2023 statement on the future of the European Open Science Cloud (EOSC)

Vienna, 19 October 2023

We reaffirm the declarations on EOSC by the Council and several Presidencies of the EU, which took place during the five-year journey from Vienna 2018 to Vienna 2023, such as among others:

- The Declaration "Opening the Door to a World of FAIR Research Digital Objects On the Threshold to the European Open Science Cloud" by the DE Presidency of the EU (2020)
- The Declaration "Riding the Next Wave of Research Data" by the PT Presidency of the EU (2021)
- The Council conclusion on research infrastructures under the CZ presidency (Dec 2022)
- The Lund declaration by the Swedish presidency "Maximising the Benefits of Research Data" (2023)

The EOSC Declarations were important steps towards inclusive, open and transparent science. Supporting EOSC underlines the importance of data accessibility, data sharing and collaboration between different scientific communities and stakeholders. In this regard, the EOSC plays a central role in putting its principles (multi stakeholderism, openness, FAIR principles, federation of infrastructures and machine-actionability) into practice, building this up to a pan-European level.

Following the postulations of EOSC Declarations, the future of EOSC is shaped by a clear vision and a reaffirmed commitment to its principles, while emphasizing interdisciplinarity, sustainability, global collaboration as well as privacy and security.

Europe has the opportunity to advance this vision and ensure that EOSC becomes a major success with positive impacts for science and society as a whole.

In conclusion, as we navigate the roadmap towards realizing the European Open Science Cloud (EOSC), it is crucial to align our efforts with the guiding principles for EOSC.

To ensure a swift and effective implementation, we propose a three-phase approach:

- FAIR Digital Objects: This initial phase focuses on making digital objects FAIR (Findable, Accessible, Interoperable, and Reusable) in a manner that is both achievable and readily machine-implementable. This approach would enable the inclusion of all structured legacy data, setting a strong foundation for EOSC.
- 2. **FAIR4Humans:** As a transitional step, we acknowledge the importance of metadata integration. While this phase demands metadata improvements, it recognizes that not all legacy systems can be transformed immediately. This approach strikes a balance between immediate progress and accommodating legacy setups.

3. **FAIR4Machines:** Our long-term objective is to make EOSC truly FAIR for machines, paving the way for advanced automation and data-driven processes. This aspirational phase underscores the commitment to continually evolve EOSC to meet the changing needs of the research community.

By adopting these phased strategies, we can advance towards the EOSC vision using a clear roadmap, ensuring that research data and resources are not only accessible but also optimized for both human and machine processing. This approach will clearly help us to create a more open, collaborative, and data-driven scientific landscape. We therefore urge the European stakeholders of EOSC to stay in step with international developments in the sector of FAIR research data, and at minimum to be ready for all publicly funded data handled by EOSC at the latest in 2027.

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