Cloud for Europe
How to provide trusted Cloud Services to the public sector?

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Digitalisation (eGovernment regulation)

- **Participation**
  - Integration by data
  - IoT

- **Cooperation**
  - Shared Service Center
  - Consolidation

- **Transparency**
  - Monitoring und Logging
  - Dashboard
  - Self-Service

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Cloud uptake by the public sector

- **Legal barriers**
  - Data protection, security of information
  - Access rights, service continuity, service migration

- **Security**
  - Safety and privacy protection
  - Control over access rights, sharing

- **Interoperability**
  - Migration between Clouds
  - Cloud Standard Services
  - Integration of new services
Trust and Innovation

....for public sector cloud adoption

• Using pre-commercial procurement
  • as an instrument for **innovation**
  • to involve industry in an **market consultation** to identify the challenges and better meet the public sector needs
• to address **SMEs** to become providers for public sector market
Who we are

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PCP Operation

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

- **R&D services**
- **Framework contract**
  - Obligation of bidders: R&D services
  - Obligation of contracting authorities: payment of the agreed price
- Demand side driven approach (needs and requirements are defined exclusively by the procurer)
- Development in **phases**
- **Multiple- and competing companies** along the whole path of the PCP
- Retaining of at least **two participating companies** until the last phase to ensure a competitive market
PCP characteristics

• **Contractual arrangements**, rights and obligations of the parties (including IPRs), are **decided upfront** and made available to all interested bidders in advance (published in the tender documentation)

• PCP enables procurers to de-risk large deployment contracts by first comparing the pros and cons of competing solution approaches from different suppliers.
Reducing the risk of large scale deployment contracts

• comparing/learning from several alternative solutions approaches in parallel before fixing the requirements/tender specs for deployment,
• splitting the R&D in phases with evaluations after each PCP phase that stops further investment in non-viable solution approaches,
• sharing the benefits/risks of commercialization/IPRs with the suppliers
• encouraging the development of open interoperable solutions.

There is overwhelming evidence that PCP increases both the participation of SMEs to the tender procedure and the awarding of actual contracts to SMEs.
Small and Medium Enterprises

- Get a fair change to provide services to the public sector
- Reduce the *perceived* risks to buy from SMEs
How to fill the gap?

**Market offer**

- Allow “shopping” of cloud services by government entities
- Aggregate public demand

**Government demand**

- Increase the perception of Trust
- Reduce the perception of complexity
- Simplify the management of cloud contracts

Demand driven approach for R&D services

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The Cloud for Europe PCP

The services
Service List Consolidation

*Piloting Services*

1. Basic Communication
2. 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
4. Public Administration Cloud Services Broker
5. Cloud Certification as a Service
6. Resilient Open-Source Cloud Services Stack
7. Changing the Cloud Provider
Challenges procured- R&D pilots

• Federated Certified Services Brokerage for EU Public Administration Cloud

• Secure Legislation-Aware Storage

• Legislation Execution Cloud Services
Challenge is to create FCSB which will enable secure legislation-aware exploitation of cross-border provided services within Federated EU PA Cloud.

Addressing:

• Interoperability
• Service governance
• Data portability
• Identity propagation
• Service certification
• Legislation awareness
• Legislation compliance assessment
• Service usage metering
Secure Legislation-Aware Storage

- Provides a basis for a Personal Digital Asset service used to share documents and data between government and citizens/companies
- Offers encryption, archive and storage platform compliance
- Establish trust on a contractual basis
- Allows easy selection (and the procurement) of legislation compliant cloud (storage) services
- Provides new tools to manage the access rights of the citizens to personal data in a legislation compliant way
- Tackle with multiple regulations concerning the storing of data...
  - ...archiving
  - ...disclosure
  - ...restricted access to backups
Legislation Execution Cloud Services

- Consider national/international legislation requirements
- Integrates legal awareness into business processes
- Supports Public Cloud Services in heterogeneous and dynamic legislation environments
First results of PCP tender

• 29 economic operators from 11 countries submitted bids to the Cloud for Europe PCP tender
• The tender opening session took place on 24-27 March in Rome.
• 13 offers to lot 1 (federated certified service brokerage)
• 7 offers to lot 2 (secure legislation-aware storage)
• 4 offers to lot 3 (legislation execution).
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### Evaluation process

- **Deadline for the submission of the offers**: 16 March
- **Opening session**: 24-27 March
- **Technical evaluation**: 24 April-22 July
- **Financial evaluation and awarding**: 15, 24 July

- 24 bids received
- 23 bids admitted to the technical evaluation
- 18 bids admitted to the financial evaluation
- 12 bids awarded
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Managing the PCP – the procurers side

Joint PCP is a quite new instrument for procurement

Lesson Learned: the process is time consuming
  • It took time to understand what joint PCP is.
  • It took time to convince procurers that PCP is different from commercial procurement.
  • As the lead procurer is the legal entity, it has to follow national legislation.
  • Legal aspects need time – procurers agreement, tender documentation
  • Bidding companies need time to understand as well what PCP is

Recommendation:
Flexible interpretation - where possible - rather than a restrictive interpretation of the tender regulation clauses, in order to obtain a solution
Managing the PCP – the vendors perspective

*Joint PCP is a quite new instrument for industry as well*

**Lesson Learned:** the process is time consuming

- Legal departments of industry bidders need to understand the difference from traditional procurement – even though the process follows the national procurement regulation
- The “risk sharing” of IPRs is difficult to agree, especially for large companies

**Recommendation:**

Teach industry (legal departments) to better understand the process
Where is the innovation

• The service will come (we hope!) soon
• There are novel features also providing open interfaces for interoperable solutions
• The public sector understands better what they want to procure (and what cloud computing is)
• The industry can provide suitable solutions to European public administrations
• SMEs are interested to become a solution provider for the public sector
Thank you for your attention!

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