

# Cloud for Europe – challenging the European market for public administrations

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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

(European eGovernment Action Plan 2011-2015)

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

# Project Objectives

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- 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)

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- **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)

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- **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)

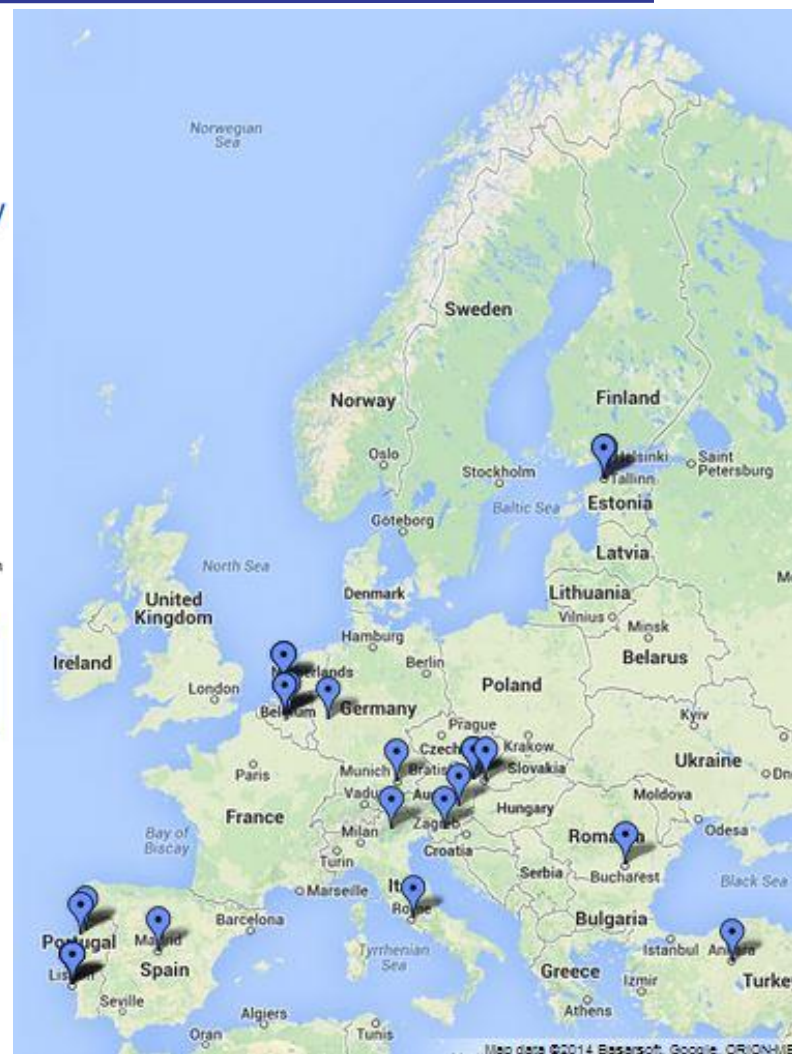
## Expected Outcomes

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- 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

A large red circle with a thick border. A horizontal purple bar with the text "MIND THE GAP" in white capital letters is centered across the middle of the circle.

**MIND THE GAP**

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

## ... by services

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- 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



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

# 1. Federated Certified Brokerage

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## 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

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### 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.)

# PCP Operation

Tender prep  
(14 months)

PCP operation  
(18 months)

Sharing  
(6 m.)

**1. Solution exploration**  
(4 months)

**Consortium A**



**Consortium B**



**Company C**



**Company D**



**2. Prototype**  
(8 months)

**Consortium A**



**Company C**



**Company D**



**3. Test Products / Pilot**  
(6 months)

**Consortium A**

**Company C**

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

# 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)



- **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

Phase	Month
Tender pre-notice	May 2014
<b>Tender release</b>	December 2014
Initial offer evaluation	
Solution selection	~ 3 months
Prototype selection	~ 5 months
First test product selection	~ 5 months

# How to engage?

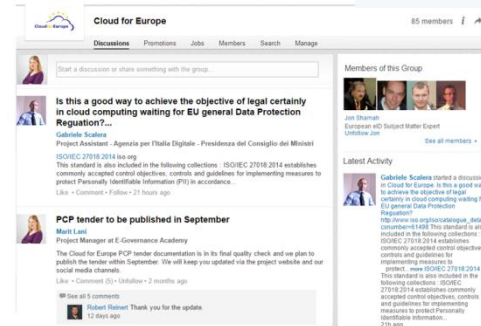
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group: Cloud for Europe



# Contact

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