## How a European network of FAIR-enabling Trustworthy Data Repositories can align to the vision of EOSC

Response of the EOSC Task Force on Long-term Data Preservation to the working paper "Toward a European network of FAIR-enabling Trustworthy Digital Repositories"

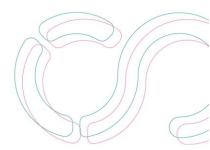
Access to research data that is as open as possible, and as protected as necessary will make the scientific process more reliable and efficient. It will allow researchers to reproduce, replicate, and re-use scientific results. The European Open Science Cloud (EOSC) aims to develop a web of FAIR (Findable, Accessible, Interoperable, Reusable) data, services and other resources for science in Europe. To enable a sustainable EOSC that provides and benefits from digital assets that retain their usability and value over time, Trustworthy Digital Repositories (TDRs) providing long-term preservation services are required. The EOSC Strategic Research and Innovation Agenda (SRIA)<sup>1</sup> underlines the importance of long-term data preservation, but an explicit strategy has not been formulated.

The EOSC task force on Long-Term Data Preservation (LTDP)<sup>2</sup> will provide recommendations on the vision and sustainable implementation of LTDP policies and practices, as well as suggestions for later strategy execution. One of the goals of the Task Force is to advise on the implementation of a European network of FAIR-enabling TDRs (hereafter referred to as the Network). The Task Force will provide a vision on the scope and functions of this network, provide an overview of current developments relevant to creating the Network, and provide recommendations on implementation strategies to the EOSC Association.

Recently, a group of representatives from the repository community outlined their vision on the functions of the Network in the working paper "Towards a European network of FAIR-enabling Trustworthy Digital Repositories (TDRs)"<sup>3</sup>. The paper describes the functions envisioned for the Network and the steps required to reach that goal. The paper was based on a workshop<sup>4</sup> organised by FAIRsFAIR, SSHOC, and EOSC-Nordic that brought together a large number of interested representatives from the repository community. A draft of the working paper received broad input from the repository community via a consultation questionnaire. The Task Force recognises that the working paper is informed by multiple prior projects and has been made broadly available for comment to the repository community. For this reason, we consider it to be representative of that community, though further engagement within and beyond the repository community is necessary.

In this response the EOSC LTDP Task Force addresses the proposals in the paper and elaborates on how the suggested functions can contribute to realising the EOSC.

The first function proposed in the working paper is that of networking and knowledge exchange. Such a function can help repositories to improve their FAIR-enabling capabilities and trustworthiness in ways that align with the expectations of certification standards such as



<sup>&</sup>lt;sup>1</sup> https://www.eosc.eu/sria

<sup>&</sup>lt;sup>2</sup> https://www.eosc.eu/advisory-groups/long-term-data-preservation

<sup>&</sup>lt;sup>3</sup> https://zenodo.org/record/7034315#.Y0VNv4TP2Hs

<sup>4</sup> https://zenodo.org/record/5849658#.Y4RxoYSZOMp

CoreTrustSeal. Incentivising and assisting repositories to achieve certification is one of the action points formulated in the European Commission's Turning FAIR Into Reality report<sup>5</sup>.

The Network could provide a means for repositories to network and start relationships that aid in offering LTDP services. This would particularly help smaller organisations to develop partnerships and shared LTDP systems<sup>6</sup>.

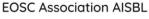
The second proposed function of the Network is that of stakeholder advocacy and engagement. This function is important for the repository community, but can also benefit EOSC. Continuous landscape monitoring is a boundary condition for the implementation of the EOSC ecosystem. The Network could function as a unified voice of the repository community to align with and input to the EOSC ecosystem, making it easier for EOSC to monitor the repository landscape and align the EOSC ecosystem with the requirements of repositories and their data and metadata users.

The final proposed function for the Network is that of coordination and development. The Network can develop and provide common frameworks for best practices for policies and routines for research data repositories. As stated in the working paper: "Standardisation and interoperability are significant points of collaboration and support for existing and new repositories in the context of the EOSC ecosystem". This idea aligns with the recommendations in EOSC's SRIA, that standardisation must come from the communities themselves in order to be accepted and successfully implemented, but that a clear community governance is needed to achieve this. The Task Force believes that the future Network, as a unified "voice" of the repository community, is essential to not only develop but also decide on standards for data repositories that align to the EOSC ecosystem. The Network can help to ensure that these standards are representative of the relevant repositories and not exclusive.

One of the priorities formulated in the SRIA and Turning FAIR into Reality Report to which the Network could contribute, would be to test and evaluate FAIR metrics and tools. Another could be to provide feedback on efforts to align certification requirements with FAIR. These functions were not specifically mentioned in the working paper, but the Task Force believes these to be relevant points of collaboration between the future Network and the EOSC.

The working paper ends with steps that need to be taken to realise the Network, such as deciding on membership, a governance structure, and a sustainable business model. On membership, the working paper formulates the opinion that it should be inclusive: not only certified TDRs should become part of the Network, but also repositories that aspire to become more trustworthy and FAIR-enabling, with the option to seek certification. The Task Force strongly agrees with this vision. By including aspiring TDRs in communities of best practice such as the future Network, the number of certified, FAIR-enabling TDRs can increase over time.

With this response paper, the Task Force expresses its support for the views presented in the working paper drawn up by the repository community. The Task Force will use these views as a starting point to advise on the establishment of the Network to the EOSC-Association.



<sup>&</sup>lt;sup>5</sup> https://op.europa.eu/en/publication-detail/-/publication/7769a148-f1f6-11e8-9982-01aa75ed71a1 <sup>6</sup>https://sr.ithaka.org/publications/the-effectiveness-and-durability-of-digital-preservation-and-curation-systems/

Ongoing work within the Task Force on a vision for EOSC on LTDP, on roles and responsibilities with respect to LTDP, and on the financial aspects of LTDP will also be used to provide input to the future planning of the network. We welcome any feedback from the community and the authors of the paper.

