Cloud for Europe – challenging the European market for public administrations

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Public sector challenges

active participation
establishing key enablers
user needs
access to public information
reduced administrative burden
seamless e-government services
strengthening citizens and businesses
improved organisational processes
increased transparency
sustainable low-carbon economy

Elevator Pitch

Public sector cloud use as a collaboration between public authorities and industry through pre-commercial procurement.
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
Major Public Deliverables (1/2)

- **Legal studies**
  - Legal implications of cloud computing on public authorities (May 2014)
  - Legal conclusions of the PCP process (November 2016)

- **Gap analyses**
  - Standards, Normalisation and Certifications Associated (May 2014)
  - Public sector study (coming soon)
  - Study of market vendors’ offering and public administrations’ requirements (coming soon)
Major Public Deliverables (2/2)

**PCP tender**
- Services catalogue (March 2014)
- Tender pre-information notice (May 2014)
- Public cloud PCP tender documentation (Dec 2014)

**Validation**
- Certification framework & evaluation methodology (2015)
- Evaluation reports for solution selection, prototypes and test products (2015-2016)

**Dissemination**
- Communication packages for industry and public sector (October 2014 + yearly updates)
Expected Outcomes

- Public sector in Europe is empowered to procure cost-effective, secure and reliable cloud services
- Pre-commercial procurement terms, do's and don'ts, opportunities and pitfalls are understood
- Industry prepared through the PCP research and experience to meet public sector needs
Who we are
Public Sector Needs

Public sector can challenge industry to develop **new and better solutions** that respond to public sector needs for which there is no cut-and-dry answer yet.

Modernise internal operations of **public services** to make them run more efficiently.

Improve the external quality of **public services** to the citizens.
Process: Gap analysis

MIND THE GAP
Process: Gaps to be addressed...

PCP shall demonstrate that gaps to public sector cloud uptake can be overcome.
... by services

- Cloud for Europe has identified numerous services that could show that issues e.g. data protection, security, control, enforcement, vendor lock-in, etc.

... can be met.

- Structured into:
  - **Piloting services**: address an actual G2C, G2B, or G2G business process
  - **Horizontal services**: support piloting services
## Initial Service List Overview

### Piloting Services
1. Basic Communication
2. Document Mgmt & 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
4. Public Administration Cloud Services Broker
5. Cloud Certification as a Service
6. Resilient Open-Source Cloud Services Stack
7. Changing the Cloud Provider
Final Services Selection

1. Federated Certified Services Brokerage for EU Public Administration Cloud

2. Secure Legislation-Aware Storage

3. Legislation Execution Cloud Services
1. 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 cross-border 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)
2. 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

Issues to be solved

• 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
3. 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 solutions** for concrete public sector needs, whilst comparing/validating alternative solution approaches
- **Share risks and benefits** with participating companies in a way that does not involve State Aid
- Create optimal conditions for **wide commercialisation** of R&D results
Project Phases

Tender preparation
(14 months)

PCP operation
(18 months)

Sharing
(6 m.)

This project is partially funded by the European Union’s Seventh Framework Programme: FP7-ICT-2013-10 and Grant agreement no: 610650
PCP Operation

1. Solution exploration (4 months)
   - Consortium A
   - Consortium B
   - Company C
   - Company D

2. Prototype (8 months)
   - Consortium A
   - Company C
   - Company D
   - Consortium A

3. Test Products / Pilot (6 months)
   - Consortium A
   - Company C
   - Company D

- Tendered through functional specification
- Framework contract governs all 3 phases
- Industry keeps IPR

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Joint cross-border PCP

Combining the procurement actions of all the contracting authorities

Only **one tender** published on behalf of all participating authorities (in English)

Only **one entity** awarding the resulting R&D service contracts for all PCP phases on behalf of all participating authorities

(Lead Procurer: AGID, Italy)
Risk-Benefit Sharing

- **IPRs shared**: ownership rights for companies – free usage rights and right to license for public procurers

- **Payment**: awarded bidders are paid for each phase

- **No state aid**: the aid element should be excluded through the contract – when the public purchaser buys R&D services at market price, there are no advantages
### Joint PCP Procedure

<table>
<thead>
<tr>
<th>Phase</th>
<th>Month</th>
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<tbody>
<tr>
<td>Tender pre-notice</td>
<td>May 2014</td>
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<tr>
<td><strong>Tender release</strong></td>
<td>December 2014</td>
</tr>
<tr>
<td>Initial offer evaluation</td>
<td>~ 3 months</td>
</tr>
<tr>
<td>Solution selection</td>
<td>~ 5 months</td>
</tr>
<tr>
<td>Prototype selection</td>
<td>~ 5 months</td>
</tr>
<tr>
<td>First test product selection</td>
<td>~ 5 months</td>
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How to engage?

• Visit [www.cloudforeurope.eu](http://www.cloudforeurope.eu)

• Join Cloud for Europe stakeholder mailing list [www.cloudforeurope.eu/stakeholder-area](http://www.cloudforeurope.eu/stakeholder-area)

• Send questions to [info@cloudforeurope.eu](mailto:info@cloudforeurope.eu)

• Follow us and engage in discussions
  - [@cloudforeurope](https://twitter.com/cloudforeurope)
  - [group: Cloud for Europe](http://www.linkedin.com/groups/Cloud-for-Europe)
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