

# Management of e-Identity for cross-boarder

IPTD new project proposal

2013. 10.

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***22nd UN/CEFACT Forum  
2013. 10.15 Sardegna***

# Agenda

- Background & global concerns 3
- Current status : difficulties & needs 10
- The project : overview 14
- Proposal of Recommendation (Draft) 23

# **Background & Global Concerns**

# Why this proposal?

- There was **no guidance about identities** for cross borders in aspect of both legal and technical considerations.
- **Identity is prerequisite to account for legal activity of e-commerce and needs to be trusted mutually.**
- However now, there are **global interoperability problems** which we can see in **recommendation 14 annex B**
- **Management of e-identity is fundamental** for setting up the trustworthy and paperless environment in internet economy(eTrade, eCommerce, etc).

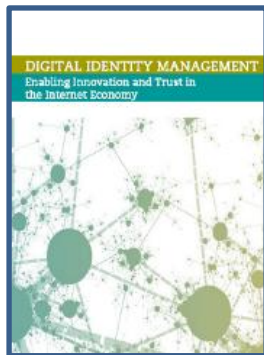
# Definition of e-identity

“Mechanism through which individuals trust each others as a prerequisite to interacting with other..”

[OECD – digital identity]



# Global Concerns



Digital identity management is

“fundamental enabler  
of innovation and trust  
in the Internet economy”

## ◆ OECD guideline about digital identity (2011)

1. **Governments** should adopt a clear **national strategy for digital identity** management.
2. **Governments** should work together to enable **cross-boarder** digital identity management.

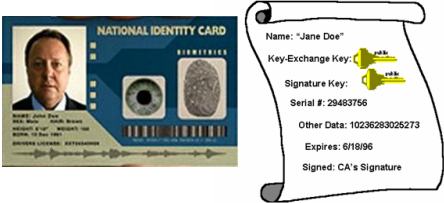
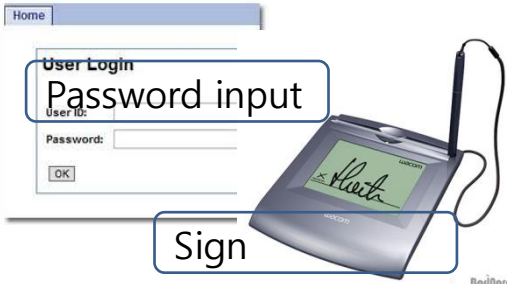
# Global Concerns



APEC ECSG 2011 ~ 『CBPR(Cross-boarder Privacy Rules)』  
interoperability of privacy frameworks all over the world”

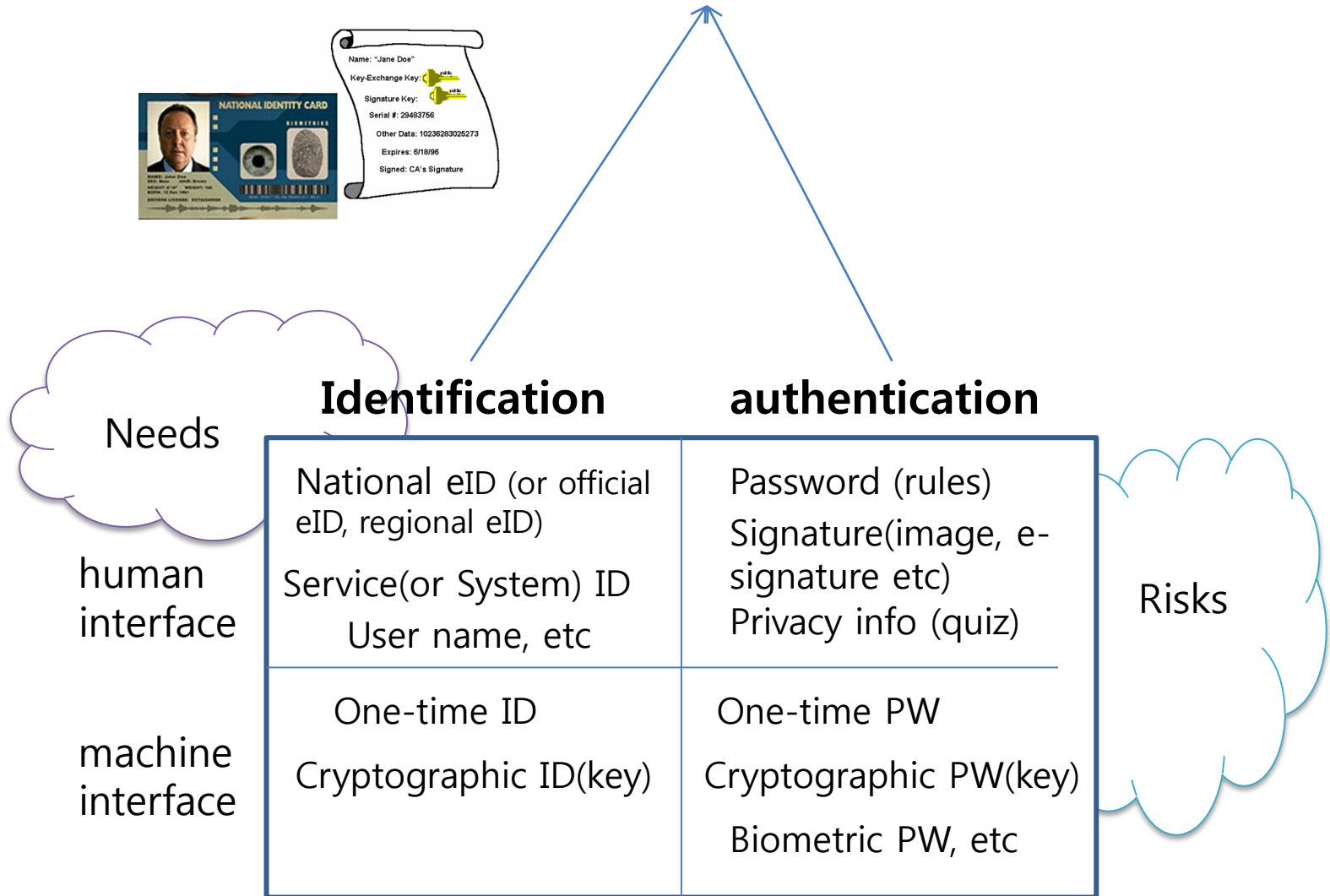
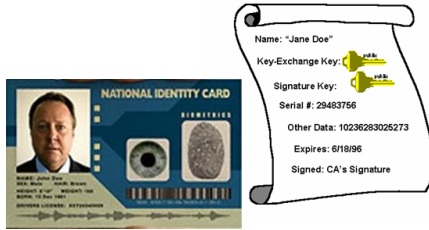
APEC TEL 2013.5 ~ 『Interoperability Principle』  
Interoperable ICT

# Understanding of e-Identity Management

Process	Provider	Procedure	User
<p><b>1. Identification</b> "Who are you?"</p>	<p>Identity Provider, Service Provider</p>	<ul style="list-style-type: none"> <li>• Prove identity</li> <li>• Register identity</li> <li>• Issue <b>e-credentials</b></li> </ul>	 <p>ID (user account)</p>
<p><b>2. Authentication</b> "OK, how can you prove it?"</p>	<p>Service Provider</p>	<ul style="list-style-type: none"> <li>• Check registry                             <ul style="list-style-type: none"> <li>- directory search</li> </ul> </li> <li>• Check security                             <ul style="list-style-type: none"> <li>- cryptographic algorithm</li> </ul> </li> <li>• Check <b>validity</b> <ul style="list-style-type: none"> <li>- trusted issuer, valid period</li> </ul> </li> </ul>	 <p>Sign</p>
<p><b>3. Authorization</b> "What can you do?"</p>	<p>Service Provider</p>	<ul style="list-style-type: none"> <li>• Permit</li> </ul>	



# e-credentials



**Current status : difficulties & needs**

# Current status :

- Different conditions by each country
  - Identity management is an integrated system of business process, policies, rules, procedures, and technical components.
  - It depends on national law or policy.
  - International legal scheme - uncertainty, risk, legal barrier
    - UNCITRAL(2012) 『 Overview of Identity Management 』
- Technical immaturity
  - Various authentication rules(country) and emerging technology
  - Level of authentication including security and privacy
    - Ex) e-signature, PKI, e-seal, e-token, biometrics(fingerprint, voice, retinal, iris, hand vein etc)...
    - Security risk and threats - phishing, hacking etc.
- Uncertain liability and authority for e- identity
  - The role and responsibility is not confirmed among government, public, private, third party ... etc.

# Current Projects

- Cross border (single window) projects
  - PAA(Pan Asia Alliance),
  - PEPPOL(Pan European Public Procurement Online),
  - STORK(Cross-border e Identification),
  - SPOCS(Simple Procedures Online for Cross border Service),
  - Nat'l Single Windows(Asia, Africa, etc), etc
- Paperless efforts
  - Trusted identity(Sharp address) and trusted communication proofs (KR)
  - De-Mail trusted service (DN)
  - Trusted third party repository (KR), etc

# Current frontier projects

- NSTIC (Nat'l Strategies for Trusted Identities in Cyberspace) 2011~
  - Cloud based identity
  - Third-party credentials
  - FCCX (Federal Cloud Credential Exchange) : online ID theft
- Cloud & Mobile service
  - openID (2005~) : OIX(Open Identity Exchange),
  - Claim based Identity (2012~) – STS(Secure Token Service) etc
  - SaaS Id(?)



My learned experience

## **Importance of Trusted Third Party's role**

- guarantee the identity of certificate holders in order to account for the legality about e-transaction neutrally, with expertise.

# **This Project : Overview**

# Project Purpose:

1. To prove the legality of e-identity
  - Integration (or federation) of eID systems to single windows, platforms, etc
  - Trusted third parties (role, responsibility,, )
2. To enhance the interoperability regarding e-identity
  - MRA(Mutual Recognition Agreement) for interconnection
  - Neutral guideline for applying e-identity technology
3. To pursuit the cost effective and practical way for implementing e-identity at the view of global
  - Risk management (assessment and compliance)

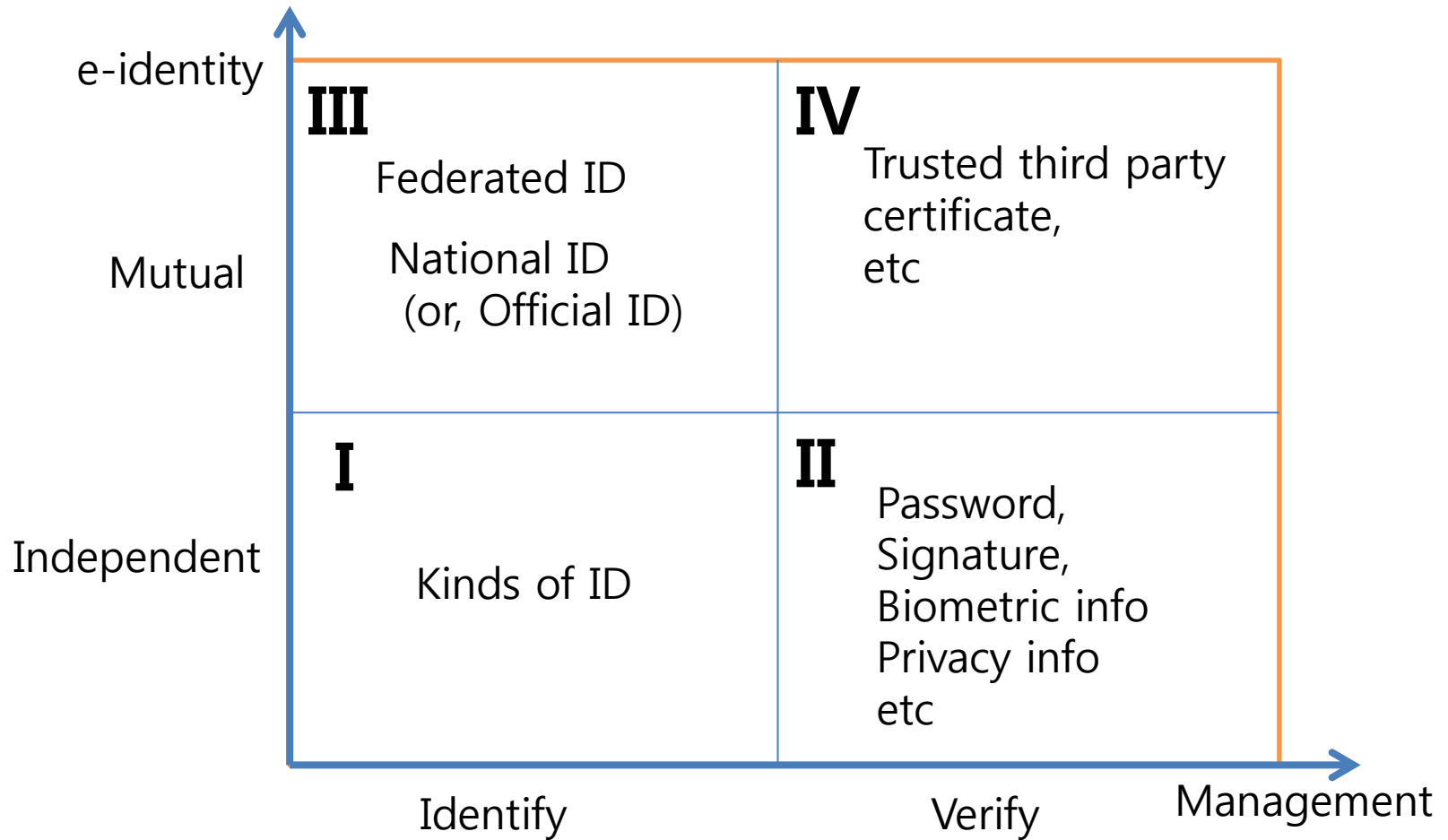
# Goals

# “trusted identity”





# Scope: Interoperability of e-identity



# Project issues (Type IV)

## Mutual recognition agreements

1. Management of e-identity depends on national (domestic) system
  - including law, technology, authority, certification, regulation and etc.
2. We focus on the **global interoperability** at the view of relying parties(or service providers)
  - following own countries' given conditions(security, privacy and/or identity policies)
3. We are trying to recognize the best practices
  - enhancing trustworthy environments in a reasonable manner in our given situations
4. We need to develop **the mutually harmonized agreements** for their interconnection.

# Project issues (Type III)

## e-Identification for cross boarder

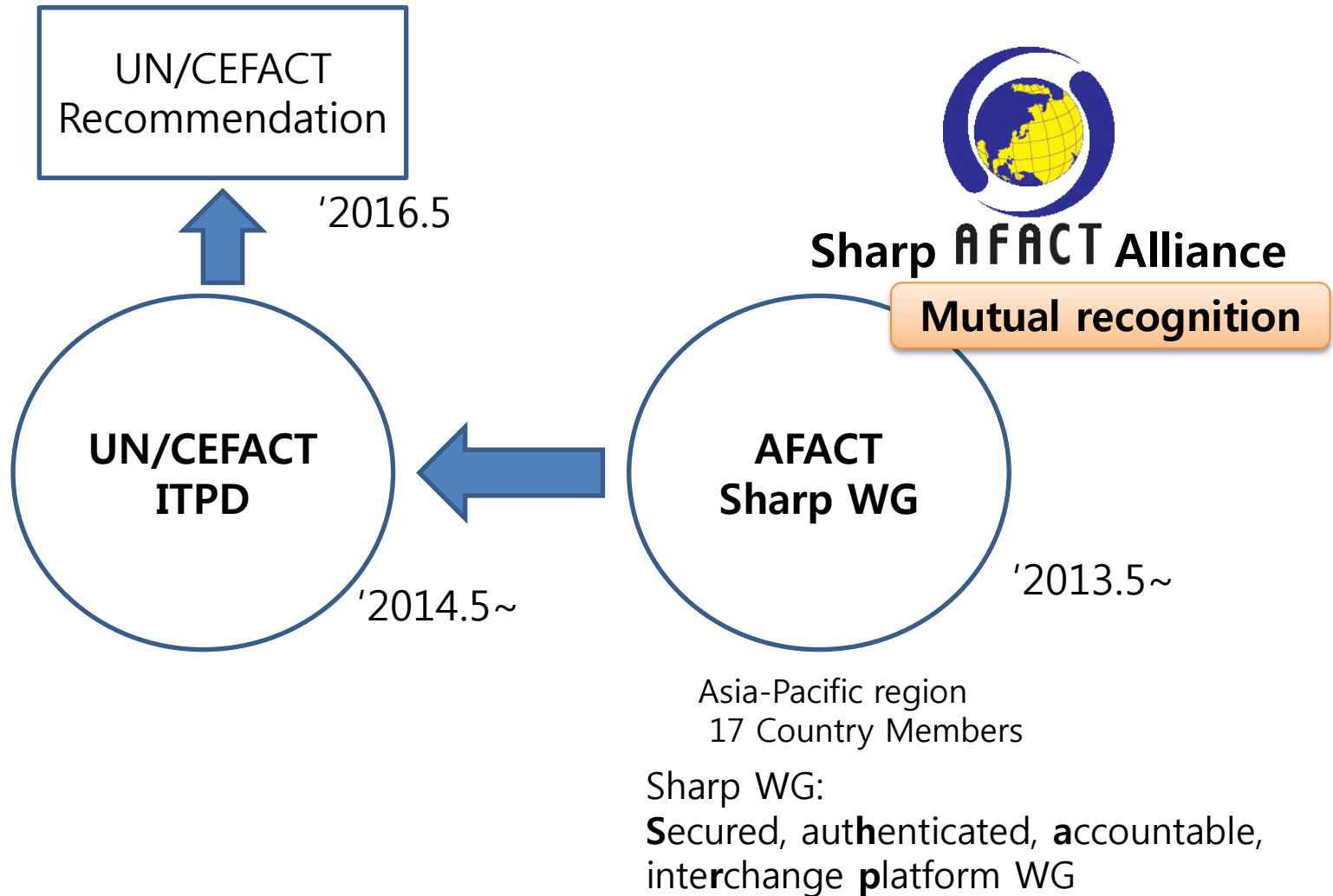
1. We focus on national or official eID schemes following own countries' given conditions
  - for the purpose of trustworthy business,
  - Facilitation of single window, trusted business platform
2. We are trying to share interoperability, integration and/or federation of them.
3. We need to develop the guideline of enhancing e-identification
  - for future integrated environment

# Project issues (Type II)

## Guideline for e-authentication

1. Domestic authentication policy can cause the problem of cross-boarder interoperability
  - for interconnecting other types of identities between different platforms or single windows
2. Therefore, we need to provide the guideline of e-authentication technology
  - for enduring high level of authentication
3. Best practice for governing trust would be discussed within member countries

# Milestone & Structure



# Project Benefits:

1. To contribute to reduce the hurdle for single window platform
2. To contribute paperless policy for green and innovative economy
3. To contribute prerequisite cost reduction due to fundamental interoperability regarding interchange of message

# Proposal of Recommendation (Draft)

1. Overview of e-identity
2. Interoperability issues
3. identification of e-credential
  - Regulations about national (or regional, official) e-id scheme
  - Integration (or federation) guideline of national eID schemes
4. authentication of e-credential
  - Requirements of high level of authentication
  - Governance system
5. Mutual recognition agreements
  - Requirements
  - Procedures

Annex A List of national (or regional, official) eID schemes

Annex B Guidelines of e-authentication technology

Annex C Case study

# Thank you

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