D2.9 - A Service Provider's Reference Cards to Data Sharing Policies

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Deliverable Abstract
Building on current best practice, notably the EOSCpilot policy recommendations and the EC Expert Group report on FAIR data, the EOSC-hub deliverable report D2.8 recommends 22 practical steps bridging general policy recommendations and future technical implementation of data sharing within the EOSC-hub service ecosystem. With this deliverable, we have translated those recommendations into practical Why-, What-, and How-reference cards that aid data and service providers in that EOSC-hub service ecosystem with the implementation of data sharing policies.

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DELIVERY SLIP

Date	***Name***	***Partner/Activity***	***Date***
From:	Frans Huigen, Ilona von Stein	DANS/WP2	29/05/2020
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Approved by:	AMB		

DOCUMENT LOG

Issue	***Date***	***Comment***	***Author***
V0.1	29/04/2020	First reference card structuring proposal, on which working group members provided feedback.	F Huigen, I von Stein, M Wittenberg (DANS); R Baxter (EPCC); J Nordling (CSC); C Ohmann & M Matei (ECRIN); A Manzi (EGI.eu)
V0.2	14/05/2020	Feedback incorporated: - added document log, copyright notice, tables of concepts and acronyms, and contents overview - altered reference cards order and structuring - additional content and references	F Huigen, I von Stein
V0.3	15/05/2020	Delivered first draft for layout and design to TRUST-IT (R Carrillo)	F Huigen
V0.4	26/05/2020	First version of the visuals and layout, minor initial comments incorporated.	F Huigen; R Carrillo & G Savini (TRUST-IT)

V0.5	26/05/2020	Second version of layout and design of the reference cards (section two of this deliverable) received comments by work group members.	I von Stein; A Manzi; T Wildish (EMBL-EBI); J Nordling; C Ohmann
V0.6	28/05/2020	Added a third section on next steps to deliverable.	F Huigen, I von Stein
V0.7	28/05/2020	Design and content iterations done to the reference cards by TRUST-IT.	R Carillo & G Savini
V0.8	29/05/2020	Wrote abstract. Further detailing - preparing final draft.	F Huigen
V0.9	29/05/2020	Full draft ready, but without the reference cards. They are in a separate pdf (delivered by TRUST-IT).	F Huigen, I von Stein
V0.10	29/05/2020	Merged final design version of the reference cards with this deliverable full draft into one PDF. Final v1.0 D2.9 ready for internal review.	F Huigen, I von Stein
V1	29/07/2020	Final version after external review	F Huigen, I von Stein

TERMINOLOGY

https://wiki.eosc-hub.eu/display/EOSC/EOSC-hub+Glossary

Terminology/Acronym	***Definition***
DataTags	A system of human-readable and machine-actionable labels that express conditions under which datasets can be stored, transmitted, or used; https://techscience.org/a/2015101601/
DOI	Digital Object Identifier, a well-recognised form of PID (qv); http://www.doi.org/
FAIR principles	Principles of best practice in open research data management, an acronym of Findability, Accessibility, Interoperability and Reusability; https://www.force11.org/group/fairgroup/fairprinciples
FREYA	European project on PIDs (qv). https://www.project-freya.eu
GDPR	The General Data Protection Regulation came into force as of 28 May, 2018. It is a regulation valid for the whole of the European Union, concerning privacy and the protection of privacy and personal data.
RDA (WG)	Research Data Alliance (Working Group)
PID	Persistent identifier, for example a DOI or accession number.
Sensitive data	Data which, for whatever reason, cannot be openly shared without the risk of disclosure of legally or ethically sensitive information.

Contents

1 Introduction and Context

Conveying policy recommendations in an attractive pragmatic way to the EOSC-hub data and service providers, that is the main objective of this deliverable. It leans on the First Policy Recommendations D2.8 report as published in December 2018 (Baxter et al., 20181). [1]The First Policy Recommendations have been translated into hands-on guidance that we recommend being adopted by data and service providers within the EOSC-hub Consortium.

To start with, there are three major high-level recommendations that pertain to the whole of the EOSC-hub service ecosystem:

1. Implement FAIR
2. Build technical expertise in 'safe data' and 'safe settings'
3. Support the wider development of ethical and information governance

By implementing these three major recommendations, data and service providers bridge gaps between general policy recommendations and future technical implementation of data sharing policies. To assists the providers engaged in the EOSC-hub Service Ecosystem as practically as possible, we mapped these major recommendations to three questions: 'Why?, What?, and How?'':

1. "Why should [providers] care about implementing data sharing policies?" maps to the third recommendation: Support the wider development of ethical and information governance.
2. "What are essential concepts that [service providers] should be aware of in the context of data sharing policies in the EOSC-hub ecosystem?" This question maps to the second recommendation: "Build technical expertise in 'safe data' and 'safe settings'".
3. "How should providers of data and services go about a pragmatic approach to bridging the gap between future technical implementation and policy recommendations for data sharing?" This question maps to the first recommendation: implement FAIR data. As extension: sensitive and non-sensitive personal data are also taken into account.

Each of the three recommendations mentioned above have been split up into a total of twenty-two sub-recommendations. This enlarges the granularity of the recommendations. We maintain that granularity by providing reference to sources - international initiatives, concepts, outputs - that might be able to help the data and service providers answer the main three questions: why, what, and how. Each reference card, following this introductory section, handles its own question and underlying sub-recommendations.

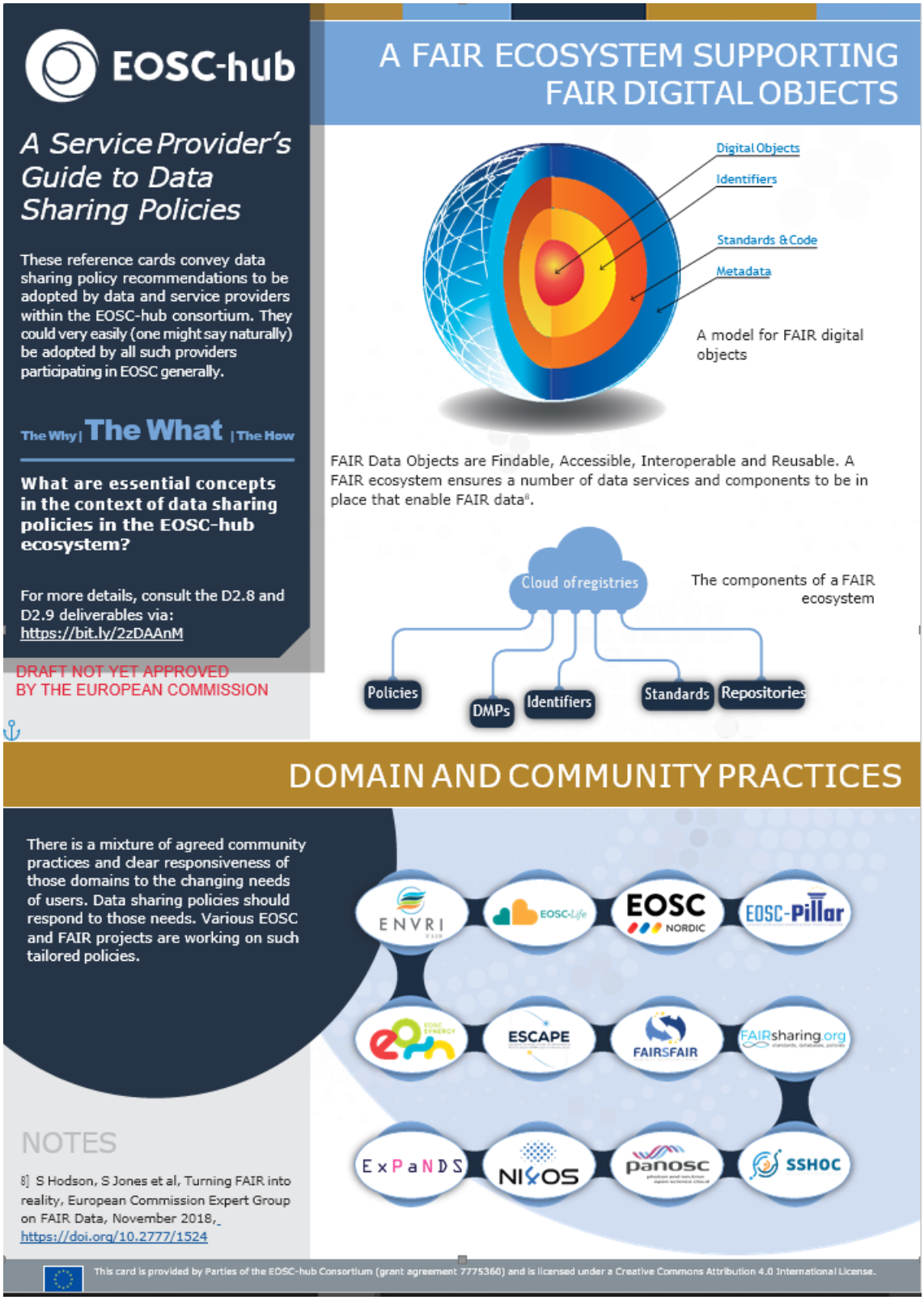
We made a design choice to map and translate recommendations into practical reference handles that data and service providers, engaged in the EOSC-hub consortium, can immediately use to overcome challenges in policy implementation. We think the reference card form is suitable for this purpose because they can easily be distributed online and offline. For example, as stand-alone presentation slides, or as visually appealing

[1] https://documents.egi.eu/document/3419

A5-formatted flyers during conferences or professional gatherings. On the next three pages you will subsequently find The Why, The What, and The How reference cards. They are designed in such a way, that they can be spread separately. Closing off this deliverable is a section on next steps.

2 Service Provider's Reference card to data sharing policies; Why

3 Service Provider's Reference card to data sharing policies; What



4 Service Provider's Reference card to data sharing policies; How

EOSC-hub

A Service Provider's Guide to Data Sharing Policies

These reference cards convey data sharing policy recommendations to be adopted by data and service providers within the EOSC-hub consortium. They could very easily (one might say naturally) be adopted by all such providers participating in EOSC generally.

The Why | The What | **The How**

How can you implement data sharing policies practically? Some examples.

For more details, consult the D2.8 and D2.9 deliverables via: https://bit.ly/2zDAAnM

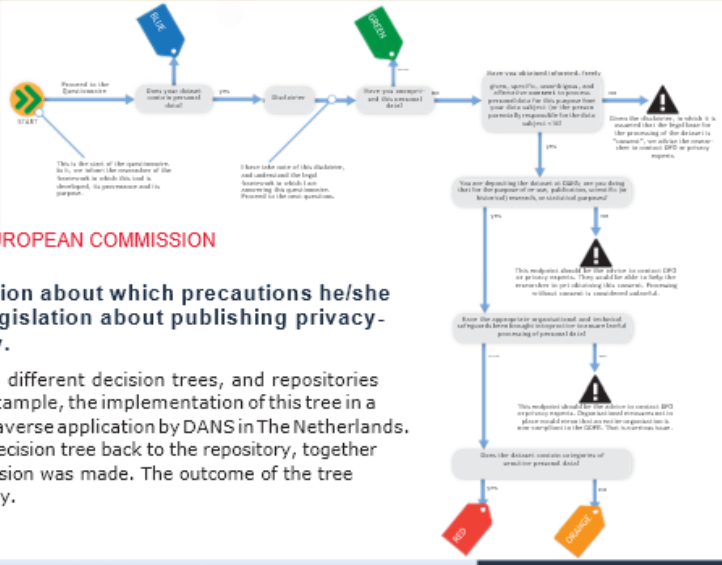
ASSIGNING PIDs

Persistent Identifiers are long-lasting references to a data object. By using PIDs, you ensure findability and accessibility.

Source: PID Chart, Fenner & Aryani, FREYA

PID graph of 3 use cases with digital objects connected by PIDs (L-R) a. different versions of software code, b. datasets hosted by a particular repository, c. all digital objects connected to a research object.

IMPLEMENT THE DATA TAGS DECISION TREE FOR SENSITIVE DATA



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This gives the user more information about which precautions he/she should take to comply with the legislation about publishing privacy-sensitive data to a data repository.

As a generic service, it can be used with different decision trees, and repositories depending on their IT-architecture. For example, the implementation of this tree in a service is currently being tested in the Dataverse application by DANS in The Netherlands. The service can send the outcome of the decision tree back to the repository, together with provenance information how the decision was made. The outcome of the tree corresponds to increasing level of sensitivity.

The Five Safes approach to data handling for medical and health data services.

Domain-specific Research Data Management Protocols with specific communities, e.g. the Science Europe Guiding document (2018[9]) adopted by for example CESSDA and ELIXIR.

ADOPT GOOD DOMAIN PRACTICES

NOTES

9] via https://bit.ly/3d4qhaR

5 Next steps

The First Policy Recommendations (EOSC-hub D2.8) have been translated into three service provider's reference cards. These cards (The Why, The What and The How) convey data sharing recommendations to be adopted by data and service providers within the EOSC-hub consortium. We suggest an online dissemination strategy for these cards, although they are also designed in such a way that they can be printed on paper. We will showcase the cards at a variety of EOSC and FAIR related (online) activities and events, providing appropriate visibility to all stakeholders. Also, further online dissemination (e.g. social media presence, webinars, video style interview) will be carried out to facilitate adoption and to obtain user feedback. Another possibility is to organize and roll-out an online focussed workshop. Details of the communication plan of these cards are to be worked out in accordance with EOSC-hub project governance and management.