

		FAIRsFAIR	EOSC FAIR WG	EOSC Landscape WG
2	Rec. 1: define FAIR for implementation	<p><a href="https://zenodo.org/record/3686901">D3.3 Policy enhancement recommendations</a>  <a href="https://zenodo.org/record/3686901">https://zenodo.org/record/3686901</a></p> <p>D3.4 Recommendations for FAIR practice, May 2020</p> <p>D3.5 Description of transition support for repositories, Aug 2020</p> <p>D2.1, D2.4 &amp; D2.10 reports on FAIR requirements for persistence and interoperability. <a href="https://doi.org/10.5281/zenodo.3557381">https://doi.org/10.5281/zenodo.3557381</a></p> <p>D2.3 Set of FAIR data repositories features. <a href="https://doi.org/10.5281/zenodo.3631527">https://doi.org/10.5281/zenodo.3631527</a></p> <p>D2.7 Framework for assessing FAIR services <a href="https://doi.org/10.5281/zenodo.3688792">https://doi.org/10.5281/zenodo.3688792</a></p> <p>M2.15, (Milestone) Assessment report on FAIRness of research software, 31st July 2020.</p>	<p>FAIR Practice TF: examines FAIR practices in a variety of disciplinary fields. Draft report will be available for consultation around July 2020. Webinar for consultation foreseen.</p> <p>Interoperability TF: plans to examine legal interoperability.</p> <p>Metrics &amp; Certification TF: Recommendation on FAIR Metrics. Interim recommendation available (<a href="https://www.eurocentral-eurosc-liaison-platform/interim-recommendations-for-metrics-and-service-certification-apply/">https://www.eurocentral-eurosc-liaison-platform/interim-recommendations-for-metrics-and-service-certification-apply/</a>) Takes into account the output of the RDA FAIR Data Maturity Model WG and of FAIRsFAIR WP2 and 4. Open questions for defining FAIR for other components of the FAIR ecosystem than data, eg software. Note the on-going creation of an RDA-Force11/RDA WG FAIR 4 Research Software (FAIR for Research Software WG Case Statement submitted on 11/5 and open for review until 11/6 <a href="https://bit.ly/28mdSI">https://bit.ly/28mdSI</a>)</p>	
3	Rec. 2: Implement a model for FAIR digital objects		<p>PID TF: (Action 2.1) Second draft of PID Policy document (developed with the Architecture WG) available for consultation. <a href="https://doi.org/10.5281/zenodo.3574202">https://doi.org/10.5281/zenodo.3574202</a></p> <p>Action 2.3 on automated compliance check: one has to consider the risks. More work needed on DO, RDA work being defined in the domain.</p>	
4	Concepts for FAIR implementation (Pillar 1)	<p><a href="https://zenodo.org/record/3686901">D3.3 Policy enhancement recommendations</a>  <a href="https://zenodo.org/record/3686901">https://zenodo.org/record/3686901</a></p> <p>D3.4 Recommendations for FAIR practice (May 2020)</p> <p>D3.5 Description of transition support for repositories (Aug 2020)</p> <p>D2.3 Set of FAIR data repositories features. <a href="https://doi.org/10.5281/zenodo.3631528">https://doi.org/10.5281/zenodo.3631528</a></p> <p>D2.6 1st reference implementation of the data repositories features, Feb 2020</p> <p>D2.9 Framework for assessing FAIR services, March 2022</p> <p>Draft recommendation for machine readable policies planned. Early discussions with FAIRing and RDA groups but keen to work with others who are working on this.</p>	<p>Interoperability FT: Recommendations on the EOSC Interoperability framework prepared with the Architecture WG. Includes discussion of technical, semantic, organisational and legal interoperability. Draft for consultation should be published soon.</p> <p>PID TF: PID Policy prepared with the Architecture WG. Second draft available for comments.</p> <p>Metrics &amp; Certification TF: Examines certification of FAIR enabling services.</p> <p>Likely more work to do on registries (Action 3.1). The need for testbeds to continuously evolve and evaluate is a good point (Action 3.4).</p>	
5	Rec. 3: develop components of a FAIR ecosystem			
6	Rec. 16: Apply FAIR broadly	<p><a href="https://zenodo.org/record/3686901">D3.3 Policy enhancement recommendations</a>  <a href="https://zenodo.org/record/3686901">https://zenodo.org/record/3686901</a></p>	<p>To keep in mind in the recommendations, although not all components are at the same stage for the definition of what FAIR means for them and of FAIRness criteria. The need to tailor the FAIR principles to the relevant context, in particular the research field, has to be kept in mind all the time (cf comments on inclusiveness below).</p> <p>The FAIR Practice TF is surveying the FAIR practices of different communities (Actions 16.2 and 16.4).</p>	
7	Rec. 17: Align and harmonise FAIR and Open data policy	<p><a href="https://doi.org/10.5281/zenodo.3686900">D3.3 Policy enhancement recommendations</a>  <a href="https://doi.org/10.5281/zenodo.3686900">https://doi.org/10.5281/zenodo.3686900</a></p>	<p>It would be useful to work on guidance to provide to researchers to guide them to find the balance between open and legitimate restrictions (Action 17.8).</p>	
8	Rec. 4: Develop interoperability frameworks	<p><a href="https://doi.org/10.5281/zenodo.3707985">D3.6 recommendations on integration of metadata catalogues (Oct 2020)</a>, <a href="https://doi.org/10.5281/zenodo.3707985">D2.2</a> <a href="https://doi.org/10.5281/zenodo.3707985">https://doi.org/10.5281/zenodo.3707985</a>, D2.5 (2nd set Dec 2020) &amp; D2.8 (3rd set Jan 2022) Recommendations for FAIR Semantics <a href="https://doi.org/10.5281/zenodo.3707985">https://doi.org/10.5281/zenodo.3707985</a></p>	<p>Interoperability TF: The interim report of EOSC Interoperability framework developed in collaboration with the Architecture WG should be public soon for consultation. Include discussion of FAIR semantics.</p> <p>FAIR Practice TF: examines the FAIR practices of communities.</p>	
9	Rec. 5: Ensure data management via DMPs	<p><a href="https://doi.org/10.5281/zenodo.3686901">D3.3 Policy enhancement recommendations</a>  <a href="https://doi.org/10.5281/zenodo.3686901">https://doi.org/10.5281/zenodo.3686901</a>, D3.4 Recommendations for FAIR practice (June 2020)</p>		
10	Rec. 6: recognise & reward FAIR data & stewardship	<p><a href="https://doi.org/10.5281/zenodo.3686901">FAIRsFAIR Support to Data Repositories (D3.5 June 2020)</a>, <a href="https://doi.org/10.5281/zenodo.3686901">D3.3 Policy enhancement recommendations</a> <a href="https://doi.org/10.5281/zenodo.3686901">https://doi.org/10.5281/zenodo.3686901</a>, D3.4 Recommendations for FAIR practice (June 2020), Data Stewardship training WP6</p>	<p>Defining metrics and certification will support rewarding FAIR data &amp; stewardship by helping to identify people and services which put best practices into action (but they should be applied with care).</p>	
11	FAIR culture (Pillar 2)	<p><a href="https://doi.org/10.5281/zenodo.3686901">D3.3 Policy enhancement recommendations</a>  <a href="https://doi.org/10.5281/zenodo.3686901">https://doi.org/10.5281/zenodo.3686901</a>, D3.4 Recommendations for FAIR practice (June 2020)</p>	<p>FAIR Practice TF: practices of different communities.</p>	
12	Rec. 18: Cost data management	<p>D3.4 Recommendations for FAIR practice (June 2020)</p>		
13	Rec. 19: Select and prioritise FAIR digital objects	<p><a href="https://doi.org/10.5281/zenodo.3686901">D3.3 Policy enhancement recommendations</a>  <a href="https://doi.org/10.5281/zenodo.3686901">https://doi.org/10.5281/zenodo.3686901</a>, D3.4 Recommendations for FAIR practice (June 2020), D3.5 Description of transition support for repositories (June 2020)</p>	<p>The recommendations on certification of FAIR enabling services will support the policies of depositing data in trusted repositories by allowing data producers to identify them.</p>	
14	Rec. 20: Deposit in Trusted Digital Repositories	<p><a href="https://doi.org/10.5281/zenodo.3686901">D3.3 Policy enhancement recommendations</a>  <a href="https://doi.org/10.5281/zenodo.3686901">https://doi.org/10.5281/zenodo.3686901</a></p>		
15	Rec. 21: Incentivise reuse of FAIR outputs	<p><a href="https://doi.org/10.5281/zenodo.3686901">D3.3 Policy enhancement recommendations</a>  <a href="https://doi.org/10.5281/zenodo.3686901">https://doi.org/10.5281/zenodo.3686901</a></p>		
16	Rec. 7: support semantic technologies	<p><a href="https://doi.org/10.5281/zenodo.3707985">D2.2 1st set of Recommendations for FAIR Semantics</a>, <a href="https://doi.org/10.5281/zenodo.3707985">https://doi.org/10.5281/zenodo.3707985</a>, D2.5 2nd set of Recommendations for FAIR Semantics (Dec 2020) and D2.8 3rd set (Jan 2022) of Recommendations for FAIR Semantics, D2.6 (Feb 2021) First &amp; D2.9 (Feb 2022) Second reference implementation of the data repositories features</p>	<p>Interoperability TF: The interim report developed in collaboration with the Architecture WG (which should be public soon) addresses the issue of semantics.</p> <p>Metrics and Certification TF: Semantics is one of the aspects of Metrics and of Certification.</p>	<p>In some countries, (for example Belgium), the government is specifically emphasizing the role of semantic interoperability in the exchange of all kinds of research information - including research (meta)data - when harvesting it from different information providers and displaying the information on a single webpage. In this particular case ECOCOM was contracted. More info: <a href="https://www.ecocom.be/index.php?id=1&amp;idc=1&amp;idm=1&amp;idp=1&amp;idc=1&amp;idm=1&amp;idp=1&amp;idc=1&amp;idm=1&amp;idp=1">https://www.ecocom.be/index.php?id=1&amp;idc=1&amp;idm=1&amp;idp=1&amp;idc=1&amp;idm=1&amp;idp=1</a></p>
17	Rec. 8: Facilitate automated processing	<p><a href="https://doi.org/10.5281/zenodo.3678716">D4.1 Draft recommendations on requirements for FAIR datasets in certified repositories</a>, <a href="https://doi.org/10.5281/zenodo.3678716">https://doi.org/10.5281/zenodo.3678716</a></p> <p>D4.5 (Aug 2021) Report on FAIR data assessment toolset and badging scheme and D4.7 (March 2022) Tools for finding and selecting certified repositories for researchers and other stakeholders</p>	<p>Interoperability TF: The interim report developed in collaboration with the Architecture WG should be public soon.</p> <p>PID TF: Initial PID policy developed with the Architecture WG will be announced soon.</p>	
18	Rec. 9: Certify FAIR services	<p>D2.7 Framework for assessing FAIR services (Aug 2021), D4.2 Repository certification mechanism: a recommendation on the Extended Requirements and Procedures (June 2020), D4.3 Report on certification support and guidance for repositories and reviewers (Aug 2022), D4.4 Coordination plan for a sustainable network of FAIR Trusted Digital Repositories (Aug 2022), Alignment of projects, activities, actors (people and repositories) and intensity and extend these relationships for a minimum of three years after the project, D4.6 Report on a maturity model towards FAIR data in FAIR repositories (Feb 2022)</p>	<p>Metrics and Certification TF: Interim report on EOSC Service Certification published Jan. 2020; final report expected Oct. 2020.</p> <p>Inclusiveness and transition period should be addressed in the report for the existing repository certification. Certification of services other than repositories will be addressed. Liaison with FAIRsFAIR WP 2 &amp; 4 relevant activities.</p> <p>FAIR Service Session EOSC Symposium Budapest 27 Nov. 2019</p> <p>Breakout session in Helsinki 22 October 2019 in "The International Community Contributing to EOSC"</p>	
19	FAIR ecosystem (Pillar 3)	<p><a href="https://doi.org/10.5281/zenodo.3686901">D3.4 Recommendations for FAIR practice (June 2020)</a>, D3.5 Description of transition support for repositories (June 2022)</p>	<p>FAIR Practice TF: Survey/spreadsheet covering a variety of disciplinary fields.</p> <p>Interoperability TF: Interviews with representatives from many disciplines.</p> <p>PID TF: In initial PID policy for EOSC (developed in collaboration with the Architecture WG: "This PID Policy should accommodate a wide range of use cases and not put in place barriers to the effective use of PIDs as needed by the research community."</p> <p>FAIR TF: Inclusiveness and feedback from implementation should be important keywords. Iterations on recommendations involving research communities should be addressed beyond the WG time span.</p>	
20	Rec. 22: Use information held in DMPs	<p><a href="https://doi.org/10.5281/zenodo.3686901">D3.3 Policy enhancement recommendations</a>  <a href="https://doi.org/10.5281/zenodo.3686901">https://doi.org/10.5281/zenodo.3686901</a>, D3.4 Recommendations for FAIR practice (June 2020), D3.5 Description of transition support for repositories (June 2020)</p>	<p>FAIR WG recommendations could be used to inform the RIs. They are key stakeholders from which to gather feedback.</p> <p>To be discussed: Caution has to be exerted before taking the recommendation into account in evaluation, especially before extensive feedback from implementation is gathered and taken into account.</p>	
21	Rec. 23: Develop components to meet research needs	<p><a href="https://doi.org/10.5281/zenodo.3686901">D3.3 Policy enhancement recommendations</a>  <a href="https://doi.org/10.5281/zenodo.3686901">https://doi.org/10.5281/zenodo.3686901</a>, D3.4 Recommendations for FAIR practice (June 2020), D3.5 Description of transition support for repositories (June 2020)</p>		
22	Rec. 24: Incentivise research infrastructures to support FAIR data			

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23	Skills for FAIR (Pillar 4)	<p><b>FAIRsFAIR</b></p> <p><a href="https://doi.org/10.5281/zenodo.3690905">D6.2 Initial Core Competence Centre Structures</a>  <a href="https://doi.org/10.5281/zenodo.3792949">D6.5 Report on annual schools in core data skills ( Feb 2022)</a>, <a href="https://doi.org/10.5281/zenodo.3690905">D6.6 Report on instructor training events (Feb 2022)</a>, <a href="https://doi.org/10.5281/zenodo.3690905">D6.7 report on additional franchised events (Aug 2020 &amp; Feb 2022)</a>, <a href="https://doi.org/10.5281/zenodo.3690905">Report on Data Stewardship pilot event at</a>  <a href="https://doi.org/10.5281/zenodo.3690905">D7.1: Report: FAIR in European Higher Education</a>  <a href="https://doi.org/10.5281/zenodo.3690905">D7.2 'Briefing on FAIR Competences and Synergies' (Aug 2020)</a></p>	<p><b>EOSC FAIR WG</b></p> <p>FAIR WG is collecting reports and examples of organisations and initiatives to professionalise data science and stewardship roles as background material for the FAIR Practice Taskforce. Potential overlap with work in FAIR Metrics &amp; Certification Task Force, this is concentrating more on the repositories themselves.</p>	<p><b>EOSC Landscape WG</b></p>
24	Rec. 10: Professionalise data science & stewardship roles			
25	Rec. 11: Implement curriculum frameworks and training	<p><a href="https://doi.org/10.5281/zenodo.3690905">D7.3 FAIR Competence Framework for Higher Education (Feb 2021)</a>  <a href="https://doi.org/10.5281/zenodo.3690905">D7.4 'FAIR Competences Adoption Handbook for Universities' (Nov 2021)</a>  <a href="https://doi.org/10.5281/zenodo.3690905">D7.5 'Good Practices in FAIR Competence Training' (Nov 2021)</a></p>		
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27	Incentives and metrics for FAIR data and services (Pillar 5)	<p><b>Rec. 12: Develop metrics for FAIR digital output</b></p> <p><b>Rec. 13: Develop metrics to certify FAIR services</b></p> <p><b>Rec. 25: Implement and monitor metrics</b></p> <p><b>Rec. 26: Support data citation and next generation metrics</b></p>	<p><b>Rec. 12: Develop metrics for FAIR digital output</b></p> <p><a href="https://doi.org/10.5281/zenodo.3678716">D4.1 Draft recommendations on requirements for FAIR datasets in certified repositories</a>, <a href="https://doi.org/10.5281/zenodo.3678716">D4.5 (Aug 2021) Report on FAIR data assessment toolset and badging scheme</a>  <a href="https://doi.org/10.5281/zenodo.3678716">D4.2 (May 2020) Repository certification mechanism: a recommendation on the Extended Requirements and Procedures</a>, <a href="https://doi.org/10.5281/zenodo.3678716">D4.3 (Aug 2021) Report on certification support and guidance for repositories and reviewers</a>, <a href="https://doi.org/10.5281/zenodo.3678716">D4.4 (Aug 2021) Coordination plan for a sustainable network of FAIR-enabling Trusted Digital Repositories</a>. Alignment of projects, activities, actors (people and repositories) and intensify and extend these relationships for a minimum of three years after the project, <a href="https://doi.org/10.5281/zenodo.3678716">D4.6 (Feb 2022) Report on a maturity model towards FAIR data in FAIR-enabling repositories</a></p> <p><b>Rec. 13: Develop metrics to certify FAIR services</b></p> <p><a href="https://doi.org/10.5281/zenodo.3688752">M2.7 Assessment report on FAIRness of services</a></p> <p><b>Rec. 25: Implement and monitor metrics</b></p> <p><a href="https://doi.org/10.5281/zenodo.3688752">M4.9 (Aug 2020) Report on FAIR data assessment mechanisms to develop pragmatic concepts for FAIRness evaluation at the dataset level</a>, <a href="https://doi.org/10.5281/zenodo.3688752">DM.5 (Aug 2021) Report on FAIR data assessment toolset and data badging scheme</a></p>	<p><b>Rec. 12: Develop metrics for FAIR digital output</b></p> <p>Metrics &amp; Certification TF works on a recommendation on metrics for FAIR, taking into account the RDA and FAIRsFAIR work on Metrics for FAIR data. Note the on-going work on the definition of FAIR software (RDA/Force11/ReSA WG being formed). Evaluation tools should be used cautiously. Communities have different FAIR practices and give different weights to the FAIR areas, which may not be taken into account in the proposed metrics. It will be essential to gather feedback on implementation of the metrics from different communities and on the possible adverse effects for some of them (cf Mark Allen's comment the other day about the fact that things which have been built and are working may be at risk).  Need to define the governance for metrics maintenance. Session at the EOSC Consultation Day on 18 May Governance, maintenance and sustainability of metrics and PIDs (PID policies)</p> <p><b>Rec. 13: Develop metrics to certify FAIR services</b></p> <p>Metrics &amp; Certification TF works on a recommendation on certification for FAIR-enabling services. Liaison established with F4F WP2 &amp; 4.</p> <p><b>Rec. 25: Implement and monitor metrics</b></p> <p>Need to gather feedback from implementation and evolve the metrics taking the feedback into account. Metrics should be used very cautiously for evaluation, especially during this phase.  Setting up an appropriate governance is critical. Need to monitor the monitoring and the monitoring tools, and evaluate the biases introduced by the tools.</p>
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32	Investment in FAIR (Pillar 6)	<p><b>Rec. 14: Provide strategic and coordinated funding</b></p> <p><b>Rec. 15: provide sustainable funding</b></p> <p><b>Rec. 27: Open EOSC to all providers but ensure services are FAIR</b></p>	<p><b>Rec. 14: Provide strategic and coordinated funding</b></p> <p><a href="https://doi.org/10.5281/zenodo.3558173">The project enables indirectly strategic and coordinated funding with the following activities: D3.3 Policy enhancement recommendations</a>, <a href="https://doi.org/10.5281/zenodo.3558173">D3.8 Changes in data policy and practice - an updated analysis (March 2022)</a>, <a href="https://doi.org/10.5281/zenodo.3558173">D4.4 Coordination plan for a sustainable network of FAIR Trusted Digital Repositories (Sept 2021)</a>. Also, activities in all WPs extensively build on existing work and standards i.e form the basis of Rec. 14 to enable and support co-ordinated and strategic funding. Leveraging existing investments. Community approval is important in this context: WPs and other work with stakeholders across WPs. <a href="https://doi.org/10.5281/zenodo.3558173">D1.6 Sustainability and RoP Plan (Feb 2022)</a>.</p> <p><b>Rec. 15: provide sustainable funding</b></p> <p>The project enables indirectly sustainable funding for FAIR data ecosystem components with the following activities: WP2 and 4 activities cover FAIR certification of data services including repositories and FAIR data assessment in trustworthy data repositories. The requirements and assessments defined and tested in the project can inform funders to sustain a FAIR data ecosystem. Relevant deliverables: <a href="https://doi.org/10.5281/zenodo.3558173">D2.7 Framework for assessing FAIR services (Aug 2021)</a> <a href="https://doi.org/10.5281/zenodo.3558173">D4.5 : Report on testbed of FAIR metrics and data assessment badging scheme (Aug 2021)</a>, <a href="https://doi.org/10.5281/zenodo.3558173">D4.6 : Report on a maturity model towards FAIR data in FAIR repositories (Feb 2022)</a></p> <p><b>Rec. 27: Open EOSC to all providers but ensure services are FAIR</b></p> <p>FAIRsFAIR activities focus on how to ensure policy and services support FAIR data and that uptake and endorsement by the community is effective. WP activities related to FAIR practices, policy and certification inform the development of EOSC RoP.</p>	<p><b>Rec. 14: Provide strategic and coordinated funding</b></p> <p>The FAIR WG recommendations will be elements to take into account to define strategic funding.  To be discussed: Caution has to be exerted before using them straightforwardly for evaluation.</p> <p><b>Rec. 15: provide sustainable funding</b></p> <p>Sustainability is one of the issues. Governance has to be set up so that getting feedback about the WG recommendations and maintaining them is ensured.</p> <p><b>Rec. 27: Open EOSC to all providers but ensure services are FAIR</b></p> <p>This is at the core of the FAIR WG remit. The final reports will address recommendations on different aspects relevant to FAIR (interoperability, PID policy, FAIR Metrics for EOSC Certification of FAIR services). The FAIR Practice TF will also publish a report based on its extensive survey of the FAIR practices of many different communities. Inclusiveness of different community practices is one of the topics addressed in the reports.</p>
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