

# FAIRNess of data in EU countries - a landscape study

Challanges and gaps in reaching FAIRness of data









Website

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Coordinator GARR

**Partners** 

**EOSC-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.









#### Challenges addressed

**COORDINATION OF** NATIONAL INITIATIVES **ALIGNMENT OF NATIONAL POLICIES**  COMMUNICATION BETWEEN THE EOSC PROJECTS

**STANDARDISATION** AND CERTIFICATION

**UPTAKE OF** FAIR PRINCIPLES COMPREHENSIVE SERVICES LANDSCAPE TRAINING FOR THE EOSC

**ENGAGEMENT OF** SCIENTIFIC COMMUNITIES





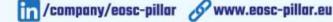


#### The EOSC-Pillar survey: a mapping & analysis of the research infrastructure landscape in Europe

- \* Goal: creating a comprehensive picture
  - \* status quo of research data infrastructure
  - \* assessment of maturity level
- \* Method: a representative online survey
  - \* definition of 4 target groups with relevance to EOSC
  - \* focus on topics with relevance to EOSC
  - \* national and European stakeholder involvement

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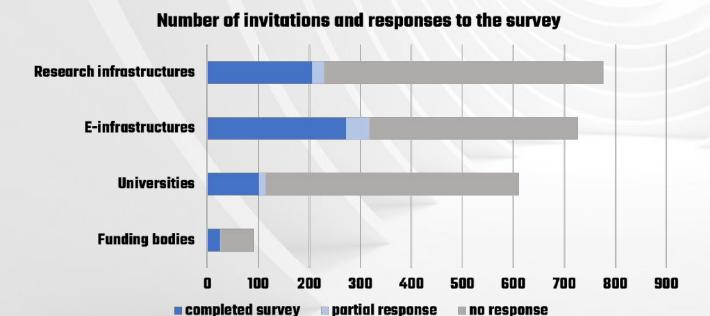




#### Targets and topics



#### Targets & response rate



#### **Topics**

- \* Business models, SLAs and user support
- \* Access policies, AAI and licensing
- Data management and FAIRness
- \* User communities and services

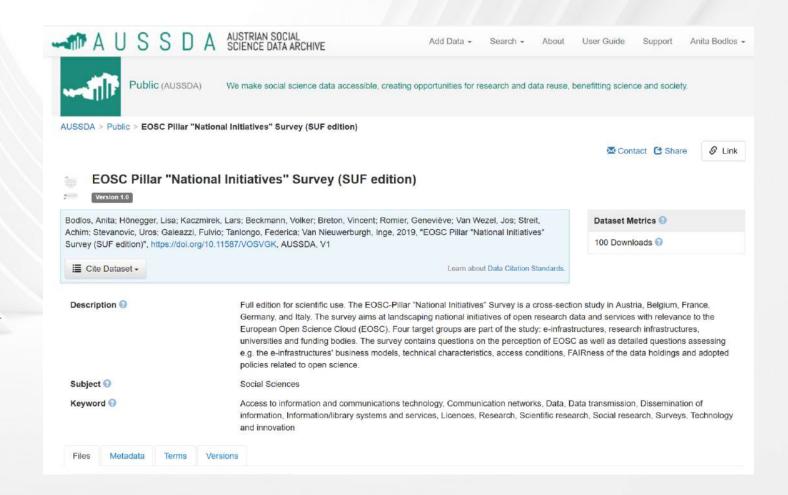






#### FAIRness of survey data

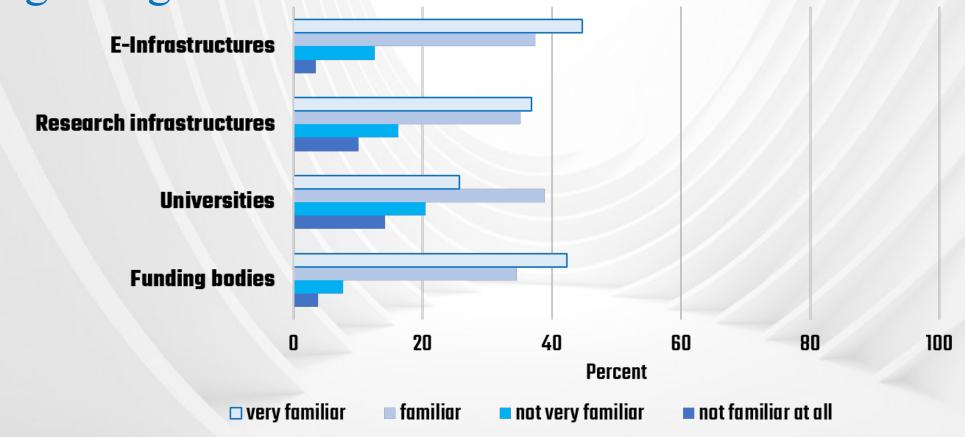
- Survey data set and additional documentation are curated and available for reuse in the AUSSDA Repository
- https://data.aussda.at/datase t.xhtml?persistentId=doi:10. 11587/VOSVGK







#### How familiar are you with the FAIR principles regarding data?

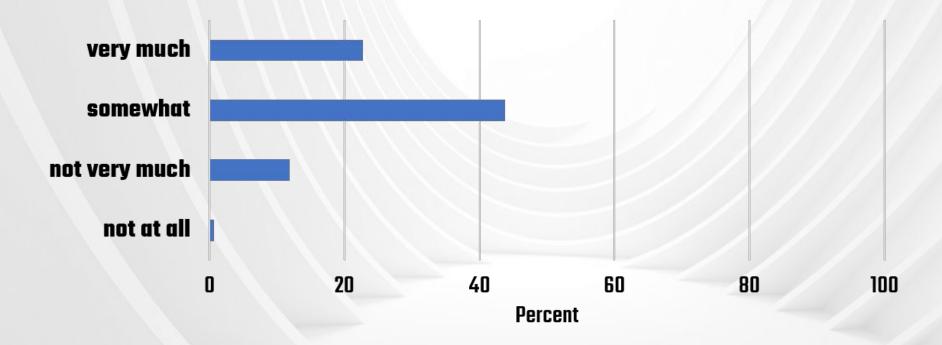


Note: total percentages for all countries, percentages do not add up to 100% as missings and residuals are not shown.





#### How FAIR do you consider your data holdings?

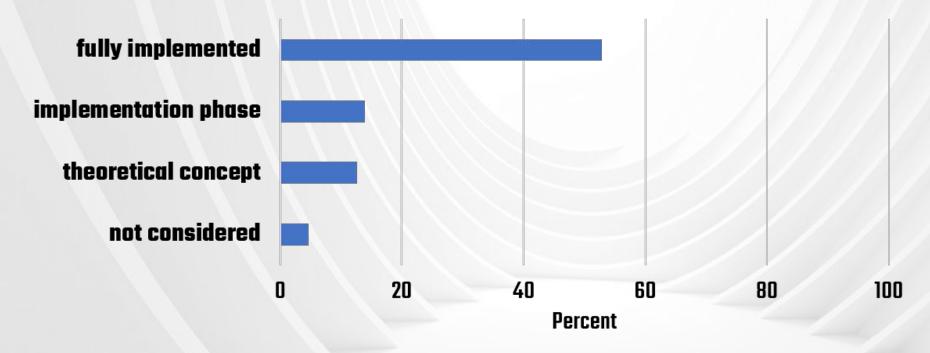


Note: question was asked to respondents representing e-infrastructures who indicated that their organisation 'offer(s) data infrastructures which store and manage research data' and who did not indicate to be 'not familiar at all' with the concept of FAIR data, mean across all countries; percentages do not add to 100% as missings are not shown.





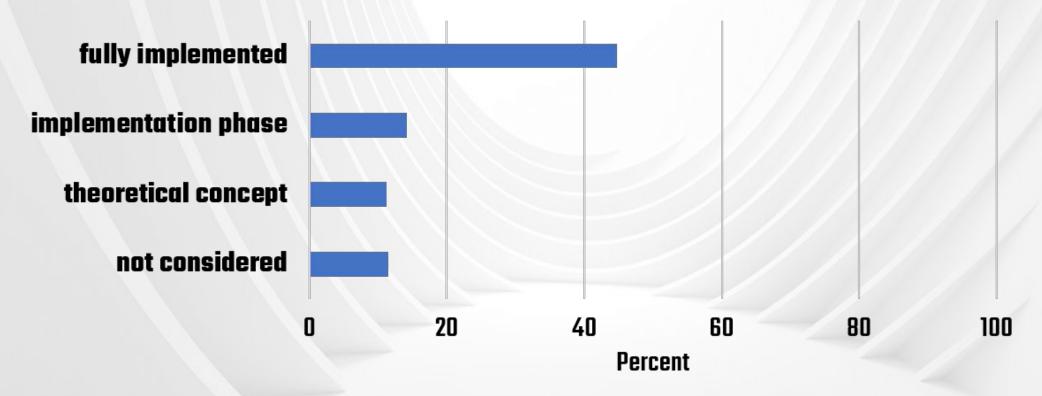
#### Does your organisation provide a search feature for metadata?



Note: question was asked to respondents representing e-infrastructures who indicated that their organisation 'offer(s) data infrastructures which store and manage research data'; mean across all countries; percentages do not add to 100% as missings are not shown; Source of question (adapted): Core Trust Seal (2018): Core Trustworthy Data Repositories Extended Guidance. available at: https://www.coretrustseal.org/wpcontent/uploads/2017/01/20180629-CTS-Extended-Guidance-v1.1.pdf, last accessed: 7 November 2019, p. 24.



#### Does your organisation provide a data catalogue in a machine-readable format?



Note: question was asked to respondents representing e-infrastructures who indicated that their organisation 'offer(s) data infrastructures which store and manage research data'; mean across all countries; percentages do not add to 100% as missings are not shown; Source of question (adapted): Core Trust Seal (2018): Core Trustworthy Data Repositories Extended Guidance. available at: https://www.coretrustseal.org/wp-content/uploads/2017/01/20180629-CTS-Extended-Guidance-v1.1.pdf, last accessed: 7 November 2019, p. 24.



#### Country specific results

- \*On average, representatives for e-infrastructures, funding bodies, universities and research infrastructures are predominantly familiar or very familiar with the principles of FAIR data.
- \* Differences across the four target groups concerning the familiarity with FAIRness of data are very small.

#### Country specifics – Austria

- \* Universities, RI and E-infrastructures indicated to be (very) familiar with the FAIR principles.
  - \* familiarity with EOSC rather low
  - \*~16% are part of an organisation which facilitates integration into **EOSC**
  - \* access restrictions: competition and funding bodies are less important than in other countries

#### Country specifics – Belgium

- \* e-Infrastructure, RI and Universities are familiar with the FAIR principles.
- \* e-I less familiar with EOSC
  - \* services esp. for natural sciences and medicine
  - \* funding esp. from government (state, region, some EU and funding bodies)



#### Country specifics – France

- \* e-Infrastructures, RI and Universities indicated to be (very) familiar with FAIRness of data
- \* Of the French e-infrastructures that responded to the survey...
  - \* ~60% consider to be familiar with EOSC,
  - \* ~70% think they will benefit from the EOSC,
  - \* ~54% are part of an organisation that facilitates EOSC integration
- \* Universities are much less familiar with EOSC (<25%)
- \* User training is offered more frequently in the country's language and less frequently in English
- \* France has the highest level of centrally organised user support





#### Country specifics – Germany

- \* Over 50% of the universities say the EOSC will affect their organisation, 75% expect to benefit from EOSC. Around 5% are already contributing to EOSC.
  - \* At the same time, only 50% of the universities are familiar with FAIR, and less than 35% have regulations in place for research data management and open data. Similarly for other aspects of FAIR (e.g. long term availability and related repositories.)
- \* The research infrastructures are more familiar with FAIR and more (20%) are already contributing to EOSC.

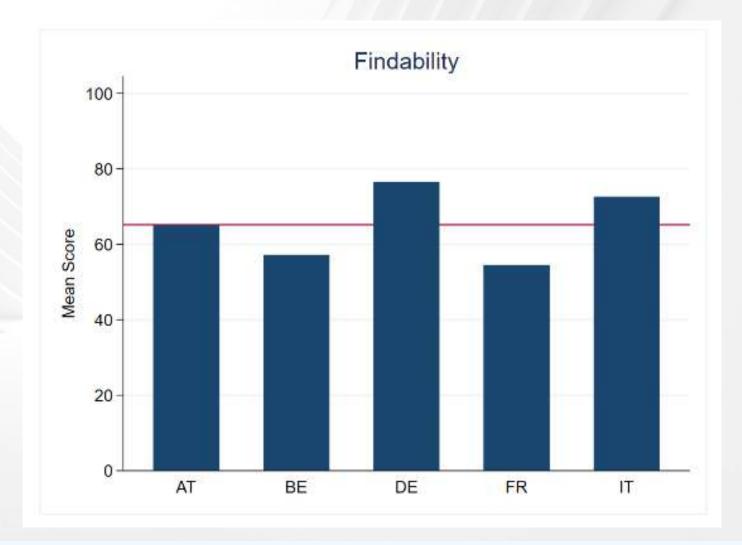
#### Country specifics – Italy

- \* Particularities about FAIRness:
  - Repositories: below average: perception of own FAIR readiness and dissemination in public domain or cc for open reuse
  - Repositories frequently perceive depositors to be "concerned" about the benefit and competitive disadvantage when sharing data (>35%), but only a minority is perceived as "very concerned" (<4%)
  - Regulations are in place but many are informal, may indicate a lack of directions from policy levels
    - exception: publication of data in repositories (many written regulations)



#### Stats on Findability

Across countries, repositories reach an average findability score of 65%. Differences across countries are overall small.

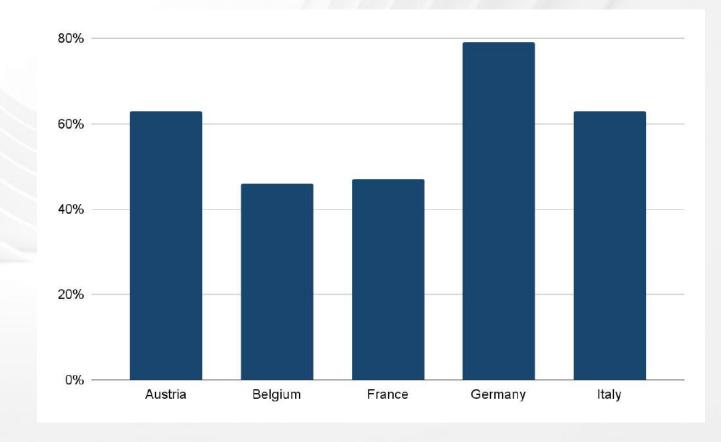






#### Stats on Findablity: Persistent identifiers (PIDs)

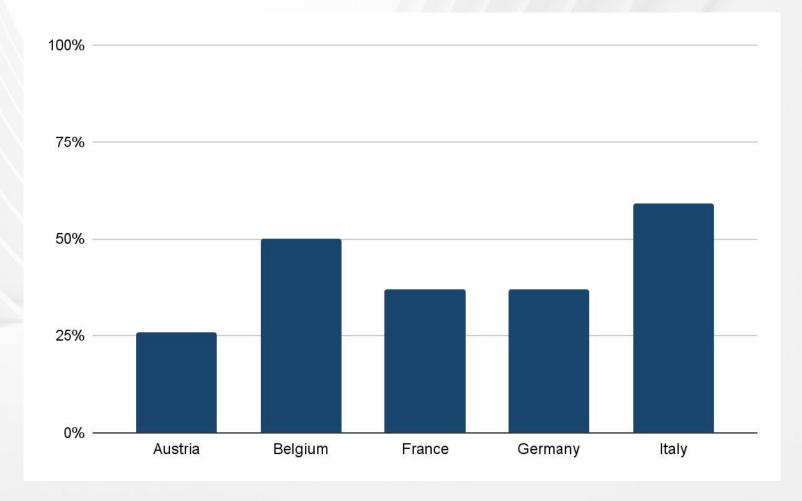
On average 44% of respondents have fully implemented this feature and another 17% are currently doing it. Of those repositories that use PIDs, DOIs are the most common, followed by Handle and URN.





#### Stats on Findablity: Unique identifiers for researchers

On average, 42% of the repositories use unique identifiers for researchers in metadata, most frequently ORCIDs. Unique identifiers for researchers are most common in Italian repositories.

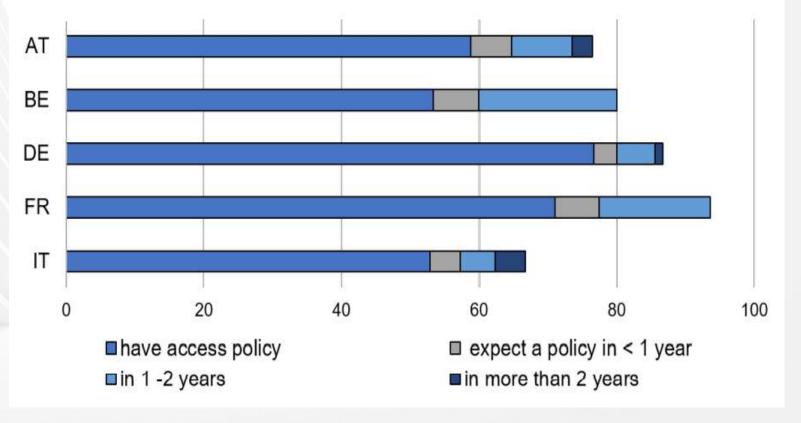






#### Stats on Accessibility (e-infra having access policy available)

Most e-infrastructures have a publicly available access policy and there is large effort to increase the number of access policies especially in France and Belgium.

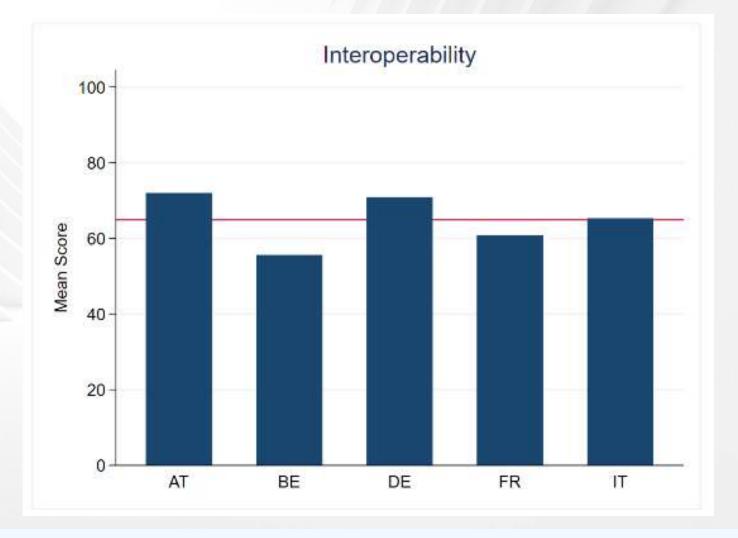






#### Stats on Interoperability

Across countries, repositories reach an average interoperability score of 65%. Differences across countries are overall small.

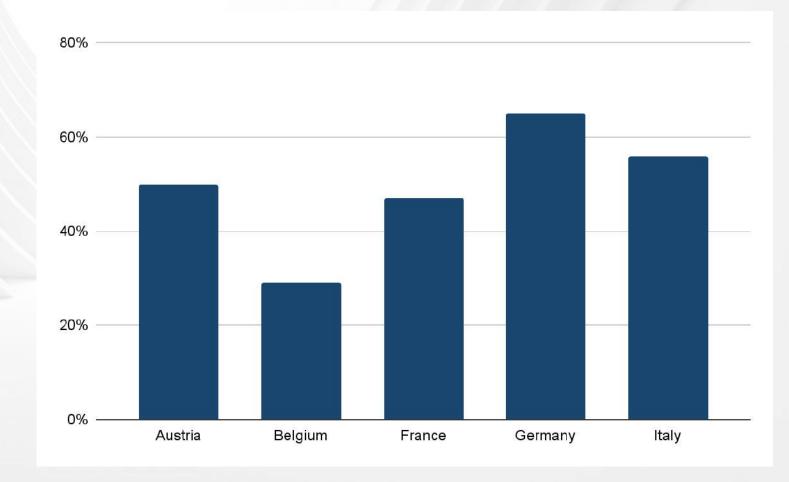






#### Stats on interoperability: Usage of standardised/controlled vocabularies for metadata

On average, 52% of the repositories use standardised/controlled vocabularies for metadata. The percentage is largest for German repositories.

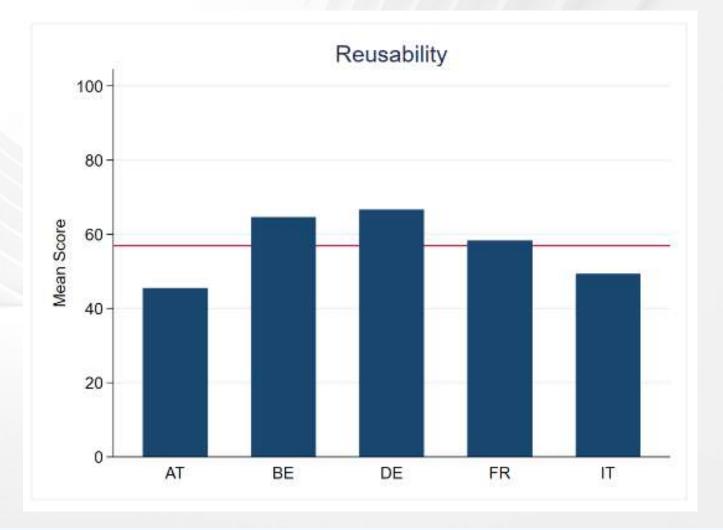






#### Stats on Reusability

Across countries, repositories reach an average reusability score of 57%. Differences across countries are moderate.



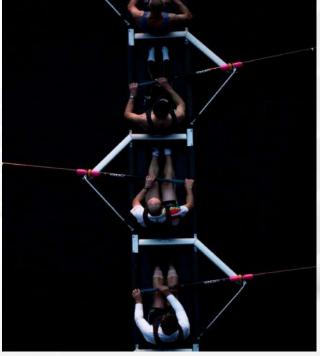




#### Some preliminary conclusions

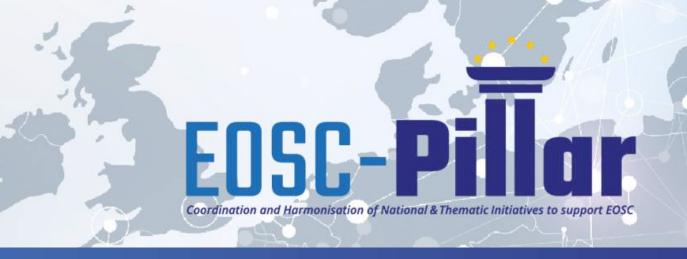












### Thank you!

federica.tanlongo@garr.it

#### Get in touch with us!



www.eosc-pillar.eu



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## Q & A Time for questions



