

# Cloud for Europe Presentation at ITAPA

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# Agenda



- 1. Project Mission
- 2. Project Objectives
- 3. C4E Major Deliverables
- 4. Gaps to be Adressed by C4E R&D Solutions
- 5. Challenges Addressed by C4E
- 6. Solutions Selection
- 7. Pre-Commercial Procurement







# Public sector cloud use as a collaboration between public authorities and industry through pre-commercial procurement



# **Project Mission**



Cloud for Europe (C4E) brings together public authorities and industry to support public sector cloud use.

- Identify obstacles for cloud use in the public sector
- Define services hindered by those obstacles
- Procure research from industry to find innovative solutions for cloud services



# **Project Objectives**



- Enable public sector cloud adoption in open dialogue between public sector and industry
- Address concerns on data protection, security, legal and contractual aspects
- Support related research from industry
  - Use of pre-commercial procurement as an instrument for innovation in the public sector



#### Who we are





IN JAVNO UPRAVO

U. PORTO







Agenzia per l'Italia Digitale

Presidenza del Consiglio dei Ministri

TÜBİTAK

# C4E Major Deliverables



First 14 months of C4E project activities were focused on gap analysis of Public Administration legal, bussiness and operational barriers for Cloud computing adoption and on PCP tender preparation.

Legal aspects of Cloud services and legal project support

- Legal Implications of CC in PA
- Legal support of PCP

# Gap analysis

- Public Sector Study
- Study of Market Vendor offerings and PA requirements





# C4E Major Deliverables



#### **PCP** Preparation

- Services Catalogue
- Selection of Joined PCP method
- Services selection and specifications
- Stakeholders consultation report
- PCP PIN preparation

#### **PCP Execution**

- PCP tender PIN in cooperation with WP4
- Procurers Agreement
- Frame Agreement
- Tender preparation in cooperation with WP2, WP4,WP9





# C4E Major Deliverables



#### **Validation**

- Exclusion, Selection, Award criteria (and questioner)
- Validation procedures

#### Communication

- www.cloudforeurope.eu, Twitter, Linkedin, YouTube
- Press releases, white paper
- Legal workshop in June
- Market communication metings in March and June
- 23 international and 10 national events





# Gaps To Be Adressed by C4E R&D Solutions



- C4E identified gaps between Public sector requirements and market Vendor offerings
- C4E identified numerous services that show that issues can be met
  - Data protection, security, legislation, enforcement, vendor interoperability in heterogenious environment
- Structure of Services
  - Piloting services: Address an actual G2C,G2B,or G2G Business Process
  - Horizontal services: Support the piloting services
- Proces of Services selection
  - State of the Art and gap analysis
  - Collection of services list through stakeholder dialogue
  - Final selection of services for PCP









Phase	No.	Challenge Summary
Design, Procurement	1	Interoperability for cross-country federated cloud service selection and competition
	2	Matching customer requirements with cloud service specification
		Assessing the legislation compliance of a cloud storage service to its contractual and functional description
Transition, Delivery	4	Defining means of assuring service compliance with legislation of EU countries
	5	Digital archiving and preservation
	6	Federated cross-border workflow engine
Operation	7	Legislation-aware data provision and access
	8	Overcome, or address legal barriers to cloud computing
	9	Enable the cloud development community to create and maintain legislation execution
	10	Legislation awareness, dynamic management, and propagation
	11	Cloud service SLA assessment and monitoring
	12	Seamless change of service provider





#### Snímek 11

lst3

I don't understand the relation between the vertical names and the horisontal lines. Friendly speaking I don't know why e.g. procurement is in the design line. Linda Strick; 29. 8. 2014

#### Service List Overview



#### **Piloting Services**

- 1. Basic Communication
- Document Mgmt. and Collaboration
- 3. Customs Supply Chain
- 4. Customs Data Pipeline
- 5. Legislation-Aware Storage
- 6. European Citizen Initiative
- 7. Archive as a Service
- 8. Secure Personal Data and Document Vault
- 9. Documents and Files Interoperability Node
- 10. eDocument Service
- 11. Restful Secure Distributed Collaboration Tools
- 12. Legislation Executing Cloud Services
- 13. Personal Digital Asset Service

#### **Horizontal Services**

- 1. eID as a Service
- 2. Encryption as a Service
- 3. Independent Third Party Assurance
- Public Administration Cloud Services Broker
- 5. Cloud Certification as a Service
- 6. Resilient Open-Source Cloud Services Stack
- 7. Changing the Cloud Provider







#### Service List Consolidation



#### Piloting Services

- 1. Basic Communication
- 2.Document Mgmt. and Collaboration
- 3. Customs Supply Chain
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#### Horizontal Services

- 1.eID as a Service
- 2.Encryption as a Service
- 3.Independent Third Party
  Assurance
- 4. Public Administration Cloud Services Broker
- 5.Cloud Certification as a Service6.Resilient Open-Source Cloud
- Services Stack
- 7. Changing the Cloud Provider

#### **Final Services Selection**

- 1.Secured Legislation -Aware Storage
- 2.Legislation Execution Cloud Services
- 3. Federated Certified Services Brokerage for EU Public Administration Cloud





# Federated Certified Brokerage



#### Status quo

- Cross-border cloud services must be secure in terms of country and EU legislation, privacy protection and security
- Current fragmentation can be overcome by federated EU public administration cloud
- Dynamic real time crossborder service certification monitoring

#### Issues to be solved

- Interoperability
   (service governance, data portability, identity propagation)
- Service certification

   (architecture of components, automated certification)
- Legislation awareness

   (legislation compliance definition and assessment, interface for legislative changes propagation)





# Secure Legislation-Aware Storage



#### Status quo

- Limited service offers for legislation awareness and security mechanisms to ensure integrity
- Encryption performed by the user or cloud provider claims to encrypt
- Cloud storage offering often not clearly perceived as legislation compliant
- Multi-legislation requirements difficult and expensive to satisfy

#### <u>Issues to be solved</u>

- Establish trust by contractual means
- Simplify selection/procurement of legislation compliant cloud (storage) services
- Create tools to manage citizen access rights to personal data in a legislation compliant way
- Tackle multiple regulations concerning the storing of data: archiving, disclosure, and restricted access to backups





# Legislation Execution Cloud Services



#### Status quo

- Some legal barriers lead to no go decisions for cloud adoption
- For sensitive data only private or community clouds are used
- Example: no automatic notification of unauthorised access to data owner and service provider

#### Issues to be solved

 Developing a cloud service that meets requirements imposed upon cloud actors by national or international legislation

#### **Possible solutions**

- A framework (methodology, guidelines, specifications)
- Generic services to be combined with business services
- Services, integrated with business services





# Pre Commercial Procurement (PCP)



PCP is one particular approach for procuring R&D services only, which enables public procurers to:

Develop solution towards concrete public sector needs, whilst comparing/validatin g alternative solution approaches

Share the risk and benefits with the participating companies in a way that does not involve State aid

Create optimal conditions for wide commercialization of R&D results





#### **PCP Procurement Model**



# LEAD AUTHORITY WITH JOINT FRAMEWORK CONTRACT

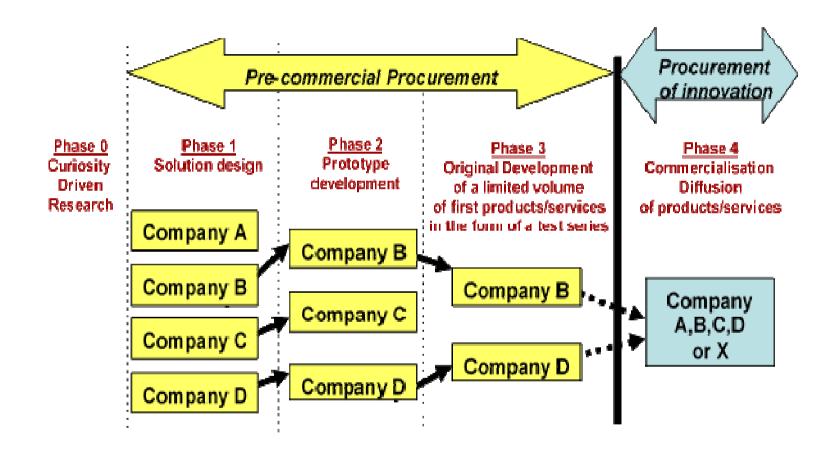
- A group of public purchasing authorities collaborate in such a way that one public purchasing authority of the group is designated as Lead Authority
- Each public purchasing authority will authorise the Lead Procurer to act on its behalf, in accordance with Italian law
- Conduct of the Joint PCP Procedure
- Award, signature and management of the Framework Contract
- All in consultation with other purchasing authorities involved in the Joint PCP





#### **PCP Phased Process**









# Joint PCP Procedure



PHASES	MONTH
Tender pre-notice	MAY 2014
Tender release	NOVEMBER 2014
Solution Selection	4 MONTHS
Prototype Selection	8 MONTHS
First Test Product Selection	6 MONTHS



#### **Tender Release**



Distribution of rights and obligations of the parties published in **tender documents** 

#### Conditions of Participation

relevant and proportionate to the circumstances of the contract

#### •Instructions to Participants

#### Framework Agreement

One single Framework contract covering all the PCP phases, which shall contain an agreement on the future procedure for implementing the different phases, through specific contracts

## Descriptive Document

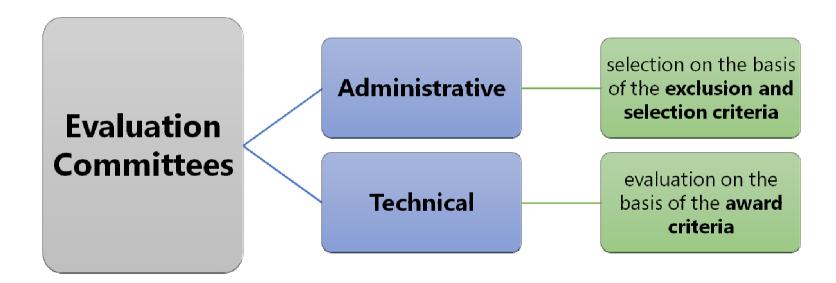




### **Initial Offer Evaluation**



#### **EVALUATION COMMITTEES**







# Thanks for your attention!



