the art technology effectively and efficiently?



eIDM-Action Areas

Key Questions (2)

- What are the necessary legal changes, supports, clarifications, etc?
- How to adapt public and private entities to the new missions and goals?
- How to avoid disruptions, incl. interruption of basic services, loss of public/business confidence?
- How to avoid pitfalls and potentially unmanageable situations, especially complexity and incompatibilities?
- What is the overall program, responsibilities, key signposts, milestones, measures of progress, periodicity of reviews, etc.?
- How to ensure timely and appropriate involvement of the right stakeholders?
- What should be the Communications strategy/program, so as to maximise the possibilities for public and business buy-in, as well as sidestep or eliminate roadblocks to progress?



European Large Scale Action: **An electronic identity management (eIDM) infrastructure for trustworthy services in e-Government and e-Commerce**

Need your help to identify:

- Societal needs/challenges and objectives (2015-2020)
- Roadmap for achieving the objectives
- Barriers
- Overcoming the barriers
- Measuring the impact
- Monitoring and evaluation
- Stakeholders, instruments/mechanism, governance





Timetable for ICT R&D and innovation strategy

- Commission Adoption: **March 2009**
- Presentation to Competitiveness Council: **May 2009**
- Presentation to CREST: **June 2009**
- Discussion at Council Working Parties: **From June 2009**
- ICT National Directors Meeting, Visby, **November 09**
- Council Conclusions: **December 2009**
- Proposals for follow-up actions: **From 2010**
- **Financial Framework: 2013-2020**

