

FAIRsFAIR 3rd Synchronisation Force Workshop TFiR Pillar 5

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Online, 12th May 2021, 10:00 CEST





Agenda

Welcome (5 mins)

Priority recommendations (50 mins)

Break (5mins)

Other recommendations (15 mins)

Whole Pillar Questions (10 mins)

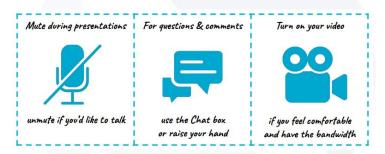
Wrap-Up (5 mins)

Resources:

- Collaborative notes
- Spreadsheet
- This presentation
- <u>Turning FAIR into</u>
 <u>Reality</u>

Zoom Room:

https://zoom.us/j/990536 02102?pwd=NnlKYUtIQVY wN3ZiYm8xQlNWRVRxUT0 9





Define	Implement			Embed and Sustain	
Concepts for FAIR implementation	FAIR culture	FAIR ecosystem	Skills for FAIR	Incentives and metrics for FAIR data and services	Investment in FAIR
Rec. 1: Define FAIR for implementation	Rec. 4: Develop Interoperability frameworks	Rec. 7: Support semantic technologies	Rec. 10: Professionalise data science & stewardship roles	Rec. 12: Develop metrics for FAIR Digital Objects	Rec. 14: Provide strategic and coordinated funding
Rec. 2: Implement a Model for FAIR Digital Objects	Rec. 5: Ensure data management via DMPs	Rec. 8: Facilitate automated processing	Rec. 11: Implement curriculum frameworks and training	Rec. 13: Develop metrics to certify FAIR services	Rec. 15: Provide sustainable funding
Rec. 3: Develop components of a FAIR ecosystem	Rec. 6: Recognise & reward FAIR data & stewardship	Rec. 9: Certify FAIR services	Above line = priority recommendations		
Rec. 16: Apply FAIR broadly	Rec. 18: Cost data management	Rec. 22: Use information held in DMPs	Below line = supporting recommendations	Rec. 25: Implement and monitor metrics	Rec. 27: Open EOSC to all providers but ensure services are FAIR
Rec. 17: Align and harmonise FAIR and Open data policy	Rec. 19: Select and prioritise FAIR digital objects	Rec. 23: Develop components to meet research needs		Rec. 26: Support data citation and next generation metrics	
	Rec. 20: Deposit in Trusted Digital Repositories	Rec. 24: Incentivise research infrastructures to support FAIR data			
	Rec. 21: Incentivise reuse of FAIR outputs				



TFiR Pillar 5: Incentives, Metrics

Incentives and metrics for FAIR data and services

Rec. 12: Develop metrics for FAIR Digital Objects

Rec. 13: Develop metrics to certify FAIR services

Rec. 25: Implement and monitor metrics

Rec. 26: Support data citation and next generation metrics

- Defining the metrics for FAIR data and FAIR services to ensure these metrics meet the needs of each field.
- A range of metrics and incentives are needed to inspire culture change.
- Metrics should be applied with care, and in conjunction with a range of incentives
- Criteria for FAIR services need more thought and should be informed by existing,
 well-established certification frameworks like those for Trusted Digital Repositories.



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Rec. 12: Develop metrics for FAIR Digital Objects

A set of metrics for FAIR Digital Objects should be developed and implemented, starting from the basic common core of descriptive metadata, PIDs and access.

Action 12.1: A core set of metrics for FAIR Digital Objects should be defined to apply globally across research domains. More specific metrics should be defined at the community level to reflect the needs and practices of different domains and what it means to be FAIR for that type of research.

Action 12.2: Convergence should be sought between the efforts by many groups to define FAIR assessment. The European Commission should support a project to coordinate activities in defining FAIR metrics and ensure these are created in a standardised way to enable future monitoring.

Action 12.3: The process of developing, approving and implementing FAIR metrics should follow a consultative methodology with research communities, including scenario planning to minimise any unintended consequences and counter-productive gaming that may result. Metrics need to be regularly reviewed and updated to ensure they remain fit-for-purpose.



Incentives and metrics for FAIR data and services

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TFiR Pillar 5: Incentives, Metrics

Rec. 13: Develop metrics to certify FAIR services

Certification schemes are needed to assess all components of the ecosystem as FAIR services. Existing frameworks like CoreTrustSeal (CTS) for repository certification should be used and adapted rather than initiating new schemes based solely on FAIR, which is articulated for data rather than services.

Action 13.1: Where existing frameworks exist to certify data services, these should be reviewed and adjusted to align with FAIR. The language of the CTS requirements should be adapted to reference the FAIR data principles more explicitly (e.g. in sections on levels of curation, discoverability, accessibility, standards and reuse).

Action 13.2: New certification schemes should be developed and refined by the community where needed to assess and certify core components in the FAIR data ecosystem such as identifier services, standards and vocabularies.

Action 13.3: Formal registries of certified components are needed. These must be maintained primarily by the certifying organisation but should also be communicated in community discovery registries such as Re3data and FAIRsharing.

Action 13.4: Steps need to be taken to ensure that the organisations overseeing certification schemes are independent, trusted, sustainable and scalable.



Break (10:55 - 11:00)



Incentives and metrics for FAIR data and services

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TFiR Pillar 5: Incentives, Metrics

Rec. 25: Implement FAIR metrics to monitor uptake

Agreed sets of metrics should be implemented and monitored to track changes in the FAIRness of datasets or data-related resources over time. Funders should report annually on the outcomes of their investments in FAIR and track how the landscape matures.

Action 25.1: Convergence should be sought between the efforts by many groups to define FAIR assessments.

Action 25.2: Funders should publish statistics on the outcome of all investments to report on levels of FAIR data and certified services. Specifically, funders should assess how FAIR the research objects are that have been produced and to what extent the funded infrastructures are certified and supportive of FAIR.

Action 25.3: Repositories should publish assessments of the FAIRness of data sets, where practical, based on community review and the judgement of data stewards. Methodologies for assessing FAIR data need to be piloted and developed into automated tools before they can be applied systematically and in a standardised way by repositories.

Action 25.4: Metrics for the assessment of research contributions, organisations and projects should take the past FAIRness of data sets and other related outputs into account. This can include citation metrics, but appropriate alternatives should also be found for the research, researchers and research outputs being assessed.

Action 25.5: The results of monitoring processes should be used to inform and iterate data policy.



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Rec. 26: Support data citation and next generation metrics Rec. 26: Support data citation and next generation metrics Systems providing citation, reuse and impact metrics for FAIR Digital Objects and other research outputs should be provided. In parallel, next generation metrics that reinforce and enrich citation-centric metrics for evaluation should be developed.

Action 26.1: The development of next generation metrics must take into account the full range of valuable research outputs and FAIR Digital Objects, including data, code and models. A variety of ways of assessing influence and impact should be incorporated.

Action 26.2: Citation of data and other research outputs needs to be encouraged and supported - for example, by including sections in publishing templates that prompt researchers to reference materials, and providing citation guidelines when data, code or other outputs are accessed.

Action 26.3: The Joint Data Citation Principles should be actively endorsed, adopted and implemented in the scholarly literature for attribution and in research assessment frameworks for recognition and career advancement.

Action 26.4: A broader range of metrics must be developed to recognise contributions beyond publications and citation. These should recognise and reward Open and FAIR data practices.



TFiR Pillar 5: Overall Questions

What's missing in the recommendations and actions in this pillar?

Any recommendations not addressed?



Wrap-Up

- Thank you!
- Notes & spreadsheet will remain open until May 21st
 EOD

- Input will be used for a report & ultimately feed into a Whitepaper
- Engage via the FAIR Data Forum