EOSC POLICY BRIEF

CALL: HORIZON EUROPE CALL INFRA 2021 EOSC-01
TOPIC: INFRAEOSC HORIZON-INFRA-2021-EOSC-01-01
PROJECT: Skills4EOSC
Skills for the European Open Science commons: creating a training ecosystem for Open and FAIR science
PROJECT WEB SITE: https://www.skills4eosc.eu/
GRANT NUMBER: 101058527
DATE: 1/09/2022 - 31/08/2025

SCOPE OF THE POLICY BRIEF

This policy brief enables EU-funded projects contributing to the advancement of the European Open Science Cloud (EOSC) to report on progress and provide input for further policy analysis and development by the European Commission. This policy brief should be understood as complementary to other mandatory reporting materials.

Policy background:

The European Open Science Cloud (EOSC) is a flagship EU initiative to deepen Open Science practices across the European Research Area (ERA). As such, it contributes to several actions of the ERA policy agenda (in particular ERA action 1 & 8). EOSC is also recognised in the European strategy for data as the data space for science, research and innovation which shall be fully articulated with the other sectoral data spaces defined in the strategy.

Overall progress is steered by the EOSC tripartite governance involving the Union represented by the European Commission, the participating countries represented in the EOSC Steering Board and the research community represented by the EOSC Association. The second phase of development of EOSC (2021-2030) takes place in the context of the EOSC European co-programmed Partnership, which brings together the European Commission and the EOSC Association.

The EOSC Strategic Research and Innovation Agenda (SRIA) co-developed with the entire EOSC community sets 3 General Objectives (GO), 14 Operational Objectives (OO) and 14 Action Areas (AA).

General Objectives (GO):

1. Open science becomes the 'new normal', by ensuring that open science practices and skills are rewarded and taught.
2. Researchers can seamlessly find, access, reuse and combine results, through the definition of common standards and the development of related tools and services.
3. A federated infrastructure under community governance enabling open sharing of scientific results is deployed and sustained.

Operational Objectives (OO):

1. Deliver and operate all the necessary components of the Minimum Viable EOSC to share openly research data, publications, software, tools and services while attracting increasing numbers and categories of users (public and private) (based on a governance structure representative of the various stakeholders and including domain-specific user environments supporting Open Science) by 2025;
2. Make monitoring systems to gather data and evidence on best Open Science practices accessible through EOSC (including the development of a dashboard to monitor the evolving landscape of policies, infrastructures and open resources made accessible via EOSC by 2023);
3. Increasingly mainstream Open Science skills in European research-performing organisations (RPOs) including through the uptake of curricula and training frameworks related to data stewardship through the lifespan of the Partnership;
4. Co-develop domain-specific standards and adopt Open Science practices through the engagement with research communities during the lifespan of the Partnership;
5. Provide the technical components of a FAIR ecosystem for uptake and customisation by the communities by 2023 (including open specifications, standards, schemas, application programming interfaces (APIs), metadata frameworks supporting FAIR digital objects and their automated processing);
6. Provide the metrics and tools to measure the adoption of the FAIR principles for research artefacts and provide frameworks to help in certifying that repository services enable FAIR in EOSC throughout the lifespan of the Partnership;

7. Co-develop a first generation of a robust pan-European network of infrastructures for software source code (including incentives for the effective documentation and sharing of research software) by 2025;
8. Co-design and adopt a Rewards and Recognition framework for FAIR and open data practices in research during the lifespan of the Partnership.
9. Implement and evolve the EOSC Rules of Participation and onboarding process for EOSC providers and increase the number of service providers and services offered progressively over the course of the Partnership.
10. Deploy and operate an authentication and authorisation infrastructure (AAI) framework to manage user identity and access by 2024;
11. Implement the EOSC persistent identifier (PID) policy and architecture by 2025;
12. Co-develop a minimum metadata framework and provide a common search and access mechanism to EOSC resources across the EOSC federation by 2025;
13. Continuously monitor and promote the increased uptake of core services and EOSC resources, access to EOSC Exchange tools and services and ensure a feedback loop with the users;
14. Define models for availability and costing of services across borders by 2023.

Action Areas (AA) of a technical nature:	Action Areas (AA) related to boundary conditions:
1. Identifiers 2. Metadata and ontologies 3. FAIR metrics and certification 4. Authentication / authorisation infrastructure 5. User environments 6. Resource provider environments 7. EOSC Interoperability Framework	8. Rules of Participation 9. Landscape monitoring 10. Business models 11. Skills and training 12. Rewards and recognition 13. Communication 14. Widening to public and private sectors and going global

More information can be found from:

- https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/open-science/european-open-science-cloud-eosc_en
- https://digital-strategy.ec.europa.eu/en/policies/open-science-cloud
- https://eosc.eu/eosc-about

FEEDBACK ON PROGRESS AND POLICY RECOMMENDATIONS (MAX 6P)

A. Overview of contributions in relation to the EOSC policy and EOSC SRIA objectives.

Skills4EOSC is a project aimed at advancing Open Science (OS) skills by unifying the Open Data training landscape into a common and trusted pan-European, which will ease and accelerate the upskilling and reskilling of different OS-related professionals including researchers, policy makers, public administration workers, data stewards and others. Furthermore, the project focuses on addressing and filling three gaps identified in the EOSC Strategic Research and Innovation Agenda (SRIA) related to OS competencies. These gaps are a **lack of Open Science and data expertise**, a **lack of clear definition of data professional profiles and corresponding career paths**, and **fragmentation in training resources**. The project focuses on Open Science career profiles, skillsets and learning materials, certification, and quality assurance (WP2), Open Science training for evidence-based public policy and administration (WP3), curricula and learning pathways for Open Science-ready institutions and thematic research institutions (WP4/WP5) and professional networks for lifelong learning (WP6), in line with the respective EOSC SRIA action areas. Besides that, the project will establish a pan-European network of competence centres (WP7/WP8) to accelerate the training of European researchers and harmonise the training of new professionals for scientific data management.

Ethical, legal and social issues (ELSI Meta WP) are considered and addressed as a transversal element of the project to underpin the principles of Open Science and enhance the quality of the results produced in the project.

The project has identified a few essential activities that must be carried out to achieve its main objective. These include landscaping and mapping activities, the creation of a methodology to define and transfer the required competencies for training and education of professionals to the competence centres for upskilling, and the conceptualisation of the coordination network of competence centres. These efforts are supported by a series of co-creation activities, including various meeting and workshops mobilizing and engaging a broad spectrum of

stakeholder groups. The aim is to ensure that the necessary competences are developed and transferred to professionals and to provide a sound set of specifications for reducing fragmentation in the Open Science skills ecosystem, which will ultimately contribute in building a new normal for the adoption of open science. The relation between Skills4EOSC's contribution and the most relevant Operational Objectives and Action Areas of the EOSC SRIA are mapped as follows:

- AA11-OO3-OO4: Skills4EOSC (S4E) contributes to mitigating the lack of **Open Science and data expertise** by leveraging the Competence Centre (CC) concept to speed up the training of European researchers and harmonise the training of new professional figures for scientific data management, aligning with EOSC policy and broadening the skills needed for Open Science to become the "new normal".

  Key actions: establishing a quality framework to pool existing competences in institutions and RI/e-Infrastructures; establish a Training-of-Trainers (ToT) strategy (WP4/5); and act as multipliers to provide lifelong training locally (WP3, 4, 5, 6 and 7). Creating a pan-European Network of Competence Centres for the provision of training activities, learning materials and to coordinate harmonisation on curricula and learning paths on Open Science.

  Expected results: A Competence Centres Network to keep updated the project's outcomes and share common challenges. Increase training capacity for European researcher, harmonized training for new data professionals , and the alignment of training programmes with EOSC policy filling the gaps indicated by the SRIA.

  ***Specific Impact**:* The creation of a Competence Centre network to stimulate training activities and improved data management skills, enhanced research quality, and increased the efficiency of scientific workflows.

- AA12--OO3-OO4: Skills4EOSC contributes to tackling the **lack of clear definition of data professional profiles and corresponding career paths**.

- **Key actions:** map existing professional profiles; building on the work available in the EOSC community and defining a harmonised Minimum Viable Skillset (WP2) for each of them (using co-creation); harmonise the relevant curricula (WP4/5) and competence accreditation mechanisms (WP2); engage (WP8) with RPOs, university networks, funders, and national training programmes to ensure their recognition and adoption.

  Expected results: Relevant identified OS profiles are mapped and an MVS is defined for each profile. The harmonised MVS profiles are used to design academic and lifelong learning courses, specificed for each data professional profile.

  Specific Impact: Harmonised curricula based on the MVS profiles are adopted by academic and non-academic training providers, ensuring quality and consistent approach to recognising competencies of the relevant OS roles. Based on the MVS, Skills4EOSC provides a Community-endorsed Quality Assurance and Methodology for Learning Materials quality assurance and certification framework for professional training and qualifications.

- AA11-OO3-OO4: Skills4EOSC contributes to decreasing the **fragmentation of training resources** by providing FAIR Open Educational Resources to increase the capacity to deliver quality training that matches the needs of different communities, considering that a very diverse and uneven picture is observed across Europe.

  Key actions: Provide a methodology for FAIR-by-Design (WP2) training resources**,** including practical information on how to use the resources (ELSI META-WP), promoting the creation of national training catalogues and inter-operation with the EOSC platform (WP7), boosting the capacity of Competence Centres (WP7) and institutions to deliver quality training that meets the needs of different communities by making FAIR Open Educational Resources available, developing curricula and courses related to the MVS specifications (WP3, 4, 5) by integrating, re-purposing, and reusing existing training materials and defining a quality assurance process of learning materials to improve re-use (WP2).

  Expected results: Increase availability of FAIR Open Education Resources and better alignment with diverse community needs. The FAIR-by-design methodology is available for reuse. The learning materials developed using the FAIR-by-design methodology are resused by competences centres. Additionally, the FAIR-by-design materials are available in training catalogues and the EOSC portals, with proper licensing to foster reuse.

  Specific Impact: *Enhance accessibility to, and reusability of, training materials. The materials should be of consistent quality and based on the FAIR-by-design methodology.*

- AA11-OO3-OO4: Skills4EOSC contributes to **upskilling the existing workforce, to promote and to disseminate Open Science practices**, and to support the long-term sustainability of OS networks through a coordination network of **Competence Centres** activated at the national or institutional level.

  Key actions: To create the Competence Centres network, a Competence Centres Charter has been prepared identifying the essential requirements for CCs to join the Skills4EOSC network, along with a Memorandum of Understanding to formalize the agreement.

  Expected results: CCs adopt the project results and identify Master Trainers for each Skills4EOSC course. Once trained, these Master Trainers commit to training their national communities to upskill the workforce and increase adoption of Open Science.

  Specific Impact: *Unifying the current training landscape into a common and trusted pan-European ecosystem, in order to accelerate the upskilling of european researchers and data professionals in the field of open science.*

- *AA9*-AA11-OO3-OO4: .Skills4EOSC fosters the growth of **professional networks** to exchange knowledge, share best practices, and promote lifelong learning.

  Key actions: To map the existence of data profesional, open science and thematic networks in the European Research Area; to create new networks (data steward, Open Science, thematic networks, where these are lacking, and to support these efforts through the creation of network startter kits. To evaluate and recommend FAIR practices for AI and Health Technology research . To develop and administer the rollout of a fellowsgip programme for data professionals

  Expected results: seven new networks will be created with 300 participants engaged, recommendations for FAIR implementation in AI and Health Technology Research to be published. Eight fellowships to be awarded

  Specific impact*:* New data professional and thematic networks will enable the exchange of best practices, cross-pollination of ideas, finding of solutions to common challenges etc. through peer networks, beyond structured training. FAIR recommedations will provide clear, easy-to-follow basic guidelines in disciplines where these currently do not exist. New connections and exchange of knowledge and expertise will be enabled through the fellowship programme and fellows will be ambassadors for FAIR

B. Key contributions subject to wider dissemination by the European Commission.

After two years of development, from September 2022 through August 2024, Skills4EOSC has successfully progressed towards its main objective of promoting skills in Open Science. Some key contributions of the project ready for wider dissemination among the EOSC community, and related to the EOSC Strategic Objectives, are listed below. An exhaustive list of Skills4EOSC's public outputs is available on the project's website (https://skills4eosc.eu/) and the Zenodo community (https://zenodo.org/communities/skills4eosc).

Skills & Training

WHYTE, Angus, GREEN, Dominique, AVANÇO, Karla, DI GIORGIO, Sara, GINGOLD, Arnaud, HORTON, Laurence, KOTESKA, Bojana, KYPRIANOU, Katerina, PRNJAT, Ognjen, RAUSTE, Päivi, SCHIRRU, Luca, SOWINSKI, Claire, TORRES RAMOS, Gabriela, VAN LEERSUM, Nida, SHARMA, Curtis, MÉNDEZ, Eva, LAZZERI, Emma. (2023). **D2.1 Catalogue of Open Science Career Profiles - Minimum Viable Skillsets** (V1.0 DRAFT NOT YET APPROVED BY THE EUROPEAN COMMISSION). Zenodo. https://doi.org/10.5281/zenodo.8101903

FILIPOSKA, Sonja, GREEN, Dominique, MISHEV, Anastas, KJORVEZIROSKI, Vojdan, CORLETO, Andrea, NAPOLITANO, Eleonora, PAOLINI, Gabriella, DI GIORGIO, Sara, JANIK, Johanna, SCHIRRU, Luca, GINGOLD, Arnaud, HADROSSEK, Christine, SOUYIOULTZOGLOU, Irakleitos, LEISTER, Carolin, PAVONE, Gina, SHARMA, Saba, MENDEZ RODRIGUEZ, Eva Maria, LAZZERI, Emma. (2023). **D2.2 Methodology for FAIR-by-Design Training Materials**. (V1.4 DRAFT NOT YET APPROVED BY THE EUROPEAN COMMISSION). Zenodo. https://doi.org/10.5281/zenodo.8305540

SCHIRRU, Luca, COLCELLI, Valentina, BRIZIOLI, Sabrina, KARABUGA, Emircan, FERNANDES, Elora, MARGONI, Thomas. (2024). **D3.7 Coordinated set of guides, fact-sheets and FAQs on ELSI aspects for Civil Servants and Policy Makers** (V1. DRAFT NOT YET APPROVED BY THE EUROPEAN COMMISSION). Zenodo. https://doi.org/10.5281/zenodo.13467302

ANASTASOPOULOU, Nana, EVANGELINOU, Betty, WEISTEEN BJERDE, Katrine, BJONNES, Lars, FILIPOSKA, Sonja, GREEN, Dominique, MORENO, Marina Sanchez, GIGLIA, Elena, PRNJAT, Ognjen, DI GIORGIO, Sara, LAZZERI, Emma. (2024). **D3.1**

Policy makers and civil servants training plan. (V2.0 DRAFT NOT YET APPROVED BY THE EUROPEAN COMMISSION). Zenodo. https://doi.org/10.5281/zenodo.10728514

Engagement

SÁNCHEZ, Marina, MÉNDEZ, Eva, WHYTE, Angus, WEISTEEN BJERDE, Katrine, MARTÍNEZ, Sara, BUENO, Gema, UCAR, Iñaki. (2023). **D2.3 Community-endorsed quality assurance and certification framework for professional training and qualifications.** (V1.3 DRAFT NOT YET APPROVED BY THE EUROPEAN COMMISSION). Zenodo. https://doi.org/10.5281/zenodo.8305482

LOCATI, Mario, TANLONGO, Federica, EVANGELINOU, Betty, DOTTA, Giulia, COCCO, Massimo, CACCIAGUERRA, Stefano. (2023). **D3.3 Guidelines and best practices for Honest Brokers.** (V1.0 DRAFT NOT YET APPROVED BY THE EUROPEAN COMMISSION). Zenodo. https://doi.org/10.5281/zenodo.10447634

BERBERI, Lisana. (2023). **D7.1 Report on CCs landscape and user support activities.** (V2.0 DRAFT NOT YET APPROVED BY THE EUROPEAN COMMISSION). Zenodo. https://doi.org/10.5281/zenodo.8305716

BERBERI, Lisana, SÁNCHEZ, Marina, UKAR, Inaki, GAIDO, Luciano, PAOLINI, Gabriella, DI GIORGIO, Sara, LAZZERI, Emma. (2023). **European competence Centres (CCs) landscape and first release of CCs Registry created** (V1.0). Zenodo. https://doi.org/10.5281/zenodo.7876465

BUSS, Mareike, ATHANASAKI, Evangelia, BERNIER, Mathilde, DRACHEN, Thea Marie, FOGTMANN-SCHULZ, Alexandra, HADROSSEK, Christine, HORTON, Laurence, JANIK, Joanna, MOLDRUP-DALUM, Per, PASQUALE, Valentina, SCHÖLLER, Emily Thorsson, SHARMA, Curtis, TORRES RAMOS, Gabriela, ULFSPARRE, Sanna Isabel, VLACHOS, Evgenios. (2023). **D6.1 Mapping of existing professional networks.** (V2.0 DRAFT NOT YET APPROVED BY THE EUROPEAN COMMISSION). Zenodo. https://doi.org/10.5281/zenodo.7591920

HORTON, Laurence, DRACHEN, Thea Marie, HANSEN, Karsten Kryger, SHARMA, Curtis, VLACHOS, Evgenios. (2023). **D6.2 Development of starter kits for professional networks: data steward.** (V1.1 DRAFT NOT YET APPROVED BY THE EUROPEAN COMMISSION). Zenodo. https://doi.org/10.5281/zenodo.7682836

HORTON, Laurence, DRACHEN, Thea Marie, HANSEN, Karsten Kryger, SHARMA, Curtis, VLACHOS, Evgenios. (2023). **D6.2 Development of starter kits for professional networks: generic**. (V1.1 DRAFT NOT YET APPROVED BY THE EUROPEAN COMMISSION). Zenodo. https://doi.org/10.5281/zenodo.7682938

LAZZERI, Emma, LAGIDO, Cristina, GIRALDO SEVILLA, Andrea, HASANI-MAVRIQI, Ilire. (2023**). Digital Skills for FAIR and Responsible Open Science: Co-creating the Content, Structure and Pathways.** Zenodo. https://doi.org/10.5281/zenodo.8401778

AZZOPARDI, Jeremy, GIGLIA, Elena, Störner, Torgil. (2024). **Video 1 - Open Science, why do we need it?.** Zenodo. https://doi.org/10.5281/zenodo.10564842

AZZOPARDI, Jeremy, GIGLIA, Elena, Störner, Torgil. (2024). **Video 2 - Open Science to enable collaboration.** Zenodo. https://doi.org/10.5281/zenodo.10564854

AZZOPARDI, Jeremy, GIGLIA, Elena, Störner, Torgil. (2024). **Video 3 - Open Science: a better return on investment.** Zenodo. https://doi.org/10.5281/zenodo.10564856

AZZOPARDI, Jeremy, GIGLIA, Elena, Störner, Torgil. (2024). **Video 4 - Open Science: equitable access for everyone.** Zenodo. https://doi.org/10.5281/zenodo.10564859

AZZOPARDI, Jeremy, GIGLIA, Elena, Störner, Torgil. (2024). **Video 5 - Open Science: why do we need data stewards.** Zenodo. https://doi.org/10.5281/zenodo.10564861

AZZOPARDI, Jeremy, GIGLIA, Elena, Störner, Torgil. (2024). **Video 6 - Open Science: science for and with citizens.** Zenodo. https://doi.org/10.5281/zenodo.10564863

Publications:

Budroni, P, Sanchés, A. F. G, Giroletti, J. M. C., Solís, B. S. Developing a Pan-European Open Science Training Landscape. The Project Skills4EOSC and selected Initiatives. De Gruyter. ABI Technik 43(2): 68–77 (2023). https://doi.org/10.1515/abitech-2023-0014

C. Synergies with other stakeholders.

Skills4EOSC actively engages a wide range of EOSC stakeholders at European, national and institutional levels.The Skills4EOSC consortium has a strong constitution with several Partners having contributed to key EOSC developments (INFRAEOSC-05-2019 Cross-Project Task Force on Training,EOSC-pilot,FAIRsFAIR, the INFRAEOSC-5b projects).

Skills4EOSC is engaging with other projects and initiatives from the EOSC and FAIR ecosystems via its coordination mechanisms and it is setting up collaborations with a number of them, such as FAIRCORE4EOSC, FAIR-IMPACT, NI4OS-Europe, PATTERN, Eurosciencegateway, OSCARS, EOSC Focus and CLARIN. The project has also formed collaboration with other organizations and stakeholders, such as KIFÜ (Hungarian Governmental Information Technology Development Agency), Univeristy of Ghent and Civil Protection agencies. The detailed activities and collaboration areas are described in M8.3 - Report on cooperation with related EOSC projects and the EOSC Partnership.

The project has established an open dialogue with the **EOSC Association**. It actively participates in the overall EOSC projects' concertation meetings and the EOSC Forum, and contributes to relevant activities and outputs. For instance, the project provided feedback for the Vademecum and the macro-roadmap. Furthermore, the project participates in the Horizon Europe (HE) Projects Working Groups (WGs), including HE Communication & Engagement, HE Technology, HE Coordinators, and HE EOSC IMPACT.

Finally, Skills4EOSC regularly interacts with relevant EOSC Task Forces through the participation within task forces by project members, with particular presence in the Advisory Group Research Carees and Curricula, while many are involved as coordinators in drafting the charters, the publication of responses to outputs, and the planning of activities to discuss feedback. Additionally, Skills4EOSC participates in concertation activities as part of the EOSC Partnership framework.

D. EOSC challenges and lessons learnt of a policy nature.

Skills4EOSC addresses the HORIZON-INFRA-2021-EOSC-01-01 topic: "Skills for the European Open Science commons: creating a training ecosystem for Open and FAIR science," and officially started in September 2022. As a coordination and support action (CSA), the project engages in a wide array of activities aimed at fostering collaboration and alignment. These efforts have had a positive impact on European Open Science Cloud (EOSC) policies, especially in the area of skills development, as outlined in the EOSC Strategic Research and Innovation Agenda (SRIA). Moreover, the project collaborates closely with the EOSC association to ensure that the EOSC viewpoints are properly considered by the Skills4EOSC. This approach enhances policy impact and fosters stronger connections between skills development efforts and EOSC's strategic objectives. The project's **Recognition Framework** was highlighted in the EC publication '**Researchers' skills, Analysis of progress made in projects funded under Horizon 2020 and Horizon Europe, including the European University Alliances**' published by the European Research Executive Agency (REA) in March 2024. The framework offers a flexible and scalable solution for cross-border skills recognition, promoting inclusivity and innovation through digital tools such as badges and European Digital Credentials. Policy recommendations include fostering stronger support for the use of digital credentials and badges at both national and European levels to ensure standardized, verifiable recognition of skills.

Skills4EOSC is also addressing policy challenges through its active participation in the EOSC Opportunity Area Experts Group OA5: Skills, Training, Rewards, Recognition & Upskilling. This involvement has been instrumental in aligning project activities with the broader EOSC Roadmap and **Multi-Annual Roadmap** (MAR), reinforcing the importance of Competence Centres and the recognition of skills in EOSC's development. Skills4EOSC also considers the upskilling of policy makers in OS issues, which could have a positive impact on policies forefront.

Another policy challenge relates to the need for increased capacity building among policymakers in Open Science (OS) and Research Data Management (RDM). The **'Science4Policy' course** addresses this challenge by equipping Policy Actors (Decision Makers, Civil Servants, Honest Brokers) with a foundational understanding of how Open Science promotes collaboration and innovation, as well as the basic concepts and societal implications of Open Science. This initiative aims to bridge the gap between scientific communities and policymakers, ensuring more informed decision-making in line with Open Science principles.

Skills4EOSC has collaborated with **civil protection agencies** to promote discussions on these issues, particularly within the context of Disaster Risk Management (DRM). These efforts were showcased at the **European Civil Protection Forum** in June 2024, emphasizing the importance of integrating OS into policy decision-making processes.

E. Link to other EU policy priorities (beyond EOSC).

The project seeks to play a pivotal role in advancing the first goal of the EOSC Partnership: promoting Open Science practices and skills as the new standard. This endeavor aims to ensure the widespread availability of highly skilled open science and data professionals, which is essential for fostering a shift toward Open Science. This transformation will not only benefit researchers but also extend its positive influence on the public sector, industry, and society as a whole. The project's methodology and its outcomes aligns with all the key impact pathways outlined in Regulation EU 2021/695, which establishes Horizon Europe. Its primary objective is to equip individuals with the necessary skills to enable open science, contributing directly to the key pathway of "**Fostering diffusion of knowledge and open science**". By creating open science professionals at various levels, the project also connects with the pathway of "**Strengthening human capital in R&I**" by opening up new career opportunities. Additionally, Skills4EOSC has the potential to make a direct economic impact by "**Creating more and better jobs**," particularly as data stewards are identified as critical to the EOSC Strategic Research and Innovation Agenda (SRIA).

This holistic approach is poised to benefit high-impact European communities and foster broader societal advancements, aligning with the United Nations Sustainable Development Goals (SDGs), particularly SDG8 on Decent Work and Economic Growth.The project makes partial contributions to SDG5 on Gender Equality, SDG10 on Reduced Inequalities, and SDG17 on International Cooperation.

While the project's societal impact is mostly indirect, it remains significant, as it promotes open science, which is inherently interdisciplinary and contributes to the United Nations and UNESCO Sustainable Development Goals (SGD), establishing an indirect link to societal key impact pathways. Through the provision of Open Science FAIR-by-design materials and a methodology adaptable to learning materials across disciplines, Skills4EOSC aligns with the five objectives outlined in UNESCO's recommendations on Open Educational Resources (OER). These objectives encompass (i) capacity-building for stakeholders to create, access, reuse, adapt, and redistribute OER; (ii) the development of supportive policies; (iii) the promotion of inclusive and equitable quality OER; (iv) fostering sustainability models for OER; and (v) facilitating international cooperation. Additionally, the project addresses the imperative for the free circulation of scientific data and the provision of adequate institutional support for scientists, as recommended by UNESCO.

SUSTAINABILITY AND LEGACY (MAX 1P)

This section should be filled only by projects in their final reporting period.

Indicate how the main project's outputs could be further maintained, supported and integrated in the broader EOSC federation after the end date of the project.