



## ILNAS

Institut luxembourgeois de la normalisation, de l'accréditation, de la sécurité et qualité des produits et services European ICT Multi-Stakeholder Platform

Rolling plan for ICT standardisation





#### **Summary**

- European ICT Multi-Stakeholder Platform
- The strategic role of ICT standardisation in the context of EU policy making
- Promoting the implementation of standards
- EU Policy areas supported by ICT standardisation
  - Societal challenges (eHealth, Accessibility, e-Skills, e-Learning, ...)
  - ➤ Innovation for the Digital Single Market (e-Invoicing, Mobile Payments, ...)
  - Sustainable growth (Smart Grids, Smart Cities, ICT Environment Impact, ...)
  - ➤ Key enablers and security (Cloud computing, Internet of Things, ...)
- Technology areas and standardisation activities
- Closing remarks





#### ICT Multi-Stakeholder Platform - Objectives

- Increase interoperability
- Promote the use of standards and specifications
- Industry preference/need for global standards
- Ensure availability of required standards and specifications for public authorities
- Provides public authorities with the certainty that with the use of the specs their "public interest" expectations are met
- Recognized specifications are not European Standards
- Specifications suitable for referencing, use remains voluntary, made available (recommended) for use in policies and legislation





#### ICT Multi-Stakeholder Platform - Organisation

- "Expert Group" created by Commission Decision of 28 November 2011 (OJ C349 of 30.11.2011, p 4 – 6)
- 4 meetings per year; first meeting March 2012
- Possibility to create sub-groups
- Experts and observers may be invited





#### ICT Multi-Stakeholder Platform - Stakeholders

- European Institutions
- Administrations of Member States (~50% of the Platform members)
- EU and international ICT standardisation bodies active in Europe: CEN, CENELEC, ETSI, ISO, IEC, ITU, ...
- Citizens, experts
- Industry, businesses, SME
- Non-Governmental Organisations
- Any legitimate interest
- Invitations to MS to nominate participants





#### ICT Multi-Stakeholder Platform - Tasks

- Advise on ICT standards work program
- Identify future ICT standardization needs from policies and legislation
- Advise on possible ICT standardization mandates
- Inform Commission on progress in ICT standardization activities
- Any other issue concerning support for ICT interoperability





#### Rolling Plan

- Defines the most important standardisation initiatives and actions supporting EU policies
- As the 2010-2013 ICT standardisation work program, its predecessor, the Rolling plan is a Commission document...
- ...But is now written in collaboration with & advised by the MSP





#### Rolling Plan – Methodology

- Drafted based on input from
  - 1. Commission's services -the so called Mirror Group- and
  - 2. on input gathered by MSP Task Force members
- Shall be endorsed by the Commission end of 2013
- To be updated at least once a year by the Commission, in collaboration with the MSP (ec-ict-std-rolling-plan@ec.europa.eu)





#### Rolling Plan – Methodology



- → Commission Services regular collaboration with stakeholders
- →Input on the Rolling Plan from all Stakeholders
- → Publication first version planned End 2013





## The strategic role of ICT standardisation in the context of EU policy making

- Rolling plan identifies EU policy priorities where ICT standards should be considered as part of policy making (mostly from the EC)
- Rolling plan identifies areas for action at the standardisation landscape
- Make sure state-of-the-art technologies get implemented
- European standards developed by CEN, CENELEC and ETSI
- Standards developed by global industry-driven ICT fora and consortia
- Standards used in support of industrial or innovation policy
- Standards play a role in EU Research and Innovation
- Standards take an important role in government internal policies and public procurement





#### Promoting the implementation of standards

- The use of standardisation in support of policy making
  - Create awareness of importance of standards
- Public procurement
  - ➤ Identifies available standards in areas with policy relevance
  - Diminish lock-in
- Research and Innovation
  - Source of new standards
  - Standardisation awareness in R&I
- Testing and quality improvement in standards
  - Ensure that there are products implementing the standards
  - > To enable interoperability in a multi-vendor environment





#### Societal challenges

- eHealth
- Accessibility of ICT products and services
- Web Accessibility
- e-Skills and e-Learning
- Emergency communications
- eCall





#### eHealth

- ICT applied to health and healthcare systems can increase their efficiency
- Lack of interoperability between eHealth systems
- Related ongoing standardisation and research activities
  - epSOS European Patient Smart Open Services
  - SemantichHealthNet Network of excellence in semantic interoperability
  - Antilope project Adoption and take up of standards and profiles for eHealth Interoperability
  - Salus project Scalable, Standard based Interoperability Framework for Sustainable Pro-active Post Market Safety Studies
  - > ... and many others...





#### Innovation for the Digital Single Market

- e-Procurement Pre and Post award
- e-Invoicing
- Card, Internet and Mobile Payments
- eXtensible Business Reporting Language (XBRL)
- Online Dispute Resolution (ODR)





#### e-Invoicing

- Structured electronic data
- Automatic processing
- EDI (Electronic Data Interchange): earliest form of e-invoicing
- New e-invoicing standards, based on different versions of XML
- Vast number of e-invoicing standards, data formats exist across EU
- Related ongoing standardisation and research activities
  - CEN CII model (see <a href="http://www.cenbii.eu/">http://www.cenbii.eu/</a>)
  - UN/CEFACT e-business messages (see <a href="http://www.unece.org/cefact.html">http://www.unece.org/cefact.html</a>)





#### Card, Internet and Mobile Payments

- Gain importance
- Based on card payments, credit transfer, direct debits or pre-funded cards and accounts
- Absence of shared standards, standardisation gaps, lack of interoperability
- Related ongoing standardisation and research activities
  - ➤ Industry organisations: European Payment Council, Global Platform (Near Field Communication, NFC)
  - ➤ ETSI, CEN: TC SCP (Smart Card Platform), TC 224 (Personal identification, electronic signature and cards)
  - > W3C (EPASOrg, EPC): Card Payments protocols
  - ➤ ISO TC68/SC7/WG10: Mobile payments WG





#### Sustainable growth

- Smart Grids and Smart Metering
- Smart Cities / Technologies and Services for a Smart and Efficient Energy Use
- ICT Environmental Impact
- European Electronic Toll Service (EETS)
- Intelligent Transport Systems (ITS)





#### Smart Grids and Smart Metering

- EU ambition: develop a low-carbon economy
- Upgraded electricity network
- Two-way digital communication between supplier and consumer
- Intelligent metering and monitoring systems
- Related ongoing standardisation and research activities
  - > ESOs: Mandate 490 by the EC
  - ➤ CEN-CENELEC-ETSI Smart Grid Coordination Group
  - **>** ...





## Smart Cities / Technologies and Services for a Smart and Efficient Energy Use

- Construction sector: highest energy consumer in the EU (~40%)
- Controlling the efficient consumption of energy at buildings
- Related ongoing standardisation and research activities
  - SEMANCO is developing a Semantic Energy Information Framework to model the energy-related knowledge planners
  - eeSemantics (stakeholders group launched by DG CONNECT): active in the area of Building Energy Management Systems
  - "Stimulating industrial innovation in the construction sector through smart use of ICT" project of DG Enterprise and Industry
  - ISO TC 268 "Sustainable development in communities"





#### Key enablers and security

- Cloud computing
- (Open) Data
- E-Government
  - > DCAT Application profile for data portals in Europe
  - Exchange of metadata on re-usable interoperability assets (eGovernment)
  - > Core Concepts to facilitate the development of interoperable solutions





#### Key enablers and security

- Electronic identification and trust services including e-signatures
- Radio Frequency Identification (RFID)
- Internet of Things
- Network and Information Security
- ePrivacy





#### **Cloud computing**

- Establish a coherent framework for Cloud Computing
- Related ongoing standardisation and research activities
  - ETSI Cloud Standards Coordination (see <a href="http://csc.etsi.org">http://csc.etsi.org</a>)
  - Cloud Standards Customer Council (see <a href="http://www.cloud-council.org/">http://www.cloud-council.org/</a>)
  - Distributed Management Task Force (see <a href="http://www.dmtf.org/standards/cloud">http://www.dmtf.org/standards/cloud</a>)
  - ➤ ETSI TC CLOUD (see <a href="http://www.etsi.org/technologies-clusters/technologies/grid-and-cloud-computing">http://www.etsi.org/technologies-clusters/technologies/grid-and-cloud-computing</a>)
  - ➤ ISO/IEC JTC 1/SC 38
  - **>** ...





## Electronic identification and trust services including esignatures

- European legislation: Proposal for a Regulation of the European Parliament and of the Council on electronic identification and trust services for electronic transactions in the internal market
- Related ongoing standardisation and research activities
  - ➤ ETSI: Trusted Lists (TS 119 612) and signature formats (CAdES, CAdES profile, ASiC, and ASiC profile)
  - e-SENS (Electronic Simple European Networked Services): eID,
     eDocuments, eDelivery, and eSignature etc. for a pan-European digital
     platform for cross-sector, interoperable eGovernment services
  - STORK: eID Interoperability Platform
  - **>** ...





#### **Internet of Things**

- Dynamic global network infrastructure
- Physical and virtual "things" have identities, physical attributes and virtual personalities
- Connect these "things" to data networks
- Related ongoing standardisation and research activities
  - ➤ Internet of Things Research in Europe Cluster (IERC) that are dealing with aspects of the standardisation in IoT
  - > Future Internet PPP (FI-PPP) deals with some issues connected to the standardisation of the IoT
  - Focus group in ISO/IEC JTC 1





#### **Network and Information Security**

- Network and Information Security Public-Private Platform has been implemented by the Commission with representation of all stakeholders
- Related ongoing standardisation and research activities
  - ➤ CEN, CENELEC and ETSI have set up a Cyber Security Coordination Group. The CSCG and the NIS Public-Private Platform will regularly update the MSP on stakeholder requirements and advise the MSP.
  - OASIS hosts the PKCS 11 standardisation project for cryptographic tokens controlling authentication information (see <a href="https://www.oasis-open.org/committees/pkcs11">https://www.oasis-open.org/committees/pkcs11</a>) and the Key Management Interoperability Protocol (KMIP) (see <a href="https://www.oasis-open.org/committees/kmip">https://www.oasis-open.org/committees/kmip</a>)
  - ➤ IEEE has standardization activities in the network and information security space, including in the encryption, fixed and removable storage





#### Technology areas and standardisation activities

- Horizontal technologies for ICT infrastructures
- Standardised technologies by one organisation depend often on one another
  - For example, a scripting standard (ECMA)
  - With specific object security (IETF)
  - > To be used within a web service (W3C)
  - That runs on top of a transport layer using specific security architectures (IETF)
  - Which in turns runs on Ethernet (IEEE)
  - And communicates with other systems over wireless networks (IEEE and ETSI)





#### **Closing Remarks**

- First version of the Rolling Plan available in December 2013
- Produced in a consensual and open way between the Commission and MSP
- Strategy document covering policy making
- Advice given by the MSP based on its broad stakeholder representation
- RP is not conceived to be a finalised document
- RP aims at giving an overview on available standards and ongoing standardisation activities
- To avoid duplication work
- Source of information for stakeholders





# Thank you for your attention!

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