

Procurement Innovation for Cloud Services in Europe

## Procurement of cloud services in Europe: How the PICSE Wizard can make a difference

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### **PICSE Mission**

### Driving PICSE forward:







**HORIZON 2020** 

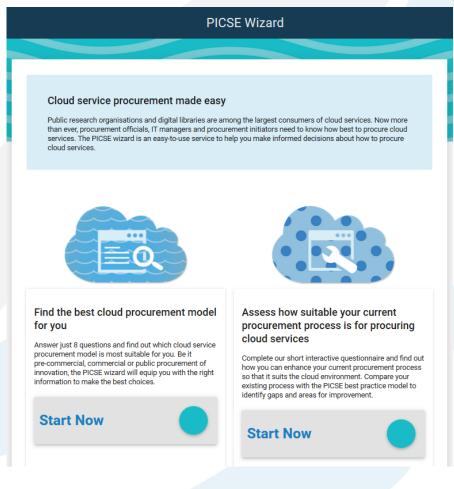
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# PICSE Wizard: Cloud service procurement made easy

An easy-to-use web-based service to help public research organisations make informed decisions about how to procure cloud services

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16/11/2015



## Why public research organisations?

- Commercial & public cloud services are suitable for scientific workloads
- PROs are now ready to procure cloud on a significant scale
- ... still too many unanswered questions





## Who is the PICSE Wizard for?



**Procurement officials** 



IT managers



**Procurement initiators** 

Public Research Organisations willing to procure cloud services through a tender procedure



### Two main functions

Find the best cloud procurement model





Assess how suitable your current procurement procurement process is for procuring cloud services

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# Find the best cloud procurement model for you

Input: The user answers to 8 multiple choice questions

#### **Output: Cloud Procurement checklist & useful tips**

Our Tips Make sure you are procuring what you need **OUR TIPS** Planning & preparatory phase Platform as a Service is the most suitable cloud service model for your needs Public cloud is the most suitable cloud deployment model for your needs OUR TIPS Lower organisational/cultural barriers in your organisation and put in place change management strategies **OUR TIPS** Run a preliminary needs assessment and disseminate a "Call for Interest" **OUR TIPS** Examples taken from the Make sure that technical, legal and financial competences related to cloud computing are covered by your procurement team. OUR TIPS Commercial Procurement Define your procurement budget **OUR TIPS** process Draft a Procurers' Agreement OUR TIPS Identify the technical, legal & financial requirements of the procurement action. Defining only technical requirements is not enough! OUR TIPS Consider the need for a pilot phase **OUR TIPS** Carry out pre-procurement market consultation & engagement OUR TIPS Select the most suitable procurement procedure that best fits your procurement & organisational needs Selection of the most suitable procurement OUR TIPS Identify the most suitable joint procurement model OUR TIPS Prepare tender documents OUR TIPS Tender request/evaluation Define objective evaluation criteria & relevant eligibility criteria for Cloud Service Providers OUR TIPS



## Some examples (1/2)

Based on your responses, Platform as a Service (PaaS) is the most suitable cloud service model for your needs.

Cloud Security Alliance definition of PaaS: Platform as a service, is the delivery of a computing platform and solution deployment of applications without the cost and complexity of buying and managing the underlying hardware and s provides all of the facilities required to support the complete life cycle of building and delivering web applications and

progran includin

#### Platform as a Service is the most suitable cloud service model for your needs

Now you've defined your service model, it's time to define your cloud deployment model.

Type of cloud cilitate bilities. This services ernet.

ated usina

sibly configuration settings for the application-hosting

Skills of the procuring organisation Successful procurement actions demonstrate that it is fundamental that the procuring organization has a very good knowledge of cloud.

Make sure that technical, legal and financial competences related to cloud computing are covered by your procurement team.

The requirements of a procurement of clo provider support and end of contract data using the service. In addition, cloud servi

When procuring cloud services there sho multiple competences in the same role. In

In traditional procurement of ICT services

Make sure that technical, legal and financial competences related to cloud computing are covered by your procurement team.

financial officers. The legal expert then evaluates the contract and the procurer manages the contract terms and conditions. Cloud services require immediate collaboration between all actors. This is partially due to the fact that no standard frameworks are in place, and also to the fact that the definition of the service is mainly a check of what different providers propose (especially in the case of PaaS, SaaS and public cloud). The role of the legal expert becomes prominent right from

#### Consider the need for a pilot phase

egulatory requirements, which may shape the type

In addition, as you are performing a joint procurement action, you need to make sure that your procurement action is well coordinated.

There are two different procurement models that can be selected to perform joint procurement:

Identify the most suitable joint procurement model

curer among them, that is responsible for all the proce vith the other procurers.

external legal entity. The second option is usually more

Guidelines on joint procurement

As cloud procurement processes should be as short as possible, the lead authority model is suggested

The lead authority will be responsible for Draft a Procurers' Agreement

e largest participating

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## Some examples (2/2)

#### Service Level Agreements

#### Remember:

- · You should attentively read and analyze the SLAs;
- You should also verify whether the cloud service agreement provides for remedies to service levels breaches or if it sets out (such as money back rebates or monetary compensation).

Check the compliance with laws and regulations.

Contractual arrangements regarding the jurisdiction and the app
 Check the data protection roles between the parties;

#### Compliance with laws and regulations

- Choose a cloud service provider who quarantees compliance with European data protection law;
- Define the degree of autonomy left to the cloud service provider acting as data processor in the choice of methods and technical or organizational measures:
- Bind the data cloud service provider acting as a data processor by means of a specific data processing agreement, or at least make sure that the boundaries
  of the data processing are clearly defined in the cloud service agreement and that the activities outsourced to the cloud service provider are adequately
  circumscribed;
- Avoid providers who use a complex chain of sub-contractors located outside the EU.

The contract should outline the governing law by which any legal disputes will be settled and the jurisdiction (place) where the dispute will be decided.

ns with mature IT systems already have implemented in-house packaged applications. Having spent years with these systems and making significant in hardware, software and management of these systems, they are reluctant to let go of these systems which have stood the test of time.

#### Training costs

nal/cultural barriers to cloud adoption are very important and should be taken into consideration especially when the organisation is procuring cloud for e.

nagement strategies and the set up of new governance mechanisms should be taken into account already at the time of procurement, as they may incur osts.

fact that some staff members will not transition well to the cloud and that some will need help to get there. As in any technology shift, some staff members to become proficient, while others will not. Be careful in considering training costs in your cloud business case.

in hardware, software and management of these

rou have executive commitment!

nal/cultural barriers to cloud adoption are very in

when evaluating costs

Aspects to

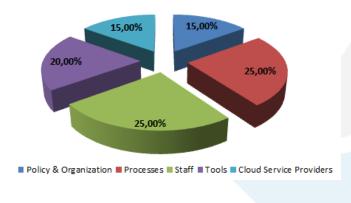
consider

How to assess cloud offers



## Assess how suitable your current procurement process is for procuring cloud services (input)

Input: The user does an assessment of its current cloud procurement process in 5 measurement areas





Select the sentence that best describes your current procedure

#### Cloud strategy in place

- O No cloud strategy in place
- O Cloud stretegy exists and is documented. The cloud procurement staff is unfamiliar with the strate;
- Oloud strategy exists and is documented. The cloud procurement team is familiar with the strategy
- O Strategic plan exists and is documented. The cloud procurement team is familiar with plan; executive management has approved and resourced the plan

#### Procurement policy for cloud services

- O No such document
- O Document exists; Incomplete or not updated
- Occument exists even if not updated; the cloud procurement team is familiar with the document
- O Document exists; complete and updated; cloud procurement team is familiar with the document

#### Procurement policy aligned with a consumption based model

- The procurement policy of the organisation only allows the procurement of software and hardware
- The procurement policy allows the procurement
- O The procurement policy allows the procurer
- O The procurement policy allows the procurem

#### **Example: Policy & Organisation**

#### Executive support

- Executive management is unfamiliar with cluss company.
- Executive management is familiar with cloud computing
- Executive management is familiar with cloud computing; has demonstrated some degree of support
- Executive management is familiar with cloud computing; has demonstrated some or substantial degree of support through budget, allocation of resources, or the like

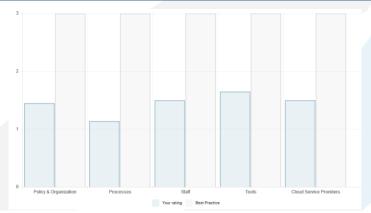
#### Cloud best practices documented

- O No cloud best practices to take as a reference
- Oloud best practices are present in the organisation but the staff is not familiar with them.
- Oloud best practices are the starting point of each cloud procurement action
- O Cloud best practices are the reference point for each cloud procurement action and are produced after each new cloud procurement



## Assess how suitable your current procurement process is for procuring cloud services (output)

# Output: Your total score compared to the best practice (for each measurement area)



Measurement Area	Your total score	Any gaps to fill?
Policy & Organization	1.45	Your procurement process must be improved! Download the report to understand the best practices you should follow!
Processes	1.14	Your procurement process must be improved! Download the report to understand the best practices you should follow!
Staff	1.50	Your procurement process must be improved! Download the report to understand the best practices you should follow!
Tools	1.65	Your procurement process is in quite a good shape for cloud. Download your report to understand what to improve
Cloud Service Providers	1.50	Your procurement process is in quite a good shape for cloud. Download your report to understand what to improve



## What's behind the PICSE tool?

- An extensive consultation of existing use cases and best practices
- The advice of the PICSE Task Force
- The input from the Helix Nebula Initiative & its Procurement Task Force
- The CERN cloud procurement experiences (Nov 2014; Nov 2015)



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## Closing remarks

- There are still a set of challenges in procuring cloud for PROs
  - Many existing procurement processes do not foresee provisioning services on-demand
  - Having the right skill-set is fundamental
  - Writing an effective cloud tender is challenging
  - Developing a standalone test to verify the suitability and ROI is not easy
  - Things are clearer for procuring laaS, the level of confidence for SaaS/PaaS is not the same
  - Joint procurement gives more opportunities
  - PCP is a new instrument
- Changes to the procurement process in the public research sector are necessary to benefit from a dynamic Digital Single Market
- The PICSE Wizard collects in one place the most relevant recommendations & tools (e.g. ENISA certification schema) that can support PROs in procuring cloud
- The Wizard cannot replace the legal & procurement advice provided by experts but can facilitate the approach of PROs to cloud procurement
- The self assessment tool included in the Wizard can help PROs filling the gaps in their current procurement process



### What's next?

- December 2015: A set of best practices for cloud procurement
- February 2016: A realistic roadmap for cloud procurement over the next 5 years
- ...and what about sustainability?







## Thank you

## Hit the ground running with the PICSE Wizard! wiz.picse.eu

#### **Contact us:**

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#### **Driving PICSE forward:**



