Interoperable eID as a key enabler for pan-European (eGovernment) services

Karel De Vriendt
European Commission
Enterprise and Industry Directorate General

OASIS Adoption Forum
London, 28 November 2006

Outline

- eID in the eGovernment policy context
- IDABC contributions
- eID interoperability standards and specifications : too many or too few?

eGovernment context

- National ands regional action plans and strategies
- *New policy defined:*
  - *Manchester Ministerial Declaration (24 Nov 2005)*
  - *eGovernment Action Plan (25 April 2006)*

Manchester Ministerial Declaration 24 Nov 2005

- **No citizen left behind – inclusion by design**
  - By 2010 all citizens become major beneficiaries
  - By 2010 innovative ICT, trust, awareness, skills for inclusion
- **ICT for efficient and effective government**
  - By 2010 high user satisfaction
  - By 2010 adm. burden reduction, efficiency, transparency, accountability
- **Delivering high impact services**
  - By 2010 100% e-procurement available, 50% take-up
  - By 2010 deliver other high impact services for growth and jobs
- **Trusted access by means of eIDM across the EU**
  - By 2010 interoperable eIDM for public services across the EU
  - By 2010 electronic document recognition framework

i2010 eGovernment Action Plan adopted on 25 April 2006

- Roadmap developments with eGovernment subgroup and with industry defining the way forward (work in progress):
  - eIDM / eDocs
  - Public eProcurement
  - Efficiency Measurement
  - Inclusive eGovernment
- Follow-up : Ministerial Conference 2007 under Portuguese Presidency

i2010 eGovernment Action Plan : eIDM actions

- The Commission, together with Member States, the private sector and civil society, will take the following action:
  - 2006 : Agree with Member States on a roadmap setting measurable objectives and milestones on the way to a European eIDM framework by 2010 based on interoperability and mutual recognition of national eIDM.
  - 2007 : Agree common specifications for interoperable eIDM in the EU.
  - 2008 : Monitor large scale pilots of interoperable eIDMs in cross-border services and implementing commonly agreed specifications.
  - 2009 : eSignatures in eGovernment: Undertake review of take-up in public services.
  - 2010 : Review the uptake by the Member States of the European eIDM framework for interoperable eIDMs.

IDABC Programme

http://ec.europa.eu/idabc/

Objectives	Identifying, supporting and promoting the development and establishment of **eGovernment services**
Target groups	**A**dministrations, **B**usiness and **C**itizens
History	Experience since 1995, IDABC is a follow-up to IDA and IDA II Programmes
Duration	5 years (2005-2009)
Global budget	**148.7 million EUR**
	Actions are Commission-driven and implemented via public procurement
Managed by	Enterprise and Industry Directorate General (idabc@cec.eu.int)

IDABC Programme
http://ec.europa.eu/idabc

Key elements of IDABC Work Programme :

- **Your Europe Portal** (http://europa.eu.int/youreurope)

- More than **20 sectoral projects in policy areas of EU** managed by other DGs, e.g. **PLOTEUS, LISFLOOD, SANREF, TRACES**

- More than **20 measures** designed to **support sectoral projects** and **eGovernment services generally** by providing basic infrastructure (**S-TESTA, eLINK, CIRCABC**), security measures (**eID**), interoperability measures (**European Interoperability Framework, XML Clearing house**), spread of good practise (**OSS repository, eGov observatory**)

Relevant measures from IDABC

- Preliminary study on mutual recognition of eSignatures

- eID interoperability for PEGS

- Operational Bridge/Gateway Certification Authority

- XML Clearinghouse

- European Interoperability Framework (EIF)

Preliminary study on mutual recognition of eSignatures

- Work carried out under guidance and support of eSignature Expert Group
- **WP1 : Information Gathering**
  - Country profiles expected December 2006
- **WP2 : Analysis and Assessment**
  - Similarities and differences : March 2007
- **WP3 : Proposal for mutual information mechanism on electronic signatures legal requirements**
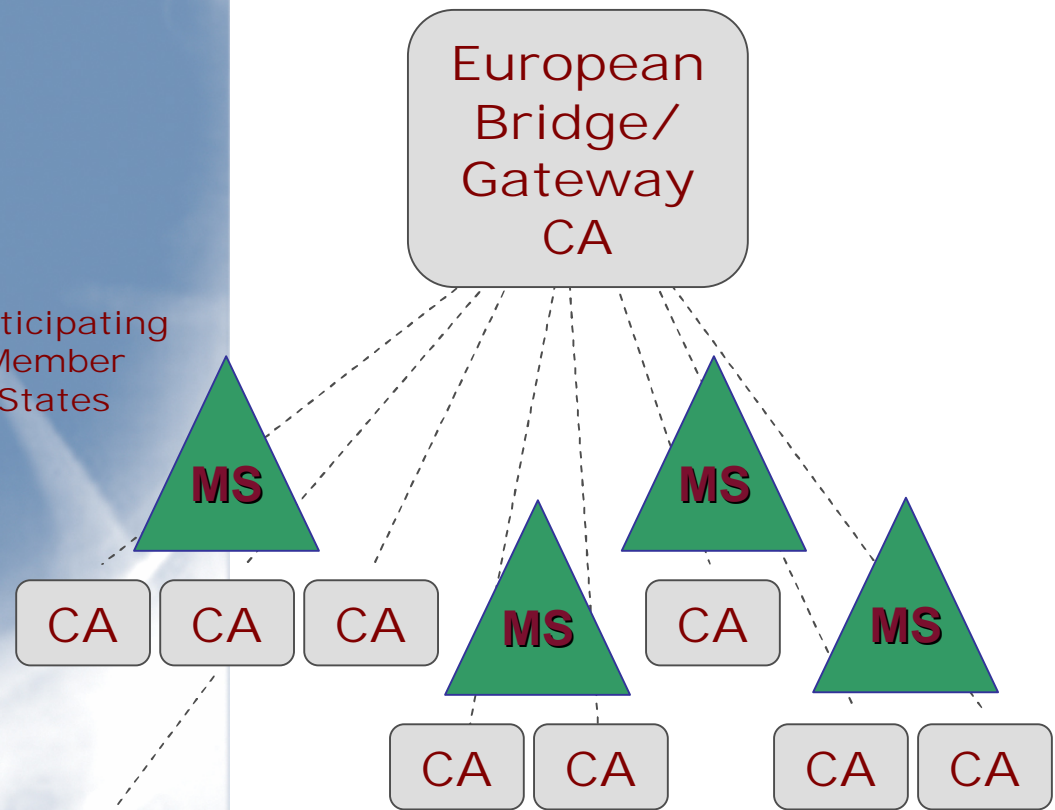
  On the basis of the results WP1 and WP2:
  - conclusions and recommendations on interoperability issues
  - Proposal for, as a minimum, a mutual information mechanism on electronic signature requirements. The proposal will elaborate in detail the legal and technical requirement which is necessary for a mutual recognition of eSignatures within the MS
  - **2Q2007**

eID Interoperability for PEGS : technical functionalities and approach

- An expert group will be called upon for this work.
- Based on existing actions at the EU level (e.g. Modinis Study on ID Management in eGovernment (DG INFSO), IST projects GUIDE, FIDIS and PRIME (DG INFSO), work by the Porvoo Group, etc…), a strategy for eID Interoperability needs to be elaborated and shall include as a minimum :
  - a survey and comparison of the national eID (electronic identification schemes whether national ID card or other means) legal instruments for the 27 MS + 2 CC;
  - a survey and description of the national technical solutions implemented in each of the 27 + 2 Countries for the national eID. The survey shall also list and describe which are the important technical components of the eID which should be taken into a account (smart card, digital certificate, biometric means, etc…)
  - a market assessment of the ID Management technical solutions; in particular a high-level description of the concept of federated identities and its applicability for interoperability of eID's shall be produced;
  - a proposal for an effective eID interoperability solution to be used by the PEGS
  - Common specifications for interoperable eID solutions shall be drafted based on the results of the elaborated strategy for eID interoperability
- Current status : co-ordination with work of DG INFSO to link to Roadmap

Bridge/Gateway Certification Authority: results from Pilot (2005)

European Bridge/ Gateway CA

Participating Member States

MS

MS

MS

MS

MS

CA CA CA

CA

CA CA

CA CA

end-user

signed message

end-user

Validation of signed message

Bridge Practices Statements
(CPS + signature policy)
in issuing TSL to Participating
Member States CAs

MOU agreement

PKI Disclosure Statement
including "Trust Validation Info"
in each Certificate Policies for
each Participating CA

Trust Equivalence Matrix
between Certificates types
across Participating CAs

Signature Validation Guidelines
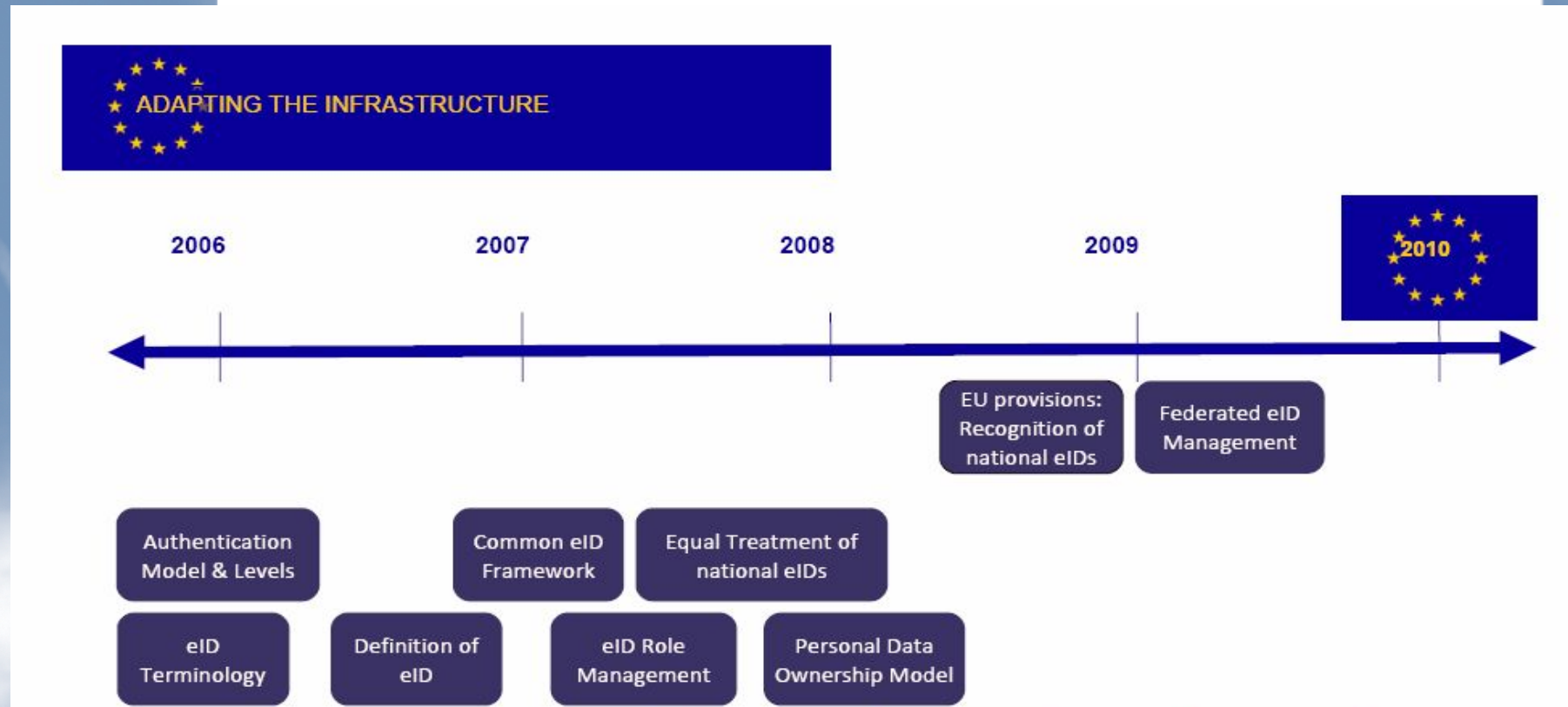in assessing trust in end-user
signature

Proposed new IDABC action : Operational Bridge/Gateway Certification Authority

- Objectives : to establish the legal, operational and technical frameworks for an operational Bridge/Gateway CA

- Overview of actions : establishment of a recognised European BGCA together with the upgrade of communication applications and tools with relevant and automated BGCA-specific features and standards. Therefore, in line with the proposed approach, a number of concrete parallel actions at the level of IDABC have been derived from the BGCA Pilot recommendations:
  - 1. Launch an operational pilot BGCA (with limited scope), serving a limited number of projects (PCIs and/or other projects)

  - 2. Set-up of an expert group on legal matters, to be composed of Commission services (INFSO, SJ, ENTR), Article 9 committee members (to be confirmed), MS legal specialists
    - a. to address legal points raised during the BGCA Pilot project (also addressing the question raised by Austria related to compliance with the European Directive on electronic signatures 199/93/EC);
    - b. to study and assess the possible forms of a European BGCA Governing Body;
  - 3. Communication, encouragement and lobbying by the Commission, the PEGSCO and the MS administrations on the results of the BGCA Pilot project results, specifically on the use of the ETSI standard and the requirements for applications to integrate it

Definition of eID roadmap

- Process :
  - leadership of DG INFSO with support of Modinis programme and external contractors
  - eID ad-Hoc group : member states inputs and feedback (last meeting held on 4 October 2006 in Brussels)
  - Industry experts feedback (through Modinis workshops)

eID Roadmap under discussion

ADAPTING THE INFRASTRUCTURE

2006 — 2007 — 2008 — 2009 — 2010

EU provisions: Recognition of national eIDs

Federated eID Management

Authentication Model & Levels

Common eID Framework

Equal Treatment of national eIDs

eID Terminology

Definition of eID

eID Role Management

Personal Data Ownership Model

Future work

- Finalisation of eID roadmap

- Preparation of "common specifications" for eID interoperability (through contract and workshops with industry)

- Preparation of large scale pilots under the CIP programme : call for proposal to be launched early 2007

- Implementation and follow-up of the eID roadmap

The Jungle of eID standards and specifications

- CEN TC224 WG 15
  - European Citizen Card standard
- OASIS SAML 2.0 (or ITU-T Recommendation X.1141)
  - http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=security#samlv20

- Liberty Alliance ID.FF 1.2 Specifications
  - http://www.project-liberty.org/liberty/resource_center/specifications/liberty_alliance_id_ff_1_2_specifications

- WS-Federation (MS-IBM-BEA)
  - WS-Federation specification as a part of WS-Security specification http://msdn.microsoft.com/webservices/webservices/understanding/advanced webservices/default.aspx?pull=/library/en-us/dnglobspec/html/ws-federation.asp
  - ADFS (Active Directory Federation Service) = Microsoft implementation of WS-Federation http://msdn.microsoft.com/msdnmag/issues/06/11/SingleSignOn/default.aspx?loc=fr

- Other initiatives :
  - Modinis « eID Conceptual framework » 1st draft : https://www.cosic.esat.kuleuven.be/modinis-idm/twiki/pub/Main/ConceptualFramework/2006.09.18.Modinis_Conceptual_Framework_1.1.pdf

(How) Does it help?

- Lack of clarity
  - Different terminology
  - Different requirements or needs covering overlapping areas
- Incompatibility between different standards :
  - SAML V2.0 Vs WS-Federation ?

  - *How are governments supposed to use all this when building interoperable environments ?*

Basic Principles

- Comply with existing existing standards
- Ensure openness of the used/proposed specifications
- Taking into account basic interoperability aspects (as mentioned in EIF) :
  - Organisational, semantic, technical
  - Accessibility, security, privacy, subsidiarity, use of open standards
- Avoiding proprietary solutions

Possible Recommendations by IDABC

- To MS :
    - Take into account EIF principles with focus on interoperability
    - Use of open standards
    - Avoid proprietary solutions
- To Industry
    - Work together to ensure maximum level of compatibility between specs and standards
    - Provide solutions compliant with eGovernment needs
    - In short term, come up with constructive proposals to make existing IDM solutions interoperable

More Information :

Web: http://ec.europa.eu/idabc

E-mail: idabc@ec.europa.eu

Address: **IDABC Secretariat**
DG Enterprise & Industry
IDABC – BREY 11/248
European Commission
B-1049 Brussels, Belgium

THANK YOU !