EOSC SOA Project Report #3: Skills4EOSC

About

Creating an EOSC-ready European Workforce

- ❖ The Skills4EOSC project was funded by the European Commission Horizon Europe programme and ran from 1 September 2022 to 31 August 2025. The project aimed to develop common curricula and training programmes for education in the fields of Open Science and FAIR data, connecting the initial implementations of skills-oriented Competence Centres in individual countries and making the most of the potential offered by EOSC for research. In this, the project supported the EOSC Partnership's Specific Objective 1.2: "Professional data stewards are available in research-performing organisations in Europe to support Open Science".
- Coordinated by Consortium GARR and supported by 44 partners in 18 European countries, Skills4EOSC set up a pan-European network of Competence Centres (CCnet) to speed up the training of European researchers and harmonise the training of scientific data management professionals.
- One key outcome of Skills4EOSC is a <u>Competence Centre Kit</u>, including useful materials, practical and resources as well as templates to formalize engagement. This supports both emerging and established Competence Centres in becoming active members of the CCnet and contributing to its long-term sustainability and impact.
- Skills4EOSC addressed three gaps in Open Science skills and training, as defined in the EOSC's Strategic Research and Innovation Agenda (SRIA):
 - a lack of Open Science and data expertise
 - ❖ a lack of clearly defined data professional profiles and career paths in this area
 - fragmentation of training resources.

Activities and Outcomes

Minimum Viable Skillsets Skills4EOSC developed a modular, flexible framework of key skills, designed to train professionals such as data stewards and policy makers, but also researchers and students. This has been summarised in a catalogue of Minimum Viable Skillsets (MVS), to create a shared starting point for the development of courses and training materials, with the aim of harmonising training in the field of Open Science and FAIR data across Europe. The MVS defines clear competence requirements for various Open Science roles to promote their professional recognition.

FAIR-by-design Methodology The <u>FAIR-by-design methodology</u> was developed to ensure the FAIRness of training materials in seven steps: Prepare, Discover, Design, Produce, Publish, Verify, and Continuous Improvement. An overview can be found in the <u>FAIR-by-design microlearning course</u> on the Skills4EOSC website. Although the FAIR-by-design methodology was developed specifically for the materials generated in the project, it can also be applied to other materials.

Open e-Learning Courses

Based on the MVS and the FAIR-by-Design methodology, train-the-trainer course units on various topics and for different target groups were developed, tested, and made available on the Skills4EOSC elearning platform. Participants who have completed all train-the-trainer courses have been awarded the status of Master Trainer and a corresponding Open Badges certification. This means they are qualified to adapt the courses and offer them in their national, regional, or thematic communities. In addition to the typical Open Science courses, there are courses on special topics, such as the FAIR-by-design methodology. Other courses are aiming to contribute to harmonising curricula and integrating Open Science fundamentals into academic programmes. All these courses will build a solid foundation of Open Science knowledge across Europe.

Competence Centres Network



Skills4EOSC Competence Centres have been conceived as access points to Open Science and FAIR. They are about knowledge transfer in the Open Science, FAIR research outputs, and EOSC context. Their main aim is to address a shortage of skills in these domains at the national, regional, and disciplinary levels by offering training, including up- and reskilling the workforce on open research practices. In this, CCs strive to connect various stakeholders to national and international OS programmes and to EOSC. (Lazzeri et al. 2025: 5f.) The CCnet was developed to enable a constant exchange between the individual (national) Open Science centres, and to accelerate training of new Open Science professionals. At the local level, the CCs serve as central hubs offering materials, training, and best practices. In Austria, the official designation of a Competence Centre is being discussed in the context of a national EOSC Node. In addition, CCnet is to maintain and further develop the materials developed within Skills4EOSC.

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Contributions by Austrian project partners

Natural History Museum Vienna The Natural History Museum Vienna (NHMW) dealt specifically with digitisation and FAIRification of object-based scientific collections within the project. One of the most salient outcomes of their work is the train-the-trainer course 'Open Science Skills for Digital Collections Curators', aimed at data curators and RDM leaders across LAM institutions (Libraries, Archives, and Museums) and universities. Due to the diversity of collections and multidisciplinary origins of the collection objects, the course is also interdisciplinary, addressing general Open Science skills as well as collection-specific challenges, including the digitisation of physical objects. In addition, NHMW contributed to the discourse on how Open Collections can promote evidence-informed decision-making. A range of stakeholders, including political decision-makers and representatives of public administration, as well as specialists from various sectors, were invited to attend the national and international events to share their expertise and experiences.

TU Wien

TU Wien played a key role in developing the curriculum, managing the project's data and engaging with stakeholders. The team contributed to positioning the role of the Competence Centres within the EOSC ecosystem and ensuring their alignment with policy priorities. A series of interactive virtual roundtables (VRTs) were organised to support the general coordination, with the aim of fostering strategic alignment among partners. These activities have strengthened coordination and coherence across the consortium, culminating in the release of the Empowering Open Science Factsheet, which presents project outcomes in a concise format and provides easy access to key deliverables.

Collaboration

Alongside its coordination work at consortium level, TU Wien and the Natural History Museum Vienna joined forces to strengthen national outreach and encourage discussion. This joint effort was reflected in a <u>webinar</u> supported by EOSC SOA, which emphasised the significance of scientific collections and Open Science in politics, culture, academia, and the arts.

Project Factsheet

- Project Name: Skills for the European Open Science Commons: Creating a Training Ecosystem for Open and FAIR Science (Skills4EOSC)
- ❖ Project Runtime: 1 Sept 2022 31 Aug 2025 (36 months)
- **❖ Project Coordinator:** GARR
- **❖ Budget:** € 6 476 658
- Funding Source: Horizon Europe
- Project Type: HORIZON Coordination and Support Action
- Project Consortium: 44 partners across 18 countries

Further Reading

- Corleto, A., Di Giorgio, S., Paolini, G., Berberi, L., Candela, L., Costantini, A., Gaido, L., Green, D., Janik, J., Tuminauskas, R., Whyte, A., Lazzeri, E., Prandoni, C., & Evangelinou, B. (2025). D7.3 Report on CCs and user support networks and recommendations for networks evolution. Zenodo. https://doi.org/10.5281/zenodo.15262091
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- Lazzeri, E., Di Giorgio, S., Lines, C., Gingold, A., Gaido, L., Prnjat, O., Sharma, C., Berberi, L., Candela, L., Schirru, L., Karla, A., & Irakleitos, S. (2023). Skills4EOSC Competence Centre Charter. Zenodo. https://doi.org/10.5281/zenodo.10048176
- Stork, Christiane. (2025). Skills4EOSC comes to an end: results and outlook. News about research data management. URL: https://www.tuwien.at/en/research/rti-support/research-data/consulting-training-and-education/news/news/skills4eosc-results-and-outlook (A

Additional Information

- https://www.skills4eosc.eu/participate/skills4eosc-training-courses
- https://learning.skills4eosc.eu/
- https://www.skills4eosc.eu/resources/courses/36-skills4eosc-training-courses-2025-leaflet

