

# Wie befördern NFDI und EOSC einen kulturellen Wandel für eine offene Wissenschaft?



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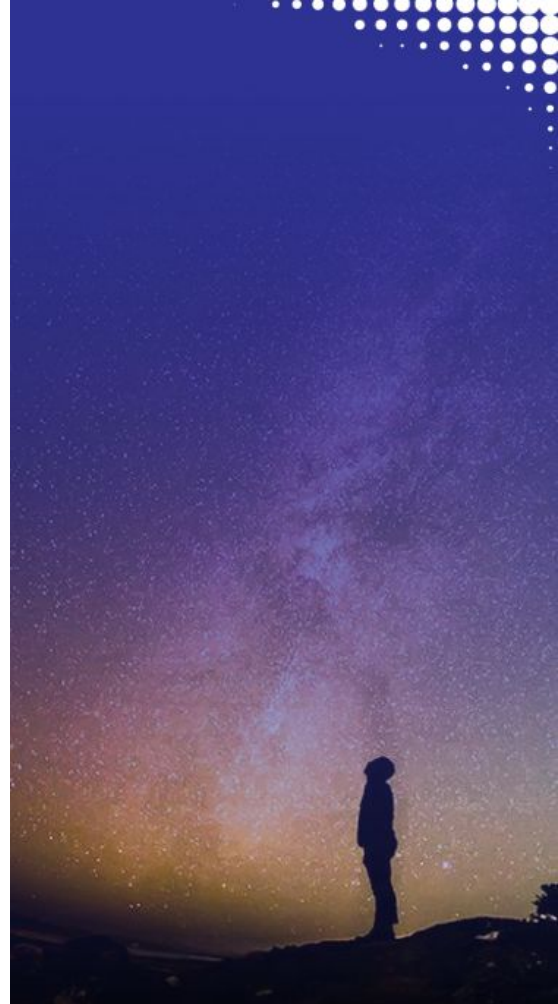
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# What is EOSC?

## European Open Science Cloud

- A virtual environment
  - Set up by **European Commission**
  - Combines existing **scientific data infrastructures and services**
  - Find, access, and reuse research data
  - **Interlink** and combine data sets with other data sets
  - Across disciplines and borders
- Enables new and unexpected discoveries



# Challenge EOSC wants to address

- Provide **access** to data/results which are now fragmented
- Battle limited **data publications** and **sharing** of data
- Handle the increase in **data volume**
- **Disciplines** that are working in silos
- Collaboration and **synergy** of data infrastructures, services and expertise
- removing **technical, policy** and **human** barriers





**EOOSC-Pillar will coordinate national Open Science efforts across Austria, Belgium, France, Germany and Italy, and ensure their contribution and readiness for the implementation of the European Open Science Cloud.**





## Key Exploitable Results



**DIVERSE USE CASES AND  
COMMUNITY-DRIVEN  
PILOTS**



**POLICY AND LEGAL  
FRAMEWORK, AND  
BUSINESS MODELS**



**NATIONAL INITIATIVES  
SURVEY**



**PROMOTION OF FAIR  
CULTURE**



**SERVICES SOURCED FROM  
THE OPEN CALL**



**COMMUNITY BUILDING  
CONTENT, EVENTS AND  
CHANNELS**



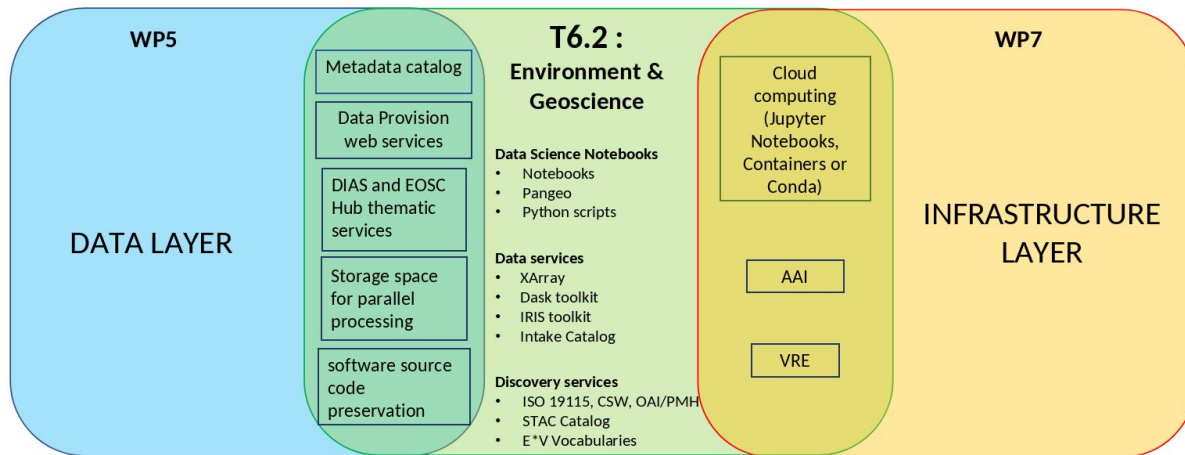
**NATIONAL SERVICE REGISTRY  
& INITIAL SERVICES  
INTEGRATED IN EOSC**

EOSC-Pillar D3.1 Summary report of the EOSC-Pillar National Initiatives Survey: <https://zenodo.org/record/3937318>



# Use-cases and community-driven pilots

- Looking at **needs** for specific research communities
- Prepare scientific communities to be **involved in EOSC**
- Analyse **specificities** but also **cross-cutting needs**
- Integrate data from all domains and **facilitate access**
- Identify **tools and services**
- Identify **gaps and needs**



**EOSC-Pillar**  
Coordination and Harmonisation of National & Thematic Initiatives to support EOSC



# Putting the “O” in EOSC

To reach a turning point for EOSC to fulfil its mission and vision, Open Science and **specifically Open Access to research results** (data, publications, software, protocols, as well as tools and services) should be a **strategic priority**, a key enabler into achieving a critical mass of accessible content for researchers to experiment with, stimulating the demand.



# Establishing a National Research Data Infrastructure in Germany (NFDI)

- Launched by Rfll (German Council for Scientific Information Infrastructures)
- Federal state agreement in November 2018 to establish a national research data infrastructure (NFDI) by GWK
- Funding up to 30 consortia in three calls (2019-2021)
  - funding period 2020 - 2028



# Objectives of NFDI

- a “polycentric” network for “horizontal” linking of existing actors, services and competencies
- those actors are: research / scientific communities & infrastructure service providers (computing centers, data centers, libraries)
- consistent (re-)usability of data across disciplines and institutional boundaries
- improving interoperability and quality assurance resulting in increased effectiveness, efficiency and sustainability of research

# Challenges for the NFDI

- **expected transition process in the next 15 - 20 years towards**
  - a new data culture,
  - new job profiles (data librarians, data scientists)
  - supported by a sustainable funding policy for RDM
- **international interoperability to**
  - increase capacity for knowledge
  - develop new research fields
  - increase of scientific knowledge
- **NFDI as contribution and node from Germany to the EOSC**

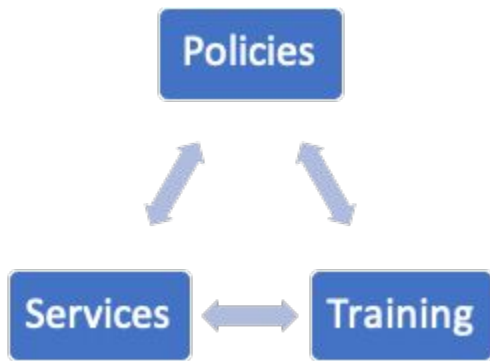
# How do NFDI consortia meet Open Science criteria ?

- collaboration on cross-cutting topics like
  - Data Literacy, Code Literacy, provision of Open Educational Resources
- to adhere to open source and open access policies for contributions like software, guidelines, training materials
- “connecting information resources to international infrastructures such as OpenAIRE and EOSC”  
(*NFDI4Culture (2020)*, doi: [10.3897/rio.6.e57036](https://doi.org/10.3897/rio.6.e57036) )

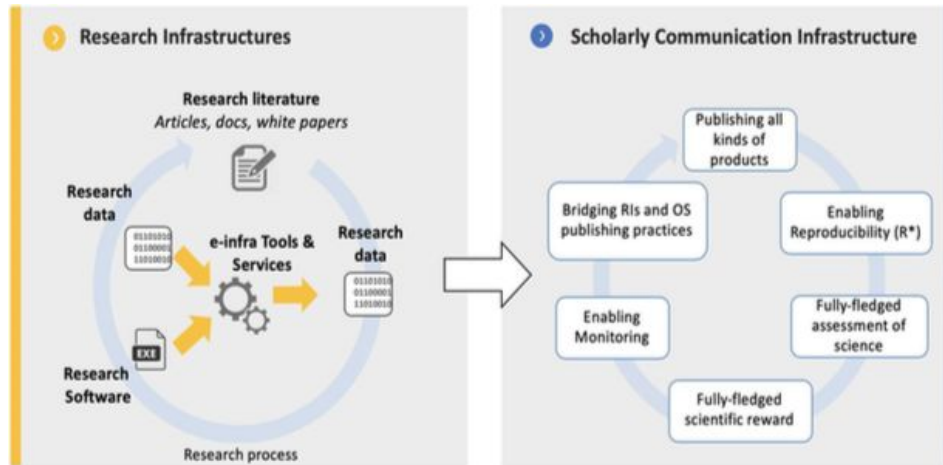
# “Achieving Open Science in EOSC”

OpenAIRE position paper (2019), doi: [10.5281/zenodo.3610132](https://doi.org/10.5281/zenodo.3610132)

OpenAIRE combines human with data infrastructure and services



Basic elements for delivering Open Science



Research life-cycle mapped to scientific/scholarly communication processes

# OpenAIRE, EOSC-Pillar and NFDI - as complementary initiatives ?!

- **OpenAIRE to support onboarding of FAIR (data) repositories to the EOSC**
- **OpenAIRE to link (e.g. via Scholix) and share knowledge via its Open Research Graph**
- **OpenAIRE to offer Open Science training and support**
- **OpenAIRE to foster collaboration and knowledge sharing via its research community dashboards**
- **EOSC-Pillar provides technical and strategic guidance for the integration and federation of services in the EOSC ecosystem**
- **EOSC-Pillar test specific services of European-wide interest for their ability to be integrated into the EOSC framework and helps find common services**

# Thank you!

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[www.openaire.eu](http://www.openaire.eu)