

EOSC-Life





Authors: R David, A Rybina, JM Burel, JK Heriche, P Audergon, JW Boiten, F Coppens, S Crockett, K Exter, S Fahrner, M Fratelli, C Goble, P Gormanns, T Grantner, B Grüning, KT Gurwitz, JM Hancock, H Harmse, P Holub, N Juty, G Karnbach, E Karoune, A

Keppler, J Klemeier, C Lancelotti, JL Legras, AL Lister, D Livio Longo, R Ludwig, B Madon, M Massimi, V Matser, R Matteoni, MT Mayrhofer, C Ohmann, M Panagiotopoulou, H Parkinson, I Perseil, C Pfander, R Pieruschka, M Raess, A Rauber, AS Richard, P



Check the paper:



Sustainability of FAIR Life Science Resources and Projects: the "BeSure" Recommendations from EOSC-Life Research Infrastructures

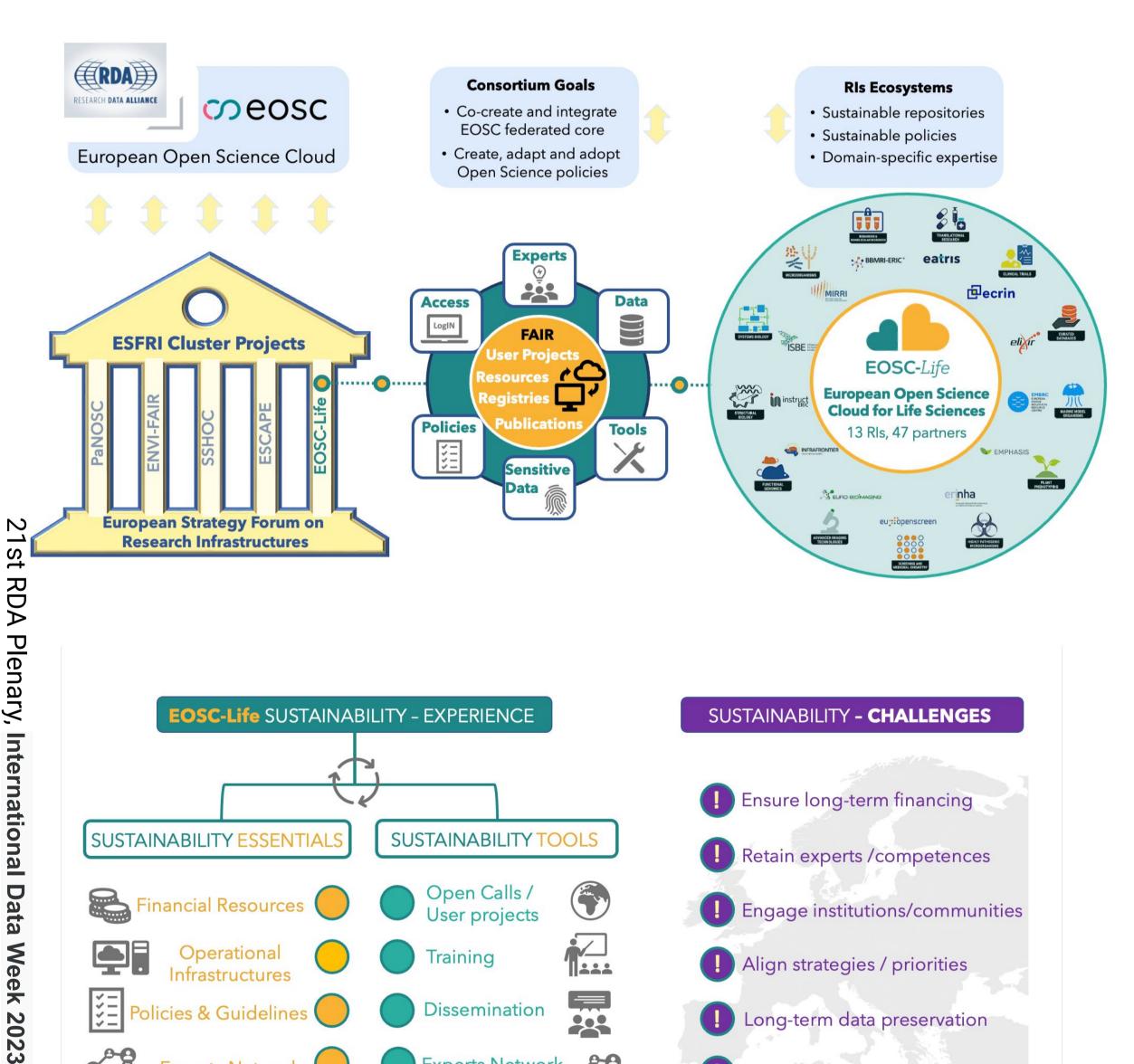
Romano, A Rosato, A Sánchez-Pla, SA Sansone, U Sarkans, B Serrano-Solano, J Tang, Z Tanoli, J Tedds, H Wagener, M Weise, HV Westerhoff, R Wittner, J Ewbank, N Blomberg, P Gribbon. Contact: romain.david@erinha.eu

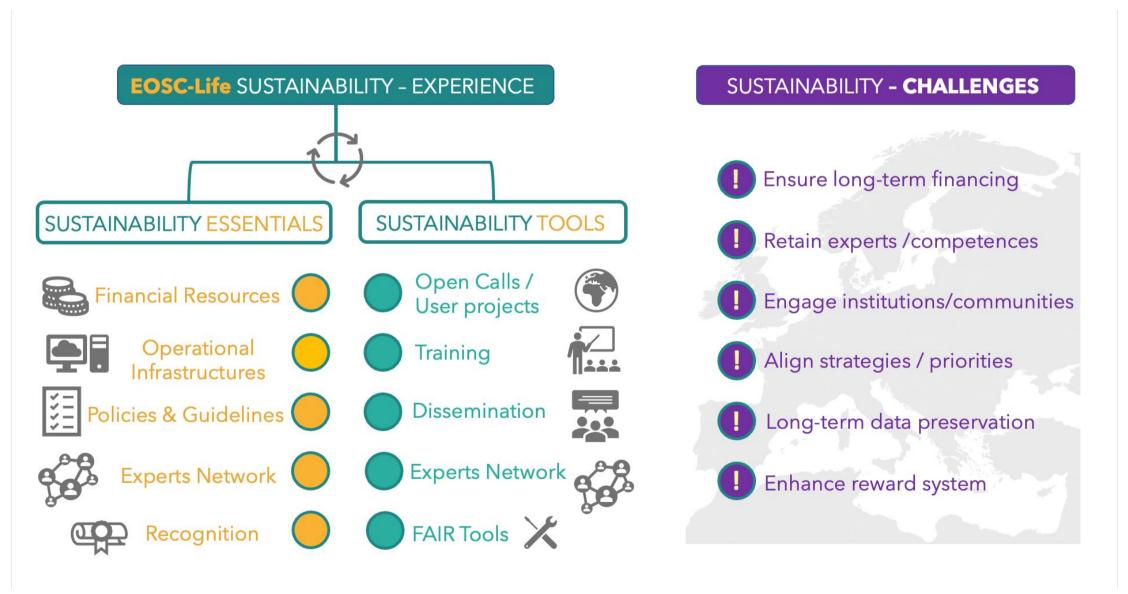
Sustainability in Life Sciences

Life Science (LS) communities must increase the sustainability of their data resources, software tools, and workflows so that the wider scientific community can use and re-use the available resources over long-term, especially in future applications machine-based analyses.

In this poster, we describe key findings from the EOSC-Life project in developing and establishing sustainable resources, tools, and cloud based LS solutions. EOSC-Life brought 13 European LS Research Infrastructures together and laid the foundation for an open, digital and collaborative space for life sciences research.

We describe organisational, technical, financial, and legal/ethical challenges that represent the main barriers to sustainability in the LS domain.





Sustainability lessons learned during the EOSC-Life project - key components iteratively driving, facilitating, and challenging the sustainability process.



In a paper accepted in the *EMBO Journal*, we demonstrate the efficiency of the EOSC-Life support model for sustainable FAIR data management. To do so, we specifically refer to lessons learned from 27 selected scientific projects and apply the "radical collaboration" method used in another Research Data Alliance publication (Pickering et al., 2021). We explore the complex sustainability needs linked to this management, including those associated associated with sensitive- and industry-related data resources.

The paper presents lessons learned from the EOSC-Life project as a set of recommendations which emphasise the need to work with experts and communicate outcomes to increase the credibility and recognition of research projects. Furthermore, we show how demonstrating and practising these recommendations also permits the more sustainable adoption of reproducible research outputs.

BeSURE recommendations

We have called these the **BeSURE** recommendations (BE REcommendations). SUstainable These recommendations cite *sustainable training methodologies* and ensure high-quality metadata that support the sustainable reusability of scientific objects.

Roles and responsibilities must be shared to ensure sovereignty, sustainable services, and tools. Finally, our analysis shows how data harmonisation facilitates the interoperability of tools, data, and solutions and improves the understanding of concepts, functionalities, and semantics in the life sciences.



A Festival of Data, 23-26 October 2023,

Salzburg, Austria

Read the paper!

David, R., Rybina, A., Burel, J.-M., Heriche, J.-K., Audergon, P., Boiten, J.-W., Coppens, F., Crockett, S., Exter Katrina, Fahrener, S., Fratelli, M., Goble, C., Gormanns, P., Grantner, T., Gruning, B., Gurwitz, K. T., Hancock, J., Harmse, H., Holub, P., ... Gribbon, P. (2023). In press: "Be Sustainable", Recommendations for FAIR Resources in Life Sciences research: EOSC-Life's Lessons. In EMBO Journal (XX). https://doi.org/10.15252/embj.2023115008







