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The National Initiatives Survey and Its Importance



Austria, Belgium, France, Germany, and Italy - Working Towards an EOSC



Federated FAIR Data Space A Space to Federate them all



he Project in **Numbers**



Foreword

am pleased to introduce the annual report of EOSC-Pillar. In the last year, we have seen significant steps forward in the EOSC governance that brought us to have a candidate European Co-Programmed Partnership as the means of steering the development and coordinating the national, institutional and European contribution to the European Open Science Cloud.

Also, in terms of implementation, the EOSC Executive Board, with its working groups, has better defined the technical and organisational structure that is consolidating around the different EOSC related H2020 projects. EOSC-Pillar is among those projects and is playing a pivotal role in preparation and harmonisation. Let me mention in the next lines few of the project activities that I consider very relevant.

EOSC-Pillar kick-started the survey of national initiatives and provided the standardised questionnaire to the other "regional projects" of the call INFREOSC-05, as the first action of their collaboration framework. This mapping activity has been instrumental for supporting the Working Group "Landscape" of the EOSC Executive Board.

I believe that the metadata framework for services is a cornerstone to enable the federation at European level: the pilot work of the project in designing the National Service Registry will strongly contribute to set the harmonised onboarding scheme into the federated catalogue.

I also consider the development of the FAIR Federated Data Space very promising, notably because it will face the challenge of offering unified search among different repositories, which is recognised as a key objective in the EOSC implementation.

In July 2019, I attended the kick-off meeting of EOSC-Pillar and I was impressed by the commitment of the consortium and the variety of highly skilled professionals participating in the project. The activities and the results achieved by the project during the first year, highlighted in this report, confirm my expectations.



Christian Cuciniello

European Commission -DG Research and Innovation, Project Officer for EOSC-Pillar

EOSC-Pillar, One Year On

oordinating central western Europe's plug-in to the European Open Science Cloud is a challenge. But through the collaboration of key players, the foundations have been established through EOSC-Pillar within its first year.

National Initiatives Survey launched and concluded

Prior to EOSC-Pillar, a cross-country survey of such magnitude has not been done in the past. To achieve this, EOSC-Pillar commenced work on the National Initiatives Survey by defining its survey targets along with other EOSC stakeholders, consulting legal experts on the survey's legal and ethical implications, and defining the distribution mechanism, eventually reaching over 2,100 organisations across the target countries for the survey.

EOSC-Pillar then developed a technical infrastructure to manage the surveys allowing for fast set-up and reuse by other stakeholders and defined the questions most relevant for the survey objectives. The considerable work has been useful as the survey method and questionnaire were reused by other regional projects, creating synergies and allowing efficiency in building the EOSC.

The survey was rolled out across EOSC-Pillar's five countries and also served as a grass-roots engagement activity, helping increase awareness of EOSC on an institutional level. The survey results were analysed and presented in a webinar, a promotional video and a summary page on the website. The outcomes helped provide input to the various EOSC Working Groups.

All the findings were then released in the Summary Report of the National Initiatives Survey ¹ (D3.1) containing all relevant findings from the survey and serve as information and input to future discussions on EOSC and the research infrastructure landscape, as well as serve the EOSC governance and policy makers in general to sound and evidence-based decision making. This marks the concluding achievement of the first year of the National Initiatives Survey work package.

Synergies established

EOSC-Pillar contributed to the establishment of the Cross-Project Collaboration Board that is now generating synergies between EOSC-Pillar, EOSC Nordic, EOSC Synergy, NI40S-Europe, ExPands, FAIRsFAIR and EOSC Secretariat.

EOSC-Pillar, given its project nature, coordinates closely with the Landscape Working Group (WG) and since the start of the project, it liaised with and supported it.

EOSC-Pillar maintained close coordination with the WG to ensure that the EOSC-Pillar survey and the surveys of the regional projects would provide relevant information to the definition of a European landscape regarding the open science initiatives, while in turn be able to build on the results achieved by the WG.

Setting the foundations for EOSC transnational services

EOSC-Pillar commenced work on the National Service Registry design and contributed to developing a new version Service Description Template (SDT) and improving the EOSC Portal.

The National Registry concept was presented to relevant stakeholders such as the Rules of Participation WG, EO-SC-hub and EOSC Enhance, bringing forward the discussion on possible mechanisms for the federation and interoperability between the national registries and the central EOSC Portal. In the end, this will enhance the visibility and findability of national services and on-board them at the European level.

In coordination with EOSC-hub, the Cross-Project Collaboration Board - Onboarding Task Force and EOSC Enhance, EOSC-Pillar has been contributing in discussions on a new SDT and refining the on-boarding processes to ensure that the future national catalogues are fully integrated in the wider EOSC environment. EOSC-Pillar is involved in the requirements gathering for EOSC Portal's enhancement and will take part in its testing and validation.

Although the EOSC SDT is not final yet, the design and configuration of the National Registry has already started and the Registry will soon start to on-board the Italian community. The Italian registry will act as a proof of concept, and then the activity will move to create the other national instances.

EOSC-Pillar has also started to coordinate internally to kickstart the activities on identifying funding sources and business models to delineate sustainability strategies for the National initiatives and transnational services, while liaising with other initiatives and bodies. This activity (still ongoing) is expected to lead to a consultation of the national initiatives in July.

Building the FAIR Federated Data Space

EOSC-Pillar aims to establish FAIR data services at the national and trans-national level. To reach the goal by progressively reducing technical, societal and organisational barriers to ensure findability, accessibility, interoperability and re-use (FAIR) of research data considered in EOSC-Pillar.

The architecture of the EOSC-Pillar FAIR Federated Data Space (F2DS) together with its components and tools is designed. The EOSC-Pillar FAIR Federated Data Space will enable unified search and data retrieval over multiple data sets from heterogeneous and distributed community-specific repositories (i.e. enabling pluridisciplinary searches).

F2DS is the unifying data space built by aggregating and enriching datasets from data repositories involved in the different project use-cases. In the first iteration, the F2DS will integrate datasets from INRAE, INSERM, HUMANUM, and IFREMER. More data sets will be added in the future.

¹ Visit https://zenodo.org/record/3937318#.X7vUMc1KjIU for more information.



The federation is implemented using FDP (i.e. DCAT repository that is searchable through Rest API and SPARQL endpoint.) and with the adaptation and use of existing tools data is made more FAIR.

The goal is to allow data producers to publish their datasets in the F2DS in the simplest and most automatic way possible. A workflow for publishing data sets constitutes the following steps: description of the the content, description of the APIs for accessing metadata, description of the available datasets, enrichment of the metadata.

The relevant research data management toolset is released for use by the implementers of the repositories in EOSC Pillar and is described in the EOSC-Pillar report "D5.1 FAIR data management tool set".

As for training activities, a comprehensive plan of education and training including a catalogue of training resources and stewardship guidelines by partners was developed. D5.3 Training Plan is not static and regularly updated to accommodate the presence at conferences and workshops. Training modules concentrate on different topics: FAIR services and tools, ontologies for specific domains etc.

In addition, the Guidelines of FAIR data stewardship, targeted primarily to data stewards teams and decision-makers, are developed and will be published in the EOSC-Pillar project portal shortly.

EOSC-Pillar has also liaised with other FAIR-initiatives to maximise the uptake of FAIR principles across the research communities.

Moving forward, EOSC-Pillar is in the process of identifying and collating existing ontologies. This exercise will enable the integration of repositories into the EOSC-Pillar F2DS. Already, a survey for ontology collection and harmonization has started. The goal is to use the ontology to enable mapping of metadata and contribute towards harmonizing the interfaces and ease of use of the F2DS.

Building Blocks Gathered for Use Cases

Within the first year, EOSC-Pillar has delivered on three key results.

The first of which is to identify, in cooperation with the GO FAIR'S CO-OPERAS Implementation Network, use cases in the social sciences and humanities community (SSH) that can be leveraged in EOSC-Pillar.

This resulted in four use cases that underline the variety of SSH practices, initiatives and needs concerning the management of research data have been identified and highlight the transversal and specific needs of researchers in the SSH.

EOSC-Pillar also identified and classified existing tools available for FAIRization (MS25).

At the end of the period, EOSC-Pillar released the State of the Art and Community Needs Report from Use Cases (D6.1) that present "the state of the art" through a cross-cutting analysis to identify commonalities and synergies among the UCs with regards to technical requirements and needs.

The cross-cutting analysis has shown that the UCs can be also demonstrators. Moreover, some technical clusters have been identified such as:

- Data Provenance
- Data Preservation
- Catalogue and on-demand processing
- Link Open Data (LOD)
- Spatio-temporal data
- Virtual Analysis Platform (VAP), Virtual Research Environment (VRE) and Big Data
- Open Source-Science-Data
- Natural Language Processing (NLP)

Progress Towards an Infrastructure Layer

To deliver solutions on: how to launch services on real-life computing and data treatment platforms, how to deal with issues resulting from giving access to users from different institutes and/or communities, how to help teams to include their services into the EOSC Portal, the first year was mainly dedicated to evaluating the needs of the communities involved in EOSC-Pillar, and, more specifically, identify what services and infrastructures will be needed by the use cases present in EOSC-Pillar. In addition, EOSC-Pillar has also pushed forward the development of solutions that are going to be needed by a wide variety of projects, such as the provision of Virtual Research Environments (VREs).

Based on the input and by studying existing procedures, a set of recommendations has been put forward on how best to prepare and organise the implementation of new services in the EOSC. Results of this can be found in the reports that accompany milestones Integration and Federation Guidelines and Procedures to include national services in EOSC.

Concerning the problem of user access management through Authentication and Authorisation Infrastructures (AAI), EOSC-Pillar further developed and successfully tested solutions, which are now ready for integration.

EOSC-Pillar was involved early on in providing solutions to challenges arising from the urgent need to treat data in the context of fighting the COVID-19 outbreak. In a collaboration among partners of EOSC-Pillar, workflows are now being set up allowing the timely analysis to support COVID-19 drug discovery.

Another success of the first year of EOSC-Pillar work was the successful launch of services using heterogeneous computing infrastructures (HPC and HTC) in the context of Galaxy workflow management.

Community Built

Guided by its Dissemination, Communication and Stakeholder Engagement Plan (D2.1), EOSC-Pillar didn't waste any time in commencing its engagement activities. The website, www.eosc-pillar.eu (2,200+ unique visitors), along with its LinkedIn (130+ followers), Twitter (500+ followers), and YouTube (1k views) channels have been set-up from month one and has been building up its audience considerably since.

It organised its first series of webinars including the first public event that saw the regional projects presented together since their launches and organised its first workshop contributing to the topic of EOSC readiness indicators on a national level drawing audiences from across other regional projects and those with interest on the role of national initiatives in EOSC. EOSC-Pillar also identified and established links with the EOSC governance members and other relevant EOSC initiatives (D2.2).

EOSC-Pillar has also actively experimented with interactive multimedia to engage and reach new audiences and disseminate the work and results that the project has produced so far. This can be observed in the up-to-date newsfeed and blog series "Around the Pillar", interactive data visualisations, beautifully designed print collaterals including roll-ups, flyers and posters, and videos spanning short video pills to live event interviews to explainer videos. EOSC-Pillar's public documents and deliverables have also gained a fair amount of visibility with almost 400 total downloads.



The National Initiatives Survey and Its Importance

A spotlight on the research supporting infrastructure

hen striving to develop the European Open Science Cloud, it is crucial to first gain an overview of the status quo concerning open science and open data in Europe. How familiar are research performing organisations and funding bodies with FAIR principles? Which policies have they already implemented? And do they expect benefits from EOSC? Do e-infrastructures restrict access to their services?

To answer these and many more questions, EOSC-Pillar has conducted the 'National Initiatives' survey among universities, funding bodies, research infrastructures and e-infrastructures in the five EOSC-Pillar countries Austria, Belgium, France, Germany, and Italy.

By analysing organisational, technical as well as legal aspects that are relevant to open science and managing data, the survey covered aspects comprising the whole research data life cycle - from data collection and processing to archiving, dissemination, and reuse.

The manager of the National Initiatives Survey Work Package, Lisa Hönegger from the University of Vienna, said: "We wanted to create a comprehensive picture of the research supporting infrastructure with state-of-the-art data in order to support creating the European Open Science Cloud and to provide empirical data for evidence-based decision making."

Some Results on EOSC and FAIR

Overall, EOSC-Pillar invited representatives of 2,204 organisations to participate in the National Initiatives survey, of which 31% seized this opportunity. Across the five EO-SC-Pillar countries, 27 funding bodies, 114 universities, 229 research infrastructures and 318 e-infrastructures responded (in full or partially) to the survey. Among many other aspects, the survey asked about the familiarity with FAIR principles as well as EOSC.

Results show that a vast majority of the funding bodies in the survey perceive themselves as familiar with EOSC (69%) and the FAIR principles (77%).

Among representatives of universities, we find a lower familiarity with EOSC (41% across

countries). However, the level of familiarity with FAIR data is comparable to the one found among funding bodies as 76% of the university representatives are on average familiar with FAIR principles. About half of the universities have written regulations on Open Access publications in place, whereas written regulations on FAIR data are by far less common.

We observe a similar picture regarding familiarity with EOSC and FAIR data for research infrastructures, which are on average more familiar with FAIR principles (70%) than with EOSC (29%).

E-infrastructures also show a high familiarity with the FAIR principles, more than 70% indicate to be familiar with it, with even more than 80% in Germany, France, and Italy. The familiarity with EOSC is lower across countries, with less than half of e-infrastructure representatives being familiar with EOSC.

How the Survey will impact EOSC

EOSC-Pillar shared information on the research design early onwards so that other regional projects, i.e. EOSC-Synergy, EOSC-Nordic and NI4OS-Europe, could reuse and adapt the survey design. This will facilitate comparing the research infrastructure landscape across Europe.

Within EOSC-Pillar, the data will support further project activities e.g. on business models. Moreover, the survey team is disseminating the results beyond the project to stakeholders across Europe and delivering the survey results to the EOSC governance, to national representatives of research and open science and all other stakeholders involved or interested in the implementation of the European Open Science Cloud.

In a next step, the project will engage into discussions with experts with the goal to derive recommendations from the data in order to support the harmonisation of services and ultimately their integration into EOSC. How can the momentum of Open Access publications be used to enhance FAIR data? Which target groups need to be further convinced of the benefits of EOSC? These are some of the questions that can nourish further discussions in the future.

By having created this overview, EOSC-Pillar delivered the basis for steering policies which support developing the European infrastructure landscape for open research data and hopes to initiate fruitful developments.

The data will be available under the DOI 10.11587/VOSVGK, the summary report under the DOI 10.5281/zenodo.3937318.

2.204

Institutions invited to take part

31%

Survey response rate

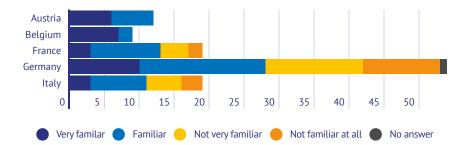
688 Institutions responded

27 funding bodies

114 universities

229 research infrastructures

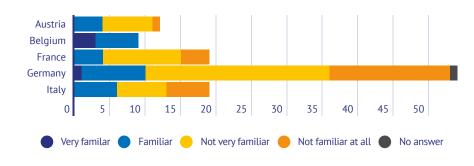
318 e-infrastructures



Number of responses per country:

- Austria 12
- Belgium 9
- France 19
- Germany 54
- Italy 19

Universities familiarity with FAIR Data Principles



Number of responses per country:

- Austria 12
- Belgium 9
- France 19
- Germany 54
- Italy 19

Universities familiarity with EOSC

Considering everything you know about EOSC, how familiar are you with EOSC and FAIR data principles?

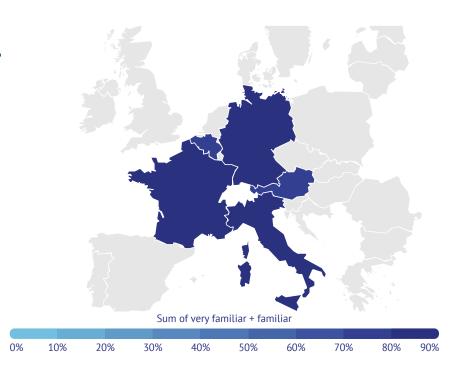
Number of responses per country:

Research Infrastructures

- Austria 8
- Belgium 20
- France 54
- Germany 77
- Italy 69

E-Infrastructures

- Austria 38
- Belgium 20
- France 25
- Germany 94
- Italy 141



E-Infrastructures familiarity with FAIR Data Principles

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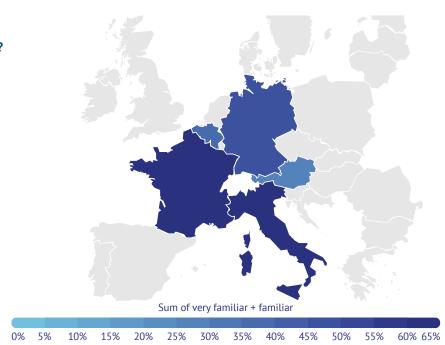
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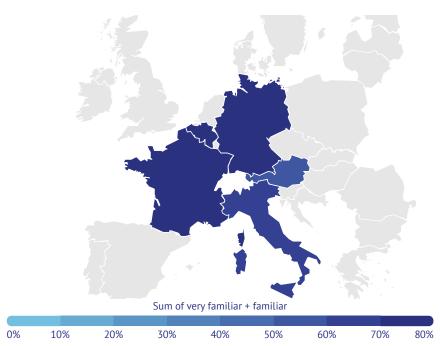
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Research infrastructures familiarity with FAIR Data Principles

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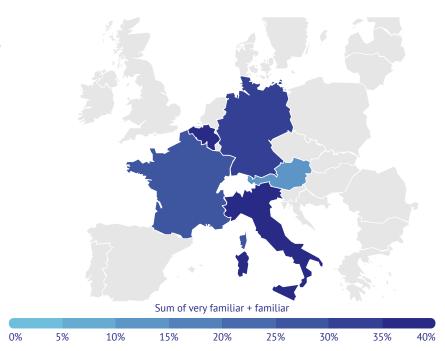
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- Germany 94
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Research Infrastructures familiarity with EOSC



Austria, Belgium, France, Germany, and Italy - Working Towards an EOSC

Austria

In Austria, an initiative called "EOSC-Café network" was started by the Federal Ministry of Education, Science and Research and the Austrian EOSC Governance Board member. It aims at integrating national initiatives in the area of open data and services into the EOSC building process. The current focus lies with establishing the EOSC mandated organisation - an ongoing discussion that is fostered within this network.

Also, there are multiple national projects on digitalisation funded by the ministry, which is dealing with aspects of data management, EOSC, FAIR, etc.
EOSC-Pillar is also establishing contact with these projects to coordinate efforts in these areas. One example is the establishment of a national "FAIR office" to make data and services FAIR in Austria. Another would be activities to engage stakeholders, especially research infrastructures and researchers, to establish their expectations and needs from EOSC.

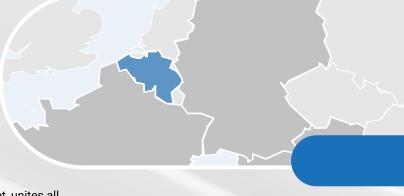


After a half a day conference dedicated on EOSC, where the Belgian experts of the EOSC working groups, the Belgian partners in EOSC projects and the different policy levels met, the dialogue continues in a dedicated group, the CIS-CFS working group Open Science. This working group aligns the consultation on Open Science between the Federal Authority and the Federated Entities and will organise consultation between the Belgian mandated organisation in the EOSC association and the regions.

In Flanders, the Flemish Open Science Board (FOSB), established in December 2019 with a dedicated budget, unites all Flemish stakeholders in a shared vision for the future concerning Open Science and EOSC. FOSB will advise policy to fully integrate Flanders into the international Open Science landscape and coordinate Open Science uptake, including infrastructure interoperability and FAIR data. The Flemish research portal (FRIS), giving an overview of research in Flanders, will connect to EOSC. In the Fédération Wallonie-Bruxelles, an Open Science working group advises policy and organises dialogue between stakeholders.

France

Several developments are ongoing in terms of Open Science and specifically on the EOSC in France. After the publication of the national Open Science plan, which explicitly includes the participation in the EOSC, in summer 2018, the French ministry of higher education, research and innovation (MESRI) is now putting in place a Coordination committee for services and e-infrastructures, with a special focus on the EOSC.





As part of this activity, a national working group has been created including the main French EOSC stakeholder organisations and the ministry to advance the coordination of EOSC related activities in France. One of the tasks of this group is to propose the mandated organization for France in the EOSC association. Part of this discussion is to determine whether an EOSC-France association should be created, or whether to mandate an existing organization.

In parallel, a process of identifying the key e-infrastructures in the French computing landscape is ongoing. The goal is to determine national and regional computing and data storing facilities, which are the key elements of the computing and data treatment effort for research and higher education in France. These shall also play a major role in the French participation in the EOSC.

Germany

For more than two decades Germany is at the forefront of Open Science in Europe. Most recently with the publication of its strategy paper in 2016 on open access ("Open Access in Germany"), the Federal Ministry of Education and Research (BMBF) backs the objectives towards an Open Access standard. This commitment towards open access and open science is carried forward by the efforts of the large German research organisations, Helmholtz Association, Fraunhofer-Gesellschaft, Leibniz Association and Mac-Planck Society, and proven by the growing number of open science policies issued by universities. The latter was clearly shown in the results of the "National Initiatives Survey" executed by EOSC-Pillar which was subsequently used to compile the Final Report by the EOSC Landscape Working Group.

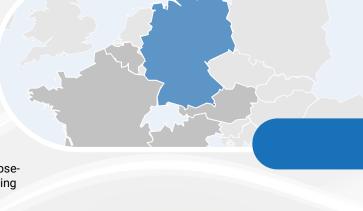
EOSC Pillar has further engaged with the national infrastructures most notably with the national research data infrastructure (Nationale Forschungsdaten Infrastruktur) NFDI. The new initiative is gaining momentum and started to discuss its role in cross-thematic services which will involve EOSC-Pillar. We also reached out to the national network provider DFN and HIFIS - the initiative that aims at building a data-oriented collaborative environment in the Helmholtz association of research centres.

Italy

In Italy, the national OS community joined forces in ICDI (Italian Computing and Data Infrastructure) a forum created by representatives of major Italian Research Infrastructures and e-Infrastructures. ICDI's objective is to promote synergies at the national level and optimise the Italian participation to European and global challenges the field of Open Science and FAIR data, including EOSC. ICDI convenes several task forces and working groups on hot OS topics.

ICDI was appointed by the Italian Ministry of Research as the Italian mandated organisation in the EOSC Association and became one of the four founding members of the EOSC Association. Today, ICDI has the form of a collaborative framework, established through an MoU signed by CINECA, CNR, Elettra Sincrotrone, ENEA, GARR, INAF, INFN, INGV, OGS, and AREA Science Park. As such, it has no legal status but it is represented by GARR. Steps are being taken to bring this arrangement to the next level and incorporate it as an independent association.

Federico Ruggieri, GARR director and the ICDI spokesperson in this building phase of the EOSC Association, was appointed as one of the provisional board members, until the first assembly, to be held in December, which will elect the association's BoD and president.

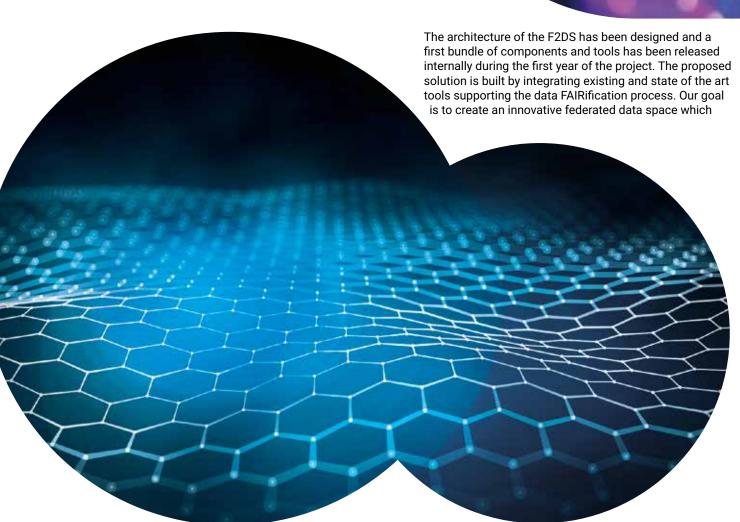






oday's problem is not about whether we have enough data, but rather if we are able to find, access, aggregate and reuse the vast amount of existing data. This is particularly true when data comes from various scientific domains and communities. Solutions for addressing this problem require a framework for interoperability of data but more importantly, of their description (i.e. metadata). A solution is therefore to not only copy the metadata of each repository into a single database, but also to make it interoperable with the help of a common enriched description format thus making the data FAIR.

Within EOSC-Pillar, Work Package 5 (WP5) aims to address this major problem by creating an innovative solution called the Federated FAIR Data Space (F2DS). This solution will enable easy alignment of the metadata to provide a unified search and data retrieval over multiple data sets from heterogeneous and distributed community-specific repositories.





allows data repository owners to easily register their repository, FAIRify their data descriptions and subsequently publish and share FAIR datasets. Our approach offers a generic framework that can be easily deployed and reused for many different purposes (e.g. share between project partners, create a specific F2DS for CovID,..). To achieve this objective, we take advantage of professional devOps tools (containers and Kubernetes) to ease deployment and management on any infrastructure and for any purpose.

The F2DS solution offers on one side a graphical interface allowing data repository owners to easily publish their datasets by mapping their metadata with the DCAT standard and with semantic artefacts (ontologies, thesauri, controlled vocabularies, etc.). The goal is to allow data producers to publish their datasets in the simplest and most automated way possible without having to make major adaptations to their data repository. The main requirement is that data repositories offer an extensive RESTful API. To register data resources, we designed an initial workflow for publishing data sets based on the following steps:

- 1. description of the repository,
- 2. description of the APIs for accessing metadata,
- 3. description of the available datasets, and
- 4. enrichment of the metadata with semantic artefacts.

Data owners can export and reuse the information provided during these various steps to add their repository in another F2DS.

On the other side, the F2DS will offer a unique search interface for researchers. For this purpose, the F2DS is built with needs in mind of the various EOSC-Pillar use-cases which cover a wide range of scientific domains (marine biology, earth science, humanities, cultural heritage, agronomy and biodiversity, biomedicine, ...). Once populated, the EOSC-Pillar F2DS will allow researchers from the different communities to have access to a large multi-disciplinary set of datasets and address transversal scientific questions by connecting the F2DS to specific tools such as workflow engines and VREs (e.g. D4Science, Jupyter notebooks).

In addition to the development of the F2DS, WP5 is in the process of identifying and collating ontologies from the various communities involved in the project. This exercise will enable the enrichment of metadata into the Pillar F2DS. To support this activity, a survey on the semantic landscape has started. The goal is to gather and aggregate the ontologies in use to enable the semantic alignment of metadata and contribute towards harmonizing the interfaces and ease of use of the F2DS.

While further development of the integration is progressing we aim to release a first test version for within 6 months. At the end of the project the F2DS will be offered in the EOSC-Pillar service portfolio and will be available for easy deployment for all those who would like to create their own F2DS to suit their particular needs.

The Project in Numbers



3 Years

Project duration

18

EOSC-Pillar Partners









































Key Exploitable Results



Diverse use cases and Community-driven Pilots



Diverse use cases and Community-driven Pilots



National initiatives survey



Promotion of FAIR culture



Services sourced from the Open Call



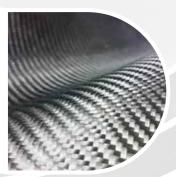
Community Building content, events and channels



National Service Registry & initial services integrated in EOSC

9 Use Cases

Defining procedures and services to enforce data provenance for thematic communities and beyond



Agile FAIR data for environment and earth system communities



Integration of data repositories into EOSC based on communities approaches



Software source code preservation, reference and access



FAIR principles in data life-cycles for Humanities



Exploring reference data through existing computing services for the bioinformatics community



Suitable data formats for seismological big data provisioning via web services



Virtual definition of big datasets at seismological data centres according to RDA recommendations



Integrating heterogeneous data on cultural heritage



Look into the Future

e are now 12 months into the project and have reached several important milestones. All tasks are now active, producing output which in some cases has already been used extensively outside our project (e.g., by our "sister projects" and the EOSC governance). Working together has also highlighted some inefficiencies, so we have reviewed our internal procedures to ensure better and more complete sharing of information and more effective interactions among all WP/Tasks, ultimately leading to improved timeliness and better quality of our outcomes. This is essential not only for the project itself, as our project is engaged (directly as a project, or through project participants) in a number of fora/bodies which are co-designing the EOSC and the way it will concretely operate in the coming years.

Coming months will bring a lot of changes in the environment around us. The EOSC governance as we know it today will leave the floor to the newly established EOSC Association: project-wise, we can be particularly glad of this achievement, as GARR (EOSC-Pillar Coordinator) is one of the 4 founding members of the EOSC Association.

Moreover, the "EOSC landscape" will be enriched by the projects stemming from the INFRAEOSC-03 and INFRAEOSC-07 calls. Meanwhile, we can expect to see even higher rate of activities within Working Groups, Task Forces and Interest Groups, through the end of 2020.

Within our project, WP5 will enrich the EOSC by improving and adding functionalities to the first release of the Federated FAIR Data Space (F2DS), an innovative solution built by integrating existing and state of the art tools supporting the data FAIRification process, aimed both at data producers (allowing them to easily register their data, describe it according to FAIR principles and finally publish and making it ready to be shared and reused) and data consumers (allowing them to easily search and access datasets). Moreover, WP7 will support the use-cases in WP6 to their integration and federation in the EOSC catalogue and the national service catalogues (a prototype thereof being developed within Task 4.4), and translate this experience into guidelines and feedback to the external activitities/projects drafting the procedures for services onboarding Back to WP5, a rich set of training activities, covering technical aspects of data management as well as mindset-changing aspects related to support of FAIRness and Open Access, will be deployed in collaboration with "sister 5b projects" and other

Summarizing, tt has been an amazing first year for us, and we can expect even more from the next 6-12 months! I am personally thankful to you all for your activity and for making this possible, and am looking forward to the first Project Periodic Review, when we will show our achievements during the first 18 months of the project.

Like our ancestors used to say... ad maiora!



Fulvio Galeazzi
EOSC-Pillar Project Manager









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