Turning FAIR Data into Reality
Interim Report and Action Plan

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European Commission Expert Group on FAIR Data

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Report framework

1. Concepts – why FAIR?
2. Creating a culture of FAIR data
3. Creating a technical ecosystem for FAIR data
4. Skills and capacity building
5. Measuring change
6. Funding and sustaining FAIR data
7. FAIR Data Action Plan

Primary recommendations and actions

Step 1: Define and apply FAIR appropriately

Step 2: Develop and support a sustainable FAIR data ecosystem

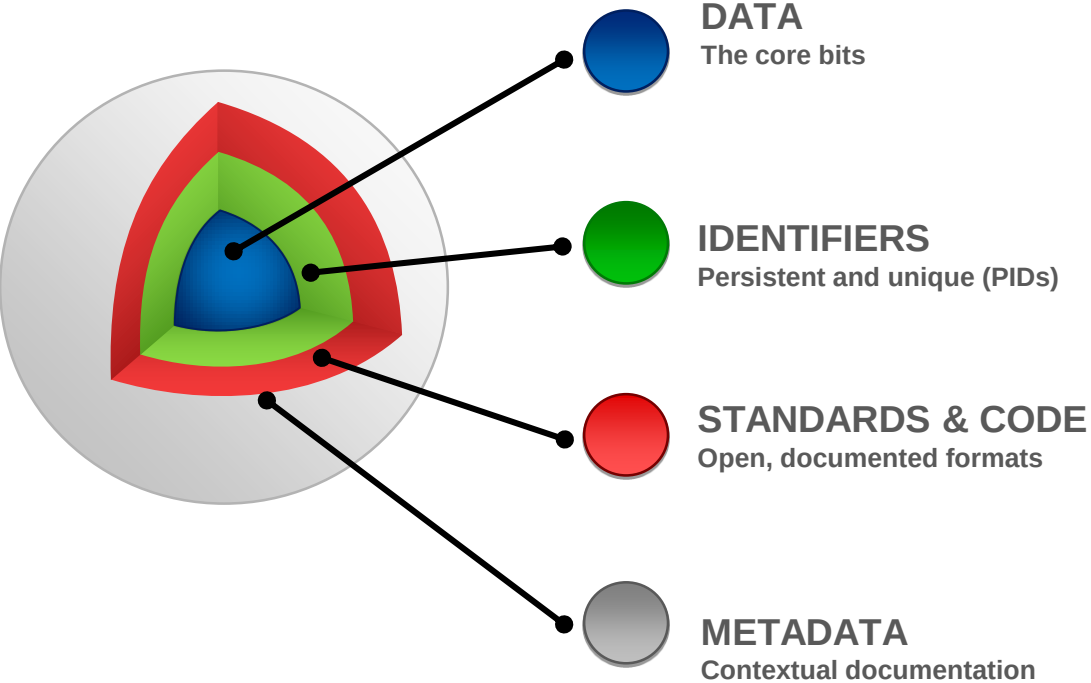
Step 3: Ensure FAIR data and certified services to support FAIR

Step 4: Embed a culture of FAIR in research practice

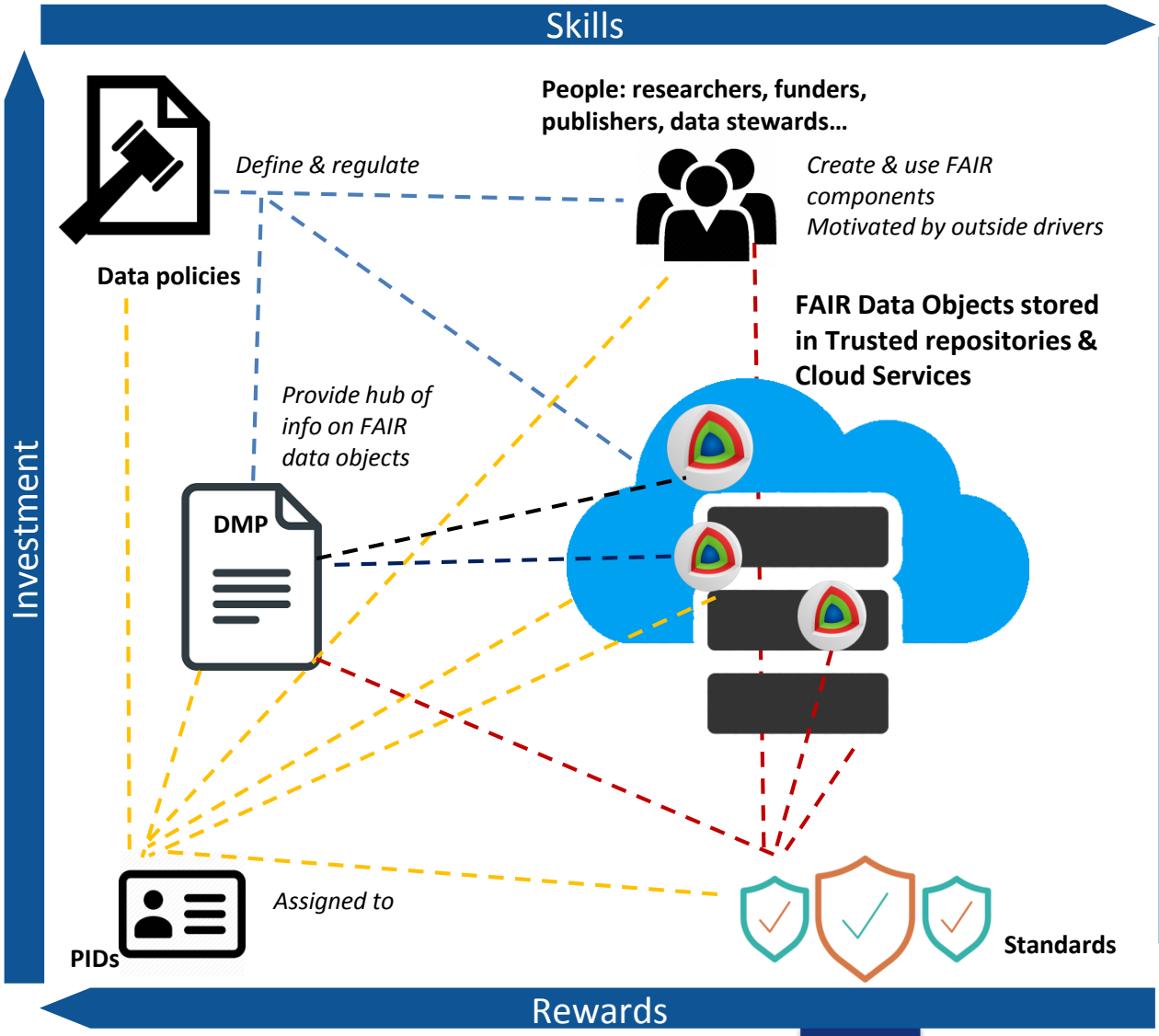
Step 1: Define and apply FAIR appropriately

1. **Definitions of FAIR:** FAIR is not limited to its four constituent elements: it must also comprise appropriate openness, the assessability of data, long-term stewardship, and other relevant features. To make FAIR data a reality, it is necessary to incorporate these concepts into the definition of FAIR.
2. **Mandates and boundaries for Open:** The Open Data mandate for publicly funded research should be made explicit in all policy. It is important that the maxim ‘as Open as possible, as closed as necessary’ be applied proportionately with genuine best efforts to share.

FAIR Data Objects



3. **A model for FAIR Data Objects:** Implementing FAIR requires a model for FAIR Data Objects which by definition have a PID linked to different types of essential metadata, including provenance and licencing. The use of community standards and sharing of code is also fundamental for interoperability and reuse.



Step 2: Develop and support a sustainable FAIR data ecosystem

4. **Components of a FAIR data ecosystem:** The realisation of FAIR data relies on, at minimum, the following essential components: policies, DMPs, identifiers, standards and repositories. There need to be registries cataloguing each component of the ecosystem and automated workflows between them.

Supported by cultural aspects: skills, metrics, rewards, investment.

Primary recommendations and actions

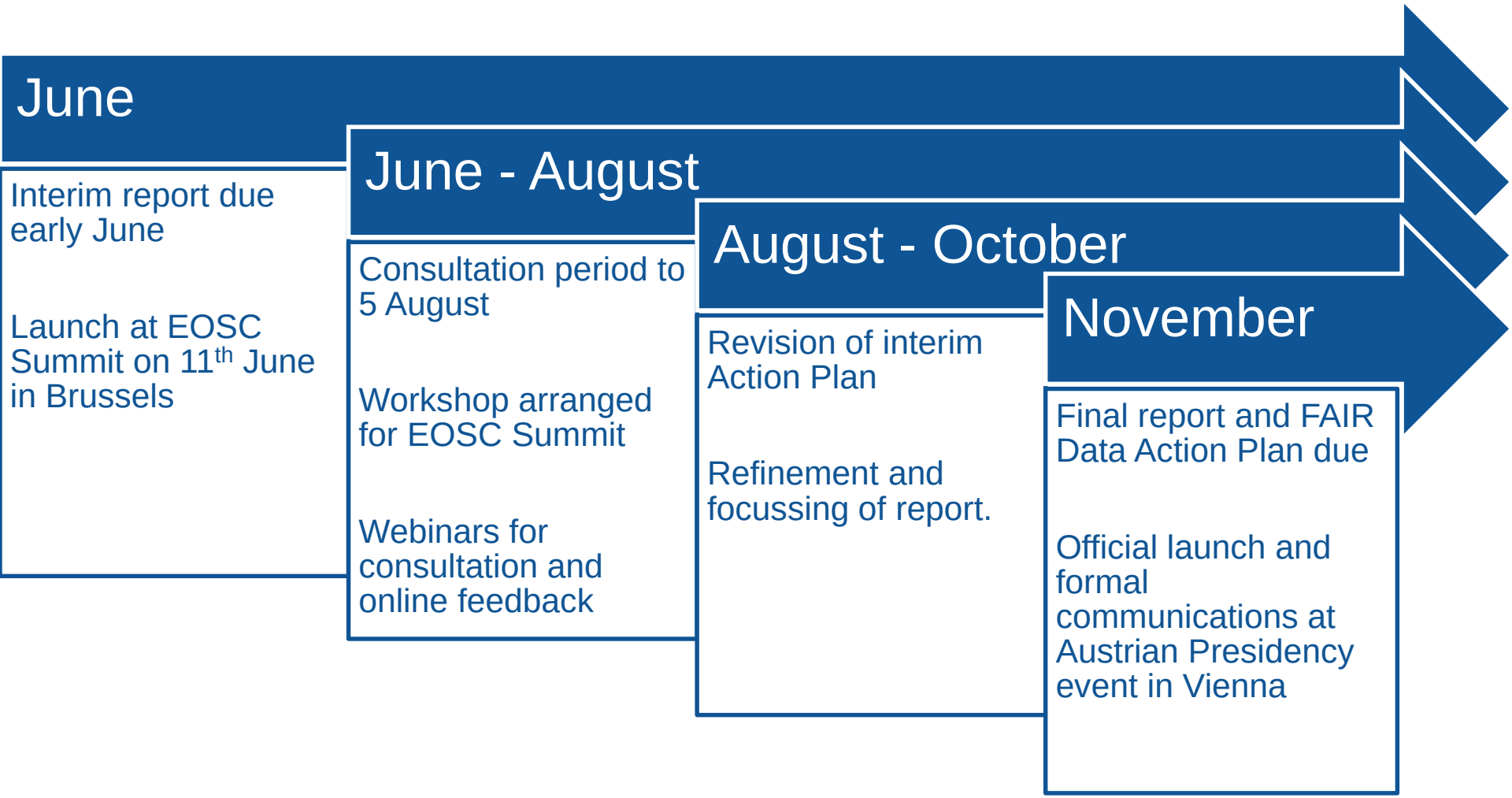
Step 1: Define and apply FAIR appropriately
Rec. 1: Definitions of FAIR
Rec. 2: Mandates and boundaries for Open
Rec. 3: A model for FAIR Data Objects

Step 2: Develop and support a sustainable FAIR data ecosystem
Rec. 4: Components of a FAIR data ecosystem
Rec. 5: Sustainable funding for FAIR components
Rec. 6: Strategic and evidence-based funding

Step 3: Step 3: Ensure FAIR data and certified services to support FAIR
Rec. 7: Disciplinary interoperability frameworks
Rec. 8: Cross-disciplinary FAIRness
Rec. 9: Develop robust FAIR data metrics
Rec. 10: Trusted Digital Repositories
Rec. 11: Develop metrics to assess and certify data services

Step 4: Embed a culture of FAIR in research practice
Rec. 12: Data Management via DMPs
Rec. 13: Professionalise data science and stewardship roles
Rec. 14: Recognise and reward FAIR data and FAIR stewardship

FAIR Data EG: Timescale



Next steps…

- Interim FAIR Data Action Plan: https://doi.org/10.5281/zenodo.1285290
- Interim FAIR Data Report: https://doi.org/10.5281/zenodo.1285272
- Comment on Report: http://bit.ly/interim_FAIR_report
- Comment on Action Plan: https://github.com/FAIR-Data-EG/Action-Plan

FAIR Data EG: membership

Simon Hodson, CODATA
Chair of FAIR Data EG

Rūta Petrauskaité, Vytautas Magnus University

Peter Wittenburg, Max Planck Computing & Data Facility

Sarah Jones, Digital Curation Centre (DCC), Rapporteur

Daniel Mietchen, Data Science Institute, University of Virginia

Françoise Genova, Observatoire Astronomique de Strasbourg

Leif Laaksonen, CSC-IT Centre for Science

Natalie Harrower, Digital Repository of Ireland – year 2 only

Sandra Collins, National Library of Ireland – year 1 only

Thank you!

Questions?

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