EOSC's Evolutionary Scenarios: Perspectives for Digital Cultural Heritage

27 November 2019 (10:00-13:00), National Library of Portugal, Lisbon

On the occasion of the Europeana 2019 Conference, the Europeana Research Community, in collaboration with EOSCSecretariat.eu has organised the workshop on **EOSC's Evolutionary Scenarios: Perspectives for Digital Cultural Heritage.**

Event Scope

The event aimed to address the challenges and opportunities that the EOSC establishment is posing to cultural heritage institutions and offer food for thought about the positioning of cultural heritage institutions within this ecosystem by:

- presenting best practices already put in place as for data or services sharing;

- discussing specific solutions for digital cultural heritage in compliance with the FAIR principles;

- inviting the audience to identify and plan activities for gathering requirements from the cultural heritage sector as a potential stakeholder in EOSC.

Report of the Workshop

The workshop introduced professionals from museums, archives and libraries to EOSC, its services and best practices in the cultural heritage and humanities sectors. The goal was to establish a new partnership between Europeana and EOSC and to seek for effective ways for the Europeana infrastructure and its network to plug into the Cloud and for EOSC to expand its community and its range of services.

It started with short welcome addresses by Marco de Niet, Chair of the Europeana Network Association Management Board (Marco is the Manager of the Research & Education Services Division & Deputy Director, Leiden University Library), Alba Irollo, Research Coordinator, Europeana Foundation and Sara Di Giorgio, Project Manager of CulturaItalia, ICCU / Member of the Europeana Network Association Management Board. These addresses summarised the engagement of Europeana with the research community (currently Europeana works with six communities and researchers are one of them – and the one with the largest representation among the delegates of this Europeana conference, some 30% of all participants. Sara di Giorgio provided data from the recent Europeana re-use survey which illustrate that the EOSC awareness among Europeana community is still relatively low but there are valuable insights on the role EOSC can play in improving the access and preservation of digital cultural heritage data.

The introductions were followed by four talks which introduces the work of the EOSC Secretariat and three ongoing HORIZON 2020 projects which engage the digital cultural heritage communities as well.

- **Setting the scene: EOSC Secretariat** was the talk delivered by Annika Kossack (Consultant, Technopolis Group). She outlined clearly the stages of development of EOSC which had been

EOSC
secretariat.eu
Setup and management of the EOSC Secretariat
supporting the EOSC Governance

mentioned for the first time in EC communication in 2016 and currently is in the stage of clarifying and implementing a governance structure. She also explained the six major domains of the EOSC model: architecture, data, services, access & interface, rules and governance. Annika gave also a clear message it is important to engage with EOSC contributing to the vision of modern research, and to the implementation of real European transversal services.

- **The power of digital e-infrastructures: EOSC-Hub** was the title of the talk of Jorge Gomes (Researcher, LIP / Laboratory of Instrumentation and Experimental Particles in Lisbon & INCD / National Distributed Computing Infrastructure). While he was outlining this infrastructure which will is being developed in a funding cycle which will end in December 2020, I had an a-ha moment. It was obvious that our traditional model of building infrastructures which always has to provide an answer to the uneasy question "if we build it will they (the users) come" is now shifting to a model where the user communities should engage and discuss with those who deliver infrastructures what they want to achieve.

- **National and European federated infrastructures: EOSC-Pillar** (delivered by Adeline Joffres, Head of International Cooperation, Huma Num) outlined the activities the regional project coordinating the national open science efforts for Austria, Belgium, France, Germany and Italy. She provided an interesting example of interoperability in a Proof of Concept which explores how to link two french repositories, the open archive HAL and nakala.

- **Social Science and Humanities Open Cloud: the SSHOC project** was presented by Franciska de Jong (Professor at Utrecht University & Executive Director of CLARIN ERIC). She argued that SSHOC is "THE cluster for cultural heritage in the EOSC" and provided an interesting example on preparing and depositing a dataset on 135.000 cultural heritage descriptions from Europeana into EOSC.

This set of talks outlined that there are different ways of joining the EOSC efforts – and the entry points could be domain-specific or regional.

The last presentation (**EOSC and research communities: the state of play**) was delivered by Franco Niccolucci, Director, VAST-LAB PIN / Scientific Coordinator of ARIADNEplus and PARTHENOS / Former professor, University of Florence. One could hardly imagine a more suitable final talk for the event – because, after so many responses to the question HOW, Prof. Niccolucci took the conversation back to the question WHY, and FOR WHOM. He illustrated the low participation of Humanities' scholars providing an example from archaeology. He asked, how many of the some 60.000 archaeologists working in Europe are aware of open science and the infrastructures to deliver it? He continued with more questions – how popular is FAIRness? Is data reuse implemented, encouraged, enabled or ignored? How EOSC will help in reducing the fragmentation among various academic domains? Should there be a common FAIR layer? What kind of common services are requires for re-use? These questions concentrate on FAIRness, services and re-use.

Question and Answer Session

The talks were followed by a *Question and Answer* session, which identified a number of issues where more discussion or practical work is needed. The main concerns of the audience were around several key areas:

- how the experience of previous infrastructures could be identified and used to match better the provision of services to the actual needs of the communities;

- how to make sure the multiple hubs will offer interoperable resources;

- what business models will be adopted to support the effort needed for the development of the EOSC;

- what practical solutions will guarantee the sustainability of EOSC and which stakeholders which will ensure it is taken forward beyond the ongoing projects which will be completed by 2022;

- how much efforts does it take to prepare specific Europeana datasets for inclusion into CLARIN;

- how to use the experience of innovation labs in cultural heritage institutions which have valuable expertise in understanding the researchers' needs and in datafication of collections.

In addition, there was an initial discussion on how the Europeana research community can be involved to address the issues of connecting the cross-domain silos.

All these require further in-depth discussion and strategic thinking and chart exciting avenues for further work where Europeana can take a leadership role with its expertise on overcoming fragmentation and silo culture.

Q&A transcription

Q: What will be done in EOSC to match the availability of services? to the needs of the communities?

A: This is an issue not only for EOSC but also for the current domain-specific repositories.

Q: We all struggle with this issue – how to strengthen the uptake. Have we learned any lessons in this?

[Q] The recent survey on reuse with the Europeana research community highlighted the issue of access to data. Since EOSC will be a sort of a hub of hubs what will be done to address the interoperability issues?

[A} The interoperability has not been resolved yet.

[A] It has been recommended JSON across all repositories.

[Q] How easy/complex is to get resources to CLARIN?

[A] It is doable – the effort around the first Europeana dataset was perfectly manageable.

[Q] There is always the aspect of the cost of the services – who will be paying for this and what business models are being considered?

[A] This is an area under discussion. It is not expected that the individual researchers will be paying on the basis of what they use but indeed this is an important issue.

Prof Niccolucci had excellent questions and suggestions – on the communities which can contribute to raise the awareness and provide training, there is an additional important player – the innovation labs in cultural

heritage institutions which do a lot of work on understanding the needs of the researchers and also on datafication of collections.

[Q] How could Europeana network support all the efforts in connecting the cross-domain silos? Also, what will be the sustainability model for EOSC? There is the issue of creating expectations what the cultural heritage institutions will be doing when they have not been fully involved in any planning and additional activities not budgeted for.

[A] The good news is that some of the key stakeholders are established legal entities (e.g. the ERICs). They will be expected to play a role in sustaining EOSC.

Conclusions

The great participation and interest of the attendees to the workshop demonstrate that cultural heritage institutions and researchers in this sector start to be aware of EOSC and its this revolutionary prospect.

The EOSC is a great initiative that could facilitate the interaction between cultural heritage sectors and the researchers in the digital humanities. It will allow millions of researchers to store, manage, analyse and re-use the great collections of museums, archives and libraries making easier the link to vast amounts of research data in the digital humanities domains in a trusted environment across technologies, disciplines and borders. In all this, Europeana as a network of accredited national repositories connecting over 2,500 local and national cultural heritage institutions, can play an important role.

The key is consulting with experts from CHIs and designing products and services around their needs. Researchers in Digital Humanities, Social Sciences and experts from the cultural heritage sectors are the largest group of stakeholders for Europeana, and we should investigate more about how they are working and what they need for a management and re-use of digital cultural heritage. EOSC can support the development of new services for improving the management and the re-use of the collections of libraries, museums and archives by researchers. By partnering with research infrastructures and EOSC, Europeana and cultural heritage institutions will be able to introduce new products and development strategies more easily and rapidly.

The wide network of cultural heritage institutions should furthermore be properly informed, involved and trained in the global strategies concerning data such as the application of the FAIR principles to the domain and the implementation of a 'Culture Cloud' as a thematic cloud within the global EOSC.

There is the opportunity to stimulate collaborative projects for integrating cultural heritage sector in the European Open Science Cloud.

The overall innovation goal here is to integrate humanities and heritage e- infrastructures as part of the EOSC.

Fig. 1 Sara di Giorgio outlining the aims of the workshop

Fig 2. Speakers at the event

Authors of this report:

Sara Di Giorgio, Istituto Centrale per il Catalogo Unico delle biblioteche italiane, Italy Rome, ORCID 0000-0001-8962-4183.

Milena Dobreva, UCL Qatar Doha, QA, ORCID 0000-0002-2579-7541.