

D2.1 Mapping of EOSC Executive Board Outputs



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D2.1 / Mapping of EOSC Executive Board Outputs

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Abstract

This deliverable offers a mapping exercise of 18 key outputs of the EOSC Executive Board to the Work Packages and Tasks in the EOSC Future project. The goal of the mapping exercise is to inform partners in EOSC Future of outputs that may be relevant for their activities in EOSC Future. The paper includes an overview of key outputs of the EOSC Executive Board with links to the outputs, an overview of the Work Packages and Tasks in EOSC Future, and a visual mapping of the outputs to the Work Packages and Tasks, with some general observations in the conclusions. The paper also serves as a summary of the activities of the EOSC Executive Board and Working Groups and EOSC Future for the interested reader about EOSC.



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List of Abbreviations

Acronym	Definition
AAI	Authentication and Authorisation Interface
Al	Artificial Intelligence
DIH	Digital Innovation Hub
EC	European Commision
EOSC	European Open Science Cloud
EOSC-A	EOSC Association
EOSC-EB	EOSC Executive Board
EOSC-F	EOSC Future
EOSC-SB	EOSC Steering Board
EOSC-WG	EOSC Working Group
ESFRI	European Strategy Forum on Research Infrastructures
EU	European Union
FAIR	Findable Accessible Interoperable Reusable
GB	Governance Board
IP	Intellectual Property
IT	Information Technology
MS/AC	Member States and Associated Countries
ОС	Other Countries
PID	Persistent Identifier
RDA	Research Data Alliance
RoP	Rules of Participation
RPO	Research-Performing Organisation
SIRS	Scholarly Infrastructure for Research Software
SME	Small and Medium-Sized Entreprise
Т	Task
ТСВ	Technical Coordination Board
TF	Task Force
WG	Working Group
WP	Work Package



1 Introduction

The European Commission (EC) launched a new governance structure for the European Open Science (EOSC) in 2018 to steer the implementation of the activities delivered by projects funded by the European Union (EU), national initiatives, and other activities from the extended coalition of doers supporting EOSC. The governance structure ran from November 2018 until December 2020 and consisted of the EOSC Stakeholder Forum, the EOSC Governance Board (EOSC-GB), and the EOSC Executive Board (EOSC-EB) as in Figure 1.1.

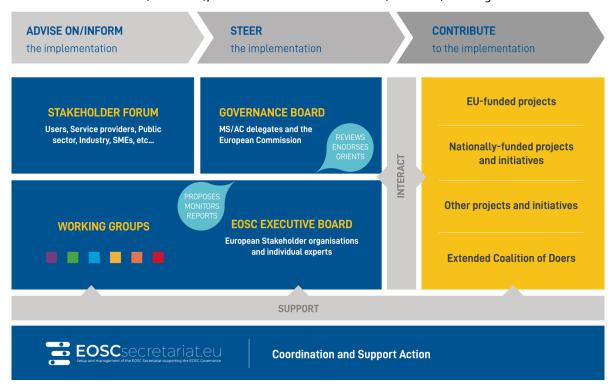


Figure 1.1: EOSC Governance Structure 2018-2020 (image courtesy of EOSCsecretariat.eu)

The EOSC Stakeholder Forum served as a feedback forum for members of the wider EOSC community to advise and inform the implementation of EOSC and consisted of users and service providers as well as public and private sector representatives. The EOSC-GB consisted of delegates of EU Member States and Associated Countries (MS/AC) as well as the EC to steer the implementation of EOSC. The EOSC-EB consisted of eleven stakeholder representatives and individual experts to oversee the implementation of EOSC, provide advice on the way forward and implementation of the strategic and funding orientations, and assist with the transition to the new governance structure of EOSC beyond 2020. The EOSC-EB further coordinated 6 thematic EOSC Working Groups (EOSC-WGs) consisting of experts from the EOSC community to advise and inform on strategic priorities for the implementation of EOSC. The EOSC governance structure 2018-2020 was supported in its activities by the Horizon 2020 Coordination and Support Action project EOSC secretariat.eu.

The EOSC Future (EOSC-F) project is a Horizon 2020 Research and Innovation Action with the aim of integrating and consolidating the existing pan-European access mechanism to public research infrastructures and commercial services through the EOSC Portal. This flagship EOSC project will run from April 2021 until September 2023 and will integrate, consolidate, and connect e-Infrastructures, research communities, and initiatives in Open Science to further develop the EOSC Portal, EOSC-Core, and EOSC-Exchange for EOSC. EOSC-F will be implemented in 11 Work Packages (WPs) consisting in total of 36 Tasks which are further linked to specific Deliverables and Milestones as well as to a high-level Technical Roadmap for the EOSC Portal.

This paper forms Deliverable D2.1 of WP2 in EOSC-F and looks exclusively at the 18 strategic documents produced by the EOSC-EB and the EOSC-WGs for the future governance and realisation of EOSC. This paper provides a mapping of these 18 strategic documents to the 11 Work Packages (WPs) and 36 Tasks of EOSC-F. The mapping is aimed predominantly at the partners realising EOSC-F and identifies which of the strategic documents may be relevant to inform or carry out the activities in each of the WPs and Tasks in EOSC-F.



2 EOSC Executive Board Outputs

2.1 EOSC Executive Board Working Groups

The EOSC-EB was supported by 6 WGs consisting of members from the EOSC community and 2 Task Forces (TFs) consisting of members of the EOSC-EB and supporting representatives from EOSC-secretariat.eu as in Figure 2.1. The TFs focused on supporting the EOSC-EB in Communications and International Engagement. The 6 WGs focused on developing the strategic topics of Architecture, FAIR (Findable Accessible Interoperable Reusable), Landscape, Rules of Participation (RoP), Skills and Training, and Sustainability for EOSC.

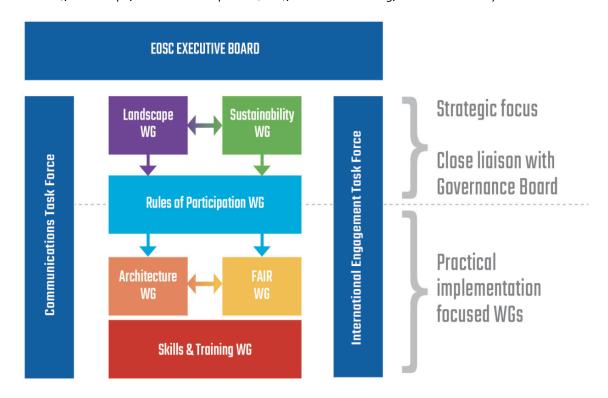


Figure 2.1: EOSC Executive Board Working Groups (image courtesy of EOSCsecretariat.eu)

2.2 Executive Board Outputs

The members of the EOSC-EB produced 3 key documents that are relevant for WPs and Tasks in EOSC-F:1

- EOSC Executive Board Final Progress Report (2021) [Progress Report]
 A summary of the work delivered by the EOSC-EB against its remit giving an overview of the governance structure, remit of the EOSC-EB, delivery of planned outputs, additional activities, and the lessons learned with recommendations to the EC and the future EOSC governance structure.
- Proposal for a European Partnership under Horizon Europe EOSC Partnership (2020) [PP]
 The proposal by the EOSC-EB in collaboration with the EC and EOSC-SB to prepare a candidate Co-Programmed European Partnership for EOSC detailing objectives and expected impacts of the EOSC Partnership and the implementation of a Web of FAIR Data and Related Services for Science.
- 3. Strategic Research and Innovation Agenda of the EOSC V1.0 (2021) [SRIA]

¹ Each of the 18 key documents in Section 2 have been given a number and short name to help read the mapping tables in Section 4. For example, 'EOSC Executive Board Final Progress Report (2021)' is #1 and shortened to 'Progress Report'.



Key strategic living document by the EOSC-EB2 defining the framework for future research, development, and innovation activities including objectives, guiding principles, challenges, prerequisites, and roadmap with priorities to implement EOSC under the EOSC Partnership.

2.3 Architecture Working Group Outputs

The Architecture WG focused on developing the technical framework required to enable and sustain an evolving EOSC federation of systems including standards, Application Programming Interfaces (APIs), and protocols to facilitate interoperable services delivered by diverse providers. The WG consisted of 3 TFs on Authentication and Authorisation Interface (AAI), Persistent Identifier (PID), and Scholarly Infrastructure for Research Software (SIRS) which produced 4 key documents that are relevant for WPs and Tasks in EOSC-F:

- 4. EOSC Authentication and Authorisation Infrastructure (2021) [AAI]
 Report by the Architecture WG TF AAI proposing a basic architecture for the EOSC AAI to establish a common ecosystem for identity and access control infrastructures for EOSC which includes first principles and requirements, a baseline architecture, and federation participation guidelines.
- EOSC Architecture Working Group View on the Minimum Viable EOSC (2021) [MVE]
 Report by the WG Architecture defining the EOSC-Core, EOSC-Exchange, EOSC Federation, and
 Minimal Viable EOSC (MVE) and proposing essential functions for the EOSC-Core and MVE in the
 initial implementation stages as well as an architectural diagram of a functional overview of EOSC.
- 6. PID Architecture for the EOSC (2020) [PID Architecture]
 Report by the WG Architecture TF PID proposing essential components and (the roles and policy enforcing abilities of) relevant stakeholders for persistent identification based on namespaces and identifying how to achieve interoperability between PID services to create an EOSC PID architecture.
- 7. Scholarly Infrastructures for Research Software (2020) [SIRS] Report by the WG Architecture TF SIRS providing a state-of-the-art of infrastructures for research software, identifying best practices and open problems, highlighting use cases and workflows, and proposing technical and policy recommendations for both short-term and long-term priorities.

2.4 FAIR Working Group Outputs

The FAIR WG focused on the implementation of Open and FAIR practices, cross-disciplinary interoperability, requirements gathering for EOSC services, and measures for increasing FAIR maturity to maximise the sharing and re-use of data. The WG consisted of 4 TFs on FAIR Practice, Interoperability, Metrics and Certification, and PID Policy which produced 3 key documents that are relevant for WPs and Tasks in EOSC-F:

8. Recommendations on Certifying Services Required to Enable FAIR within EOSC (2021) [FAIR Services]

Report from the WG FAIR TF Metrics and Certification providing an analysis of relevant activities for the certification of services that are required to enable FAIR research outputs, incentivisation and support, gaps and opportunities for extension, and priorities for future work on FAIR services in EOSC.

9. Recommendations on FAIR Metrics for EOSC (2021) [FAIR Metrics] Report from the WG FAIR TF Metrics and Certification providing an analysis of relevant activities and recommendations to define and implement FAIR metrics in EOSC, a proposal for a set of FAIR metrics to be tested, an analysis of gaps and opportunities for extension, and priorities for future work.

D_{2.1} Mapping of EOSC Executive Board Outputs

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² The SRIA was predominantly prepared by the EOSC-EB in close collaboration with the EOSC-WGs and the EOSC community via a public consultation before being handed over to the EOSC Association to refine and finalise in order to sign the Memorandum of Understanding with the EC enacting the EOSC Partnership.



10. Six Recommendations for Implementation of FAIR Practice (2020) [FAIR Practice]

Report from the WG FAIR TF FAIR Practice providing a state-of-the-art of FAIR practices for digital objects across research communities and FAIR policies in different countries as well as differences in FAIR maturity between communities and recommendations on how FAIR can be turned into practice.

2.5 Landscape Working Group Outputs

The Landscape WG focused on the mapping of existing research infrastructures that are candidates to be part of the EOSC Federation and to provide options for EOSC convergence and alignment of structures and initiatives in the EU including national research infrastructures and e-infrastructures, national Open Science policies, research infrastructures associated with the European Strategy Forum on Research Infrastructures (ESFRI), thematic initiatives and clouds, EOSC-relevant projects in Horizon 2020, and international WGs on Open Science and EOSC. The WG produced 2 key documents that are relevant for WPs and Tasks in EOSC-F:

11. Country Sheets Analysis (2020) [Country Sheets]

Report from the WG Landscape providing an analysis of country questionnaire sheets that were completed by representatives of 47 MS/AC and Other Countries (OC) to assess the availability of data, infrastructures, and related policies needed to enable EOSC to prepare the landscape analysis report.

12. Landscape of EOSC-Related Infrastructures and Initiatives V2.0 (2020) [Landscape V2.0]

Report from the WG Landscape providing results of the survey in collaboration with representatives of MS/AC on the availability of data, infrastructures, and related policies needed to enable EOSC and providing a comprehensive overview of the landscape of current activities for EOSC in MS/AC/OC.

2.6 Rules of Participation Working Group Outputs

The Rules of Participation (RoP) WG focused on developing a minimal set of clear RoP that define the rights, obligations, and accountability governing all EOSC transactions by EOSC users, providers, and operators with an emphasis on openness, transparency, inclusiveness, and finding common requirements across a heterogeneous landscape. The WG produced 2 key documents that are relevant for WPs and Tasks in EOSC-F:

13. EOSC Rules of Participation (2021) [RoP]

Report from the WG RoP stating the standards and conduct required of EOSC participants that underpin the policies, processes, and procedures required to provide an assurance of openness, quality, and trust in the practices and services offered through voluntary participation in EOSC.

14. Ownership and Evolution of RoP from 2021 Onwards (2021) [RoP 2021+]

Report from the WG RoP providing recommendations that from 2021 onwards the RoP are managed through a standing EOSC RoP Board established as an Operational or Advisory Body of the EOSC-A to ensure that the RoP are fit for purpose and that EOSC participants act in accordance with the RoP.

2.7 Skills and Training Working Group Outputs

The Skills and Training WG focused on providing a framework for a sustainable skills development and training infrastructure to build competences and capabilities in using EOSC and to support EOSC in all phases and ensure maximum uptake. The WG produced 1 key document that is relevant for WPs and Tasks in EOSC-F:

15. Digital Skills for FAIR and Open Science (2021) [Digital Skills]

Report from the WG Skills and Training proposing a framework to build competences and capabilities in EOSC including developing next generation professionals, collaborating to enhance digital skills, building a knowledge hub of resources and tools, and influencing policies for FAIR and Open Science.

2.8 Sustainability Working Group Outputs

The Sustainability WG focused on providing strategic, legal, and financial recommendations to implement an operational, scalable, and sustainable EOSC Federation beyond 2020 that will gradually open up its user base



to the public and private sectors including suitable business models, governance structures, and types of legal entity vehicles for EOSC. The WG produced 1 key document that is relevant for WPs and Tasks in EOSC-F:

16. Solutions for a Sustainable EOSC aka FAIR Lady Report (2020) [FAIR Lady]
Report from the WG Sustainability proposing means to sustain EOSC beyond 2020 including a financial model, legal vehicle, and governance structure for EOSC beginning with a first iteration to establish a MVE for publicly funded researchers and then expanding to the public and private sectors.

2.9 Working Group Collaboration Outputs

The WG Architecture and WG FAIR also collaborated in activities related to PID policy and an interoperability framework for EOSC to produce 2 key documents that are relevant for WPs and Tasks in EOSC-F:

- 17. A Persistent Identifier Policy for the EOSC (2020) [PID Policy]

 Report from WG Architecture and WG FAIR defining expectations about the PIDs that will be used to support a functioning environment for FAIR research and outlining the requirements for providers and their services which will be further guided through recommendations on the PID architecture.
- 18. EOSC Interoperability Framework (2021) [Interoperability]

 Report from WG Architecture and WG FAIR identifying requirements and recommendations to create an EOSC Interoperability Framework organised in four layers for technical, semantic, organisational, and legal interoperability as well as a proposal for the management of FAIR digital objects in EOSC.



3 EOSC Future Work Packages

3.1 EOSC Future Work Packages and Pillars

The activities and realisation of outputs in EOSC-F are structured around 11 WPs consisting of 36 Tasks:

- WP1 Project Management;
- WP2 Project Strategy and EOSC Alignment;
- WP3 Architecture and Interoperability;
- WP4 Design and Development of Portal Supply Layer;
- WP5 Design and Development of Portal Demand Layer;
- WP6 Integration of Community Services and Products into EOSC;
- WP7 EOSC Service Delivery and Planning;
- WP8 Commercial Services;
- WP9 Training and Skills;
- WP10 Stakeholder Engagement, Outreach, and Marketing;
- WP11 Ethics Requirements.

3.2 Work Package 1

WP1 on Project Management is responsible for successful project delivery via adequate management and quality control mechanisms. WP1 activities include: managing and supporting project administration and internal communications; handling overall project administration tasks; coordinating activities for quality assurance, validation, and risk management; creating and maintaining a secure and user-friendly environment for co-working, communication, and storage of information and planning; drafting and implementing a data management plan and handling all ethical, legal, and Intellectual Property (IP) issues. WP1 consists of 5 Tasks:

- T1.1 Project Representation;
- T1.2 Technical Coordination and Project Delivery;
- T1.3 Executive Management and Risk and Quality Control;
- T1.4 Exploitation and Innovation Management;
- T1.5 Management of RDA Open Calls, Business Pilots, and Procurement.

3.3 Work Package 2

WP2 on Project Strategy and EOSC Alignment will develop the EOSC-F strategy and align with EOSC governance, EOSC projects and initiatives, EOSC stakeholders, and policy developments and policymakers in Open Science. WP2 activities include: implementing and supporting the project Strategy and Oversight Board (SOB); interacting and aligning with key EOSC stakeholders and EOSC projects as well as aligning core capabilities and inclusion criteria for EOSC resources; creating an EOSC Observatory to track the EOSC readiness and maturity of MS/AC as well as monitoring EOSC policy developments. WP2 consists of 3 Tasks:

- T2.1 Project Strategy;
- T2.2 EOSC Alignment;
- T2.3 EOSC Observatory.

3.4 Work Package 3

WP3 on Architecture and Interoperability will facilitate researchers to better collaborate across disciplines and share research resources by: defining an overarching federated EOSC architecture and interoperability framework and its application to the EOSC-Core and EOSC capabilities; defining and improving the architecture collecting feedback from other WPs as well as via functional requirements from cross-community use cases to share, access, analyse and re-use resources via services; defining and improving the interoperability framework and guidelines for all functional areas; defining processes and guidelines to enable EOSC-Core delivery and to ensure the openness and adaptability of EOSC. WP3 consists of 4 Tasks:

T_{3.1} - EOSC Architecture Design Governance and Interoperability Framework;



- T_{3.2} Developing Guidelines for Operational Services of the EOSC-Core;
- T_{3.3} EOSC Interoperability Framework Task Forces;
- T3.4 EOSC Portal Technical Roadmap;

3.5 Work Package 4

WP4 on Design and Development of Portal Supply Layer will design and implement the EOSC Portal back-office that serves EOSC providers and facilitates access to EOSC-Core services allowing them to share and manage EOSC resources by: analysing requirements defined by the providers; delivering software to support EOSC providers to onboard their resources and manage order requests through the EOSC Portal; delivering a proof-of-concept software for the EOSC-Core as an enabling layer for an EOSC Execution Framework across clusters, research infrastructures, and e-infrastructures; delivering software to collect and aggregate accounting, monitoring, and usage statistics about EOSC resources and to enable uniform message exchange; delivering software necessary to operate the EOSC providers helpdesk. WP4 consists of 4 Tasks:

- T4.1 EOSC Back-Office Requirements Analysis;
- T4.2 EOSC Back-Office Management Tools for Providers;
- T4.3 EOSC Back-Office Monitoring Framework for Resources;
- T4.4 EOSC Back-Office Helpdesk System;

3.6 Work Package 5

WP5 on Design and Development of Portal Demand Layer will design and implement the EOSC Portal front-office and its functionalities for EOSC users who want to discover and use EOSC resources by: extending the existing functionality of the EOSC Portal towards better composability of different types of EOSC resources; including functionalities beyond the results of previous projects such as smart discovery of EOSC resources, extended marketplace and user-profile, recommendations by Artificial Intelligence (AI), and user feedback; codesign and co-evaluating with users to ensure that requirements are correctly interpreted; supporting and training users to benefit from the advanced functionality; aligning with the results of WP3, being compatible and integrated with APIs delivered by WP4, providing solutions aligned with identified needs in WP9, and providing stable software in releases for WP7. WP5 consists of 4 Tasks:

- T_{5.1} EOSC Front-Office Requirement Analysis;
- T_{5.2} EOSC Front-Office Catalogue Functionalities;
- T_{5.3} EOSC Front-Office Functionalities for Support and Training;
- T_{5.4} EOSC Portal User Experience Enhanced by AI;

3.7 Work Package 6

WP6 on Integration of Community Services and Products into EOSC will populate, connect, and support both the supply and the demand layers of the EOSC Portal by: coordinating and implementing the pipeline which populates EOSC with providers and their resources; improving the offerings of providers in EOSC by integrating their resources into EOSC-Core functions; bringing together research communities from the science clusters and validating the EOSC vision through innovative and focused Test Science Projects which highlight added value, multidisciplinarity, and composability of EOSC resources. WP6 consists of 3 Tasks:

- T6.1 Connecting Providers and Resources to the EOSC and Expanding Across Domains;
- T6.2 Integration of EOSC-Core Services into European Research Practice;
- T6.3 Demonstrating EOSC Value through Cross-Domain Research Test Science Projects.

3.8 Work Package 7

WP7 on EOSC Service Delivery and Planning will enhance the operational aspects of the EOSC Portal, support EOSC users and providers with a highly usable service platform, and deliver tools and activities to ensure the basic functionalities underpinning the EOSC Portal by: supporting the day-to-day operations of the EOSC-Core and deploying software components developed in WP4 and WP5; ensuring the quality of the services meets the agreed service level descriptions; providing security support and problem resolution for the EOSC-Core components; maintaining trust in the security of information across the EOSC-Core and by extension across



EOSC as a whole; ensuring that services are planned and delivered meeting user requirements and expectations in the most efficient manner possible. WP7 consists of 5 Tasks:

- T7.1 EOSC Service Planning;
- T7.2 EOSC Service Management;
- T_{7.3} EOSC Federated Authorisation and Authentication;
- T7.4 EOSC-Core Delivery;
- T7.5 EOSC Security Operations and Policy;

3.9 Work Package 8

WP8 on Commercial Services will increase the service offer of EOSC by: bringing added-value commercial cloud services to EOSC users through engagement with providers of commercial services and development and management of procurement frameworks; expanding the EOSC Digital Innovation Hub (DIH) as the primary platform for industry usage of EOSC resources and for awareness raising to innovative Small and Medium-Sized Enterprises (SMEs) and other private enterprises; increasing data connectivity and data compatibility on Data Spaces through procurement of use cases by service providers. WP8 consists of 2 Tasks:

- T8.1 Increase Connectivity by Commercial Cloud Services and Data Spaces Procurement;
- T8.2 Digital Innovation Hub;

3.10 Work Package 9

WP9 on Training and Skills will run a comprehensive training and support programme that empowers EOSC stakeholders to use data, services, and software by: providing researchers and data practitioners with consolidated cross-infrastructure and cross-domain training packages on EOSC Portal services and on data access and sharing using EOSC; training content and resource providers on joining EOSC and aligning service offers; providing Information Technology (IT) and library personnel at research-performing organisations (RPOs), research infrastructures, and EOSC projects with training packages on the EOSC Portal to align with EOSC-Core services and to provide resources into EOSC-Exchange. WP9 consists of 3 Tasks:

- Tg.1 Training and Support Coordination and Leveraging;
- Tg.2 Training Delivery and Content Integration for EOSC;
- T9.3 Developing the EOSC Knowledge Hub;

3.11 Work Package 10

WP10 on Stakeholder Engagement, Outreach, and Marketing will coordinate and support the user engagement and outreach activities of the project with the aim of: involving EOSC users in the co-design of key elements of the EOSC architecture and the delivery of EOSC services; ensuring a broad uptake of EOSC resources and project results; coordinating the user engagement activities across all WPs in the project; coordinating the Research Data Alliance (RDA) support to the project. WP10 consists of 3 Tasks:

- T10.1 Engagement Strategy, Coordination, and Support to Implementation;
- T10.2 RDA Support to EOSC;
- T10.3 Marketing, Branding, Outreach.

3.12 Work Package 11

WP11 on Ethics Requirements ensures that the project is compliant with proscribed ethics requirements and consists of activities related to data privacy and the appointment of a Data Protection Officer, setting up and conducting an ethics review, and the procedures to identify and recruit any human participants in the project.



4 Mapping of Outputs

The goal of the mapping exercise is to link the 18 key outputs of the EOSC-EB to the 11 WPs and 36 Tasks in EOSC-F so that partners working on related topics in the WPs and TFs can quickly see if there are outputs which may be relevant for their work in EOSC-F. The mapping exercise is below in Table 4-1, Table 4-2 and Table 4-3. The EOSC-EB outputs are listed in the left vertical column in numerical order 1-18 with their shorthand name as presented in Section 2. The EOSC-F WPs and Tasks are listed in the top horizontal columns in numerical order of WPs and Tasks with their shorthand name as presented in Section 3.

Outputs deemed relevant for some or all of the activities in a WP and Task have been highlighted in green. Outputs not deemed relevant for activities in a WP and Task have been highlighted in red. We leave the ultimate decision on the relevance of outputs to a specific WP and Task to the individual WP, Task, and Activity leaders, noting that an output may simply provide the background for an activity, inform the further steps to proceed with an activity, or be critical to the success of an activity.

The envisioned path is thus (1) a partner checks the tables and is interested in an output highlighted in green (2) the partner then checks the description of the output in Section 2 against the description of the Task in Section 3 and if needed against the detailed Description of Action (3) the partner is interested in reading more about the output and clicks through the provided hyperlinks in Section 2.

Table 4-1: Mapping of EOSC Executive Board Outputs to EOSC Future Work Packages 1-3

	Output			WP1				WP ₂		WP ₃				
			T1.2	T1.3	T1.4	T1.5	T2.1	T2.2	T2.3	T3.1	T3.2	Тз.з	T3.4	
1	Progress Report													
2	PP													
3	SRIA													
4	AAI													
5	MVE													
6	PID Architecture													
7	SIRS													
8	FAIR Services													
9	FAIR Metrics													
10	FAIR Practice													
11	Country Sheets													
12	Landscape V2.o													
13	RoP													
14	RoP 2021+													
15	Digital Skills													





Table 4-2: Mapping of EOSC Executive Board Outputs to EOSC Future Work Packages 4-6

Output			W	P4			W	P ₅	WP6			
	Овгриг	T4.1	T4.2	T4.3	T4.4	T5.1	T5.2	T5.3	T5.4	T6.1	T6.2	Т6.3
1	Progress Report											
2	PP											
3	SRIA											
4	AAI											
5	MVE											
6	PID Architecture											
7	SIRS											
8	FAIR Services											
9	FAIR Metrics											
10	FAIR Practice											
11	Country Sheets											
12	Landscape V2.0											
13	RoP											
14	RoP 2021+											
15	Digital Skills											
16	FAIR Lady											
17	PID Policy											
18	Interoperability											



Table 4-3: Mapping of EOSC Executive Board Outputs to EOSC Future Work Packages 7-11

Output		WP ₇					WP8			WP9			WP10		
	Output	T7.1	T7.2	T7.3	T7.4	T7.5	T8.1	T8.2	T9.1	T9.2	Т9.3	T10.1	T10.2	Т10.3	WP11
1	Progress Report														
2	PP														
3	SRIA														
4	AAI														
5	MVE														
6	PID Architecture														
7	SIRS														
8	FAIR Services														
9	FAIR Metrics														
10	FAIR Practice														
11	Country Sheets														
12	Landscape V2.o														
13	RoP														
14	RoP 2021+														
15	Digital Skills														
16	FAIR Lady														
17	PID Policy														
18	Interoperability														



5 Conclusions

The 18 key documents from the EOSC-EB are strategic documents that describe the state-of-the art of key topics for EOSC, define the specifications of key components for EOSC, and make recommendations for the future development and implementation of EOSC.

The following observations are noteworthy:

- The output documents are neither relevant for WP1 which deals strictly with project management and project delivery nor WP11 which deals with addressing the ethics requirements of the project.
- All output documents are relevant to some extent for partners in WP2 and specifically for partners involved in the development of the project strategy and the coordination and support of the SOB.
- The Progress Report is a summary document describing activities and outputs of the EOSC-EB and is useful for becoming quickly acquainted with the history, activities, and outputs of the EOSC-EB.
- The Partnership Proposal is an outdated document, having been superseded by the SRIA, and as such is interesting for historical purposes but does not capture the current state-of-plan or plans for EOSC.
- The SRIA is the key strategic document for EOSC and as such it is crucial that all partners in the content WPs 2-10 have read the SRIA and drawn links in their work to relevant topics in the SRIA.
- The Architecture and FAIR outputs are relevant for the technical WPs and and should be useful for the Technical Roadmap and the activities of the Technical Coordination Board (TCB) in EOSC-F.
- The Landscape outputs are relevant for activities related to defining and monitoring the EOSC readiness of MS/AC as well as activities requiring an overview of national contributions to EOSC.
- The RoP outputs are relevant for activities related to defining inclusion criteria for capabilities in the MVE and the onboarding of users/providers and their related resources/services into the EOSC Portal.
- The Skills and Training output is mostly relevant for the activities in WP9 while the Sustainability output which incorporates legal, financial, and technical aspects of EOSC is relevant for various WPs.

It should be noted that the EOSC Partnership has in the meantime been signed by the EOSC-A and EC and that the new governance structure of the EOSC Partnership Board consists of the EC, EOSC-A, and the EOSC Steering Board (EOSC-SB) of representatives of the MS/AC.

EOSC-F will be collaborating closely with the EOSC-A and EOSC-SB in order to stay informed of current developments and strategically align activities. EOSC-F will especially work closely with the new TFs of the EOSC-A. Many of the TFs, especially the technical TFs, are highly relevant for the activities and the Technical Roadmap in EOSC-F. EOSC-F and EOSC-A have ensured that each TF has a representative that is also in one of the WPs of EOSC-F.



References

- [1] Abramatic, J-F., Hrušák, J. & Jones, S. (editors under EOSC Executive Board) (2021) EOSC Executive Board Final Progress Report. Available at: https://op.europa.eu/en/publication-detail/-/publication/80c2b77b-53c1-11eb-b59f-01aa75ed71a1 (Accessed: 29 September 2021).
- [2] EOSC Executive Board (editor) (2020) *Proposal for a European Partnership under Horizon Europe EOSC Partnership*. Available at: https://ec.europa.eu/info/files/european-open-science-cloud-eosc_en (Accessed: 29 September 2021).
- [3] EOSC Association (editor) (2021) Strategic Research and Innovation Agenda of the EOSC V1.0. Available at: https://eosc.eu/eosc-sria-v10-15-february-2021 (Accessed: 29 September 2021).
- [4] Wierenga K., Johansson, L., Kanellopoulos C., Groep, D., Vaghetti, D. & Liampotis, N. (authors under EOSC Executive Board) (2021) EOSC Authentication and Authorisation Infrastructure. Available at: https://op.europa.eu/en/publication-detail/-/publication/d1bc3702-61e5-11eb-aeb5-01aa75ed71a1 (Accessed: 29 September 2021).
- [5] Van de Sanden, M., Robertson, D., Appleton, O. & Manghi, P. (editors under EOSC Executive Board) (2021) EOSC Architecture Working Group View on the Minimum Viable EOSC. Available at: https://op.europa.eu/en/publication-detail/-/publication/91fco324-6b50-11eb-aeb5-01aa75ed71a1 (Accessed: 29 September 2021).
- [6] Schwardmann, U., Fenner, M., Hellström, M., Koers, H., L'Hours, H., Matthews, B., Ritz, R., Valle, M., Van de Sanden, M. & Zamani, T. (authors under EOSC Executive Board) (2020) *PID Architecture for the EOSC*. Available at: https://op.europa.eu/en/publication-detail/-/publication/3136c3e6-4f07-11eb-b59f-01aa75ed71a1 (Accessed: 29 September 2021).
- [7] EOSC Executive Board (editor) (2020) *Scholarly Infrastructures for Research Software*. Available at: https://op.europa.eu/en/publication-detail/-/publication/145fdof3-3907-11eb-b27b-01aa75ed71a1 (Accessed: 29 September 2021).
- [8] Genova, F., Aronsen, J.M., Beyan, O., Harrower, N., Holl, A., Principe, P., Slavec, A. & Jones, S. (editors under EOSC Executive Board) (2021) *Recommendations on Certifying Services Required to Enable FAIR within EOSC*. Available at: https://op.europa.eu/en/publication-detail/-/publication/70aa74b5-53bf-11eb-b59f-01aa75ed71a1 (Accessed: 29 September 2021).
- [9] Genova, F. & Jones, S. (editors under EOSC Executive Board) (2021) *Recommendations on FAIR Metrics for EOSC*. Available at: https://op.europa.eu/en/publication-detail/-/publication/ced147cg-53co-11eb-b59f-01aa75ed71a1 (Accessed: 29 September 2021).
- [10] EOSC Executive Board (editor) (2020) Six Recommendations for Implementation of FAIR Practice. Available at: https://op.europa.eu/en/publication-detail/-/publication/463ofa57-1348-11eb-9a54-01aa75ed71a1 (Accessed: 29 September 2021).
- [11] EOSC Executive Board (editor) (2020) *Country Sheets Analysis*. Available at: https://op.europa.eu/en/publication-detail/-/publication/95e4a900-2a21-11eb-9d7e-01aa75ed71a1 (Accessed: 29 September 2021).
- [12] EOSC Executive Board (editor) (2020) Landscape of EOSC-Related Infrastructures and Initiatives V2.o. Available at: https://op.europa.eu/en/publication-detail/-/publication/9c7f3c1e-2aea-11eb-9d7e-01aa75ed71a1 (Accessed: 29 September 2021).
- [13] EOSC Rules of Participation Working Group (editor under EOSC Executive Board) (2021) EOSC Rules of Participation. Available at: https://op.europa.eu/en/publication-detail/-/publication/a96d6233-554e-11eb-b59f-01aa75ed71a1 (Accessed: 29 September 2021).



- [14] EOSC Executive Board (editor) (2021) Ownership and Evolution of RoP from 2021 Onwards. Available at: https://op.europa.eu/en/publication-detail/-/publication/dg6b5gb8-7ofd-11eb-gacg-01aa75ed71a1 (Accessed: 29 September 2021).
- [15] EOSC Executive Board (editor) (2021) *Digital Skills for FAIR and Open Science*. Available at: https://op.europa.eu/en/publication-detail/-/publication/af7f7807-6ce1-11eb-aeb5-01aa75ed71a1 (Accessed: 29 September 2021).
- [16] EOSC Executive Board (editor) (2020) Solutions for a Sustainable EOSC aka FAIR Lady Report.

 Available at: https://op.europa.eu/en/publication-detail/-/publication/581d82a4-2ed6-11eb-b27b-01aa75ed71a1 (Accessed: 29 September 2021).
- [17] EOSC Executive Board (editor) (2020) A Persistent Identifier Policy for the EOSC. Available at: https://op.europa.eu/en/publication-detail/-/publication/35c5ca10-1417-11eb-b57e-01aa75ed71a1 (Accessed: 29 September 2021).
- [18] Corcho, O., Eriksson, M., Kurowski, Ojsteršek, M., Choirat, C., Van de Sanden, M. & Coppens, F. (authors under EOSC Executive Board) (2021) EOSC Interoperability Framework. Available at: https://op.europa.eu/en/publication-detail/-/publication/d787ea54-6a87-11eb-aeb5-01aa75ed71a1 (Accessed: 29 September 2021).