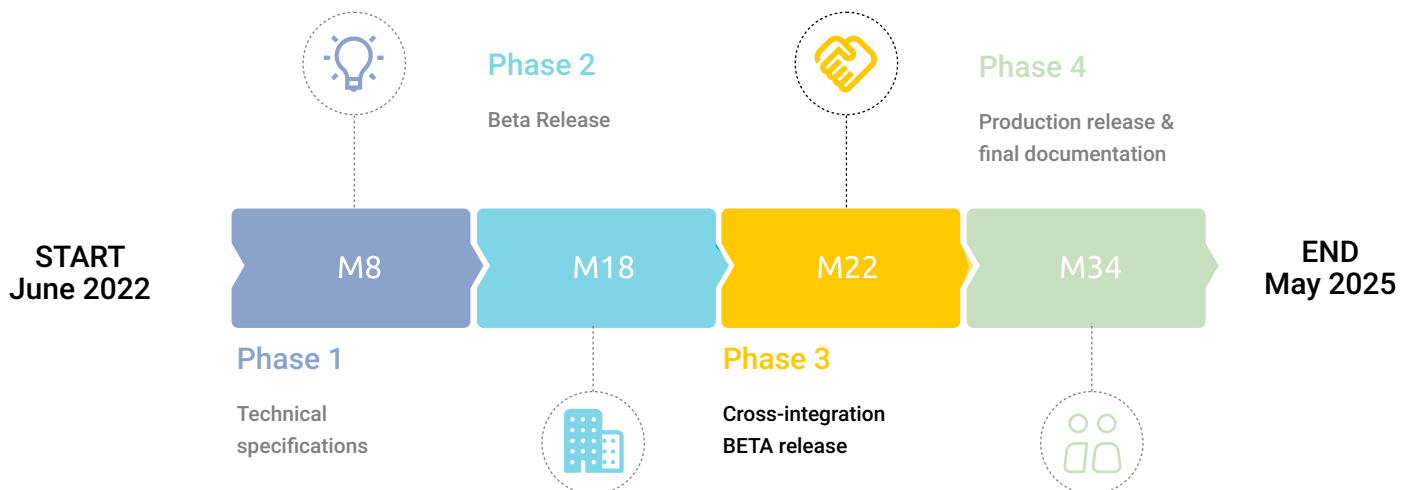


## Briefing #8

### Top project achievements

1. Successful project meeting organized in Athens which provided long-sought live interaction between the project team members and important updates regarding the evolving EOSC landscape.
2. Two important deliverables published:
  - [D1.4 FAIRCORE4EOSC Cross-integration Beta Release Report](#)
  - [D2.2 Compliance Assessment Toolkit](#)
3. FAIRCORE4EOSC concluded the second project year that was full of development work and interaction with wide variety of stakeholders. Next it is time to turn gear up for the last project year fine-tuning the components, solving the sustainability questions and promoting the work done for a FAIR EOSC.



## Technical updates

The last quarter period of the project was a very active period of many workshops FAIRCORE4EOSC represented itself (i.e. FAIRCORE4EOSC All Hands Meeting, euroCRIS, PIDfest, EOSC Beyond workshop EOSC Nodes federation, EUNIS Congress).

In the week of 22nd of April FAIRCORE4EOSC organized its second all-hands meeting (AHM), organized in sunny Athens by GRNET. The AHM was very well attended with more than 25 colleagues from the development, case study and demonstrator teams. The meeting was held at the end of the Cross-Integration & Case Studies BETA Integration phase, therefore the meeting started with updates from the case studies, demonstrators and on the components. From the updates can be concluded that good progress has been made, but still work must be done. Also, the successful one-to-one speed-dating sessions between case studies/demonstrators and component teams have been held and these were seen again as very useful and will be continued in an online setting. Next to the speed-dating sessions, a dedicated session was organized to discuss the cross-integration and architecture aspects related to specific requirements. Also, this session was very well received. FAIRCORE4EOSC is aiming at building new EOSC-Core components to support FAIR. Because of all the moving parts within EOSC, the EOSC Procurement and the EOSC EU Node, the EOSC Federation, introduced uncertainties to which extend the project can deliver new core components in a sustainable way. To discuss these challenges sessions were organized to discuss the approach to test integration of the FC4E components with the EOSC Core capabilities via the EOSC Beyond Innovation Sandbox. To further explore this option FC4E attended the EOSC Beyond workshop on EOSC Nodes federation and their federation requirements for the EOSC Core services, organized by Cyfronet, held on the 10-12th of June in Krakow. At the end of the AHM meeting, a session was organized also on the topic of sustainability. The session started with presentation from Peter Szegidi from the EC to provide a status overview on the EOSC EU Node. Mark Dietrich from EGI gave an overview of the EOSC-Beyond project and Ilaria Nardello from EOSC Association gave an overview of the Sustainable Exploitation Planning (SEP) methodology to develop sustainability plans for the FC4E components. These presentations were followed by a hands-on session where the components teams familiarised themselves with the SEP methodology on a very practical level and started developing a sustainability plan for their components utilising the SEP template presented by Nardello. These sustainability plans will be further developed in the final year of the project.

The euroCRIS conference was held on the 15-17th of May at the TU Vienna in Austria. Colleagues involved in different FC4E components and case studies attended the conference, presentations were provided on the PID Meta Resolver (PIDMR), on how to use the PIDGraph data in Research.fi and how CRIS systems could use the Metadata Schema and Crosswalk Registry (MSCR). Next to attending the euroCRIS conference, FAIRCORE4EOSC organized a half-day workshop "Hands-on research data". In this workshop FC4E presented the different components, also FAIR-IMPACT presented the cascading grant call for support to enable testing of specific tools, approaches and methods to support FAIR, and had the attendees the opportunity to meet the developers in one-one meetings.

The PIDfest was organized on the 11-13th of June in Prague, Czech Republic. The aim of PIDfest is to bring together PID advocates, users, and leaders from around the world to solve real world infrastructure challenges that will accelerate research and innovation. In FC4E many developments are PID related and were therefore also present, e.g presentations from SWH on Identifying Billions of Source Code Artifacts: the SWHID in Publication Workflows, from ARDC and DataCITE on Research Activity Identifiers (RAiD): Bringing an Emerging PID to Global Production, from SURF on Digital portfolios, RAiD or otherwise, from GRNET and DANS on A Knowledge Base for Persistent Identifiers, in collaboration with FAIR-IMPACT on PID Policies and on EOSC-focused components and services for supporting PID use and implementation.

EUNIS is the European University Information Systems organization. It brings together those who are responsible for the management, development and the policy for Information Technology in Higher Education in Europe and held its yearly event on 5-7th of June in Athens.

The MSCR team submitted a paper and held a presentation on "Implementing interoperability – Metadata Schema and Crosswalk Registry approach to FAIR metadata mappings". The paper received the best paper award.

These workshops and conferences are considered very important to assess if the components being developed are fit for purpose and to receive valuable feedback on the status and directions we develop the components.

In the developments of the EOSC Software Heritage Mirror (SHWM), FAIRCORE4EOSC is setting up a full mirror of the Software Heritage Software Archive to ensure the open-source software is preserved in the context of EOSC. SHWM team achieved an important milestone, to have the mirror agreement signed between GRNET and INRIA.

## Case Study Progress

The Maths case study (CS) team has pursued its efforts to develop the necessary components to ingest articles and software metadata in the PIDGraph. They are now waiting for Datacite to validate or provide feedback for our articles and software metadata mappings. They also adopted the endpoints developed by the zbMATH Open API team, which are now operable to help expose metadata in the MaRDI infrastructure's OAI-PMH server. They are continuing their work on configuring the necessary file formats and crosswalks to make the data findable in the desired Datacite target format. Once achieved, the next step is to focus on integrating the RDGraph services to expose our metadata. Regarding the MSCR component, they are continuing efforts to map swMATH and CodeMeta vocabulary, and expect to coordinate with the MSCR team soon.

The Social Sciences and Humanities CS team continued the work on the integration with the MSCR and DTR. A concrete integration of the MSCR in the VCR was demonstrated at the technical meeting in Athens, showcasing the execution of a crosswalk to aid the user with pre-filled metadata in the UI when adding resources to a collection. This work also started the exploration of solutions on how to easily map a metadata instance to a schema in the MSCR. They are exploring a potential solution utilising the DTR. Within the DOG, work has continued to integrate with the DTR and the taxonomy API specifically. An initial alpha version of the service, aimed at internal testing has been deployed.

The Climate Change CS team continued its work on the implementation of the RAiD connection, with the intention of linking climate datasets to existing research activities, and of the DTR usage for the automated import of climate datasets. The next step is now to use the PIDGraph to extend the provenance based on a dataset DOI for selected climate datasets with the help of RAiD and DTR - the most important requirement of the case study. A new provenance module should realise this extension and expand the existing implementation.

The European Integration of National-level services CS team has worked on testing PIDGraph, RAiD, MSCR and DTR components. The early testing phase is completed. PIDGraph has been tested for enriching the research metadata on outputs, exploring workflows and implementing them in national CRIS systems. Both CERIF2 and research.fi data models have been successfully registered to MSCR. Next in piloting MSCR is

registering HELIX metadata schema and opening discussion on registering either OpenAIRE Guidelines or the SKG-IF to enable mapping between OpenAIRE and national CRIS systems. RAiD has been tested with legacy project data and creating a RAiD for a project has been successful by using REST endpoint and manually. DTR has been initially evaluated on how it can be employed (together with MSCR) to facilitate (a) better documentation of the standards, (b) operation of metadata transformations. RDGraph has been queried for metadata on datasets with Finnish affiliation to enrich Research.fi.

The EOSC service providers and RDM communities CS team has worked on MSCR and DTR components. Demonstrator activities of WP4 have realised as command line interface -tool, TACOS-cli<sup>2</sup>, which allows to interact with APIs of MSCR and DTR services from terminal. We in WP7 have been designing and evaluating how TACOS-cli could be best used to implement integration between EUDAT B2SHARE -service and MSCR and DTR -components. The interaction between B2SHARE service and MSCR and DTR -services is likely to be built around this TACOS-cli tool. The next step for MSCR and DTR integration is to start defining B2SHARE community specific metadata extensions to DTR and further develop TACOS-cli to make it possible to create community metadata extensions using crosswalks in MSCR.

Besides, WP7 organised a speed-dating session during the technical project meeting to facilitate the interaction between the CS teams and the components development teams, and to help solving issues around the CS component integration work. Speed-dating sessions were greatly appreciated and it is currently discussed at TSG level whether to pursue this kind of sessions remotely, on a regular basis.

Finally, a FC4E pre-day workshop was organised in Vienna on May 14, ahead of the EuroCris conference to present most project components and the Case Study work and engage with the EuroCris and Austrian communities.