



# Cross border procurement of e–infrastructure services

**Bob Jones (CERN)**



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EGI-Engage deliverable 2.11  
***Cross Border Procurement of  
e-Infrastructure services:  
Opportunities, Barriers, Use  
cases, Best Practices***

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services: Opportunities, Barriers, Use cases, Best  
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D2.11

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**Abstract**

This report presents the results of the cross-border procurement of e-Infrastructure services study within the EGI-Engage project. Barriers that inhibit procurement are defined and a set of case studies examined to identify best practices that can overcome such procurement barriers. Analysis of the barriers, case studies and best practices led to a series of opportunities being proposed for the future planning of EGI and the Open Science Commons.



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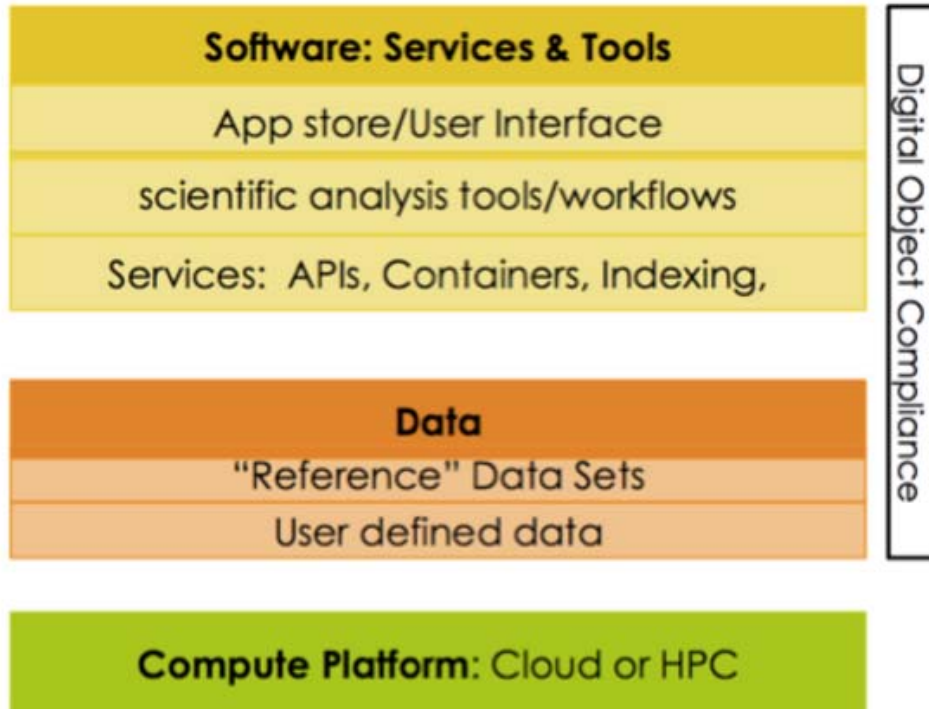
The EGI-Engage project is co-funded by the European Union (EU) Horizon 2020 program under Grant number 654142 <http://go.egi.eu/eng>

<https://documents.egi.eu/document/3013>

- Helix Nebula Science Cloud Pre-Commercial Procurement
- GÉANT tender for Infrastructure as a Service solutions
- The Commons Credit Model

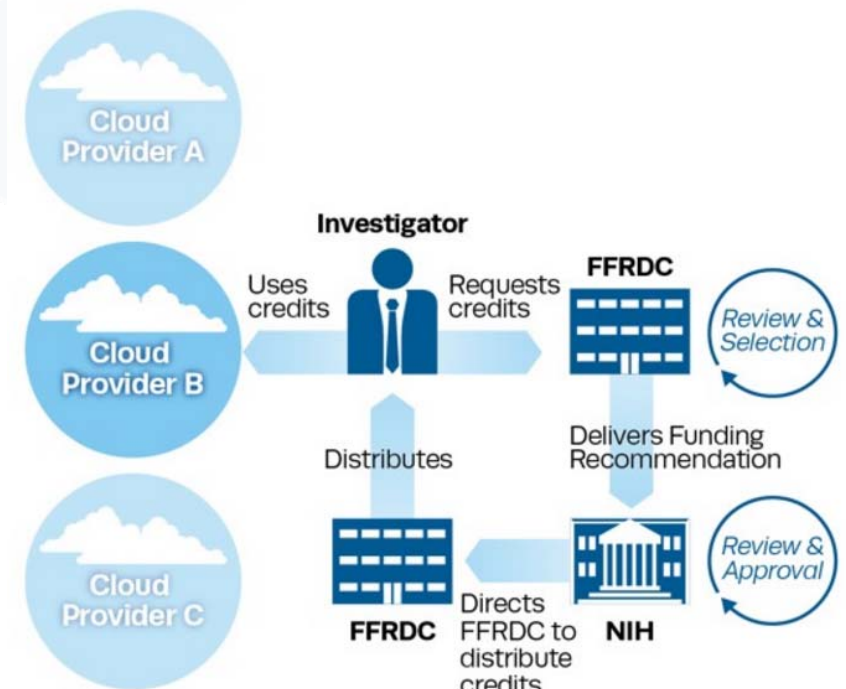


# Cloud Credits Pilot: A Business Model to Support the Use of Cloud Computing for the Commons



## Commons Credits Pilot

The Commons FFRDC : Federally Funded Research and Development Center



**NIH plans to allocate \$55.5 Million to the cloud commons pilot during 2017-2020**

Source: <https://datascience.nih.gov/>

# Service Lifecycle

## Community Service Discovery, Collaboration and Management



### 1. CANDIDATE SERVICES

This is the starting point to list a service that could potentially be used to solve a campus business problem or a community need. This is where providers start the process to participate. Campuses cannot sign up for candidate services until initial requirements are met.



### 2. PROVISIONAL SERVICES

Internet2 and service provider work together on standard contracts with community terms and conditions and offers a pilot service to our community. Providers remain in provisional status until they complete 10 successful campus pilots.



## Community Validated Services

Defines platform service lifecycle that will govern how services enter into production and are eventually retired

Different phases will require different procurement approaches



### EARLY ADOPTER

Universities continue using the service and work with Internet2 and the service provider to develop it further.



### SUNSET

This phase marks the end of the lifecycle, when a service is in the process of moving out of the Internet2 service catalog, and ongoing subscriptions sunset at the end of existing terms or twelve months, whichever is later.

### SERVICE VALIDATION

A sponsor and group of universities work with the service provider and Internet2 to define the service.

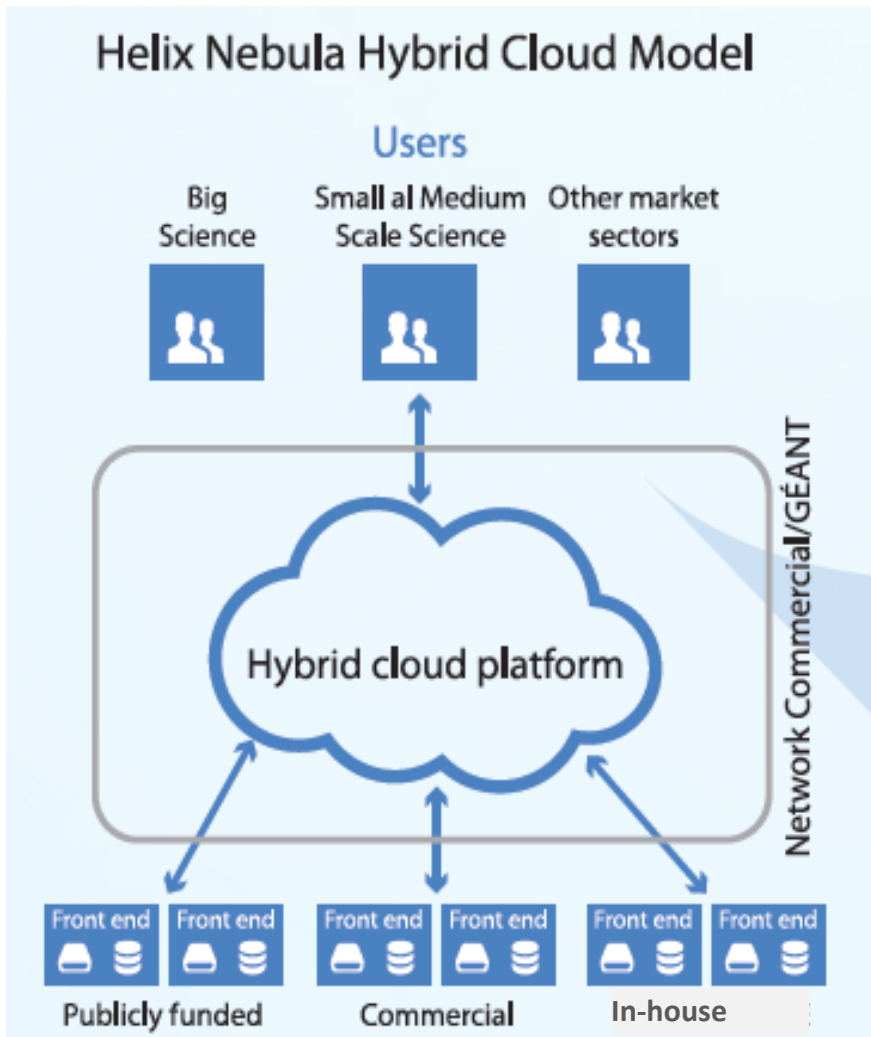


### GENERAL AVAILABILITY

The service is open to all eligible universities. Quarterly Advisory Board meetings continue to inform the service roadmap.



# The Hybrid Cloud Model



EIROforum IT Working Group  
25 April 2017

**The Federated Scientific Data Hub**

**Abstract**

The paper proposes to establish a federated scientific data hub to deliver trusted data-intensive services in a federated environment where data complies with the "FAIR" principles (Findable, Accessible, Interoperable, Re-usable). It will leverage existing services across Member States and disciplinary, social and geographical borders to become a core feature of the European Open Science Cloud.

**About the EIROforum**

EIROforum partners are intergovernmental research organisations – CERN, ESA, EMBL, ESO, EuroFusion, European XFEL, ILL and ESRF – covering disciplines ranging from particle physics, space science and biology to fusion research, astronomy, and neutron and photon sciences. The partner organisations have a truly European governance, funding and remit, and in many cases share a global engagement. They are world leaders in basic research, as well as in managing and operating large research infrastructures and facilities. The EIROforum collaboration is helping European science reach its full potential through exploiting its unparalleled resources, facilities and expertise. By combining international facilities and human resources, EIROforum exceeds the research potential of the individual organisations, achieving world-class scientific and technological excellence in interdisciplinary fields. EIROforum works closely with industry to foster innovation and to stimulate the transfer of technology.

Edited by Bob Jones, CERN IT department, on behalf of the EIROforum IT Working Group.



Analysis led to an identification of a set of potential opportunities for cross-border procurement:

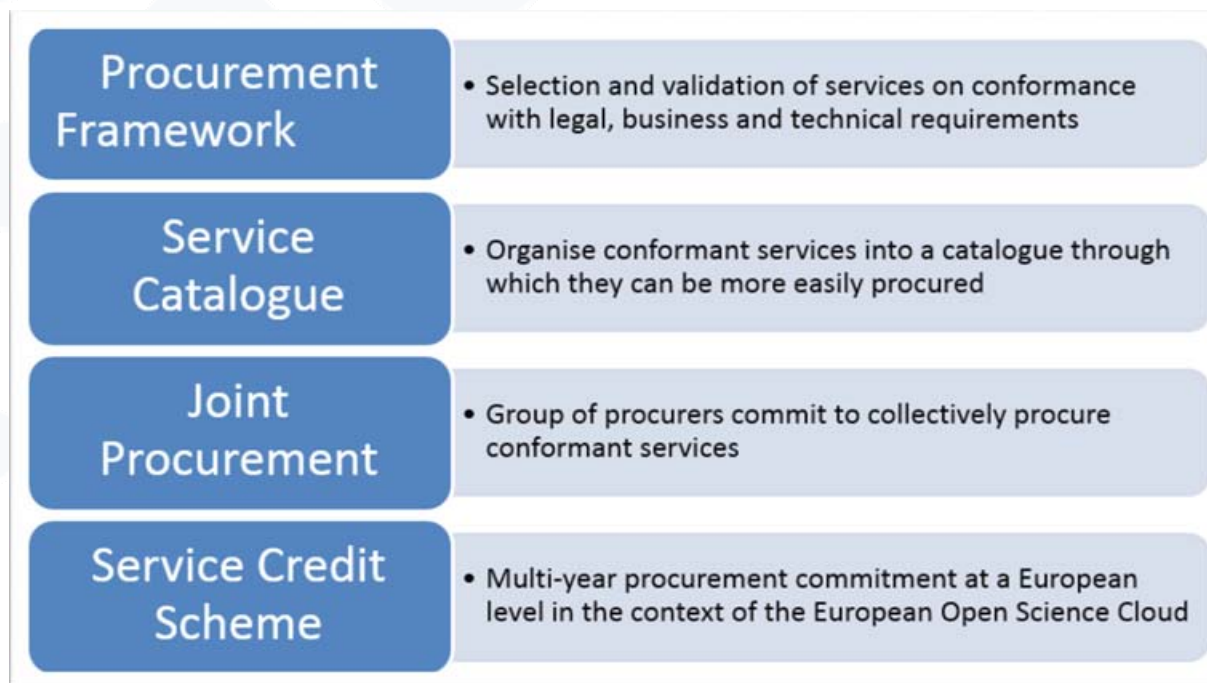


Figure 1 Potential Procurement Opportunities for EGI

Each successive opportunity represents increasing added value for the stakeholders with the key questions being:

- who pays?
- what risks are the participating parties ready to accept?

## How e-IRG can help

- The 2016 edition of the **e-IRG roadmap recommends a service marketplace approach** for implementing an e-Infrastructure commons
- As part of the **e-needs** gathering process for the ESFRI 2018 Roadmap, **e-IRG can help drive the market analysis by quantifying the scale and variety of services that RIs will need over the medium term**



## Summary

- There are a number of on-going procurement activities which are breaking new ground, gathering valuable experience and lessons learned that can serve the community for the future
- Collective procurement has advantages of reducing the time, effort and risk while increasing cost effectiveness for individual organisations in the community which often lack procurement experience
- Bringing together this valuable experience in the context of the EOOSC will help organise our community and increase the added value of the EOOSC itself.