EOSC-hub week, 19 May 2020

Rapporteur template

Session Name	
[Issues in Cross-Border Consumption of Resources in EOSC](#), chaired by Dale Robertson, JISC (**[Watch recordings](#)**)	
Main take-aways	*Please list here the main takeaways from the session.* The session addressed issues of relevance to the EOSC Shared Resources, an important element of the Federating Core proposed by EOSC-hub. The challenges involved in cross-border service provision were illustrated by three presentations about lessons learned from experience, from the Nordic countries (EOSC-Nordic), EGI and EUDAT. Although there are technical (interoperability) challenges, these are mainly able to be overcome. More intractable are the semantic operational, policy, legal and financial aspects, which are much more time-consuming to address. These include issues such as restrictions on what institutions can do; GDPR, IPR and other regulatory restrictions; VAT; and limitations of funding mechanisms such as Virtual Access. The discussion with panellists, presenters and the audience recognised that whilst financial incentives to share public services across borders may be limited or lacking, a case can be made for providing services across borders based on user demand for trustworthy (including sustained) services, access to which would enhance European research excellence. A shared commitment to the European "greater good" could potentially result in services being provided across borders if sufficient trust were built amongst member states. **Introduction** ○ Dale Robertson introduced the session and background. **EOSC-Nordic - Ilja Livenson "Practical alignment of e-Infrastructure services in a cross-border setup."**

Ilja Livenson presents the Maturity model including EOSC Nordic project's suggestions for EOSC service support. The tool should be available on EOSC Nordic website during the week of 25th May 2020.

Each country across EOSC is expected to follow service providers. Services have been analysed in categories and attributes with certain ranking. Model shows the minimum level for heterogenous EOSC services. Service providers will be made aware of FAIRness. Answers and best practices to be provided ahead of time.

Discussion:

- Owen Appleton: Nordic collaboration looks positive, can it be used elsewhere?
    - Ilja Livenson: There are political aspects as challenges. More synergy needed instead of competition.

EGI – Sy Holsinger: "pay-for-use in a publicly funded e-Infrastructure – experience and lessons learnt"

Federated environment required as well as use cases to analyse. After having a central project for funding into multiple projects it is required to have multiple business models. Budget allocation and requirements are seen as a new mechanism. EGI will make a contract and also validation with particular aspects to run in multiple countries. Various business pilots have been run earlier. Multiple providers available in multiple countries. In-house courses provided as training.

For documentation: Letter of intent, service offers, selection criteria, Dedicated P4U SLAs and OLAs templates as well as broker and coordination fees.

Individual pricing tool required and it is necessary to decide how to have better collection of individual information for EGI providers.

Discussion

Everything covered is described in SLA. If you have a reliable contract you are able to accept the financial risk caused by it. Very important is to understand your limitations.

EUDAT – Mark van de Sanden "EUDAT cross-border use cases"

Communities in 15 countries, users located in many different organisations. It was introduced several use cases in various countries such as ICOS and CompBioMed. It was stated that there are synchrotrons available.

Challenges:

Organisations and communities have different mandates which influences what kind of services can be provided and mandated. Challenges in pricing and in choosing the service providers. New users should be defined. Number of core services expected. Cloud should be related to the customer and close to the customer.

Discussion

Services go beyond the project. Service depends on the contract owner. EOSC is focusing on being free but resources are not free though.

2. **Panel discussion and Q&A**
   - Owen Appleton, EGI
   - Rene Belso, DeIC
   - Liina Munari, European Commission
   - Antti Pursula, EUDAT
   - Steve Robertshaw, Across Limits
   - Federica Tanlongo, GARR and EOSC-Pillar

Panel discussion

Q1: What is the incentive for public funders to provide (national) services across borders? What is the incentive for public service providers to do cross-border provision of resources/services and what mandate do they have for this?

- **OA:** Wider research community to be supported. Policy, high and funder level planning. Users should get something out of it.
- **RB**: As funding has been provided by the ministry it has its own starting income. It requires cost recovery and if there is no business model it would not be possible. Otherwise sharing knowledge and expanding within the network the cross-border sharing
- **LM:** Business model has no reciprocity. Our task in funding international level everything is not able to flow in place.
- **AP:** Service providers to answer the demand of the customers. People are used to commercial cloud providers. We should support international research for your country to be competitive.
- **SR:** Facilities are project-based which shows they cannot be always available.
- **FT:** If you gain more expansion, I believe while residual activity can work, it includes differences, even if the stage and resources are overabundant. If everyone could use everyone's resources

would be the most useful way to act. Of course nothing comes for free. There should be an association to be in charge of this

Q2: How should funding flow to providers, for them to make their services available across borders?

- It was mentioned that a business model across borders is required.
- **SR:** We should see the likely impact of this at first and to remember the financial crisis a few years ago and its impacts. How political funders are willing to be involved in this should be checked.
- **LM:** Services available should be seen and why are they provided, what is the value of them? Commission point of view is getting more important in particular because funding EOSC is coming to the end of its day as its funding cannot continue forever.
- **OA**: Token mechanism has complexities if you are unsure how to generate funding opportunity. There should be a baseline certainty even if it is an unknown demand. It is required the resources would be easy to purchase. One idea would be to have semi-artificial needs available.
- **AP:** Mutual benefit for national funders should be available. Nordic countries have tried something already. As an example a "joint pot of funding" might be an interesting idea.
- **FT:** User side should have some disciplines and criteria. Users should be harmonised. A lot of mechanisms are in-kind funded. In-kind should be defined in EOSC.

Q3: What is the overhead on cross-border provision/consumption of resources, in terms of procurement rules, contracts, SLAs etc?

- **AP:** After you make the contract with the user you will have an overhead. You need SLAs as well as definitions for your services. Provision of services to be made easy and possibly within central representatives. Different nodes of the community taken into account.
- **RB:** No extra overhead. it does not matter where the user comes from as long as there is a payment of the cost.
- **SH:** There is an overhead when you start scaling out. You need to improve the automation in order to reduce the overhead to replace the key words and templates (it is time-taking).
- **OA:** VAT is an interesting one. How many parties are there available in one country?
- **FT:** This is public in multiple countries. It could be great if everyone would have the similar situations in all countries. Perhaps we should consider further collaboration.

- **SR:** Some funding needs to be sorted in investments. We should consider EOSC as a business-minded opportunity.
- **LM**: EOSC as business - I agree with this. Country-specific matters could be used as specialisation.

Q4: What is the "overhead tolerance" of users for services [hassle, money, wait-time etc] and how does that influence their choices?

This question was not discussed.

Q5: [What kind of service environment do we need to create, to make publicly-funded services appealing? - how to make them the services of choice over other options?]

This question was not discussed.

Future steps	*Please indicate how the outputs of the discussion will be used in the work of the EOSC WGs*
	The session and the ideas of the panellists would be fruitful to be used in developing the deliverables of the Sustainability WG. The discussion during the session provides input towards the work on EOSC Business Models currently taking place within EOSC-hub. The outputs from that work will be provided to the Sustainability WG.