

EOSC National Structures: an overview of the national EOSC coordination and engagement mechanisms in Europe

Publication Date: October 2021

Authored by: Sara Garavelli (CSC - IT Center for Science),
Iiris Liinamaa (CSC - IT Center for Science),
Anu Märkälä (CSC - IT Center for Science)

Contributors: EOSC national structures representatives;
Horizon 2020 EOSC regional projects (EOSC-Nordic; EOSC-Pillar; EOSC-Synergy;
NI4OS-Europe).



Acknowledgements

We would like to thank all the individuals and organisations that contributed to the study. Without their collaboration this report would not have been possible to produce.

Special thanks to the Horizon 2020 EOSC regional projects that played a key role in the information collection phase: EOSC-Nordic (GA No. 857652); EOSC-Pillar (GA No. 857650); EOSC-Synergy (GA No. 857647) and NI4OS-Europe (GA No. 857645).

Thank you to the European Commission (Open Science Unit, Directorate-General Research and Innovation, DG RTD) and to the members of the EOSC Steering Board for the support provided in coordinating this effort.

Disclaimer

This document has been produced by the EOSCsecretariat.eu project which has received funding from the European Union's Horizon Programme call H2020-INFRAEOSC-05-2018-2019, Grant Agreement No. 831644.

The information and views set out in this report are those of the authors and do not necessarily reflect the official opinion of the European Commission and the EOSC Partnership, which cannot be held responsible for the use which may be made of the information contained therein.

Table of Contents

EXECUTIVE SUMMARY	4
1. INTRODUCTION.....	5
2. METHODOLOGY AND DATA COLLECTION.....	6
3. OVERVIEW OF THE EOSC NATIONAL STRUCTURES	7
4. COORDINATION MODELS IN THE DIFFERENT COUNTRIES.....	11
5. MAIN PRIORITIES AND ACTIVITIES PERFORMED.....	14
6. SUCCESS FACTORS FOR EOSC NATIONAL STRUCTURES AND MAIN EOSC ENGAGEMENT CHALLENGES AT COUNTRY LEVEL	17
7. CONCLUSIONS AND RECOMMENDATIONS.....	18
ANNEX A – LIST OF INTERVIEWED EOSC NATIONAL STRUCTURES.....	22
ANNEX B – COUNTRY ANALYSIS.....	24
ALBANIA	24
ARMENIA	27
AUSTRIA.....	28
BELGIUM.....	32
BOSNIA AND HERZEGOVINA	34
BULGARIA.....	37
CROATIA	40
CZECH REPUBLIC.....	44
DENMARK	48
FAROE ISLANDS	51
FINLAND	51
FRANCE.....	54
GEORGIA.....	58
GERMANY	60
GREECE.....	64
HUNGARY.....	66
ITALY	68
LATVIA.....	74
MOLDOVA.....	76
MONTENEGRO	79
NORTH MACEDONIA	82
NORWAY.....	85
POLAND	86
PORTUGAL.....	90
REPUBLIC OF CYPRUS.....	93
ROMANIA.....	95
SERBIA.....	99
SLOVAKIA	102
SLOVENIA.....	105
SPAIN	109
SWEDEN.....	113
SWITZERLAND	118
THE NETHERLANDS.....	121
UNITED KINGDOM	124
ANNEX C - EOSC NATIONAL STRUCTURES TEMPLATE.....	127
ANNEX D - LIST OF ABBREVIATIONS	130

Executive Summary

The European Open Science Cloud (EOSC) Partnership **will bring together institutional, national and European initiatives** and engage all relevant stakeholders to **co-design and deploy a European Research Data Commons**.

The Partnership will seek engagement with the Member States and Associated Countries on two levels: i) via a “Steering Board” external to the EOSC Association; ii) and via mandated national organisations members of the EOSC Association.

In addition to these official engagement mechanisms, a series of **EOSC national structures** have emerged in the last year with the **goal of supporting the countries in organising the EOSC coordination and engagement activities at local level**. The EOSC national structures **do not necessarily correspond to the mandated organisations**. In some countries, they are the first step towards the appointment of a mandated organisation but in many cases, they are **complementary structures essential to bring EOSC closer to the national research community and to stimulate active participation of researchers as providers and users of FAIR digital content**.

This study, conducted by CSC – IT Center for Science in the context of the EOSCsecretariat.eu project has surveyed **EOSC national structures in 22 EU Member States, 11 Associated Countries and Switzerland in 2021**.

The main findings of the study are summarised below:

- 85% of the surveyed countries **have an EOSC national structure already in place or are in the process of setting up such a structure**. At the time of writing the report **only one EOSC national structure (Austria) correspond to the mandated organisations of the EOSC Association**;
- In 30% of the countries, the decision of setting up an EOSC national structure was a **top-down decision coming from a ministry or a national research funding organisation** whereas in 14% of the countries, **EOSC national structure was pushed by researchers, Open Science stakeholders and other relevant actors** in the country. **In most cases, it was however the combination of the previous two approaches**;
- The most common **motivational mechanism** triggering the set-up of the EOSC national structures is the need to **coordinate the EOSC activities** at national level to **avoid duplication of efforts, align national views, strengthen collaborations** at country level, **define future investments and increase effects of individual efforts at European level**;
- There are **four ways how different countries have organised the EOSC structures at national level**: i) **Consortia**; ii) **Individual legal entities** (in all the cases these are the predecessors of the national mandated organisations); iii) **Expert Groups**; iv) **National Programmes**. They have different governance structures, objectives and roles in the countries. An aspect common to all of them is that **they are all striving for permanent structures**;
- The four main priorities of the EOSC national structures are: i) **Engaging** stakeholders at national level into EOSC; ii) **Coordinating EOSC** activities at national level; iii) **Disseminating EOSC** at national level iv) **Offering a channel to connect the national stakeholders with the EOSC governance**. In some countries **providing training** on EOSC specific topics and **steering and supporting national priorities and investments** have also been indicated as crucial mandate of the EOSC national structure;
- The **engagement and support of key national stakeholders, research funding organisations, policy makers and the government is considered an essential precondition** for a successful establishment of the EOSC national structures. For their long term contribution to EOSC, their role needs **to be clarified and recognized by the EOSC Partnership**;
- The EOSC national structures can bring **great added value to the countries by aligning efforts and improving the country position in EOSC; ensuring equal access to EOSC information and opportunities; increasing uptake of Open Science** in the country; **facilitating national networking and internationalisation opportunities**;
- The EOSC national structures can **support the EOSC Partnership in boosting the EOSC awareness and stakeholder engagement, overcoming language and cultural barriers, strengthening involvement of national policy makers and enforcing EOSC-compliant policies** at national level and **providing expertise to support the EOSC monitoring activities**.

1. Introduction

The European Open Science Cloud (EOSC) Partnership will **enable a trusted, virtual, federated environment** in Europe to store, share and re-use research data across borders and scientific disciplines. The **Partnership will bring together institutional, national and European initiatives** and engage all relevant stakeholders to **co-design and deploy a European Research Data Commons** where data are Findable, Accessible, Interoperable, Reusable (FAIR)¹.

The Partnership will **transform the broader research and innovation ecosystem along multiple dimensions** (cultural, technical, organisational, educational, policy) and **multiple levels** (international, European, national, institutional).

The Member States and Associated Countries involved in the EOSC governance 2019–2020 have recognized the **strategic value of improved alignment and compatibility of national plans** for data infrastructures in the EOSC context.

The Partnership will seek engagement with the Member States and Associated Countries on two levels:

1. The governance of the Partnership foresees a coordination structure (called “**Steering Board**”), external to the EOSC Association, which shall provide strategic guidance by the Member States and Associated Countries to the EOSC Association running the Partnership. The “Steering Board” will play an essential role to enable progressive alignment of infrastructural and policy planning at national level with the EOSC deployment planning at European level;
2. The Member States will have the possibility to **mandate national organisations** who will become members of the EOSC Association and represent all national research stakeholders in the Partnership. These nationally-mandated organisations are those who will bring concrete national commitments to the Partnership.

In addition to these official engagement mechanisms mentioned in the *Draft proposal for a European Partnership under Horizon Europe: European Open Science Cloud Partnership* document², a series of **EOSC national structures** have emerged in the last year with the **goal of supporting the countries in organising the EOSC coordination and engagement activities at local level**. The EOSC national structures **do not necessarily correspond to the mandated organisations**. In some countries, they are the first step towards the appointment of a mandated organisation but in many cases, they are **complementary structures** essential to bring EOSC closer to the national research community and to stimulate active participation of researchers as providers and users of FAIR digital content.

This study presents an overview of the **EOSC national structures within the European Union Member States (MS)³, the Associated Countries (AC) to Horizon Europe⁴ and Switzerland**, i) providing information on their rationale, scope of activities and governance models; ii) describing the best practices and main challenges of engaging stakeholders with EOSC at national level and running such national EOSC structures; iii) highlighting the benefits that EOSC national structures can bring to the different countries and to the EOSC Partnership and Ecosystem at large.

This study covers **EOSC national structures in 22 EU Member States, 11 Associated Countries and Switzerland in 2021**, giving a snapshot of the rapidly evolving situation. The full list of countries covered by the study is reported in Annex A.

This study was conducted by CSC – IT Center for Science⁵ in the context of the EOSCsecretariat.eu⁶ project (INFRAEOSC-05-2018-2019) as a part of the project’s support for the EOSC Partnership.

The study will **support the work** of the EOSC Partnership under the Horizon Europe and provide useful insights especially for the **sub-group A of the EOSC Steering Board, “National Contributions to European Open Science**

¹ Findable, Accessible, Interoperable, Reusable; www.go-fair.org/fair-principles/

² Draft proposal for a European Partnership under Horizon Europe: European Open Science Cloud Partnership https://ec.europa.eu/info/sites/default/files/research_and_innovation/funding/documents/ec_rtd_he-partnership-open-science-cloud-eosc.pdf

³ https://europa.eu/european-union/about-eu/countries_en

⁴ https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/list-3rd-country-participation_horizon-euratom_en.pdf

⁵ www.csc.fi

⁶ www.eoscsecretariat.eu

Cloud”, that is investigating annual monitoring practices for national contributions to EOSC and for the **EOSC Association and its related Task Forces** (especially the “**Researcher Engagement & Adoption Task Force, REA TF**”).

The mapping of the EOSC national structures will represent a useful instrument also for the EOSC ecosystem at large to **clarify who are the key and authoritative EOSC contact points in different countries**, streamlining the communication and supporting the engagement activities.

In addition, **for the countries still exploring how to organise EOSC coordination and engagement at national level**, the study might **spark inspiration and provide examples for benchmarking**.

2. Methodology and data collection

The study was conducted between April 2021 and October 2021. The study started with a literature review of EOSC landscape studies and EOSC-related national structures to understand what information was available which resulted in the notion that there was **no systematic compilation of information about EOSC national structures nor an analysis of them**. The studies and reports used for the literature review are:

- Country sheets analysis - Report from the EOSC Executive Board Working Group (WG) Landscape⁷
- Landscape of EOSC-related infrastructures and initiatives - Report from the EOSC Executive Board Working Group (WG) Landscape⁸
- Open science policies and resource provisioning in the Nordic and Baltic countries (first report)⁹
- D2.5: Open Science policies and resource provisioning in the Nordic and Baltic countries (second report)¹⁰
- D3.2 First report on mapping of EOSC prospective service providers and candidate services¹¹
- NI4OS-Europe Workflows for setting up National Open Science Cloud initiatives Checklist¹²
- NI4OS-Europe National OSC initiatives models¹³
- EOSC-Synergy Country Landscapes¹⁴
- EOSC Pillar Country Questionnaire
- Second Working Proposal for Living Indicators to Monitor MS Progresses Towards EOSC Readiness¹⁵

In order to complement the information sourced through the existing reports, a template to collect information from the countries was developed in consultation with the regional projects (EOSC Nordic¹⁶, EOSC Pillar¹⁷, EOSC

⁷ (2020, November 18). Country sheets analysis - Publications Office of the EU. Retrieved September 8, 2021, from <https://op.europa.eu/en/publication-detail/-/publication/95e4a900-2a21-11eb-9d7e-01aa75ed71a1/language-en/format-PDF/source-search>

⁸ (2020, November 19). Landscape of EOSC-related infrastructures and initiatives. Retrieved September 8, 2021, from <https://op.europa.eu/en/publication-detail/-/publication/9c7f3c1e-2aea-11eb-9d7e-01aa75ed71a1/language-en>

⁹ (2020, February 26). Open science policies and resource provisioning in the Nordic and Retrieved September 8, 2021, from <https://zenodo.org/record/4083762>

¹⁰ (2021, February 26). D2.5: Open Science policies and resource provisioning in the Nordic Retrieved September 8, 2021, from <https://zenodo.org/record/4604950>

¹¹ (2020, August 28). D3.2 First report on mapping of EOSC prospective service providers Retrieved September 8, 2021, from <https://zenodo.org/record/4268965>

¹² (2021, April 5) NI4OS-Europe Workflows for setting up National Open Science Cloud initiatives Checklist Retrieved September 9, 2021, from <https://doi.org/10.5281/zenodo.4662573>

¹³ (2020, September 30). NI4OS-Europe National OSC initiatives models | Zenodo. Retrieved September 8, 2021, from <https://zenodo.org/record/4061801>

¹⁴ <https://www.eosc-synergy.eu/national-eosc-landscapes/>

¹⁵ (2021, January 20). Second Working Proposal for Living Indicators to Monitor ... - Zenodo. Retrieved September 8, 2021, from <https://zenodo.org/record/4452799>

¹⁶ EOSC-Nordic. Retrieved July 2, 2021, from <https://www.eosc-nordic.eu/>

¹⁷ EOSC-Pillar. Retrieved July 2, 2021, from <https://www.eosc-pillar.eu/>

Synergy¹⁸ and NI4OS-Europe¹⁹). The template is available in Annex C of this document. **The regional projects played a fundamental role** not only in developing and validating the country template but were instrumental for the **identification of the authoritative national contact points in the countries** covered by their projects and in facilitating the collection of data.

The countries covered by the regional projects are the following ones:

- **EOSC Nordic:** Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, Sweden
- **EOSC Pillar:** Austria, Belgium, France, Germany, Italy
- **EOSC Synergy:** Czech Republic, the Netherlands, Poland, Portugal, Slovakia, Spain, United Kingdom
- **NI4OS-Europe:** Albania, Armenia, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, Georgia, Greece, Hungary, North Macedonia, Moldova, Montenegro, Romania, Serbia, Slovenia

For the countries not covered by the regional projects or for those where the identification of an authoritative contact was particularly complicated, the EOSC Steering Board played a crucial role in filling the gaps.

The following **thirty-four countries are covered by this study** (for the missing countries either it was not possible to establish a contact with the country representative or the country decided to not participate to the study): **Albania, Armenia, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Faroe Islands, Finland, France, Georgia, Germany, Greece, Hungary, Italy, Latvia, Moldova, Montenegro, North Macedonia, Norway, Poland, Portugal, Republic of Cyprus, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, The Netherlands, United Kingdom.**

After the identification of all the country contacts, the information was collected through interviews (see the list of countries and organisations interviewed in the Annex A and the complete country sheets in Annex B). Information collection through interviews was followed by the analysis and consolidation of the input received.

Early results were presented at the EOSC Symposium on the 15th of June 2021²⁰. Further analysis as well as collection for further responses continued afterwards. In October 2021, the consolidated version was sent to the respondents, to the EOSC Steering Board, to the EOSC Association Board of Directors and to the coordinators of the regional projects for validation. Based on their comments and feedback, the report was improved and the final version published on Zenodo.

3. Overview of the EOSC national structures

In this study, EOSC national structures mean **the arrangements at national level to organise EOSC coordination and engagement activities in a country.**

Out of the 34 countries surveyed for this study, 11 (32%) have an EOSC national structure already in place. 18 (53%) countries are currently in the process of setting up such a structure, 4 (12%) countries are planning to do so in the future. Only one country (Faroe Islands) is not planning to set up any EOSC national structure because there is no complexity to manage in the country in terms of coordination of the different actors (the country is so small that the EOSC coordination will be managed by the Open Science representatives directly).

Status	#	Countries
EOSC national structure in place	11	Austria, Belgium, Croatia, Czech Republic, Finland, Germany, Italy, North Macedonia, Romania, Slovakia, Sweden
Set up in progress	18	Albania, Armenia, , Bosnia and Herzegovina, Bulgaria, France, Georgia, Greece, Hungary, Moldova, Montenegro, Poland, Republic of Cyprus,

¹⁸ EOSC synergy. Retrieved July 2, 2021, from <https://www.eosc-synergy.eu/>

¹⁹ NI4OS- Europe. Retrieved July 2, 2021, from <https://ni4os.eu/>

²⁰ EOSC Symposium 2021 | EOSC Secretariat. Retrieved September 17, 2021, from <https://www.eoscsecretariat.eu/events/eosc-symposium-2021>

		Serbia, Slovenia, Spain, Switzerland, The Netherlands, United Kingdom.
Not available yet but planned	4	Denmark, Latvia, Norway, Portugal
Not planned	1	Faroe Islands

Table 1 Status of EOSC national structures in October 2021

The picture below provides an overview of the status of the EOSC national structures in October 2021

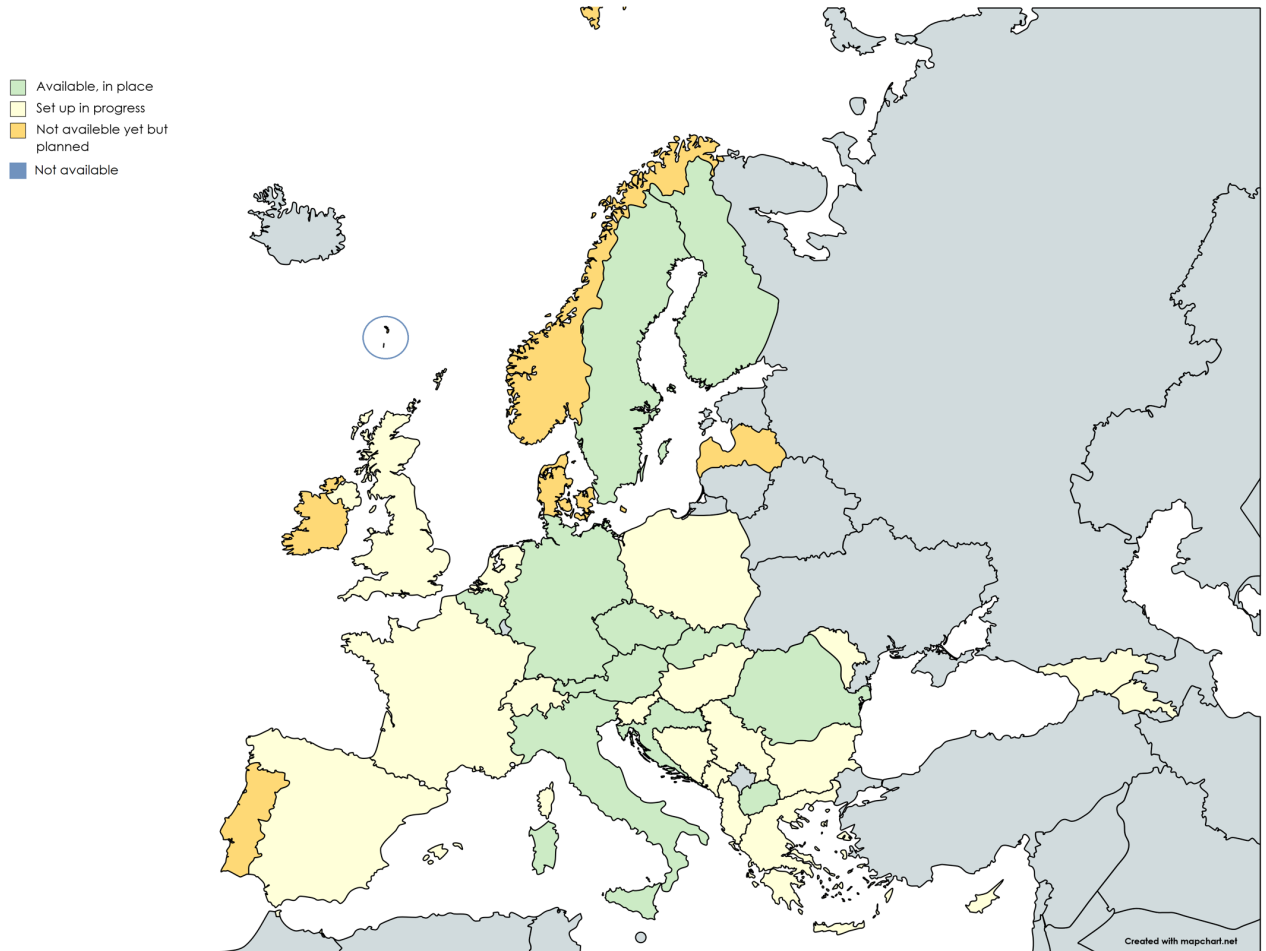


Figure 1 Status of EOSC national structures in October 2021

In ten **countries** (Albania, Belgium, Denmark, France, Portugal, Republic of Cyprus, Slovenia, Spain, Sweden, The Netherlands), the decision of setting up an EOSC national structure was a **top-down decision coming from a ministry or a national research funding organisation** whereas in five countries (Armenia, Georgia, Germany, Greece, Italy), **EOSC national structure was pushed by researchers, Open Science stakeholders and other relevant actors** in the country (bottom-up approach). **In most cases**, it was however the **combination of the previous two approaches** (hybrid).

The most common **motivational mechanisms** triggering the set-up of the EOSC national structures are summarised in the following:

- Need to **coordinate the EOSC activities** at national level to **avoid duplication of efforts, align national views, strengthen collaborations** at country level, **define future investments** and **increase effects of individual efforts** at European level;
- **Political willingness**;
- **Engage stakeholders at national level** (in particular, policy and decision makers);

- Increase **awareness and uptake of FAIR principles, Open Science & EOSC** and **build related skills** for the development of a sustainable Open Science Strategy;
- **Improve the response of organisations in participation in the EOSC calls under Horizon Europe;**
- **Participation to EU projects** (in particular, the NI4OS-Europe project had a specific mandate to establish National Open Science Cloud – NOSCI²¹ – initiatives in the South East European region).

As the study will demonstrate, there are **various ways how different countries have organised the EOSC structures at national level**. Therefore, depending on the country in question, EOSC national structures **may correspond to EOSC mandated organisations, to National Open Science Initiatives (NOSCI), or to other initiatives, organisations, expert groups or other bodies** that are responsible for organising EOSC coordination and engagement activities at national level.

The table below gives an overview of the EOSC national structures versus the current EOSC Association mandated organisations:

#	Country	MS/AC	EOSC national structure	EOSC mandated organisation
1	Albania	AC	Albanian Initiative for Open Science Cloud (AIOSC)	Academic Network of Albania (RASH)
2	Armenia	AC	Name not defined yet	N.A.
3	Austria	MS	EOSC Support Office Austria/Austrian EOSC Mandated Organisation (ACONET Association)	ACONET Association (as legal entity)
4	Belgium	MS	ICC-FCC OS EOSC Taskforce: International Co-operation Commission (ICC) and Federal Co-operation Commission (FCC) Open Science EOSC Taskforce	Belnet
5	Bosnia-Herzegovina	AC	Name not defined yet	N.A.
6	Bulgaria	MS	Bulgarian Initiative for Open Data and Cloud Computing (BgI-ODCC)	N.A.
7	Croatia	MS	The Croatian Open Science Cloud (locally HR-OOZ) Initiative	University of Zagreb Computing Center (SRCE)
8	Czech Republic	MS	EOSC Coordination Platform	CESNET
9	Denmark	MS	The National EOSC Coordination Committee	Technical University of Denmark (DTU) - Danish e-Infrastructure Cooperation (DEIC)
10	Faroe Islands	AC	Not planned	N. A.
11	Finland	MS	EOSC Finnish Forum	N.A.
12	France	MS	Collège EOSC France	National Institute for Research in Digital Science and Technology (INRIA)
13	Georgia	AC	Georgian Open Science Cloud Initiative GOSCI	N. A.

²¹ The term NOSCI has been coined by the NI4OS-Europe project to indicate national initiatives dealing with Open Science Cloud. NOSCI usually strives to create preconditions for the implementation of Open Science and coordinate policy and infrastructure development in the country. In general, the primary focus of the NOSCI is more on preparing the national level for EOSC.

#	Country	MS/AC	EOSC national structure	EOSC mandated organisation
14	Germany	MS	Nationale Forschungsdateninfrastruktur (NFDI) e.V. (National Research Data Infrastructure)	German Research Foundation (DFG)
15	Greece	MS	Hellenic Open Science Initiative (EPAE/HOSI)	N.A.
16	Hungary	MS	Open Science Forum (Nyílt Tudományos Fórum)	Governmental Agency for IT Development (KIFU)
17	Italy	MS	Italian Computing and Data Infrastructure (ICDI)	Consortium GARR
18	Latvia	MS	Higher Education and Science Joint Digital Services Center	N.A.
19	Moldova	AC	Name not defined yet	N.A.
20	Montenegro	AC	National open science cloud initiative in Montenegro (NIOON)	N. A.
21	North Macedonia	AC	National Open Science Cloud Initiative in North Macedonia (NOSCI.MK)	N. A.
22	Norway	AC	Name not defined yet	N. A.
23	Poland	MS	EOSC Network – Poland	National Science Center (NCN)
24	Portugal	MS	Name not defined yet	Foundation for Science and Technology (FCT)
25	Republic of Cyprus	MS	Cyprus Open Science Initiative	N.A.
26	Romania	MS	Romanian Open Science Cloud Initiative (RO-NOSCI)	ICI Bucharest - National Institute for Research & Development in Informatics
27	Serbia	AC	TONus - Team for Open Science in Serbia	N. A.
28	Slovakia	MS	National EOSC working group	Slovak Scientific and Technical Information Centre (CVTI SR)
29	Slovenia	MS	Slovenian Open Science Community	Academic and Research Network of Slovenia (ARNES)
30	Spain	MS	Spanish Network for e-Science (Red Español de e-Ciencia)	Spanish National Research Council (CSIC)
31	Sweden	MS	National Reference Group for EOSC	Swedish Research Council (SRC)
32	Switzerland		Swiss National Strategy for Open Science (Open Access and Open Research Data)	ETH Zurich
33	The Netherlands	MS	The National Programme Open Science (NPOS) FAIR Data Table	N. A.

#	Country	MS/AC	EOSC national structure	EOSC mandated organisation
34	United Kingdom	AC ²²	Name not defined yet	N.A.

Table 2 EOSC national structures mapped against the current mandated organisations in the EOSC Association

At the time of writing the report only one EOSC national structure corresponds to the mandated organisation. That is the EOSC Support Office Austria that also exercises the role of the Austrian mandated organisation.

However, **almost half of the countries** (Albania, Armenia, Bosnia and Herzegovina, Bulgaria, Greece, Hungary, Italy, Latvia, Moldova, Norway, Portugal, Serbia, Slovenia) **are working to set-up EOSC national structures to make it become the official mandated organisation** in the EOSC Association.

4. Coordination models in the different countries

Four different coordination models for the EOSC national structures emerged from the data collected. The models are:

- i) Consortia;
- ii) Individual legal entities;
- iii) Expert Groups;
- iv) National Programmes.

Models	Countries	# of countries
Consortia	Bosnia and Herzegovina, Croatia, Denmark, Finland, France, Georgia, Montenegro, North Macedonia, Republic of Cyprus, Romania, Slovenia, Spain	12
Individual legal entities	Albania, Austria, Bulgaria, Greece, Hungary, Italy, Latvia, Moldova, Norway, Serbia	10
Expert groups	Belgium, Czech Republic, Poland, Slovakia, Sweden, United Kingdom	6
National Programmes	Germany, Portugal, The Netherlands	3
Not known	Armenia, Switzerland	2

Table 3 Coordination models in the different countries

They have different governance structures, objectives and roles in the countries. An aspect common to all of them is that **they are all striving for permanent structures**.

4.1 Consortia

Countries: Bosnia and Herzegovina, Croatia, Denmark, Finland, France, Georgia, Montenegro, North Macedonia, Republic of Cyprus, Romania, Slovenia, Spain

Joining forces in a consortium is by far the most common way to organise national EOSC engagement and coordination at country level. The consortia are **groups of organisations that are active at national level with respect to EOSC and Open Science** and have decided to work together to coordinate and align EOSC activities at local level. **They do not have any mandate to represent the country in any official EOSC forum**. They usually

²² Expected to sign Association Agreement to Horizon Europe late 2021

work in close collaboration with the ministries and support them in coordinating the national activities and stakeholders around EOSC.

The consortia are usually very well structured. They often have Memorandums of Understanding (MoU) or collaboration agreements in place that define the roles and responsibilities clearly. The consortia usually have a smaller coordinating body with executive power and a broader group of individual members or member organisations but also other governance systems occurred in the responses. Usually, **all the organisations contribute to the consortia with in kind contributions**. Only in few cases some financial support is provided by the government to support the operation of the coordinating body of the consortium.

In addition to the coordination of strategic discussions with the local ministries, the consortia organise very concrete activities to support the creation of EOSC awareness and the engagement of the stakeholders in the country.

The most mature examples are in Finland, France, Slovenia and Spain.

Finland has established the **EOSC Finnish Forum (EOSC-FF)** with the aim of coordinate the engagement of Finnish stakeholders at national level. The Forum is composed by all individuals based in Finland who are involved or interested in EOSC and have signed / or are working for an organisation that has signed the Declaration of Open Science²³. The Forum is open to all the different types of stakeholders including the private sector. The Forum is led by a Coordinating Committee composed by a consortium of organisations (the Finnish Ministry of Education & Culture (OKM); Academy of Finland (AKA); The Federation of Finnish Learned Societies (TSV) as representative of the Open Science National Coordination initiative; Finnish organisations part of the EOSC Association or contributing to the EOSC Association Task Forces and supported by an Office hosted by CSC – IT Center for Science.

The **Collège EOSC France** will be one of the committees under the responsibility of the national committee for digital services and e-infrastructures (CoSIN). The CoSIN groups together the directors/presidents of the main relevant organisations in France. The CoSIN mandates a permanent secretariat (SPSIN), which then puts in place the Collège EOSC France and oversees its activities in between the meetings of the CoSIN. The Collège will have a pilot, who is not from the ministry, and a co-pilot from the ministry.

The main purpose of the **Slovenian Open Science Community** is to connect all stakeholders in the field of open science in Slovenia. The aim is to establish a unified, complementary system of open science in Slovenia, in the field of services, infrastructures and training, in order to improve the working conditions of researchers, encourage the dissemination, exchange and reuse of knowledge through open access, develop open science related skills and set up a training system for target users. The University of Maribor Library, the coordinator of the consortium, will provide legal and administrative support and ensure transparent information to the members council that will govern the initiative on activities in international organisations and infrastructures, project cooperation and information from the Ministry of Education, Science and Sport.

On July 2020 the ministerial act CIN/658/2020 has founded in Spain the **Spanish Network for e-Science**. This is a network aimed at promoting and coordinating the development of e-Science in Spain, including the areas related to EOSC. The network has been also supported by the Spanish Thematic Network in the field of Open e-Science, a project funded by the national programme of knowledge generation and scientific and technological development of the Ministry of Science and Innovation. The Spanish Network for e-Science gathers together the 32 Spanish institutions that have applied to be members of the EOSC Association and all the Spanish institutions that participates into the projects funded in the INFRAEOSC calls. One of the main objectives is to maintain and reinforce the participation of Spanish institutions in EOSC.

4.2 Individual legal entities

Countries: Albania, Austria, Bulgaria, Greece, Hungary, Italy, Latvia, Moldova, Norway, Serbia

Individual legal entities are the second most common way to organise national EOSC engagement and coordination. These legal entities are those that are planning to become the **official mandated organisations in the EOSC Association**. They usually are composed by a group of organisations that are active at country level in the fields of EOSC, Open Science, e-infrastructures and research infrastructures and **have received an official mandate from a**

²³ <https://avointiede.fi/en/policies/declaration-open-science-and-research-2020-2025>

local Ministry or Government. In almost all the cases, the **legal entities do not receive any financial support** by the government.

The most mature examples are Austria and Italy.

In Austria, the **EOSC Support Office** organised its first General Assembly on October 13th 2021. The entity is organised as a consortium and it includes the Austrian EOSC Association members and observers but also other EOSC-related initiatives in the country, like the FAIR Office Austria. It also stresses the missions and viewpoints of universities in its activities. As the EOSC Support Office was established on the 26th of March 2021, an informal reflection group that had been active for more than four years was integrated into it and given a formal status. The group is now called EOSC Café and it is coordinated by the Ministry of Education, Science and Research (BMWFV). The role of it is to gather sort of intelligence from within the EOSC Partnership and external points of view. It is described to have characteristics of a think tank and open discussion forum. The EOSC Café gives the EOSC Support Office the possibility to approach other entities, for example the national research funders that are represented in it. This helps the Austrian mandated organisation in forming an overview of the opinions and priorities of national EOSC stakeholders.

In Italy, the **Italian Computing Data Infrastructure (ICDI)** represents a vast majority of research infrastructures and e-infrastructures in the country²⁴. Besides the signatories of ICDI's MoU, ICDI also animates a wider community in the country by convening periodical meetings, offering training and information about topics related to Open Science and EOSC, and by carrying out consultations. ICDI has a mailing list with about 40 different institutions through which it can reach a huge number of EOSC stakeholders. The long-term goal of ICDI is to create an official national coordination body that would be the representative of Italian infrastructures and would interact with national and European institutions on their behalf. At the moment, ICDI is in the process of becoming a legal entity. In the meantime, GARR, the Italian Research and Education Network, is representing ICDI in the EOSC Association as the mandated organisation for Italy.

4.3 Expert Groups

Countries: Belgium, Czech Republic, Poland, Slovakia, Sweden, United Kingdom

In several countries, national EOSC coordination and engagement is organised through **expert groups that are run by individual key experts in the fields of EOSC and Open Science in the country**. The coordinating expert groups **have a mandate from a local Ministry or a comparable public administration authority** to coordinate the EOSC activities at local level. Usually, **the main focus of the expert group is to define the national EOSC strategy**.

Some examples are the following:

In Belgium, the **International Co-operation Commission and Federal Co-operation Commission (ICC-FCC) groups** are set up by law to ensure consultation between the authorities. ICC-FCC groups are composed of individual officials representing the federal, community and regional authorities, complemented by experts. The coordination group Open Science will foster Belgian participation with EOSC through awareness raising and by gathering EOSC stakeholders to exchange information. They will participate in the EOSC decision making process following Belgium's engagements regarding Open Science as expressed in the different government levels and its entities' multiple national and international engagements. Both on Flemish and French Community level initiatives are supported to better connect to EOSC.

The **Czech EOSC Coordination Platform**, coordinated by the Ministry of Education, Youth and Sports (MEYS), counts around 40 people representing policy-makers and different RPOs coordinating and organising the EOSC activities and engagement at national level, and working to prepare a comprehensive architecture for investments in the EOSC implementation in the Czech Republic by using the European Structural and Investment Funds.

EOSC–Network Poland, coordinated by the National Science Centre (NCN), gathers experts from members and observers of the EOSC Association and is open to any institutions engaged with EOSC or Open Science to support development of EOSC, coordinate and strengthen EOSC-related activities at national level and embed them in the international context of EOSC.

²⁴ List of members <https://www.icdi.it/en/about/members>

The **Slovak National EOSC Working Group** serves as a professional strategic and advisory body for the formation of opinions and positions of the Slovak Republic within the EOSC initiative. The National Working Group is not the mandated organisation for Slovakia, but the organisation coordinating the activities at national level into EOSC with members from the Slovak Centre of Scientific and Technical Information (CVTI SR – the Slovak mandated organisation), Ministry of Education, Science, Research and Sport of the Slovak Republic, Slovak Academy of Sciences, Institute of Informatics, Slovak Academy of Sciences, Institute of Experimental physics and SANET (Slovak Academic Network).

In Sweden, **the National Reference Group for EOSC**, has been established to support the Swedish Research Council (SRC) in its role as the Swedish mandated organisation in the EOSC Association. Through dialogue, it aims to ensure that stakeholders' perspectives are represented in the EOSC Partnership. SRC convenes and chairs the group. The reference group for EOSC is integrated into a larger reference group for Open Access and EOSC which supports the national objective of transitioning Open Access to research data.

UK recognises the need for the national digital research infrastructure to interoperate with EOSC. For this reason they will initially build a national EOSC community to increase awareness of and engagement with EOSC and provide a forum for exchanging views and experiences relating to EOSC.

4.4 National Programs

Countries: Germany, Portugal, The Netherlands

In Germany and the Netherlands (and most likely in Portugal, still under discussion at the time of writing the report), the national EOSC engagement and coordination is organised through a national program. Those countries having a national program, have a rather structured approach towards EOSC with a consortium strengthening the connections and active collaboration between key stakeholders and EOSC. There is an agreed coordinator for the initiative. National Programs are **technical cooperation initiatives that develop a comprehensive approach towards open science and FAIR principles engaging relevant stakeholders into action within a country and to provide a common platform for different aims unique to the country.**

The national programs are financially supported by the governments.

The most advanced example is Germany. The **National Research Data Infrastructure (NFDI)** is a networked organisation that has the objective to systematically index, edit, interconnect and make available the valuable stock of data from science and research. So far, these data have mostly been available in a decentralised, project-related, or temporary form. The German federation and the states fund the NFDI jointly. Reasons for an engagement with EOSC are to bring the interests and ideas of the national science system in the European context and exchange best practices and solutions. Working together on a European level can trigger innovations and raise potential even more than is possible only on a national level. NFDI is organized around different thematic consortia that are connected to different initiatives, e. g. the consortium GHGA is strongly connected to EMBL. The NFDI consortia NFDI4BioDiversity, GHGA and DataPlant are engaged via the German node de.NBI with ELIXIR. The NFDI consortium KonsortSWD is connected with the ESFRI ERICs CESSDA and ESS. The consortium NFDI4Culture is connected with CLARIN and DARIAH. The national initiative is financially supported. The German federal and state governments envisage funding up to 30 consortia. A total of up to €90 million is available per year, for ten years, to fund the association and the consortia.

5. Main priorities and activities performed

The four main priorities of the EOSC national structures highlighted by the respondents are the following:

- Engaging stakeholders at national level into EOSC (29 answers)
- Coordinating EOSC activities at national level (23 answers)
- Disseminating and promoting EOSC at national level (22 answers)

- Offering a channel to connect the national stakeholders with the EOSC governance (18 answers)

Other priorities highlighted by the countries are:

- Providing training on EOSC specific topics at national level
- Steering and supporting national priorities and investments

5.1 *Engaging stakeholders at national level into EOSC*

The primary aim of the EOSC national structures is to engage the national stakeholders into EOSC. The most common target stakeholders of the EOSC national structures are **research performing organisations, research funding organisations, research institutions** (public or private), **higher education institutes** (such as private and public universities), and **infrastructures**. **Policy makers and ministries** are also on top of the list to align the strategic position of the country in EOSC.

The most common engagement instruments are the **direct involvement of the key stakeholders in the governance of EOSC national structures** and the **set-up of thematic working groups** usually reflecting the discussions that at European level take place in the EOSC Association Task Forces. In Sweden, for example, the Association of Swedish Higher Education Institutions (SUHF) has established a reference group for coordination of universities' EOSC engagement and is an integral part of the EOSC national structure. A couple of countries (Finland and Italy) also provide **incentives** to increase the EOSC national engagement. This is done for example by organising open calls²⁵ to provide financial support for the participation of individual national stakeholders to EOSC events. Greece, Portugal and Spain are planning to do the same in the future when their EOSC national structures are operational.

When it comes to the engagement of policy makers and ministries, in many countries the EOSC national structures have **close relations to the ministries responsible for science and education or are even being coordinated by them**. The Spanish Network for e-Science carries out advisory tasks requested by the General Secretariat for Research and analyses among other things how the development of e-science affects Spanish and international research, development and innovation systems. North Macedonia, where the local EOSC national structure consists only of research performing organisations, aims to build a partnership with the Ministry of Education and Science to contribute to the upgrading of national legislation on Open Science. In Slovenia, Latvia, Switzerland and potentially in the future in North Macedonia too, the respective ministries are planning to financially support the EOSC national structures.

5.2 *Coordinating EOSC activities at national level*

Coordination has different meanings across the EOSC national structures. In many countries one important aspect of coordination is building **shared positions in the EOSC-decision making** at national level to build a coherent message that can then be channeled to the EOSC Partnership. Almost all the countries are also coordinating the **country's participation in the activities organised by the EOSC Partnership** (e.g. collection of information to contribute to the surveys and monitoring activities related to EOSC, appointment of national experts that can contribute and represent the country in the EOSC Association Task Forces, etc.). Especially in South East Europe, coordination is closely linked to the formation or implementation of the **national Open Science strategy**. In some countries such as Germany, Italy or Spain, EOSC coordination also means **coordinating scientific and technical infrastructures** at country level. Finally, in almost all the countries the role of the EOSC national structure is to **align the different EOSC/OS-related initiatives ongoing at national level** (e.g. Open Access, RDA, OpenAIRE, GEANT, etc) **to avoid duplication of efforts and maximise synergies**.

5.3 *Disseminating and promoting EOSC at national level*

In addition to various coordination activities, the EOSC national structures aim to **raise awareness of EOSC at national level**. **Dissemination and events** play an important role here. Most of the EOSC national structures organise public webinars, workshops or other events to inform the national stakeholders about the latest developments of

²⁵ <https://avointiede.fi/en/news/open-call-early-careers-and-rda-supporters-apply-free-registration-17th-rda-plenary>

EOSC and to discuss with them topical issues related to EOSC. In addition, several EOSC national structures actively **promote the EOSC Association membership** to other organisations in the country.

5.4 *Offering a channel to connect the national stakeholders with the EOSC governance*

All EOSC national structures include at least some of the EOSC Association members and observers and EOSC Steering Board representatives of the country. They are the natural channel to bring the shared country view **to the EOSC Partnership**. A shared message from all of the organisations belonging to the same country is considered a way to reinforce the country's position in the EOSC Association.

5.5 *Providing training on EOSC specific topics at national level*

In some countries the EOSC national structures organise **Open Science and EOSC trainings with the aim of building new skills, knowledge and also national infrastructures**. Establishing data stewardship programmes and providing EU-compliant digitization strategies, experience and expertise, focussing on Open Science is also in scope.

In Georgia training on EOSC specific topics is offered at national level as one of the priorities of the EOSC national structure. In Austria, the EOSC national structure is responsible for setting up competence centers and training on Open Science. In Italy, the Open Science Café²⁶ is a series of events designed to support the Italian research communities in implementing Open Science in their specific domains. Training is offered specifically to the wider community of the ICDI, not just the ICDI MoU signatories. In some cases it is seen as train-the-trainers. In Portugal, there is consideration on arranging collaboration with Centres of Expertise / service providers. Netherlands is aiming at realising a national FAIR data ecosystem with the help of professional data stewards.

Many of the EOSC national structures offer also **one to one support** to organisations on questions related to EOSC and Open Science more broadly. From stakeholders perspective, it is convenient to have an EOSC **contact point** in the country. This is especially important in the countries where there is no mandated organisation.

5.6 *Steering and supporting national priorities and investments*

In Czech Republic, the EOSC Coordination Platform has been established to create a forum to debate how to implement the EOSC initiative in the country in terms of **preparing an overall architecture of investments in the data infrastructure** and debate the political and technical approaches to these capital investments as well as the development of the necessary human resources. The respective incentives will be effected using the European Structural and Investment Funds as of 2022.

In Latvia, Higher Education and Science Joint Digital Services Center has as one of their main priorities **to develop and jointly procure high quality digital services for research institutions**.

The Dutch National Programme Open Science (NPOS) FAIR Data Table will act as the instrument to **harmonise efforts and investments related to research data and to build a national agenda to realise the aspired FAIR-compliant, federated ecosystem in the country**. This data ecosystem is foreseen as a vivid and collaborative national data landscape with a well-supported federated digital infrastructure of interoperable local FAIR data resources at RPOs and RFOs, to strengthen data use and re-use across all science domains in the Netherlands. An important element will be the realisation of a strong community of professional data stewards to assist local implementation of high-quality machine-actionable FAIR data (and associated metadata). Here, they will build upon the strength of the Dutch FAIR expert community, including the international GOFAIR organisation hosted in Leiden, the Netherlands.

²⁶ <https://www.icdi.it/en/activities/tf-cc/open-science-cafe>

6. Success factors for EOSC national structures and main EOSC engagement challenges at country level

When setting up a national EOSC structure there are a set of preconditions that are considered essential by the countries surveyed for a successful establishment: the **engagement and support of key national stakeholders, research funding organisations, policy makers and the government** is at the top of the list. Support is intended in some cases as **financial support** (seed money or support for a coordination office are a good starting point) whereas in other cases support refers to in-kind contributions from the members in terms of **human resources** that can dedicate time to launch the new structure. Support is also meant in terms of **co-ownership spirit by research stakeholders. Intensive collaboration among the stakeholders** is considered particularly important in the federal countries.

A common understanding on the main goals of the initiative among the members is also a very important aspect: the EOSC landscape is still quite fragmented and different stakeholders have a different interpretation of EOSC.

Finally, the **ability to showcase tangible benefits for the country in the short-term** is considered an important aspect to move to the operational phase.

The operational phase also requires the same preconditions as mentioned above plus three extra conditions:

- **duties and responsibilities** of all stakeholders must be **clear** to avoid duplication of effort and a smooth operation of the national structure;
- the national structure has to **fit-in the EOSC model as integral and important part**;
- the activities and services provided by the national structure must be perceived as added value services by the community to **increase attractiveness**.

For a long-term sustainability, the survey revealed that the **political, regulatory and legislative support** is considered the main component for the success of such structures. The **cultural change** that EOSC is expected to bring in making Open Science the new normal is also an essential element for confirming the existence of EOSC national structures.

Because the engagement of stakeholders in EOSC is the main trigger behind the establishment of EOSC national structure, the countries have been asked to indicate the main existing challenges in terms of national EOSC engagement:

- **Poor understanding of EOSC**
 - misunderstanding what EOSC is (e.g. presumption that EOSC = Open Access);
 - Lack of understanding about the benefits of engagement in EOSC (only few use cases illustrating benefits of EOSC exist);
 - Unclear EOSC legal framework and sustainability model including funding models to pay for use or provision of EOSC services;
 - Shortage of concise materials providing clear description and explanation of EOSC;
 - EOSC still perceived as an excessively complex organisational structure, while the perception of the concrete opportunities in scientific terms is not yet always well understood (need of disseminating the good practices especially in academia);
 - misunderstanding on how to get involved into EOSC initiative.
- **Low uptake of Open Science**
 - Low understanding Open Science as instrument for qualitative research;

- Stakeholders assign low priority to activities related to open science as there are no associated rewards or incentives;
- lack of competencies in Open Science: need of train the trainers programme; lack of dedicated staff to training.
- **EOSC target stakeholders still unclear: Is EOSC talking to researchers or research decision makers?**
- **Difficulty to reach and engage universities** starting from the difficulty of identifying the right contact person at universities
- **Difficulty to engage research infrastructures**
 - difficulty to make research infrastructures direct actors of EOSC with a strong voice, as they are not directly represented (e.g. at the EOSC Association) but are represented through their hosting research organisations
- **Low support from the relevant ministries**
- **Lack of incentives**
 - Lack of incentives to practice open science. Incentives and rewards are only related to publishing research results in journals with impact factor, so practising open science is not yet recognized in research career
 - Lack of funding for open science practices, such as open access publishing, data repositories, etc.
- **Cultural change**
 - Highly organised vertical communities are reluctant to evolve covering additional standards and procedures
 - Internal institutions' rules in using research infrastructure and resources
- **Role of national structures in the EOSC landscape still unclear**

7. Conclusions and recommendations

In addition to the EOSC Steering Board and the mandated organisations, **the EOSC Partnership should consider the EOSC national structures that have emerged in the last year as an integral part of the EOSC Ecosystem key for the success of EOSC.**

Not all the countries do necessarily need to set up an EOSC national structure if they have already efficient mechanisms to coordinate the EOSC activities and engagement at national level.

The countries that have set up EOSC national structures or are in the process of doing so have highlighted that these structures **can bring valuable benefits to the countries and also to the EOSC Partnership at large.**

Main benefits for the countries:

- *Aligning efforts and improving the country position in EOSC*
- *Ensuring equal access to EOSC information and opportunities*
- *Increasing uptake of Open Science in the country*
- *Facilitating national networking and internationalisation opportunities*
- *Providing a one-stop shop for data, services and competences*

Aligning efforts and improving the country position in EOSC

The fragmentation of the EOSC landscape at European level is mirrored at national level. Different initiatives, projects, organisations (but also departments in the same organisations) work on the same EOSC-related topics because they are not aware of ongoing or previous efforts or do not have a complete understanding of the various initiatives in areas of Open Data, Open Science, FAIR, among the others. The EOSC national structures play a fundamental role in **supporting the national stakeholders in understanding the synergies that can be established** among the different initiatives in order to **align activities and avoid duplication of effort, thus strengthening the common impact**. Approaching the alignment at national level is less complex than approaching it at European level.

In some cases, the misalignment comes directly from the national investments: **better aligned (complementary) investments in Open Science and EOSC could reduce the costs faced by the different countries**. The EOSC national structures, given their multi-stakeholder composition, could play a consultancy role for ministries and local governments on future investments.

The EOSC alignment at country level is also key to create consensus and coherent messages on EOSC at national level. This will help the country (via the EOSC Association members/observers and the EOSC Steering Board representatives) to better **channel the national / regional / domain specific priorities into the EOSC Partnership with a better chance of influencing and co-shaping the EOSC European strategy**.

Ensuring equal access to EOSC information and opportunities

Not all the organisations have the capacity and resources to join the EOSC Association (or are not yet ready to do so) or to participate into EOSC-related projects and initiatives despite their interest. The EOSC national structures are the **vehicles that can ensure inclusiveness of all the target stakeholders in EOSC**. Ensuring the engagement of all the national stakeholders and facilitating the dissemination of information, the EOSC national structures can ensure that equal opportunities are provided to all the national stakeholders contributing to the growth of the country. In Slovakia for example the EOSC national structure helped to raise awareness about the EOSC secretariat co-creation opportunities. As a result of the promotional activities at national level the Slovak University of Technology in Bratislava has been awarded the co-creation project “VIR-SCAN – Wastewater Monitoring Data as an Early Warning Tool to alert COVID-19 in the Population”. Thanks to the project the faculty could buy the necessary equipment for SARS-CoV-2 monitoring of wastewater contributing to the elaboration of effective measures for monitoring or recurrence of COVID-19 in the population.

Increasing uptake of Open Science in the country

In all the countries, the EOSC national structures support the implementation of Open Science in the country by **contributing to / creating the national strategy and guidelines**, by **influencing the legislation**, by **implementing policies**, by **coordinating activities in the country** and by **sharing best practices**. In the countries where Open Science is still not yet mature, they are playing a fundamental role to speed up the creation of a national Open Science strategy (mainly in the South East European region, in the Baltic countries and in the Balkans); in the countries where Open Science is already a well-recognised practice, they are collaborating with the existing OS initiatives and complementing them.

Facilitating national networking and internationalisation opportunities

EOSC national structures facilitate stakeholder networking at national level and open doors for internationalisation by connecting stakeholders from different regions of Europe. The presence of a national forum **facilitates the sharing of knowledge and best practices** among different entities, enabling the reuse of information, tools and services, avoiding duplication of effort and increasing the skills in the country. The EOSC national structures also create opportunities for international collaboration and can help in establishing professional relations between national and international research teams (this was highlighted especially by the South East European countries).

Providing a one-stop shop for data, services and competences

In some countries, the EOSC national structures also correspond to competence centers or are in charge of providing the national e-infrastructure / research infrastructure and data services **becoming the training and technical reference point for EOSC users in the country**.

Main benefits for the EOSC Partnership

- *Boosting EOSC awareness and stakeholder engagement*
- *Overcoming language and cultural barriers*
- *Strengthening involvement of national policy makers and enforcing EOSC-compliant policies at national level*
- *Providing expertise to support the EOSC monitoring activities and in general the EOSC developments*

Boosting EOSC awareness and stakeholder engagement

The EOSC national structures **have the capacity to mobilise the entire national research network** becoming one of the most powerful dissemination multipliers that the EOSC Partnership can leverage to create awareness about EOSC. EOSC national structures are permanent in time and are usually operating in collaboration with the ministries and governments. In many cases they are also working at local level to encourage organisations to join the EOSC Association and they are directly supporting stakeholders to increase their participation in EOSC related projects bringing expertise from the countries into EOSC.

Overcoming language and cultural barriers

The EOSC national structures facilitate stakeholder engagement as they can overcome two very common barriers in Europe: different languages and different cultures. The EOSC national structures can “talk” the same language of the national stakeholders and they also know how to best engage with them. The engagement practices that work in South East European countries might be different from those that are most effective in Central or Northern Europe and vice versa.

Strengthening involvement of national policy makers and enforcing EOSC-compliant policies at national level

The EOSC national structures in almost all the cases **have direct contacts to or involvement of ministries and local governments which makes them able to bring decision makers closer to EOSC**. This strong collaboration at national level makes the EOSC national structures **conduits for the enforcement of EOSC-compliant policies at national level**.

In Bosnia-Herzegovina for example the establishment of good mutual collaboration between the EOSC national structure and the ministry resulted in the inclusion of the Open Science principles in the future calls for research grants as well as into the Strategy for Scientific -Technological Development, Higher Education and Information Society of the Republic of Srpska for the period 2022-2028. Another example of strong collaboration between policy makers and the EOSC national structure that has had a direct impact in terms of enforcement of EOSC-compliant policies comes from Poland. Poland has incorporated a Data Management Plan in the NCN’s grant application and a requirement to share FAIR data related to publications funded by the NCN. It is foreseen that the adoption of the Data Management Plan will increase the uptake of EOSC-relevant investments by the research community.

Providing expertise to support the EOSC monitoring activities and in general the EOSC developments

The EOSC national structure are in almost all the countries multi-stakeholder structures. In many cases, because they are striving for alignment of EOSC/OS activities in the countries, they are very well connected to EOSC-related and complementary initiatives gathering together a **unique broad set of national competences**. The different expertise present in the EOSC national structures can be leveraged by the EOSC Association and Steering Board to source in a structured way the information needed for the EOSC monitoring framework. Channelling the request of information through the EOSC national structure can facilitate the collection of information. In general, the EOSC national structures can also be leveraged by the EOSC Partnership as “sounding bodies” for all the EOSC activities that deserve national perspectives or different expertise.

In order to capitalise the potential benefits described above:

- **the role and positioning of the EOSC national structures should be better clarified and recognised by the EOSC Partnership.**

- Given their multi-stakeholder structure and the strong links with the ministries and the local governments, the EOSC national structures could play a role in the **EOSC monitoring framework**;
 - Because all the EOSC national structures **are striving for permanent structures** the EOSC Partnership should consider the EOSC national structures as powerful **long-term engagement channels to reach out to the EOSC national stakeholders**;
 - given the efforts they are performing at national level in terms of engagement, the EOSC national structures should be considered as **sounding bodies** for the EOSC Partnership consultations, for example they could provide useful insights to the Researcher Engagement & Adoption Task Force of the EOSC Association.
- **structured communication mechanisms** facilitating regular interaction and exchange of information between the EOSC national structures and the EOSC Partnership **but also among the different national structures** (exchanging best practices and lessons learnt could be beneficial for the different countries, especially for those in the set up phase of these national structures) should be put in place
 - the EOSC national structures can act as **reference contact points for the EOSC national stakeholders in the country**. This study is the first effort to map which are the authoritative contacts that national stakeholders can reach out to in the different countries. As the landscape is evolving very rapidly, an update of this report is suggested in a year time (maybe as part of the upcoming project awarded for the HORIZON-INFRA-2021-EOSC-01-02 Supporting the development and coordination of activities of the EOSC Partnership). A dynamic map on the eossc.eu website could be also a good visual instrument to provide the information included in this study.

Annex A – List of interviewed EOSC national structures

Country	EOSC national structure	Interviewees & contact points
Albania	Albanian Initiative for Open Science Cloud (AIOSC)	<ul style="list-style-type: none"> Interviewees: Academic Network of Albania (RASH)
Armenia	Set-up in progress	<ul style="list-style-type: none"> Interviewees: Institute for Informatics and Automation Problems of the Armenian National Academy of Sciences (IIAP-NAS-RA)
Austria	EOSC Support Office Austria/Austrian EOSC Mandated Organisation	<ul style="list-style-type: none"> Interviewees: Technical University of Vienna (TU Wien), Graz University of Technology (TU Graz), University of Vienna (UNIVIE) Contact point: Paolo Budroni, Coordinator of the Austrian EOSC Mandated Organisation Initiative (Chair of GA), paolo.budroni@tuwien.ac.at Other: Ilire Hasani-Mavriqi, Ilire ilire.hasani-mavriqi@tugraz.at, Chair of Management of EOSC Support Office Austria
Belgium	ICC-FCC OS EOSC Taskforce: International Co-operation Commission (ICC) and Federal Co-operation Commission (FCC) Open Science EOSC Taskforce	<ul style="list-style-type: none"> Interviewees: Belgian Science Policy Office (BELSPO), National Fund for Scientific Research (FNRS), and the Research Foundation – Flanders (FWO) Website: https://www.belspo.be/belspo/coordination/addgrp.asp?l=fr&group=CFS-CIS%20Open%20Science Contact point: eric.laureys@belspo.be Other: bart.dumolyn@vlaanderen.be
Bosnia and Herzegovina	Set-up in progress	<ul style="list-style-type: none"> Interviewees: University of Banja Luka (UNIBL) Website: https://nauka.link Contact point: info@nauka.link
Bulgaria	Bulgarian Initiative for Open Data and Cloud Computing (BgI-ODCC)	<ul style="list-style-type: none"> Interviewees: Institute of Information and Communication Technologies/Bulgarian Academy of Sciences (IICT-BAS) Website: https://bpos.bg/
Croatia	The Croatian Open Science Cloud (locally HR-OOZ) Initiative	<ul style="list-style-type: none"> Interviewees: University of Zagreb Computing Center (SRCE), Ruđer Bošković Institute (RBI) Website: https://www.srce.unizg.hr/en/hr-ooz Contact point: hr-ooz@srce.hr
Czech Republic	EOSC Coordination Platform	<ul style="list-style-type: none"> Interviewees: Ministry of Education, Youth and Sports, e-INFRA CZ large research e-infrastructure Website: https://www.e-infra.cz/eosc Contact point: Lukas.Levak@msmt.cz Other: ludek@ics.muni.cz; Marek.Vysinka@msmt.cz
Denmark	The National EOSC Coordination Committee	<ul style="list-style-type: none"> Interviewees: DeiC Danish e-Infrastructure Cooperation
Faroe Islands	Not planned	<ul style="list-style-type: none"> Interviewees: Research Council Faroe Islands
Finland	EOSC Finnish Forum	<ul style="list-style-type: none"> Interviewees: Academy of Finland, CSC-IT Center for Science, Ministry of Education and Culture (OKM) and the Federation of the Finnish Learned Societies (TSV)

		<ul style="list-style-type: none"> • Website: avointiede.fi/en/networks/eosc/eosc-finnish-forum • Contact point: eosc-ff-support@postit.csc.fi
France	Collège EOSC France	<ul style="list-style-type: none"> • Interviewees: Minister of Higher Education, Research and Innovation (France) • Contact point: volker.beckmann@recherche.gouv.fr
Germany	Nationale Forschungsdateninfrastruktur (NFDI) e.V. (National Research Data Infrastructure)	<ul style="list-style-type: none"> • Interviewees: National Research Data Infrastructure (NFDI) • Website: www.nfdi.de • Contact point: info@nfdi.de
Georgia	Georgian Open Science Cloud Initiative (GOSCI)	<ul style="list-style-type: none"> • Interviewees: Georgian Research and Educational Networking Association (GRENA)
Greece	Hellenic Open Science Initiative (EPAE/HOSI)	<ul style="list-style-type: none"> • Interviewees: Greek Research and Technology Network (GRNET), Athena Research Center (ATHENA RC) • Contact point: info@grnet.gr
Hungary	Open Science Forum (Nyílt Tudományos Fórum)	<ul style="list-style-type: none"> • Interviewees: Governmental Agency for IT Development (KIFU), University of Debrecen (DE) • Website: www.openscience.hu and https://kifu.gov.hu/ni4os/ • Contact point: ni4os@kifu.hu
Italy	Italian Computing and Data Infrastructure (ICDI)	<ul style="list-style-type: none"> • Interviewees: Italian Computing and Data Infrastructure (ICDI) • Website: www.icdi.it/en • Contact point: info@icdi.it
Latvia	Higher Education and Science Joint Digital Services Center	<ul style="list-style-type: none"> • Interviewees: Ministry of Education and Science of Latvia • Contact point: Aleksandrs-martins.blums@izm.gov.lv
Moldova	Set up in progress	<ul style="list-style-type: none"> • Interviewees: Research and Educational Networking Association of Moldova (RENAM)
Montenegro	National open science cloud initiative in Montenegro (NIOON)	<ul style="list-style-type: none"> • Interviewees: University of Montenegro (UoM)
North Macedonia	National Open Science Cloud Initiative in North Macedonia (NOSCI.MK)	<ul style="list-style-type: none"> • Interviewees: Ss. Cyril and Methodius University in Skopje (UKIM) • Website: https://www.nosci.mk/ • Contact point: nosci@nosci.mk
Norway	Under planning	<ul style="list-style-type: none"> • Interviewees: Ministry of Education and Research, Research Council of Norway
Poland	EOSC Network – Poland	<ul style="list-style-type: none"> • Interviewees: National Science Center (NCN)
Portugal	Under planning	<ul style="list-style-type: none"> • Interviewees: Foundation for National Scientific Computing (FCCN), Foundation for Science and Technology (FCT)
Republic of Cyprus	Cyprus Open Science Initiative	<ul style="list-style-type: none"> • Interviewees: Cyprus Institute (CYI), University of

		Cyprus (UCY)
Romania	Romanian Open Science Cloud Initiative (RO-NOSCI)	<ul style="list-style-type: none"> Interviewees: Slovak Centre of Scientific and Technical Information (CVTISR) Website: eraportal.sk/en/eraportal/open-access-and-eosc/european-open-science-cloud-eosc/
Serbia	TONus - Team for Open Science in Serbia	<ul style="list-style-type: none"> Interviewees: University of Belgrade (UoB), Institute of Physics Belgrade (IPB)
Slovakia	National EOSC working group	<ul style="list-style-type: none"> Interviewees: Slovak Centre of Scientific and Technical Information (CVTISR) Website: www.cvtisr.sk Contact point: otvorenaveda@cvtisr.sk
Slovenia	Slovenian Open Science Community	<ul style="list-style-type: none"> Interviewees: Academic and Research Network of Slovenia (ARNES), University of Maribor (UMUKM) Website: odprtaznanost.si Contact point: info@odprtaznanost.si
Spain	Spanish Network for e-Science (Red Español de e-Ciencia)	<ul style="list-style-type: none"> Interviewees: Polytechnic University of Valencia (UPV) Website: www.e-ciencia.es/en/ Contact point: oficina-eciencia@upv.es
Sweden	National Reference Group for EOSC	<ul style="list-style-type: none"> Interviewees: Swedish Research Council Website: www.vr.se/english/mandates/open-science/open-access-to-research-data/european-open-science-cloud---eosc.html Contact point: openseience@vr.se
Switzerland	Swiss National Strategy for Open Science (Open Access and Open Research Data)	<ul style="list-style-type: none"> Interviewees: ETH Zurich
The Netherlands	The National Programme Open Science (NPOS) FAIR Data Table	<ul style="list-style-type: none"> Interviewees: Ministry of Education, Culture and Science, Ministry of Economic Affairs and Climate Policy, Chair NPOS FAIR Data Table Website: www.openseience.nl/en/national-programme-open-science
United Kingdom	Set-up in progress	<ul style="list-style-type: none"> Interviewees: JISC, UK Research and Innovation (UKRI) Contact point: UKOSC-coords@jiscmail.ac.uk

Annex B – Country Analysis

Albania

Country: ALBANIA <i>Information validated by: Academic Network of Albania (RASH)</i>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Set-up in progress
Name of the EOSC national structure	Albanian Initiative for Open Science Cloud (AIOSC)

Established on / Estimated start	2022
Duration of the mandate	Aiming for permanent
Main purpose	Open Science is part of our national strategy 2021-2026 for education and science and our engagement in EOSC serves this purpose, the integration of Albanian scientific research in the European scheme of Open Science. Given that Albania is moving towards European integration, the necessary steps are being taken by the relevant ministry to create the Albanian framework for Open Science. This will also serve the internationalization of Albanian universities, one of the pillars of our higher education for the future.
Objectives	<ul style="list-style-type: none"> • the internationalization of Albanian science • increase the value of publication through the open science instrument • increasing the access of companies to the Albanian scientific product • the internationalization of Albanian universities • increase cooperation between Albanian and foreign researchers
Main priorities:	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Coordinating EOSC activities at national level
Governance structure:	A single organisation – RASH – Academic Network of Albania
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	Yes. RASH is currently the mandated organisation.
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	RASH has joined EOSC Association as a member and is leading the formation of the initiative.
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	Yes. RASH is currently the mandated organisation.
Profile of the EOSC national structure:	Service provider for research
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	RASH has joined EOSC Association as a member and is leading the formation of the initiative.
Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • OpenAIRE • GEANT
Main drivers and approach to set up a EOSC national structure	<p>Top-down approach (central decision of the related ministry or national research funding organisation)</p> <p>Main drivers triggering the set up of the national structure:</p> <ul style="list-style-type: none"> • Ministry of Education • RASH • NASRI - National Agency for Scientific Research

	<ul style="list-style-type: none"> • Rector's Conference
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes. It is currently being formed as part of the initiative.
Funding/revenue stream model	With the legal act for Open Science will specified also the financial issues, but I think will be supported from the Ministry RASH will contribute with ICT infrastructure with in-kind contributions
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations into the EOSC Association • Organisation of public webinars/events to: <ul style="list-style-type: none"> ○ inform national stakeholders about the EOSC latest developments ○ collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) ○ discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.) • Meeting face to face with single research institutes or universities explaining the benefits of OS • Discussion with the NASCRI to make the participation in open science initiative as eligibility participation condition in open calls
EOSC national structure target stakeholders overview	RASH is a consortia of Institutions and responsible for creating the OSC in Albania. It therefore has a list of interested stakeholders already established under its umbrella and will expand on this of the NOSCI. Currently stakeholders include all academic institutions of Albania. Also has the related Ministry's support for the initiative.
Success factors for the set-up/operation/sustainability of the EOSC national structure	Set-up of the initiative <ul style="list-style-type: none"> • Misunderstanding from open Science and interpretation as free access • The university autonomy made a bit difficult the implementation Operation <ul style="list-style-type: none"> • New investment in infrastructure • Development of services and SW Sustainability <ul style="list-style-type: none"> • Financial coverage of initiative and services for OSC
Main challenges	Stakeholder engagement at national level <ul style="list-style-type: none"> • Legal framework • Understanding OS as instrument for qualitative research National initiative set-up/ operation/ maintenance <ul style="list-style-type: none"> • financial coverage
Main benefits of EOSC national engagement	For the country <ul style="list-style-type: none"> • Presentation of Albanian research to European partners • Standardization of cloud services • Participation on open calls For the EOSC Governance/future developments

	<ul style="list-style-type: none"> • Participation actively in policymaking for OSC • New collaboration with European universities
Main benefits of the presence of an EOSC national structure in the country	<p>For the country</p> <ul style="list-style-type: none"> • Make research results accessible for all academic community and more • Interconnect universities and industry through OS access
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	Yes, the acceleration of our Membership request as National member in EOSC Association will facilitate our position in interlocution with Albanian stakeholders for OS.

Armenia

<p>Country: ARMANIA <i>Information validated by: Institute for Informatics and Automation Problems of the Armenian National Academy of Sciences (IIAP-NAS-RA)</i></p>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Set-up in progress
Name of the EOSC national structure	Name under definition
Duration of the mandate	Aiming for permanent
Main priorities:	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Offering a channel to connect the national stakeholders with the EOSC governance
Governance structure:	Not defined yet
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	Yes
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	Institute for Informatics and Automation Problems of the National Academy of Sciences of the Republic of Armenia (IIAP-NAS-RA) is currently an observer in the EOSC Association and is leading the creation of the initiative.
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	Yes.
Profile of the EOSC national structure:	Research performing organisation
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Institute for Informatics and Automation Problems of the National Academy of Sciences of the Republic of Armenia (IIAP-NAS-RA) is currently an observer in the EOSC Association and is leading the creation of the initiative. No other organisation is currently reporting any other association with EOSC.

Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • OpenAIRE • NGI • GEANT
Main drivers and approach to set up a EOSC national structure	<ul style="list-style-type: none"> • Bottom-up
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations into the EOSC Association • Organisation of public webinars/events to: <ul style="list-style-type: none"> ○ inform national stakeholders about the EOSC latest developments ○ collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) ○ discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.)
EOSC national structure target stakeholders overview	Currently creating user communities, trying to identify all stakeholders.

Austria

Country: AUSTRIA Information validated by: Paolo Budroni (TU Wien), Ilire Hasani-Mavriqi (TU Graz), Lisa Hönegger (UNIVIE), Barbara Sánchez Solís (TU Wien)	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Available, in place
Name of the EOSC national structure	EOSC Support Office Austria/Austrian EOSC Mandated Organisation
Established on / Estimated start	13.10.2021 first General Assembly
Duration of the mandate	Permanent
Main purpose	Strengthening innovation and competitiveness as well as sustainability, transformation and increased internationalisation in Austria and Europe by establishing a real “Austrian Mandated Organization”.
Objectives	<ul style="list-style-type: none"> • Support and strengthen Austrian institutions in their work for EOSC • Capacity building, both in terms of infrastructure and in terms of knowledge and skills • Networking and exchange of experience with partners of the EOSC Support Office and beyond, e.g. stakeholders from the political, social and economic environment • Connecting the Austrian with the European level of EOSC

	<ul style="list-style-type: none"> • Coordination of the various inquiries and work assignments of the EOSC Association AISBL and its committees at the Austrian level
Main priorities:	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Offering a channel to connect the national stakeholders with the EOSC governance • Coordinating EOSC activities at national level
Governance structure:	One legal entity bringing together a consortium of organisations
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	Yes. The EOSC Support Office Austria will be the operative entity of the Austrian Mandated Organisation.
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	The EOSC Support Office Austria will represent the Austrian Mandated Organisation in the EOSC Association. A national EOSC networking initiative coordinated by the Austrian EOSC Steering Board member will be continued as a reflection group and open forum to the Austrian initiative (the EOSC Support Office Austria). (e.g., the national initiatives include representatives of the EOSC Association, etc.)
Profile of the EOSC national structure:	The EOSC national structure is composed by research performing organisations; service providers for research; museums
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Yes, all current members or observers are included in the set up of the EOSC Support Office Austria. They are participating in the Consortium and MoU that is designed to coordinate the Austrian EOSC activities.
Direct links with other EOSC/OS initiatives active in the country	At this point, the two EOSC support projects, EOSC Secretariat and EOSC-Pillar are directly collaborating with the national initiative. The EOSC Support Office is also linked to a ministry-funded digitization project that aims at strengthening the FAIR principles and establishing next generation repositories. It is also linked to the initiatives RDA Austria and the FAIR Office Austria. The representatives from the partners are involved in all mentioned projects and initiatives. A further direct link related to OS initiatives is the continuous interaction with national funding agencies, and three involved ministries, which are respectively responsible for science and education, infrastructures and the implementation of the PSI Directive.
Main drivers and approach to set up a EOSC national structure	<p>Hybrid approach. Main drivers triggering the set-up of the national initiative:</p> <ul style="list-style-type: none"> • Need to set up research and research data infrastructures aligned with a) researchers' communities b) research support units c) funding bodies demands or requirements • Enhance FAIR and permanent access to data spaces (software, collections, digitized material, digital assets and resources) and hardware • Providing EU-compliant digitization strategies, experience and expertise, focussing on OS • Need to improve skills and training and to align the establishment of data stewardship programmes

Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes. The governance was defined by the partners of the EOSC Support Office and is described in a consensual agreement (MoU).
Funding/revenue stream model	At the moment, the national initiative is supported and solely financed by in-kind contribution from the partner institutions. It is still to be discussed and defined if there will be additional funding or revenue streams.
Main activities performed by the EOSC national structure	<p>At its current status, these activities are performed by the national initiative (further activities are planned for the future):</p> <ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC through different Working Groups aligned with the Task Forces of the EOSC Association AISBL • Disseminating and promoting EOSC at national level through different channels, workshops, webinars and collecting and managing information through a National EOSC Mandated Organisation WIKI • Offering a channel to connect the national stakeholders with the EOSC governance, though brokerage of information and offering qualified and trusted information • Coordinating EOSC activities at national level through a MoU among all Members, Observers and other EOSC related activities/initiatives in Austria (principle of inclusion) • Creation of a reflection Group with think tank character, composed also by external members/experts (Austrian EOSC Café - Open Forum). • Direct involvement of the Austrian Ministry of Science and Education (BMWFV) in all activities of the Mandated Organisation (through participation in the WIKI and through the coordination of the Austrian EOSC Café • Continuous and permanent Landscaping and Monitoring activity and release of an Austria Country Report on a quarterly basis • Creation of a Working Group dedicated to the generation of KPIs and their implementation
EOSC national structure target stakeholders overview	n/a (this will likely be defined in a working group addressing the topics of stakeholder engagement - ALL stakeholders relevant to EOSC)
Success factors for the EOSC engagement at country level	n/a Comment: Currently, a working group for KPIs is being established to define these factors. This WG will maintain a close working link to the continuous monitoring WG mentioned above
Success factors for the set-up/operation/sustainability of the EOSC national structure	n/a Comment: Currently, a working group for KPIs is being established to define these factors
Engagement best practices	<ul style="list-style-type: none"> • The definition of the rules of procedure and internal regulations were defined in a consensual and structured process. The result is an MoU with consensual character • The creation of a national Wiki with defined terms of use with the use of CC-BY licence by default for its content. • The creation of a Reflection Group, which might be composed by external parties. Interested parties and initiatives are allowed to

	<p>participate. The Reflection Group is working since 2017 and was a relevant entity while preparing the launch of the EOSC (November 2018)</p>
Main challenges	<ul style="list-style-type: none"> • Stakeholder engagement at national level & EOSC national structure set-up/operation/maintenance: <ul style="list-style-type: none"> ○ definition of resources ○ requirements of resources ○ the allocation of the resources ○ to maintain fairness among Partners (in order to respect the principles of openness, inclusion, balance of decisional power) ○ community building, in the sense of establishing real partnership in a highly competitive field of actions
Main benefits of EOSC national engagement	<ul style="list-style-type: none"> • Engagement activity: Engaging with stakeholders at national level through different Working Groups aligning them to the Task Forces of the EOSC Association AISBL • Promotion of EOSC: Disseminating and promoting EOSC at national level through different channels, workshops, webinars and collecting and managing information through a national EOSC Mandated Organisation Wiki • Aligning activities and efforts in establishing data stewardship programmes, enhancing skills and improving training • Distribution of trusted information: Offering a channel to connect the national stakeholders with the EOSC governance, though brokerage of information • Bundling of EOSC building processes at domestic level: Coordinating EOSC activities at national level • Thinking out of the box: Creation of a Reflection Group with think-tank character to promote the networking with similar Austrian and European institutions working in similar projects, and ensuring that Austria is connected with the rest of the world in research matters, promoting access to decision-makers in Austria and in the European Union, and facilitating access to qualified and structured data and information • Involvement of decision makers: Direct involvement of the Austrian Ministry of Science and Education (BMFWF) in all activities of the Mandated Organisation (through participation in the Wiki and through the coordination of the Austrian EOSC Café) • Awareness about all relevant processes: Continuous and permanent landscaping and monitoring activities and release of an Austrian Country Report on a quarterly basis • Shift of mentality: Creation of a Working Group dedicated to the generation of KPIs and their implementation • For the EOSC Governance/future developments: Contribute with “certified” experts and qualified knowledge to the EOSC building process
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	<p>Improve the continuous information to the national initiatives and create a dedicated forum for them, underlining their coordination role/activities.</p>

Belgium

<p>Country: BELGIUM <i>Information validated by: Belgian Science Policy Office (BELSPO), National Fund for Scientific Research (FNRS), and the Research Foundation – Flanders (FWO)</i></p>	
Status of the EOSC national structure	■ Available, in place.
Name of the EOSC national structure	ICC-FCC OS EOSC Taskforce - International Co-operation Commission (ICC) and Federal Co-operation Commission (FCC) Open Science EOSC Taskforce
Established on / Estimated start	October 2013
Duration of the mandate	Permanent
Main purpose	The three entities (BELSPO, FNRS, and FWO) actively engaged in Open Science, the federal, Flemish authorities and the Wallonia-Brussels Federation, who consult within the ICC-FCC Open Science EOSC Taskforce have all committed to the EOSC Partnership. Belgium is represented in the EOSC Steering Board and provided a mandated organization to the EOSC Association.
Objectives	Foster Belgian participation with EOSC through sensitizing or creation of infrastructures. Participate in the EOSC decision making process accordingly with Belgium's engagements regarding Open Science as expressed in Belgium and its entities' multiple national and international engagements.
Main priorities	<ul style="list-style-type: none"> • Disseminating and promoting EOSC at national level • Offering a channel to connect the national stakeholders with the EOSC governance • Coordinating EOSC activities at national level
Governance structure:	A coordination group: ICC or FCC groups, or fused ICC-FCC groups are set up by law to allow for consultation on matters of interest to the Federal Authority and the Federated Entities at the international level and Belgian levels. They are made up of officials representing the federal, community and regional authorities.
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	No, A consensus was reached to have Belgium represented in the EOSC Association by the National Research and Education Network (NREN): Belnet (https://www.belnet.be/en/communities/higher-education)
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	Both the Belgian representative in the EOSC Steering Board and the Belgian representative of the mandated organization to the EOSC Association are part of the ICC-FCC OS EOSC Taskforce. They report at a national and regional level.
Does / Will the EOSC national structure have the mandate to represent the Member State in the EOSC Partnership?	Every Belgian entity participating in the EOSC Partnership will do so individually. Belgian representation with a EOSC Partnership Board will however be subject to consultation within the ICC-FCC OS EOSC Taskforce.
Profile of the EOSC national structure:	Science policy administrations

Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	The Belgian Mandated Organization representative reports to the ICC-FCC OS EOSC Taskforce. Under the umbrella of ICC-FCC open science group, representatives of other Belgian members and observers are also invited.
Direct links with other EOSC/OS initiatives active in the country	The federal Open Science advisor, the Flemish Open Science Board and the Groupe de Travail Open Science of the Wallonia-Brussels Federation are represented in the ICC-FCC OS EOSC Taskforce. So were/are EOSC Pillar and OpenAire. All Belgian civil servants covering Open Science matters with the OECD, UNESCO, the EC and the Council of the EU (ERAC) have a seat in the ICC-FCC OS EOSC Taskforce.
Main drivers and approach to set up a EOSC national structure	Top-down approach (central decision of the related ministry or national research funding organisation). Main drivers triggering the set-up of the EOSC national structure: <ul style="list-style-type: none"> • Belgian Science Policy Office (BELSPO - federal) • Departement Economie, Wetenschap en Innovatie (EWI - Flanders) • Direction générale de l'Enseignement supérieur, de l'Enseignement tout au long de la vie et de la Recherche scientifique (DGESVR - Wallonia-Brussels Federation)
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	The ICC-FCC OS EOSC Taskforce has a rotating presidency, official members (administrations) and experts (stakeholders).
Funding/revenue stream model	The national initiative does not require financing.
Main activities performed by the EOSC national structure	The ICC-FCC OS EOSC Taskforce is for consulting and common decision making only.
EOSC national structure target stakeholders overview	Administrations, funders, service providers, RPOs, infrastructures.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • True and not just perceived added value for participants • Focus on FAIR Open Access • Efficient governance structure • Top class ICT backup
Success factors for the set-up/operation/sustainability of the EOSC national structure	<ul style="list-style-type: none"> • Intensive collaboration between the stakeholders in the federal and regional initiatives • Incentives for the researchers and research communities • Visible benefits, use cases and impact • Connection to the national nodes of research infrastructures • Sustainable and complementary e-services • A federation of regional and national e-infrastructures • Use of seed money
Engagement best practices	Best practices should be related to engagement of stakeholders (policy makers, research communities, etc.): e.g. The Belgian Science Policy Office (BELSPO), the State Archives and the Royal Belgian Institute for Natural Sciences work together in transforming a Social Sciences and Humanities data repository into an all-round multipurpose data repository for all interested RPO within the EOSC framework.

Main challenges	<ul style="list-style-type: none"> For some stakeholders in academia, EOSC still perceived as an excessively complex organizational structure, while the perception of the concrete opportunities in scientific terms is not yet always well understood (need of disseminating the good practices) Lack of availability of academic stakeholders to engage in and dedicate time to the EOSC.
Main benefits of EOSC national engagement	<ul style="list-style-type: none"> For the country: Credibility of the sensitizing efforts in favour of Open Science For the EOSC Governance/future developments: Legitimacy to the Belgian representation with EOSC
Main benefits of the presence of an EOSC national structure in the country	<ul style="list-style-type: none"> For the country: Aligning efforts and emulating best practices between different entities For the EOSC Governance/future developments: The creation of a network of goodwill on which to build in the future

Bosnia and Herzegovina

Country: BOSNIA AND HERZEGOVINA <i>Information validated by: University of Banja Luka (UNIBL)</i>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Set-up in progress
Name of the EOSC national structure	Name under definition
Estimated start	Estimated to have the MoU signed by the end of 2021
Duration of the mandate	Temporary, with possibility to renew
Main purpose	The activities on establishing the NOSCI have been launched in order to establish a more formal way of organizing and coordinating the open science activities. Through engaging with EOSC we aim to offer access to the resources, tools, services and know-how, not available in the country, to researchers and related institutions. This will enable participation in new projects, creating new technologies and services, opening up the possibility for creating new jobs and markets, which would attract researchers, engineers, and innovators both to academia and industry as well as ease the current brain drain negatively affecting the region.
Objectives	<ul style="list-style-type: none"> officially participate in the EOSC activities in order to maximize the potential benefits for the country, coordinate and organize efforts of its members regarding the open science and EOSC, promote and raise awareness on open science and EOSC, provide open science infrastructures and services for the benefit of the research and education community to carry out research, interconnect with leading international open science structures and researchers.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> Engaging stakeholders at national level into EOSC Disseminating and promoting EOSC at national level Offering a channel to connect the national stakeholders with the EOSC governance

Governance structure:	<p>A consortium. We aim to establish a Joint Research Unit (JRU) including, but not limited to, the following parties:</p> <ul style="list-style-type: none"> • University of Banja Luka, • University of Sarajevo, University of East Sarajevo, • University of Tuzla, • University of Zenica, • University of Bihać, • University of Mostar • Džemal Bijedić University of Mostar, • Ministry of Scientific and Technological Development, Higher Education and Information Society of Republic of Srpska, • Federal Ministry of Education and Science, • Ministry of Civil Affairs of Bosnia and Herzegovina,
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	Yes
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	University of Banja Luka is member of EOSC Association as observer.
Profile of the EOSC national structure:	The national initiative will be a consortium of Research performing organisations, Research funding organisations, and Policy makers.
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Yes. University of Banja Luka is currently the only member of EOSC Association as observer and is leading the formation of the initiative. University of Banja Luka joined European University Association's platform for EOSC contributing in future discussions and work on setting up joint priorities that are of strategic relevance to universities.
Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • OpenAIRE – BiH representatives in the OpenAIRE are the University of Banja Luka and NGO CREDI from Sarajevo. They are also members of the OpenAIRE working group that identified following priorities to work on: recommendations on how to align practices and policies regarding EOSC; advanced training for OpenAIRE NOADs on EOSC state-of-the-art; provide practical recommendations on data to allow data transfer between institutions and EOSC (using OpenAIRE services) and identify how OpenAIRE and EOSC could/should work together. • Network of Open Access Research Infrastructures (OA Network) is established in WBC and supported by RCC. The Steering Committee and Advisory Council have been verified. The Advisory Council will choose the priority actions the OA Network should focus on by the end of 2021 and give guidance to the OA Network.
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>Hybrid approach. Main drivers triggering the set up of the national initiative:</p> <ul style="list-style-type: none"> • To enable effective coordination and development of the open science initiative and related user support structures • Pooling resources in order to increase effects of individual efforts • Raising awareness on open science beyond usual suspects

	<ul style="list-style-type: none"> Easing the brain drain through promotion of modern ways to work and cooperate with international partners
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes. JRU Steering Committee will be the management body of the JRU. It will consist of one appointed representative from each JRU Member. The role of the Steering Committee is to plan the activities of the JRU, convene meetings, and promote the exchange of data on Open Science Infrastructures, training, support and dissemination activities. JRU Steering Committee's decisions are to be made by consensus of all JRU Members.
Funding/revenue stream model	The national initiative is not financially supported. It will not create obligations of a financial nature between the Parties. Each Party will cover its own costs in participating in NOSCI.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> EOSC Awareness creation at national level Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level Engagement of organisations into the EOSC Association Organisation of public webinars/events to: <ul style="list-style-type: none"> inform national stakeholders about the EOSC latest developments collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.)
National initiative target stakeholders overview	Target stakeholders are 8 public universities in B&H, as well as 3 main ministries involved in policy making and funding scientific research.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> Government involvement and support Research community support Endorsement of open science practices by policy makers, funding bodies, promotion committees, etc. Availability of access to resources, tools and platforms that would be otherwise not available in the country
Success factors for the set-up/operation/sustainability of the EOSC national structure	Set-up <ul style="list-style-type: none"> Engagement of main stakeholders Governmental support Operation <ul style="list-style-type: none"> Stakeholders' involvement Sustainability <ul style="list-style-type: none"> Continued collaboration between stakeholders Attracting new stakeholders Existence of incentives to practice open science Existence of funding for open science practices (e.g. data repositories, open access publishing, data stewards...)
Engagement best practices	As a result of project activities and good mutual collaboration, the Ministry for Scientific-Technological Development, Higher Education and Information Society (MNRVOID) of the Republic of Srpska expressed interest to include OS principles in the future calls for

	research grants as well as incorporating OS and RRI principles into the Strategy for Scientific-Technological Development, Higher Education and Information Society of the Republic of Srpska for the period 2022-2028.
Main challenges	<p>Stakeholder engagement at national level</p> <ul style="list-style-type: none"> • Lack of understanding about the benefits of engagement in EOSC • Stakeholders assign low priority to activities related to open science • Lack of incentives to practice open science • Lack of funding for open science practices, such as open access publishing, data repositories, etc. <p>national initiative set-up/ operation/ maintenance</p> <ul style="list-style-type: none"> • Complicated governmental structure of B&H
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • Access to resources, tools and platforms that would be otherwise not available in the country • Easier sharing and re-use of the research data, which increases quality and reliability of science and productivity of researchers. • Connection with stakeholders from other regions of Europe • Sharing of experiences and best practices. <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Facilitates the sharing of knowledge and experiences • Supports decentralization and regional growth.
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • National stakeholders will have the opportunity to co-shape the overall strategic agenda for research EU. • National stakeholders will have the opportunity to implement the SRIA, which is the basis for developing the priorities for the next EC work program Horizon Europe (2021-2027). • Researchers will have easier access to Horizon Europe funding (being part of the developments, collaborating in consortia, etc.) • Increases productivity of science and improves national performance in DESI indicators. <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • More efficient contact for the country level activities. • May boost EOSC presence and voice in the local communities. • Eases dissemination at country level.
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	<ul style="list-style-type: none"> • Provide a clear list of benefits for stakeholders, including research, policy and economic benefits. • Provide a list of open science best practices that stakeholders across Europe have adopted, along with their impact in terms of participation in new projects, creating new technologies and services, opening up the possibility for creating new jobs and markets, which would attract researchers, engineers, and innovators both to academia and industry. DESI indicators may also be used.

Bulgaria

Country: BULGARIA

Information validated by: Institute of Information and Communication Technologies/Bulgarian Academy of Sciences (IICT-BAS)

Status of the EOSC national structure	■ Set-up in progress
Name of the EOSC national structure	Bulgarian Initiative for Open Data and Cloud Computing (BgI-ODCC)
Estimated start	September 2021
Duration of the mandate	Aiming for permanent
Main purpose	The main purpose is to provide faster and seamless sharing of publications, data and other digital research outputs and thus strengthen the communication and collaboration between scientists. The initiative aims to open opportunities for new levels of integration and raise awareness to facilitate a global, sustainable and cooperative Open Science.
Objectives	The main goal of engagement with EOSC is to provide researchers and people who are interested, with access to scientific publications reviewed by independent experts, reliable research data and results, in an open and non-discriminatory manner at the earliest possible stage of the dissemination process, as well as to provide an opportunity for their use and reuse.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Offering a channel to connect the national stakeholders with the EOSC governance
Governance structure:	<p>During the inauguration meeting on 22.07.2021 (online) the following organisations declare to sign the MoU in the next two months (up to end of September 2021):</p> <ul style="list-style-type: none"> • Institute of Information and Communication Technologies, Bulgarian Academy of sciences (IICT-BAS); • Sofia University “St. Kliment Ohridski” (SU); • Institute of Mathematics and Informatics, Bulgarian Academy of Sciences (IMI-BAS); • National Institute of Geophysics, Geodesy and Geography, Bulgarian Academy of Sciences (NIGGG-BAS) • Institute of Mechanics, Bulgarian Academy of Sciences (IMech-BAS); • Technical University of Sofia (TU-Sofia) • Medical University, Sofia (MU-Sofia); • University of Plovdiv “St. Paisiy Hilendarski” (Uni-Plovdiv) • University of Library Studies and Information Technologies, Sofia (ULSIT –Sofia) <p>A secretariat was selected (three people - one each from IICT, IMI, SU) to prepare the kick-off meeting.</p> <p>The whole process of founding the BgI-ODCC is monitored by representatives of the Ministry of Education and Science.</p> <p>Other organizations are expected to join by the end of September.</p>
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	Yes

What is / will be the relation between the EOSC national structure and the EOSC Partnership?	The national initiative will include representatives of the EOSC Association
Profile of the EOSC national structure:	<ul style="list-style-type: none"> • Research performing organisation • Service provider for research
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Yes
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>Hybrid approach. Main drivers triggering the set up of the national initiative:</p> <ul style="list-style-type: none"> • Existence of local stakeholders who are willing to use FAIR data principles and implement Open Science and OSC services • Engaging of policy makers and governmental bodies to create OSC ecosystem on national level • Creation and funding the national programs to stimulate researchers in the area of OS and OSC.
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes. It is under formation.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations into the EOSC Association • Organisation of public webinars/events to: <ul style="list-style-type: none"> - inform national stakeholders about the EOSC latest developments - collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) <p>discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.)</p>
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • Governmental support • National funding in the research and e-Infrastructures.
Success factors for the set-up/operation/sustainability of the EOSC national structure	<ul style="list-style-type: none"> • Set-up: Covering the main actors which can contribute to development of the OSC ecosystem on the national and European level • Operation: Involvement of the core organizations in the operation and government of the initiative • Sustainability: Balancing of funding by European and national sources
Engagement best practices	Creation of National repository and national portal for Open Science and publish of the National Open Science Plan.
Main challenges	Lack of awareness of the benefits of EOSC

Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • Sharing knowledge in the area of “Open Science” and “Open Science Cloud” among the OSC community on the national level. • Identifying specific needs of the OSC community in the country • Increasing collaboration of the researchers from different scientific fields by giving access to Open Data repositories and Open Science Cloud services on the national level. <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Inclusivity of small countries with small potential of researchers in area of OS and OSC • Understanding the specific needs of the researchers from small countries and closing different gaps in future developments of the EOSC
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • Better understanding the various international initiatives in area of Open Data and Open Science Cloud • Helping to local researcher to comply with the requirements of EU projects. <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Contributing with specialists in the field of open data and services which able to work in different working groups of EOSC • Increasing the end-users which should use the EOSC repositories and services.

Croatia

<p>Country: CROATIA <i>Information validated by: University of Zagreb Computing Center (SRCE), Ruđer Bošković Institute (RBI)</i></p>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Available, in place.
Name of the EOSC national structure	The Croatian Open Science Cloud (locally HR-OOZ) Initiative
Established on / Estimated start	July 2021
Duration of the mandate	Aiming for permanent
Main purpose	<p>The EOSC will enable open and reliable virtual environment for more than 2 million European researchers, among whom are Croatian researchers. We strongly believe that this will boost the development of science and innovation in Europe and, consequently, in Croatia as well.</p> <p>In its main strategic documents related to science and technology (“The National Recovery and Resilience Plan 2021–2026 ” and “The 2030 National Development Strategy”) recognized the open science and open access to scientific information as the strategic orientation for future development of high-quality science and education.</p> <p>Furthermore, in the National Development Strategy 2030, open science is recognized as the key component needed for successful transformation of Croatian scientific and innovation system. Therefore, open science has an important role in the process of upgrading of our research and development system and as such will be included in the new version of the law on science and higher education. It is also worth noting that</p>

	<p>strengthening open science has been included in our National Plan for Recovery and Resilience, as part of the component 3 “Education, science and research”.</p> <p>Based on this, the HR-OOZ Initiative has managed to bring together key stakeholders in creating required preconditions for the implementation, realization, and promotion of open science. It is the result of joint work of numerous stakeholders in the science and higher education system in Croatia. The Initiative was launched with the support of the Ministry of Science and Education and the Croatian Science Foundation.</p> <p>The vision of HR-OOZ is to build a modern, high-quality, internationally relevant, and competitive science environment in Croatia based on the principles of open science that are harmonized and connected with the European research area (ERA) and relevant European initiatives.</p> <p>Thus, Croatia needs a national cloud for open science to ensure coordination of the development and use of modern e-infrastructure and to make the services, services and resources emerging in Croatia accessible, accessible, interoperable and reusable to all scientists in the Republic of Croatia, and to join EOSC and at European level.</p>
Objectives	<p>The main objectives of the HR-OOZ Initiative’s engagement with EOSC are ensuring the development and long-term sustainability of national research infrastructures and their connection with European and international research infrastructures, coordination of research infrastructure development with e-infrastructure development and increasing potential of Croatian institutions for successful participation in the Horizon Europe calls.</p>
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Adoption of a clear national policy of open science in the Republic of Croatia that will reward behaviour and results that respect the principles of open science • Defining HR-OOZ as a quality and reliable national environment (infrastructure in a broad sense) and ensuring its sustainability over time (so that institutions and researchers can dedicate themselves to research and education) • Ensuring the connection of Croatian research area (especially HR-OOZ) with the European (especially EOSC) primarily at the level of data and collaborative systems
Governance structure:	<p>Consortium. HR-OOZ Initiative members:</p> <ul style="list-style-type: none"> • Croatian Science Foundation • Institute of Ethnology and Folklore Research • Josip Juraj Strossmayer University of Osijek • Juraj Dobrila University of Pula • Ministry of Science and Education of the Republic of Croatia • National and University Library in Zagreb • Ruđer Bošković Institute • University North • University of Dubrovnik • University of Rijeka • University of Slavonski Brod • University of Split • University of Zadar

	<ul style="list-style-type: none"> • University of Zagreb • University of Zagreb University Computing Centre SRCE • University of Zagreb, Faculty of Electrical Engineering and Computing • University of Zagreb, Faculty of Humanities and Social Sciences • University of Zagreb School of Medicine <p>Founding Members of the HR-OOZ Initiative signed the Memorandum of Understanding in July 2021.</p>
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	No. Currently, the University Computing Centre - SRCE is full member of the EOSC Association and mandate organisation appointed by the Ministry of Science and Education of the Republic of Croatia. However, it would be a topic discussed in a process of setting future governance model of the HR-OOZ.
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	<p>EOSC Association: Member of the Council of the HR-OOZ Initiative, Ivan Marić, is also Delegate in the General Assembly of the EOSC Association, representing SRCE as a mandate organisation in the EOSC Association. More organisations from Croatia are interested in joining the EOSC Association, but currently SRCE is the only member from Croatia. SRCE's experts, Miroslav Milinović, Emir Imamagić, Draženko Celjak and Kristina Posavec participated in drafting charters for new EOSC Task Forces AAI Architecture, Rules of Participation compliance monitoring, Long-term data preservation and Researcher engagement and adoption.</p> <p>EOSC Steering Board: Ministry of Science and Education of the Republic of Croatia appointed Ivan Marić a national representative in the EOSC Steering Board.</p>
Profile of the EOSC national structure:	<ul style="list-style-type: none"> • Research funding organisation • Research performing organisation • Service provider for research
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Yes. SRCE is full member, and currently the only member of EOSC Association.
Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • ERICs (DARIAH-HR, HR-CLARIN, CROSSDA the public research data service and the national service provider for the CESSDA ERIC) • OpenAIRE NOAD • NGI • HR RDA National node
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>Hybrid approach. Main drivers triggering the set up of the national initiative:</p> <ul style="list-style-type: none"> • recognition of open science as one of the main drivers for reforming the science and innovation system in Croatia • long-lasting collaboration among the key stakeholders in the area of open science in Croatia • participation in the NI4OS project • set up of the EOSC partnership • implementation of open science principles in Croatian research and science community with aim to create preconditions for data

	interoperability which will be focal point for building a modern, high quality, internationally relevant, and competitive science environment in Croatia in line with FAIR data principles
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes. The HR-OOZ Initiative will be governed by the Council. The members of the Council will be leaders of founding member institutions or persons authorized by them to represent the institution in the Council. By the end of the August the constituting session of the HR-OOZ Council will be held where chair and deputies of the HR-OOZ Council will be elected. In addition, Rules of Procedure for HR-OOZ Council is currently under development. It is planned that work will be carried through various Working Groups governed by the Council.
Funding/revenue stream model	Funding is important objective planned to be a part of the “Organisational and Technology definition of HR-OOZ” deliverable (working title Council have to define). It will be defined in next 6-9 months.
Main activities performed by the EOSC national structure	Organization of one to one meetings with members of HR-OOZ Initiative before signing MuO. Currently, Initiative is in process of forming the Council of HR-OOZ Initiative that will develop Rules of Procedure for the Initiative.
EOSC national structure target stakeholders overview	The national initiative target stakeholders - all public research organizations (35) and researchers (around 9,000 FTE) in Croatia, support staff at public research organizations in charge of data management and open science, business community involved in open science, and general public. Furthermore, the national initiative aims at policymakers and research funding organizations.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • Government support • Research community support • Valorisation of researcher’s EOSC engagement in national career advancement requirements
Success factors for the set-up/operation/sustainability of the EOSC national structure	<p>Set-up</p> <ul style="list-style-type: none"> • Support of the key national stakeholders, research policy and research funding organisations (Ministry and CRF) • Support from members (CEO level) • Initial in-kind (voluntary based) contribution from members • Common understanding on the main goals of the initiative among the members <p>Operation</p> <ul style="list-style-type: none"> • Investment in human resources • Workable organisational and operation model on the national level (agreed duties and responsibilities of all stakeholders) • Active participation and joint work of all member organisations • Fit-in the EOSC model as integral and important part • Value of services to the community <p>Sustainability</p> <ul style="list-style-type: none"> • Achieve a long-term sustainability (including funding) • Adequate digital skill (training) programme • Regulatory and legislative support • OS principles become integral part of the national research system in Croatia

Main challenges	<ul style="list-style-type: none"> • Somewhat low support from the key national stakeholders, primarily the relevant ministry • Low awareness of the EOSC and the benefits of open science among the community • Diversity of views on the main roles and responsibilities of organizations forming the national initiative
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • improving research conditions for the academic community • creating opportunities for international collaboration, • increases the level of cooperation with the international partners within EU • raising awareness among the research community and the broader public on the benefits of EOSC and open science in general, and the opportunities it offers • enabling better monitoring of the project funding opportunities <p>For the EOSC Governance/future developments:</p> <ul style="list-style-type: none"> • It will enable same research conditions for every single European researcher striving to foster and raise European science to a higher level of quality and competitiveness.
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • bringing together all relevant stakeholders in the field of open science, at national level • coordination and harmonization of all activities in Croatia related to open science • jointly creating preconditions for the implementation, realization, and promotion of open science, allowing to reach a consensus among different stakeholders • Consolidation of the national open science ecosystem, minimization of fragmentation and overlap of activities • Initiative will draft the proposal of the National Action Plan for Open Science and proposal of the law governing the scientific activity in the part related to the open science in Croatia • HR-OOZ will build a modern, high-quality, internationally relevant, and competitive science environment in Croatia <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Dissemination and promotion of national services and resources, which will be onboarded into EOSC in national research and science community. • Increase visibility of EOSC on national level in national research and science community.
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	<p>Consider the way EOSC Association membership fee is calculated. Better synergy and coherence would be achieved if more organisations from one country would be able to join the EOSC Association and be actively involved in creation of strategies for the implementation of open science principles with key stakeholders at EU level.</p>

Czech Republic

<p>Country: CZECH REPUBLIC <i>Information validated by: Ministry of Education, Youth and Sports</i></p>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Available, in place.

Name of the EOSC national structure	EOSC Coordination Platform
Established on / Estimated start	Beginning 2021
Duration of the mandate	Permanent
Main purpose	To coordinate and organise the EOSC activities and engagement at national level, and to prepare a comprehensive architecture for investments in the EOSC implementation in the Czech Republic, to be effective as of 2022 by using the European Structural and Investment Funds.
Objectives	The EOSC Coordination Platform has been established to create a forum to debate how to implement the EOSC initiative in the Czech Republic in terms of preparing an overall architecture of investments in the data infrastructure and debate the political and technical approach to these capital investments and development of necessary human resources. The respective incentives will be effected using the European Structural and Investment Funds as of 2022. The high-level goal and objective of the EOSC Coordination Platform are, therefore, to gather all the relevant stakeholders from higher education institutions, Czech Academy of Sciences and public administration to agree upon the approach to build the national data infrastructure linked to EOSC.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Coordinating EOSC activities at national level
Governance structure:	Working groups coordinated by the Ministry of Education, Youth and Sports (MEYS) in a close cooperation with the e-INFRA CZ large research e-infrastructure and the National Library of Technology. Currently, the steering working group counts around 40 people, representing policy-makers and different research performing organisation stakeholders supporting EOSC in the country. Sub-groups to address technical features of the development of the Czech national data infrastructure are being established and becoming operational in autumn 2021.
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	No. The CESNET Association is the Czech Republic's mandated organisation in the EOSC Association. The CESNET Association is coordinating the national e-INFRA CZ large research e-infrastructure and is one of the main players contributing to the EOSC Coordination Platform.
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	<p>EOSC Association: All three Czech members of the EOSC Association (CESNET, Masaryk University and VŠB-Technical University of Ostrava) have representatives in the EOSC Coordination Platform. CESNET is also the mandated organisation in the EOSC Association on behalf of the Czech Republic.</p> <p>EOSC Steering Board: ministerial representatives in the EOSC Steering Board are also members of the EOSC Coordination Platform.</p>
Does / Will the national initiative have the mandate to represent the Member State in the EOSC Partnership?	No. The EOSC Coordination Platform is a stakeholder forum, not an executive body. However, representatives both from the responsible Ministry and the Czech mandated organization are members of the platform.

Profile of the EOSC national structure:	<ul style="list-style-type: none"> • Research funding organisation • Research performing organisation • Service providers for research
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Yes. The CESNET Association, the Masaryk University and the VŠB – Technical University of Ostrava that have become members of the EOSC Association engage also with the EOSC Coordination Platform as members thereof and the leading consultants to the Ministry of Education, Youth and Sports on the EOSC related issues.
Direct links with other EOSC/OS initiatives active in the country	<p>There is currently no national register of EOSC or Open Science activities in the Czech Republic. However, the National Library of Technology is the leading responsible organization to coordinate the national Open Access initiatives and is expected to broaden its scope to the support of the Open Science activities in general (scientist's One Stop Shop for Open Science).</p> <p>Also several (approx 10 from the 23 public universities in the country) universities currently use special support to start defining and developing their own strategies for Open Science (these activities are supported by a specific intervention from MEYS, using the European Structural and Investment Funds). Several of these universities have representatives in the EOSC Platform, but no formal links are established.</p>
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>Hybrid: the bottom up interest met the MEYS need for a body through which to interact with all relevant stakeholders</p> <p>Main drivers triggering the set-up of the EOSC national structure:</p> <ul style="list-style-type: none"> • Follow up on the EOSC development at the European level • Establish a comprehensive architecture to implement EOSC • Invest in the data infrastructure development in the country • Set up a long-term initiative to deal with the FAIR data policy and find national-wide acceptance
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Working groups coordinated by the MEYS in close cooperation with the e-INFRA CZ large research e-infrastructure and the National Library of Technology.
Funding/revenue stream model	Personal engagement of members participating in the EOSC Coordination Platform in their capacity of data policy experts. The participation is paid for by the respective organizations, no explicit funding is provided by MEYS or other body.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Organisation of public webinars/events to: <ul style="list-style-type: none"> · inform national stakeholders about the EOSC latest developments · collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) · discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.)

	<ul style="list-style-type: none"> • One to one support to organisations to better understand the EOSC landscape, to discuss the benefits of joining the Association, etc. • Help to shape planned supportive/financial instruments for the EOSC implementation in the Czech Republic • Search for consensus on how to implement EOSC in the Czech Republic so the implementation actually extends and develops national research area
EOSC national structure target stakeholders overview	In general, all higher education institutions, public research institutes founded by public administration, public research institutes established by the Czech Academy of Sciences, and private research organizations.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • Dissemination of the FAIR data and Open Science policies • Coordination of research stakeholders with policy-makers • Incentives to invest in the data infrastructure development • Incentives to invest in the human resources development • Understanding and accepting the benefits of EOSC (Open Science) by the research community
Success factors for the set-up/operation/sustainability of the EOSC national structure	<p>Set-up</p> <ul style="list-style-type: none"> • Pro-active engagement of research performing stakeholders • Agreement on the common goals and expected achievements/benefits <p>Operation</p> <ul style="list-style-type: none"> • Co-creation and co-ownership spirit by research stakeholders • Stable and sustainable services, which the researchers can depend upon <p>Sustainability</p> <ul style="list-style-type: none"> • Permanent coordination and support platform up and running • Clear and understandable benefits for the individual researchers and their teams
Engagement best practices	Too early to actually understand what works at the national level. At this moment, the most important is the willingness to interact, bring together major players and give them opportunity to express their opinion and contribute to the solution.
Main challenges	Too soon to provide a fair judgement (but a shared vision is the most complicated to achieve now).
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • Deeper involvement in the European Research Area • More efficient scientific data sharing internationally • Intense clustering/networking of research stakeholders • Higher visibility of research performing organisations <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Structured inputs by the Czech Republic to the EOSC AISBL • Coherent approach of Czech research stakeholders to EOSC
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • Intense clustering/networking of research stakeholders

	<ul style="list-style-type: none"> • Building a comprehensive national data infrastructure • Finding a join consensus on EOSC implementation • Implementing the Open Science and FAIR data policies <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Coherent statements from and the position of the country • More intense (clearly heard) voice (than just individual institutions) – but this related to the way the national initiative is recognized at, e.g., EOSC Association level – otherwise the national initiate is “just” supporting the mandated organization.
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	<p>Make sure there is sufficient information flow into the country (thinking about more active approach, not only expecting that researchers are hunting for ESOC information).</p> <p>Guarantee fair involvement in the bodies and task forces (e.g., the current Board of Directors does not have any one from the “new” EU countries).</p>

Denmark

<p>Country: DENMARK</p> <p><i>Information validated by: DeiC–Danish e-Infrastructure Cooperation</i></p>	
Status of the EOSC national structure	Not available yet, but planned
Name of the EOSC national structure	The National EOSC Coordination Committee
Established on / Estimated start	Autumn 2021
Duration of the mandate	Temporary, with possibility to renew
Main purpose	<p>Denmark engages with EOSC in order to allow the national research communities to take advantages of and add to the possibilities offered by the EOSC.</p> <p>The national initiative will share and expand the national knowledge base concerning EOSC.</p>
Objectives	<p>The objective of the initiative is to collect, share and use knowledge about EOSC nationally in order integrate the EOSC in the research infrastructure, services and other support initiatives build up and provided for research in Denmark.</p> <p>The national initiative must:</p> <ul style="list-style-type: none"> • invite all parties with an interest in EOSC – whether it is e.g. as a partner in a Horizon Europe project or a researcher that is curious about EOSC • personally invite all national participants in EOSC Association’s Task Forces. • encourage participation from all research disciplines and universities. However, the number of participants from each research discipline/university will mirror the expected interest in EOSC and may vary • encourage and support all kinds of knowledge sharing and network building among the participants

	<ul style="list-style-type: none"> transfer information between the committee representing the research communities, disciplines and universities and DeiC as mandated organisation.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> Engaging stakeholders at national level into EOSC Offering a channel to connect the national stakeholders with the EOSC governance Coordinating EOSC activities at national level
Governance structure:	<p>A consortium</p> <p>DeiC- the Danish Infrastructure Consortium is initiator and support for the Danish National EOSC Consortium.</p> <p>DeiC will propose a simple governance structure supporting open collaboration and knowledge sharing among the participants nationally as a starting point.</p>
Does / will the national initiative also exercise the role of the EOSC mandated organisation in the EOSC Association?	<p>No. DeiC is the mandated organisation in the EOSC Association.</p> <p>An objective (see above) for the national initiative will be to transfer information between the committee representing the research communities and DeiC as mandated organisation.</p>
What is / will be the relation between the national structure and the EOSC Partnership?	<p>DeiC will be both mandated organisation as well as initiator and support for the national initiative. Hereby the link is very strong.</p> <p>National members of EOSC Steering Group are invited and expected to take part.</p>
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	Yes
Profile of the EOSC national structure:	<ul style="list-style-type: none"> Research performing organisation Other (Research Infrastructure Provider)
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Denmark has appointed one member of the EOSC representing national interests. That is DeiC.
Direct links with other EOSC/OS initiatives active in the country	<p>EOSC-Nordic: DeiC is project manager for the project and takes part both as task leaders and participants.</p> <p>EOSC Task Forces: All appointed members of EOSC Task Forces as well as participants in EOSC projects will be invited and strongly encouraged to participate in the Danish National EOSC Coordination Committee.</p>
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>Top-down approach (by DeiC)</p> <p>Main drivers triggering the set-up of the national structure:</p> <ul style="list-style-type: none"> Making EOSC an asset for researchers in DK Encourage active commitment to national benefit Establishment of national EOSC knowledge base
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	No, it is to come.
Funding/revenue stream model	DeiC supports the national initiative financially as initiator and with support. The exact amount of pm and additional financial support will be decided at a later stage depending on the number of participants and activity level.

Sustainability Plan	There is no plan in place.
Main activities performed by the EOSC national structure:	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations into the EOSC Association • One to one support to organisations to better understand the EOSC landscape, to discuss the benefits of joining the Association, etc. <p>The national initiative will start with a series of meetings. In collaboration among the members, it is decided upon if additional activities is needed to support the objectives for the group.</p>
EOSC national structure target stakeholders overview	The target stakeholders will be members of EOSC Association Task Forces, participants in EU-Horizon projects as well as researchers and research support staff with an interest in EOSC.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • National research communities to take advantages of and add to the possibilities offered by the EOSC • Expand the national knowledge base concerning EOSC • Increasing EOSC project participation nationally • Increasing EOSC Partnership participation nationally
Success factors for the set-up/operation/sustainability of the EOSC national structure	<p>Set-up of the initiative</p> <ul style="list-style-type: none"> • Participation of critical mass • Participation from a broad range of research communities, disciplines and universities – to be surveyed <p>Operation</p> <ul style="list-style-type: none"> • Knowledge base building – a web site will support collection and sharing • Inspiring (pro)activity and engagement – collection of ‘stories’ and examples shared on the web site <p>Sustainability</p> <ul style="list-style-type: none"> • n/a
Engagement best practices	Anyone with an EOSC interest is aware of the Danish National EOSC Coordination Committee, ideally an active member.
Main challenges	<p>Stakeholder engagement at national level</p> <ul style="list-style-type: none"> • Interest • Involvement <p>national initiative set-up/ operation/ maintenance</p> <ul style="list-style-type: none"> • Participation • National perspective (as opposed to university-centric)
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • Active involvement and participation in the development of EOSC • Benefits from EOSC to national research • The value of national collaboration related to EOSC development <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • n/a

Main benefits of the presence of a national initiative in the country	<p>For the country</p> <ul style="list-style-type: none"> • National engagement • Cost effectiveness • Internationale collaboration towards shares challenges <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • n/a
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	<ul style="list-style-type: none"> • Easy access to dialogue with experts • Availability of EOSC A representatives for taking (virtual) part in national meetings

Faroe Islands

<p>Country: FAROE ISLANDS <i>Information validated by: Research Council Faroe Islands</i></p>	
Status of the EOSC national structure	Not planned
Motivation	Given the small size of the country, no EOSC national structure is planned. The EOSC activities are followed by the two experts in charge of Open Science and European funded projects. These experts are also the same persons in contact with the EOSC Steering Board.

Finland

<p>Country: FINLAND <i>Information validated by: EOSC Finnish Forum Coordinating Committee</i></p>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Available, in place.
Name of the EOSC national structure	EOSC Finnish Forum (EOSC-FF)
Established on / Estimated start	January 2021
Duration of the mandate	Temporary, with possibility to renew (current mandate: 1 year)
Main purpose	EOSC-FF was established to support the Finnish stakeholders in following EOSC development under Horizon Europe framework programme so that they can better understand and influence the research priorities in the area; bring the Finnish expertise in the European context and bring back into the country the most suitable opportunities and services coming out from EOSC to foster innovation and boost the societal impact of Finnish high-quality research.
Objectives	<p>EOSC-FF aims to coordinate engagement of Finnish stakeholders involved or interested in EOSC at national level. More specifically, EOSC-FF allows Finnish stakeholders to:</p> <ul style="list-style-type: none"> • discuss and exchange information on the latest EOSC developments and assess their implications on other national initiatives; • represent the collective interests of Finland into EOSC by formulating a shared approach/message to be communicated to the EOSC Governance;

	<ul style="list-style-type: none"> • discuss potential future EOSC-related collaborations and opportunities at national level and strengthen the collaboration between Finnish RDI actors.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level • Disseminating and promoting EOSC at national level • Offering a channel to connect the national stakeholders with the EOSC governance
Governance structure:	<p>A consortium (the so called EOSC-FF Coordinating Committee) consisting of the following organisations:</p> <ul style="list-style-type: none"> • The Finnish Ministry of Education & Culture (OKM) • Academy of Finland (AKA) • The Federation of Finnish Learned Societies (TSV) as representative of the Open Science National Coordination initiative • Finnish organisations part of the EOSC Association operating at national level: Currently, CSC–IT Center for Science (CSC) • Finnish representatives in the EOSC Association Advisory Groups
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	No, it does not. Finland does not have a mandated organisation.
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	Representatives of the EOSC Association members/observers or Advisory Groups are part of the EOSC-FF Coordinating Committee. Representatives of the EOSC Steering Board are part of the EOSC-FF Coordinating Committee.
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	No, it does not. The EOSC-FF is not part of the EOSC Association therefore the Finnish members/observers part of the EOSC Association do not officially represent Finland but their organisations. The same applies to the EOSC Steering Board members. However, as one of the main objectives of the EOSC-FF is to gather feedback from national stakeholders, these are discussed in the Coordinating Committee and the most relevant and shared ones are indeed fed into the EOSC Governance via the representatives of the EOSC Association / Steering Board.
Profile of the EOSC national structure:	<ul style="list-style-type: none"> • Research funding organisations • Service providers for research • TSV as representative of the Open Science National Coordination Body
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Yes, they are. They are part of the EOSC-FF Coordinating Committee and actively support the EOSC-FF objectives/activities.
Direct links with other EOSC/OS initiatives active in the country	<p>The Open Science National Coordination initiative is formally represented in the EOSC-FF Coordinating Committee with the purpose of synchronising the OS & EOSC activities</p> <p>The EOSC-FF is acting also as the Finnish Research Data Alliance (RDA) national node</p>

<p>Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure</p>	<p>Hybrid approach (OKM, AKA, TSV and CSC encouraged the organisation of a national initiative) because:</p> <ul style="list-style-type: none"> • There was a need of establishing a coordination at national level among the different actors involved in EOSC to understand the national expectations/contributions to EOSC and its impact to support the EOSC co-design • There was a need to further disseminate and promote EOSC at national level
<p>Does /Will the EOSC national structure have a governance structure in place? How is it regulated?</p>	<p>Yes, it does. EOSC Finnish Forum has three bodies: The Forum is composed by all individuals who have joined EOSC Finnish Forum. It is the main arena for discussion and interaction. The Forum meets at least every four months either virtually or physically. All individuals based in Finland involved or interested in EOSC that have signed / or are working for an organisation that has signed the Declaration of Open Science can join the Forum. The Forum is open to all the different types of stakeholders including the private sector. The Coordinating Committee facilitates the work of EOSC Finnish Forum and meets at least once every two months to organise the activities of EOSC-FF. The EOSC-FF Office supports the Coordinating Committee in running EOSC Finnish Forum and its activities. The EOSC-FF Office is hosted by CSC – IT Center for Science and has two officers. The EOSC-FF governance & operation is regulated by a Terms of Reference endorsed by the Coordinating Committee.</p>
<p>Funding/revenue stream model</p>	<p>The operation of the EOSC-FF Office is financially supported by the Finnish Ministry of Education & Culture. All the organisations contributing to the Coordinating Committee participate with in-kind contribution. Participation to the EOSC-FF is free of charge.</p>
<p>Main activities performed by the EOSC national structure</p>	<ul style="list-style-type: none"> • EOSC awareness creation at national level • Creation of a national EOSC community (via the Forum membership) including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations into the EOSC Association • Organisation of public webinars/events to: <ul style="list-style-type: none"> ○ inform national stakeholders about the EOSC latest developments ○ collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) ○ discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.) • Organisation of EOSC Cafés reserved to the members of the EOSC-FF to answer questions about EOSC • One to one support to Finnish organisations to better understand the EOSC landscape, to discuss the benefits of joining the Association, etc. • Promotion & dissemination of RDA activities in the country • Provision of incentives to increase the engagement in EOSC (e.g. financial support for event participation via Open Calls)

EOSC national structure target stakeholders overview	<ul style="list-style-type: none"> • Academia & research • Data Center / Service Provider • Policy / Funding Agency • Large enterprise
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • Clear collaboration with the Open Science National Coordination initiative • Clear value proposition for stakeholders
Success factors for the set-up/operation/sustainability of the EOSC national structure	<p>Set-up</p> <ul style="list-style-type: none"> • Strong commitment from the Coordinating Committee members • Financial support for an Office coordinating and organising the set-up • Engagement of the main EOSC players at national level <p>Operation</p> <ul style="list-style-type: none"> • Governance established and functioning • Funding available to support the EOSC-Office • Formal agreement among the Coordinating Committee members (ToRs) <p>Sustainability</p> <ul style="list-style-type: none"> • Low entry barriers – The EOSC-FF is open to all individuals. The only requirement is the signature of the Open Science Declaration • Support of the Finnish networks of Open Science and universities to promote the EOSC Finnish Forum • Permanent coordination and support platform up and running
Main challenges	<ul style="list-style-type: none"> • Sustainability • Role of national initiatives in the EOSC landscape still unclear
Main benefits of EOSC national engagement	<ul style="list-style-type: none"> • Facilitated sharing of information (language barrier) • Trusted national network • Capillary dissemination of information
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • Reference contact point for EOSC questions (one to one support) • Forum to share and discuss EOSC-related activities and increase EOSC-related knowledge and competence at national level • Better alignment on EOSC future developments and better understanding of researchers and organisations views on EOSC <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • National contact points to timely disseminate and inform about EOSC • Establishment of engagement mechanisms independent from EOSC funded projects

France

Country: FRANCE <i>Information validated by: Collège EOSC France</i>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Set-up in progress
Name of the EOSC national structure	Collège EOSC France
Established on / Estimated start	November 2021

Duration of the mandate	Temporary, with possibility to renew
Main purpose	<ul style="list-style-type: none"> • Coordination of the French position within the EOSC. • Animation of the French EOSC community. • Proposing the French mandated member of the EOSC Association
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Coordinating EOSC activities at national level
Governance structure:	A consortium (The list of member organisations cannot be disclosed yet.)
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	No, the Collège EOSC France is not a legal entity, but will propose the French mandated member.
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	The composition of the Collège EOSC has not been decided yet, but the French delegate at the EOSC Steering Board will be member of the coordinating body. Thus, the French interests with respect to EOSC Association and Steering Board are directly represented and coordinated here.
Does / Will the EOSC national structure have the mandate to represent the Member State in the EOSC Partnership?	No. Each member state is represented by an individual (not by an organisation), who is a delegate assigned by the relevant ministry. In the case of France, the delegate is nominated by the French Ministry of Higher Education, Research and Innovation (MESRI).
Profile of the EOSC national structure:	<ul style="list-style-type: none"> • Research funding organisations • Research performing organisations • Service providers for research
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	The composition of the Collège EOSC has not been decided yet, but participation of the French EOSC Association members seems most likely.
Direct links with other EOSC/OS initiatives active in the country	Committee for Open Science (CoSO): as the CoSIN (under which the Collège EOSC France is set up), this is one of the two national committees coordinated by MESRI/DGRI. CoSO and COSIN have a working group (bureau) which coordinates the activities of both committees.
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>Top-down approach (central decision of the related ministry or national research funding organisation)</p> <p>Main drivers triggering the set up of the national structure:</p> <ul style="list-style-type: none"> • coordinate EOSC France stakeholders • have a forum which proposes the mandated member for the EOSC association • inform the EOSC relevant community in France about EOSC and its opportunities • improve the response of French organisations in participation in EOSC calls under Horizon Europe

Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes. The Collège EOSC France will be one of the committees under the responsibility of the national committee for digital services and e-infrastructures (CoSIN). The CoSIN groups together the directors/presidents of the main relevant organisations in France. The CoSIN mandates a permanent secretariat (SPSIN), which then puts in place the Collège EOSC France and oversees its activities in between the meetings of the CoSIN. The Collège will have a pilot, who is not from the ministry, and a co-pilot, who can be from the ministry.
Funding/revenue stream model	The College EOSC France will have most likely only a budget for organising its meetings etc. This still has to be decided. The College is not itself going to provide (in-kind) contributions to the EOSC, but is representing the organisations and the ministries which do.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations into the EOSC Association • Organisation of public webinars/events to: <ul style="list-style-type: none"> ○ inform national stakeholders about the EOSC latest developments ○ collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) ○ discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.) • One to one support to organisations to better understand the EOSC landscape, to discuss the benefits of joining the Association, etc.
EOSC national structure target stakeholders overview	Whereas the 5 large research performing organisations (CEA, CNRS, INRAE, INRIA, INSERM) are well connected to the EOSC, this is not true for a large number of universities, except for the national unions of universities (CPU, UDICE, CGE) and some larger universities (e.g. Université Paris Saclay, Univ. Strasbourg). Another main target is the large number of research infrastructures not yet integrated in the EOSC. Thus, universities and research infrastructures are among the main target stakeholders, although interests of the already established stakeholders (e.g. the French members/observers of the EOSC Association) will naturally also play an important role.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • integrate the majority of the ~100 national research infrastructures in the EOSC • inform, make aware, and connect the majority of the 85 French universities with EOSC • find persistent business models for service provision of French e-infrastructures to the EOSC • financial benefit for French partners from Horizon Europe EOSC projects' overall budget closer to 21%, which is the current French contribution to the EU budget.
Success factors for the set-up/operation/sustainability of the EOSC national structure	Set-up <ul style="list-style-type: none"> • timely: have the Collège EOSC France operational by December 2021

	<ul style="list-style-type: none"> • inclusive: manage to set up working groups under the Collège which include the main EOSC stakeholders in France <p>Operation</p> <ul style="list-style-type: none"> • timely: manage to decide on a long-term setup for the national initiative (e.g. continue as Collège or form a [non-legal] entity) in spring 2022 • productivity: kick-off several activities related to EOSC (e.g. training) • information: set up an informative webpage responding to EOSC stakeholder need in France, have regular information through e.g. e-mail and/or social media, organise regular EOSC France events <p>Sustainability</p> <ul style="list-style-type: none"> • manage to have significant and increasing funding streams connected and co-aligned with EOSC France contributions
Engagement best practices	<p>France managed to raise awareness for Open Science and participation in related activities mainly through a top-down approach:</p> <ul style="list-style-type: none"> • first putting in place a general law which gives the wider frame to require Open Science when activities are publicly financed (“loi numérique”, 2016), • followed by a national Open Science plan (2018), which is then detailed and enriched by further actions at the institutional level (e.g. CNRS open science road map, 2019) and accelerated through financing of Open Science relevant activities (e.g. through ANR, PIA, plan relance, ...). A revised, second version of the plan for the 2021-2024 period has been published in July 2021.
Main challenges	<p>Stakeholder engagement at national level</p> <ul style="list-style-type: none"> • difficulty to reach and engage universities • difficulty to make research infrastructures direct actors of EOSC with a strong voice, as they are not directly represented (e.g. at the EOSC Association or at the Collège EOSC France) but are represented through their hosting research organisations. <p>national initiative set-up/ operation/ maintenance</p> <ul style="list-style-type: none"> • manage to have an inclusive national initiative, which is still manageable and responsive. • the national initiative has to launch practical activities that show the added value of EOSC.
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • co-align investments with EOSC relevant activities • better sharing of resources (e-infrastructures, services, human resources, ...) • apply best practices of the EOSC at national level • benefit from EOSC core services <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • increase awareness and support on the French ministries’ side for the EOSC • Strong commitment of the French EOSC actors to the governance activities (active participation in governance bodies, supporting EOSC in the Horizon Europe shadow committee discussions)
Main benefits of the presence of an EOSC national structure	<p>For the country</p>

	<ul style="list-style-type: none"> • better representation of French interests, speaking with one voice at the EOSC level • better sharing of resources (e-infrastructures, services, human resources, ...) • better information of the French research community about Horizon Europe opportunities <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • bring to EOSC stakeholders that were so far underrepresented (research infrastructures, universities) • increase knowledge about EOSC among all research communities • increase awareness and support on the French ministries' side for the EOSC
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	Support for communication effort, provision of communication material

Georgia

Country: GEORGIA <i>Information validated by: Georgian Research and Educational Networking Association (GRENA)</i>	
Status of the EOSC national structure	<input type="checkbox"/> Set-up in progress
Name of the EOSC national structure	Georgian Open Science Cloud Initiative GOSCI
Established on / Estimated start	Estimated to have the MoU signed by end of October 2021
Duration of the mandate	Aiming for Permanent
Main purpose	The main outcome of the GOSCI will be the support towards research and education community of Georgia to have access to scientific data, services and facilities already available and the ones which will be implemented at EOSC in future. The main purpose will be to support Georgian research teams with integration in European Research Area.
Objectives	<ul style="list-style-type: none"> • To participate in cooperation with government in the process of adoption of strategic vision and implementation of scientific research and innovation development in the country. • To facilitate the involvement of research and education institutions in the implementation of Georgian Open Science Cloud Initiative. • To support active participation of Georgian research organizations in Horizon Europe calls related to EOSC activities.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Offering training on EOSC specific topics at national level
Governance structure:	A consortium. Organizations that expressed interest in participation include research infrastructure, electronic infrastructure, academic libraries, universities, research centers. Currently several institutions have clearly expressed their interest towards establishment of GOSCI: High Energy Physics Institute of Tbilisi State University, Ivane Beritashvili Center of Experimental Biomedicine, Georgian Research

	and Educational Networking Association GRENA, National Science Library.
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	No. In the process of negotiations with government it appeared that National Science Foundation of Georgia is planning to become mandated member.
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	Members of GOSCI are planning to be involved in EOSC Task Force activities
Profile of the EOSC national structure:	<ul style="list-style-type: none"> • Research performing organisation • Service provider for research
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Currently none of the organizations from Georgia holds status of EOSC Association members/observers, however it is expected that GOSCI member organization will apply for observer status.
Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • OpenAIRE • NGI • GEANT
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	Bottom up
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes. It will be self-regulated with rules defined in the MoU.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Organisation of public webinars/events to: <ul style="list-style-type: none"> - inform national stakeholders about the EOSC latest developments - discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.)
EOSC national structure target stakeholders overview	Currently identifying stakeholders. On April 14, 2021 40 representatives of research and education community from various cities of Georgia participated in the first national dissemination event.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • Government involvement and support • Research community support • Support of libraries • GOSCI involvement and support
Success factors for the set-up/operation/sustainability of the EOSC national structure	Set-up <ul style="list-style-type: none"> • Critical mass of the research community interested in EOSC • Communication among the stakeholders

	<p>Sustainability</p> <ul style="list-style-type: none"> • Functional structure and targeted strategy • Presence or absence of funding mechanisms • Presence or absence of revenue generating models • Proven benefits for the community
Main challenges	<p>Stakeholder engagement at national level</p> <ul style="list-style-type: none"> • The EOSC sustainability model is not well clear at this moment. • Support from national government is not well defined yet. <p>national structure set-up/ operation/ maintenance</p> <ul style="list-style-type: none"> • The EOSC sustainability model is not well clear at this moment. • Support from national government is not well defined yet.
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • With the help of EOSC sharing and re-use research data becomes more effective, which increases quality and reliability of science and productivity of researchers. • Forms professional links between Georgian and EU research teams. <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • The implementation of FAIR data and Open Science principals will lead to the development of Open Science in Georgia.
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • National research and education community members will have excess to latest information and activities related to EOSC and benefit from it. • Researchers will have easier access to Horizon Europe funding being part of the developments, that will lead to the further development of science in the country. <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Be a contact point for rising awareness about EOSC.
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	Compose and highlight the benefits for the research and education community.

Germany

<p>Country: GERMANY <i>Information validated by: National Research Data Infrastructure (NFDI)</i></p>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Available, in place.
Name of the EOSC national structure	Nationale Forschungsdateninfrastruktur (NFDI) e.V. (National Research Data Infrastructure)
Established on / Estimated start	12.10.2020
Duration of the mandate	Permanent
Main purpose	The NFDI is a networked organisation that has the objective to systematically index, edit, interconnect and make available the valuable stock of data from science and research. So far, these data have mostly

	<p>been available in a decentralized, project-related, or temporary form. The German federation and the states fund the NFDI jointly. Digital data storage is an indispensable prerequisite for treating new research issues, generating findings, and making innovations.</p> <p>Reasons for an engagement with EOSC are to bring the interests and ideas of the national science system in the European context and exchange best practices and solutions. Working together on a European level can trigger innovations and raise potential even more than is possible only on a national level.</p>
Objectives	NFDI and EOSC connects that they both want to implement the FAIR principles in the science system and promote data sharing. By engaging with EOSC, NFDI aims to exchange ideas and best practices and get in touch with other initiatives. Furthermore, the interests of the national science system can be represented on a European level.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Offering a channel to connect the national stakeholders with the EOSC governance • Coordinating EOSC activities at national level
Governance structure:	A national programme
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	Yes
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	The German Federal Ministry of Education and Research are part of the Board of Trustees of the NFDI Association. Members of the NFDI Association partly are also applying for EOSC membership.
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	Yes
Profile of the EOSC national structure:	Service provider for research
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	<p>Not all of the members/observers of the country are participating in NFDI (so far), but a great amount of them. DFG (currently (interim) mandated organisation for Germany) is highly involved in the establishment of NFDI. The selection process for funding of NFDI consortia is set up and carried out by the DFG.</p> <p>EOSC members/observers that are also members in the NFDI Association: FZJ, UGOE, GWDG, KIT, TIB, DFN-Verein, ZBW, DESY. Apart from the membership in the association, most of the organisations are also part of NFDI consortia. The consortia are a crucial component in building the NFDI.</p>
Direct links with other EOSC/OS initiatives active in the country	NFDI Consortia are connected to different initiatives, e. g. the consortium GHGA is strongly connected to EMBL. The NFDI consortia NFDI4BioDiversity, GHGA and DataPlant are engaged via the German node de.NBI with ELIXIR. The NFDI consortium KonsortSWD is connected with the ESFRI ERICs CESSDA and ESS. The consortium NFDI4Culture is connected with CLARIN and DARIAH. Since the

	NFDI is still being completed with further consortia (in 2021 and 2022), the list of links will steadily grow.
Main drivers and approach to set up a EOSC national structure	Bottom-up. Main drivers triggering the set-up of the national structure: <ul style="list-style-type: none"> • Recommendation by German Council of Information Infrastructures (RfII) • Engagement of Politics on highest levels • Rigorous selection of participating consortia by German Research Foundation (DFG) • Strong collaboration of Research and Research Infrastructure partners
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes. NFDI is a registered association. The board of directors is formed by the directorate, supported by an office. There are four bodies: Advisory Board, Scientific Senate, General Assembly, Assembly of Consortia. Furthermore, there are departments: consortia, sections. With these bodies and departments different actors from science and politics are getting involved in the work. The initiative with its structure will be evaluated by the Wissenschaftsrat.
Funding/revenue stream model	The national initiative is financially supported The German federal and state governments envisage funding up to 30 consortia. A total of up to €90 million is available per year, for ten years, to fund the association and the consortia. There are no revenue streams for NFDI.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Organisation of public webinars/events to: <ul style="list-style-type: none"> - inform national stakeholders about the EOSC latest developments - collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) - discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.) • Organisation of EOSC Cafes' reserved to the members] to answer questions about EOSC
EOSC national structure target stakeholders overview	Current number of members: about 190 (and counting) <ul style="list-style-type: none"> • Universities, Research Institutions, Infrastructure Providers, organisations that contribute in a specific way to the purpose of the association • Up to 30 consortia with 300-400 partners in general
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • Clear understanding of the potential national contributions to EOSC • Clear understanding of the EOSC governance model including e.g. how national contributions are foreseen to take place • Alignment of EOSC goals with NFDI goals, including organisational, technical, legal and ethical aspects • Frequent information exchange about progress and plans between relevant EOSC stakeholders and NFDI stakeholders

<p>Success factors for the set-up/operation/sustainability of the EOSC national structure</p>	<p>Set-up</p> <ul style="list-style-type: none"> • Bottom up participation of the target group • Understandable goals that add value • Involve existing initiatives on this subject, connect to the relevant actors <p>Operation</p> <ul style="list-style-type: none"> • Good working and transparent communication channels • Integration and connection of all participated actors • Successful recruiting <p>Sustainability</p> <ul style="list-style-type: none"> • Functional structure and targeted strategy • Sustainable funding • Acceptance in the target group • Strong network
<p>Engagement best practices</p>	<p>From the very beginning a number of workshops for key activities, such as ontology and metadata modelling, have been organised jointly by NFDI members.</p>
<p>Main challenges</p>	<p>Stakeholder engagement at national level</p> <ul style="list-style-type: none"> • to equally integrate consortia and their participating organisations, • to offer equal participation opportunities to all science areas, • to kick-start the exchange of knowledge and experience between different science areas <p>national structure set-up/ operation/ maintenance</p> <ul style="list-style-type: none"> • to manage strong network growth in a short time, • to establish all processes of a newly born organisation while already delivering results
<p>Main benefits of EOSC national engagement</p>	<p>For the country</p> <ul style="list-style-type: none"> • to get involved in European activities, • to exchange best practices and solutions, • to contribute by bringing national innovations to the European level including to make available data services • to benefit by implementing standards agreed upon by EOSC at the national level, thus making national services interoperable • to promote EOSC services at the national level and to encourage their re-usage • to promote NFDI services at the EU level and to encourage their re-usage <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • to work user-orientated and user-friendly • to increase acceptance in the national context
<p>Main benefits of the presence of an EOSC national structure</p>	<p>For the country</p> <ul style="list-style-type: none"> • to coordinate relevant actors and initiatives • to set up efficient networks and infrastructure • to strengthen the scientific landscape <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • to integrate national stakeholders • to facilitate the communication to national stakeholders

Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	Implement a mentoring programme which e.g. addresses the efficient onboarding of new EOSC members to the (rather complex) “EOSC world”
--	--

Greece

Country: GREECE Information validated by: Greek Research and Technology Network (GRNET), Athena Research Center (ATHENA RC)	
Status of the EOSC national structure	<input type="checkbox"/> Set-up in progress
Name of the EOSC national structure	'Hellenic Open Science Initiative' with the distinctive title 'EPAE/HOSI'
Established on / Estimated start	Estimated to have the MoU signed by the end of 2021
Duration of the mandate	Permanent
Main purpose	<p>The Hellenic Open Science Initiative can play a key role to involve user communities and research infrastructures in the very design of EOSC and its sustainable evolution. HOSI at national level aims to bring together all relevant stakeholders, to promote synergies and cooperation among the consortium, spread awareness and communicating EOSC developments and therefore reduce fragmentation and promote federation at national level.</p> <p>EOSC can offer to the research communities access to resources, tools and platforms that would be otherwise not available in the country. Researchers will be able to jointly create innovative new technologies and services, which in turn will lead to the creation of new jobs and markets.</p>
Objectives	<ul style="list-style-type: none"> • The official National participation in the EOSC activities and throughout the wide range of EOSC-relevant activities to maximize the potential benefit for the country. • Greece to be officially represented by a Mandated Organization that collectively represents the interdisciplinary Greek Research and Educational Community.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Offering a channel to connect the national stakeholders with the EOSC governance • Coordinating EOSC activities at national level
Governance structure:	<p>A consortium. Organisations include organizations representing research infrastructure, electronic infrastructure, academic libraries, universities, research centers and initiatives related to OS. (indicative names include ATHENA RC, GRNET, NCSR Demokritos, CERTH, National Hellenic Research Foundation, ITE, and many more) A recent, but not currently updated list may be found here: https://hellenicdataservice.gr/news/actions/view/523 More organisations have been added since then.</p>

Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	Yes
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	Many of the organizations committed in the Greek NOSCI are currently members in the EOSC Association, specifically ATHENA RC, GRNET, FORTH, JNP, NCSR DEMOKRITOS and OpenAIRE. (https://eosc.eu/members?field_country_value=Greece&field_status_value=All&field_type_of_organisation_value=All)
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	Yes
Profile of the EOSC national structure:	It will be a consortium of Research performing Organisations, Service providers, Research infrastructure organisations and might include the National Research funding organisation.
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Yes
Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • GEANT • EGI • EUDAT • EuroHPC • PRACE • OpenAIRE • RDA
Main drivers and approach to set up a EOSC national structure	Bottom-up (initiative by researchers, OS stakeholders and actors in the country)
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes. It will be self-regulated with rules defined in the MoU.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations into the EOSC Association • Organisation of public webinars/events to: <ul style="list-style-type: none"> ○ inform national stakeholders about the EOSC latest developments ○ collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) ○ discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.) • Provision of incentives to increase the engagement in EOSC (e.g. financial support for event participation via Open Calls)

EOSC national structure target stakeholders overview	Target stakeholders include research funders, research providers, service providers, research “consumers” (research intensive SMEs) and OS facilitators (including OS initiatives). An indicative total number of all the above is around 40 stakeholders.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • Government involvement and support • Research community support • NOSCI involvement and support
Success factors for the set-up/operation/sustainability of the EOSC national structure	<ul style="list-style-type: none"> • Set-up: Internal governance (MoU) • Sustainability <ul style="list-style-type: none"> ○ Promotion and adoption of Open Science principles and best practices ○ Presence or absence of funding mechanisms
Main benefits of EOSC national engagement	<ul style="list-style-type: none"> • For the country <ul style="list-style-type: none"> ○ EOSC makes easier the sharing and re-use research data, which increases quality and reliability of science and productivity of researchers. ○ Connects to stakeholders from other regions of Europe ○ Supports decentralisation and regional growth. • For the EOSC Governance/future developments <ul style="list-style-type: none"> ○ Facilitates the sharing of knowledge and experiences. Countries that are already advanced in FAIR data and Open Science policies can share their best practices and lead in developing EOSC.
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • National representatives will have the opportunity to co-shape the overall strategic agenda for research EU, which is a de facto reality for all, independently whether they participate in EOSC or not. • National representatives will have the opportunity to co-shape the SRIA, which will be the basis for developing the priorities for the next EC work programme Horizon Europe (2021-2027). • Researchers will have easier access to Horizon Europe funding (being part of the developments, collaborating in consortia, etc.) • Increases productivity of science and improves national performance in DESI indicators. <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Centralises point(s) of contact per country. • May boost EOSC presence and voice in the local communities. • Eases dissemination at National level.
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	Provide a clear list of benefits for stakeholders, including research, policy and economic benefits.

Hungary

Country: HUNGARY <i>Information validated by: Governmental Agency for IT Development (KIFU), University of Debrecen (DE)</i>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Set-up in progress

Name of the EOSC national structure	Nyílt Tudományos Fórum (Open Science Forum)
Established on / Estimated start	Forum created on 28.05.2021, estimated to sign a MOU by the end of 2021.
Duration of the mandate	Aiming for permanent
Main purpose	The national initiative complements the ongoing “top level” efforts of developing an Open Science Strategy. Through the EOSC infrastructure the research community can have access to resources that otherwise would not be available, service providers can offer services to a wider user community. The national initiative can be proven useful in preparing all national stakeholders for their participation into the EOSC Ecosystem. On the one hand by increasing awareness about EOSC, on the other hand by involving local stakeholders into the EOSC activities.
Objectives	<ul style="list-style-type: none"> • Contribute to a better definition of the country level Open Science Strategy • Alignment of the country level tasks to the EOSC task forces activities and vice versa: provide useful input into the international teams • Maximize the potential benefit for the country.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Coordinating EOSC activities at national level
Governance structure:	not yet defined, possibly a joint governance of the NI4OS-Europe Hungarian partners (consortium)
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	Yes
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	EOSC Association – one of the representatives of the national initiative, KIFÜ is the country delegate to EOSC Association
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	Yes. Currently KIFU is the Mandated organisation and is also leading the formation of the initiative.
Profile of the EOSC national structure:	<ul style="list-style-type: none"> • Research performing organisation (Debrecen University) • Service provider for research (KIFÜ)
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Currently KIFÜ is the only EOSC Association members in the country
Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • OpenAIRE • NGI • RDA • GEANT

Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	Hybrid. Main drivers: <ul style="list-style-type: none"> • Engaging stakeholders at national level • Coordinating EOSC activities at national level • Contribute to the development of a sustainable Open Science Strategy
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Currently under formation
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations into the EOSC Association • Organisation of public webinars/events (forums) to: <ul style="list-style-type: none"> ○ inform national stakeholders about the EOSC latest developments ○ collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) ○ discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.)
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • Government support • Research community support • NOSCI involvement and support • Service providing financial models well defined
Success factors for the set-up/operation/sustainability of the EOSC national structure	Set-up of the initiative <ul style="list-style-type: none"> • Involvement of researchers themselves • Clear communication of benefits Operation <ul style="list-style-type: none"> • A good set of objectives and tasks • Regular meetings • Engaged task leaders Sustainability <ul style="list-style-type: none"> • Incentives • Possibility to give input to forming EOSC
Main benefits of the presence of an EOSC national structure	For the country <ul style="list-style-type: none"> • Co-shape research strategy within the EU • Better performance in Horizon Europe calls • Increase in science productivity... For the EOSC Governance/future developments <ul style="list-style-type: none"> • Provides contact points for the country • Facilitates dissemination
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	Provide tangible use cases

Italy

Country: ITALY <i>Information validated by: ICDI</i>	
Status of the EOSC national structure	■ Available, in place.
Name of the EOSC national structure	Italian Computing and Data Infrastructure (ICDI)
Established on / Estimated start	30/10/2019
Duration of the mandate	Temporary, with the possibility to renew
Main purpose	The turning point for Italy is that EOSC is one of the most ambitious actions taken to implement Open Science, and it can build on Europe's unique position in terms of collaboration. ICDI started as a collaboration agreement between the most important research organisations such as the CNR, with the aim to collaborate in new projects and to coordinate their participation in EOSC. Then when the EOSC Association was funded ICDI was one of the four founding members. Up to now in the EOSC Association the number of the Italian organisation are 20 and most of all are members of ICDI but not all. In the long term, our vision aims to create a national coordination body that is representative of Italian infrastructures and interact with national and European institutions on their behalf.
Objectives	<ul style="list-style-type: none"> • promoting synergies at the national level; • optimising the Italian participation to European and global challenges in this field, including the European Open Science Cloud (EOSC), the European Data Infrastructure (EDI) and HPC; • setting up a Competence Center and organising training courses on Open Science's topics; • collecting and spreading information on specific topics related to Open Science and EOSC activities, both on its own initiative and in response to requests from the MUR and the Italian delegations in ESFRI and EOSC, with the aim of improving the knowledge of the scenario of Italian research and digital infrastructures (a recent example of this documentation action is the survey on free access infrastructural resources for research on SARS-CoV-2 and COVID-19 in Italy).
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Offering a channel to connect the national stakeholders with the EOSC governance • Offering training on EOSC specific topics at national level
Governance structure:	A consortium. A vast majority of Research Infrastructures and e-Infrastructures of national interest are represented in ICDI. The Italian Ministry of University and Research participated in the initiative as an observer. ICDI has the form of a MoU signed by Area Science Park, CINECA, CNR, Elettra Sincrotrone, ENEA, GARR, INAF, INFN, INGV, OGS, SISSA, Università di Milano-Bicocca, Università di Trento and Giovanni XXIII Foundation for Religious Studies. Many of ICDI's partner research bodies, such as CNR, INFN, INGV, have laboratories throughout Italy. In particular CNR (the National Research Council) is the largest public research institution in Italy, and it has more than 4,000 researchers and technologists performing multidisciplinary activities. The list of partners is expanding.

	<p>Besides the MoU participants, ICDI animates a community which involves most of the representatives of Research Infrastructures and e-Infrastructures of national interest. See the members' list at https://www.icdi.it/en/about/members</p> <p>The ICDI community is wider and still growing and includes the Italian ESFRI delegation and EOSC Governing Board member, and representatives from major research organisation, like ASI, Stazione Zoologica Anton Dohrn and the universities of Firenze, Napoli, RomaTre, Torino, Padova, Perugia, Bari, and Venezia.</p> <p>The activities towards this wider community involve convening periodical meetings, offering training and information related to OS and EOSC topics, and carrying out consultations</p>
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	Yes: ICDI is the mandated organisation in the process of becoming a legal entity, in the meantime, GARR is representing ICDI in the EOSC Association as the mandated organisation for Italy. The statute and bylaws will need to be specified in coherence with the form chosen for the Legal Entity
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	ICDI members are part of the EOSC Association and of the EOSC Steering Board.
Profile of the EOSC national structure:	<ul style="list-style-type: none"> • Research performing organisations • Service providers for research
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Not all the EOSC Association members are participating in ICDI: Italian organizations members of the EOSC Association are 20, half are members of ICDI. Nevertheless, some members of ICDI are not members of EA. In some cases, they have expressed an interest in joining the EOSC association - especially if they have a direct interest in EOSC - in other cases it's enough to participate in the national initiative. Sometimes due to administrative barriers. The membership situation is constantly evolving.
Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • EOSC Pillar: INFRAEOSC-05-2018-2019 project coordinated by GARR to harmonise national Open Science efforts across Austria, Belgium, France, Germany and Italy, and ensure their contribution and readiness for the implementation of the European Open Science Cloud (EOSC). • EOSC Advisory Groups: ICDI coordinates the Italian contribution to the development of EOSC, through the participation of Italian delegates in the EOSC Advisory Groups. • EOSC Steering Board • Italian OpenAIRE NOAD • National node of the ESFRI RI are members of ICDI • National node of EGI
Main drivers and approach to set up a EOSC national structure	<p>Bottom-up. Main drivers:</p> <ul style="list-style-type: none"> • harmonising and supporting the Italian participation to EOSC and HPC (some of the Italian institutions involved in EuroHPC Joint Endeavour, i.e. INFN and CINECA, are leading partners of ICDI and ICDI acts as a forum for coordinating and sharing information on these issues as well) • promoting FAIR, open access and open science

	<ul style="list-style-type: none"> • fostering e-infrastructures federated services • setting up training and network of expertises (competence center) for implementing open science
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	<p>Yes: ICDI is managed by an Executive Board, which is a General Assembly formed by two representatives from each partner of the MoU. There we discuss the strategic activities.</p> <p>All the ICDI activities are done as in-kind contributions, each organisation is supporting their persons. There are no dedicated people for the NOSCI. And we have a need for dedicated people.</p>
Funding/revenue stream model	Currently, it is not funded and it's animated on a voluntary basis.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations into the EOSC Association • Organisation of public webinars/events to: <ul style="list-style-type: none"> ○ inform national stakeholders about the EOSC latest developments ○ supporting research communities to implement open science in their specific domains ○ collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) ○ discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.) • Organisation of EOSC Cafes' reserved to the members to answer questions about EOSC: the Open Science café is a series of events designed to cover major topics and news from the Open Science world dedicated to the Italian community: https://www.icdi.it/en/activities/tf-cc/open-science-cafe • One to one support to organisations to better understand the EOSC landscape, to discuss the benefits of joining the Association, etc. • Provision of incentives to increase the engagement in EOSC (e.g. financial support for event participation via Open Calls) • Federated services among the members e.g. cloud.
EOSC national structure target stakeholders overview	<p>The main stakeholders are: researchers, public and private institutions, bodies and research centres, public administrations, professionals and companies that (re)use or produce data for research, funding bodies, public and private training and education institutions and agencies and ultimately citizens.</p> <p>Regarding the Italian community: ICDI have a mailing list with about 40 different institutions. Many of them, such as the CNR, have offices all over the country and have thousands of researchers and scholars. So through the partner network we can reach a wide community of users.</p> <p>Through the Open Science Café webinars, we had around 1,000 participants with more than 1,500 views for the videos (live or on demand) of the first 4 episodes.</p>
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • Offer a clear value proposition and awareness of what are the advantages to adhere to EOSC

	<ul style="list-style-type: none"> • National strategy that include funders and policy makers and coordination actions to the different projects/initiatives • Develop competencies and skills to guarantee FAIR-by-design processes • Adequate National funding: dedicated line of funding for EOSC from the Ministry • Involve the Universities in the ICDI and the large research communities
<p>Success factors for the set-up/operation/sustainability of the EOSC national structure</p>	<p>Set-up</p> <ul style="list-style-type: none"> • dedicated staff for the daily management and coordination of initiatives, for the training activities. From our community there is a high need for guidance on developing policies and on how to apply FAIRness, Open Science paradigm in the daily research workflows. It is difficult to meet this expectation by working on a voluntary basis. • Identify the right contact points in each institution <p>Operation</p> <ul style="list-style-type: none"> • Set up the National registry • Offer support to service providers and content provider to be integrated • Support to adopt policy recommendations for implementing Open Science • Organize train-the-training courses <p>Sustainability</p> <ul style="list-style-type: none"> • National funds to finance ICDI activities on a stable basis • National funds to ensure that Open Science requirements are integrated into research
<p>Engagement best practices</p>	<p>To promote community engagement ICDI set up task forces dedicated to topics of interest to the Italian community (https://www.icdi.it/en/activities):</p> <ul style="list-style-type: none"> • The Italian Federated Cloud Platform Task Force (FCP-IT) to develop a strategy and identify adequate technical solutions to create a federated cloud dedicated to research on a national scale and to propose itself as a model at the European level. • The Italian Competence Center for EOSC Task Force (https://www.icdi.it/en/activities/tf-cc) to set up a national Competence Center and a platform to federate, coordinate and further disseminate the existing competences within Research bodies, Infrastructures and Universities that are part of the Italian Open Science community. • The Clinical Data Management Task Force to build a support platform for the management of clinical data, with a special focus on data related to COVID-19, contributing to the European COVID-19 platform, and creating a Proof of Concept that can be used for sharing biomedical data relating to other pathologies. • 4.ICDI is responsible for collecting information on specific topics related to Open Science and EOSC activities, both on its own initiative and in response to requests from the MUR and the Italian delegations in ESFRI and EOSC, with the aim of improving the knowledge of the scenario of Italian research and digital infrastructures. A recent example of this documentation action is the survey on free access infrastructural resources for research on SARS-CoV-2 and COVID-19 in Italy.

	<p>We are setting up Shadow Working Groups, composed of experts and young researchers, who will discuss and provide feedback to the Italian delegates participating in the EOSC Advisory Groups. This activity allows us to share with the ICDI community the strategies and directions of the EOSC and to create a virtuous mechanism of bottom up participation.</p>
Main challenges	<p>Stakeholder engagement at national level</p> <ul style="list-style-type: none"> • to identify the right contact person for outreach activities: especially in the University • Stakeholders want to know what are the advantages of joining EOSC and what is the added value in terms of infrastructure development and research. • lack of competencies in Open Science issues: need of train the trainers programme; lack of dedicated staff to training <p>national structure set-up/ operation/ maintenance</p> <ul style="list-style-type: none"> • activities are currently carried out on a voluntary basis. A light but efficient organisation needs to be established and maintained to coordinate the implementation of strategies and work plans.
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • Supporting and accelerating the development of open science • Facilitating cross disciplinary collaborations • Developing Open Cloud services for reseach • Sharing services and e-infrastructure • Optimising funding through greater coordination of research and higher education centres • Improving Italy's positioning in the European scene and increasing Italian participation in international calls for proposals <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Enabling open access to services and data across the different scientific disciplines • Ensuring the participation of research communities in the development of EOSCs • To make it possible to share needs and requirements in order to implement services and infrastructures to develop science across border • Boosting the Italian participation to EOSC Association activities
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • To form a single voice representing the needs of the research world, able to relate to ministries and funding bodies. • Enabling the coherent development of open science in universities and research centres throughout the country • Developing public e-infrastructures and cloud services for research and education, based on the needs of the community and able to guarantee the security of data and their storage at national public providers. <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Ensuring the participation of the Italian community in the EOSC Convergence of national funding for EOSC and Open Science development • Coordination of extensive training on Open Science methodologies for the new generation of researchers

Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	<ul style="list-style-type: none"> Facilitate exchange and collaboration at European level between the various national initiatives to exchange experiences and lessons learned. Facilitate the referral to ICDI of Italian members in the EOSC association who are not members of ICDI yet.
--	--

Latvia

Country: LATVIA <i>Information validated by: Ministry of Education and Science of Latvia</i>	
Status of the EOSC national structure	<input type="checkbox"/> Not available yet, but planned
Name of the EOSC national structure	Higher Education and Science Joint Digital Services Center
Established on / Estimated start	2022
Duration of the mandate	Permanent
Main purpose	<p>Engagement is based on opportunities for Latvian researchers and open science and focusing on increased coordination on issues of FAIR research data, as well as ensuring equal access and representation of research institution into EOSC.</p> <p>Synergies with EOSC are essential to fulfil the objectives on the Latvian National Open Science Strategy which is expected to be approved in the Cabinet of Ministers by the end of 2021.</p>
Objectives	The initiative is envisioned to be a member of the EOSC association and itself be actively involved in EOSC projects, as well as facilitating the participation of other national stakeholders in EOSC-related initiatives.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> Developing and jointly procuring high quality digital services for research institutions Coordinating national stakeholders to address current and future needs Coordinating EOSC activities at national level
Governance structure:	A single organisation (Higher Education and Science Joint Digital Services Center) governed primarily by the largest research institutions.
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	Yes
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	EOSC Association - membership EOSC Steering Board – via involvement of stakeholders from the Ministry of Education and Science
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	Yes
Profile of the EOSC national structure:	Service provider for research

Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	To be determined. Initially the Joint Services Center is being established by the 3 or 4 largest universities with the possibility to expand membership later. All research institutions nationally will be able to receive some services from the JSC and to participate in the stakeholder forum.
Direct links with other EOSC/OS initiatives active in the country	EOSC Nordic project participants will be invited to actively participate in the JSC once it is established.
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	Hybrid - primarily bottom-up initiative of the large universities but supported by the Ministry of Science and Education (also financially). Main drivers triggering the set-up of the national structure: <ul style="list-style-type: none"> • Need for higher quality/cheaper joint services • Need to reform the Academic Network • Need to implement the National Open Science Strategy (introducing FAIR and good RDM practices) • Participation in EOSC
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes. Still in progress – but the governance structure is modelled on Finland's CSC.
Funding/revenue stream model	<ul style="list-style-type: none"> • Member-organizations (membership fees + in-kind contributions) • Horizon and EOSC projects, etc. • The Ministry of Education and Science • Other clients of the services offered
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organizations into the EOSC Association • Organization of public webinars/events to: <ul style="list-style-type: none"> ○ inform national stakeholders about the EOSC latest developments ○ collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) ○ discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.) • Organization of EOSC Cafes' reserved to the members to answer questions about EOSC
EOSC national structure target stakeholders overview	Member research institutions + other research institutions.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • Synergies of EOSC projects with the strategies of RIs • Sustainability of services after projects finish • Cooperation between stakeholders • International consortia
Success factors for the set-up/operation/sustainability of the EOSC national structure	Set-up of the initiative <ul style="list-style-type: none"> • Member organization buy-in Operation <ul style="list-style-type: none"> • Quality governance structure

	<ul style="list-style-type: none"> • Ability to attract the best talent Sustainability <ul style="list-style-type: none"> • Being able to demonstrate value • High quality services for a good price
Main challenges	Lack of ability to form an equivalent legal entity to CSC.
Main benefits of EOSC national engagement	For the country <ul style="list-style-type: none"> • Harmonization of policies and practice with EU best-practice For the EOSC Governance/future developments <ul style="list-style-type: none"> • Addressing the needs of local stakeholders at a cross-national level.
Main benefits of the presence of an EOSC national structure	For the country <ul style="list-style-type: none"> • Increasing the visibility of EOSC opportunities and services For the EOSC Governance/future developments <ul style="list-style-type: none"> • Single point of contact organization

Moldova

Country: MOLDOVA Information validated by: <i>Research and Educational Networking Association of Moldova (RENAM)</i>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Set-up in progress
Name of the EOSC national structure	Name under definition
Established on / Estimated start	November-December 2021
Duration of the mandate	Aiming for Permanent
Main purpose	A NOSCI is envisaged as a coalition of national organisations that have a prominent role and interest in the EOSC. The main aim of NOSCI will be the promotion of synergies at national level, and the optimisation/articulation of their participation to European and global challenges in this field of OSC, including the EOSC.
Objectives	<ul style="list-style-type: none"> • To develop the national initiatives for open data, open science services, cloud and data infrastructures towards achieving the overall EOSC vision • To facilitate the compliance with EOSC standards of the related national OS initiatives and national research programmes • To promotion of FAIR practices and EOSC services
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Offering a channel to connect the national stakeholders with the EOSC governance
Governance structure:	Consortium
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	Yes, Currently the mandated organisation for Moldova is the Information Society Development Institute.

What is / will be the relation between the EOSC national structure and the EOSC Partnership?	The national initiative plans to comprise all main national stakeholders, including the Information Society Development Institute that is currently member of the EOSC Association.
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	Yes
Profile of the EOSC national structure:	The Ministry of Education, Culture and Research is supposed to coordinate the NOSCI; universities, research institutes and service providers are supposed to form the NOSCI consortium
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	One known member of the EOSC Association - the Information Society Development Institute is taking part in the formation of the national initiative triggered by the Research and Educational Networking Association of Moldova (RENAM).
Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • NGI (providing computer resources and platforms for OS support) • GEANT-RENAM platform for high-speed connectivity and OS related services • EIFL – open science publications • REM (Resurse Electronice pentru Moldova – Electronic Resources for Moldova) – access to scientific publications
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>Hybrid approach.</p> <p>Main drivers triggering the set up of the national structure:</p> <ul style="list-style-type: none"> • Universities and research institutes interested in applying OS approach and FAIR principles • RENAM interested in supporting e-Infrastructures and providing OS related services • Ministry of Education, Culture and Research interested in coordinating efforts at national level, forming OS legislation and relevant regulation documents • Scientific libraries interested in supporting citizen science and providing access to open publications
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes, but currently it is under formation and after it requires coordination with the Ministry of Education, Culture and Research.
Funding/revenue stream model	National funding is supposed to support setting-up the NOSCI; after as possible funding instrument of NOSCO operation can be considered National OS support programme.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations into the EOSC Association • Organisation of public webinars/events to: <ul style="list-style-type: none"> ○ inform national stakeholders about the EOSC latest developments ○ collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects)

	<ul style="list-style-type: none"> ○ discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.) ● One to one support to organisations to better understand the EOSC landscape, to discuss the benefits of joining the Association, etc.
EOSC national structure target stakeholders overview	<ul style="list-style-type: none"> ● Stakeholders are currently being identified and will mostly be through known channels (researchers, librarians, etc.); approximately 10 members at the initial stage.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> ● Clear understanding of benefits of OS and EOSC for both the research community and the whole society ● Comprehensive description of the procedure how the researchers/organisations can access the services on-boarded into EOSC
Success factors for the set up/operation/sustainability of the national structure	<p>Set-up</p> <ul style="list-style-type: none"> ● Ministry of Education, Culture and Research engagement and its coordinating role <p>Operation</p> <ul style="list-style-type: none"> ● Links between RENAM and other e-Infrastructures <p>Sustainability</p> <ul style="list-style-type: none"> ● Rewarding researchers in OS ● National funding for OS support
Engagement best practices	Adaptation of appropriate OS policy at the national level is needed in Moldova.
Main challenges	<p>national initiative set-up/ operation/ maintenance</p> <ul style="list-style-type: none"> ● Political situation with new government to be appointed – changing the minister and other persons in charge ● Availability of National funding for OS support
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> ● integration of Moldovan researchers into the European Research Area ● adoption of the EU standards/approaches at the national level ● Access to OS services, research data through involvement in EOSC, open exchange of scientific information with international colleagues <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> ● inclusion of Moldovan research community into EOSC related regional and European projects ● Open and seamless access to research data and data exchange
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> ● to trigger development of OS policy and legislation at the national level ● to trigger movement of R&E community to the best practices in OS ● open access to research data and open publication of research results <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> ● Widening relations and cooperation with EOSC Governing structures and EOSC related projects with perspective of NOSCI members involvement in the current and future projects and other collaborations activities.

Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	To guide the national representatives, including policy makers, the mandated organisation in EOSC, how to support better NOSCI set-up and future operation.
--	---

Montenegro

Country: MONTENEGRO <i>Information validated by: University of Montenegro (UoM)</i>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Set-up in progress
Name of the EOSC national structure	National open science cloud initiative in Montenegro (NIOON)
Established on / Estimated start	Estimated start on September 2021
Duration of the mandate	Not clear
Main purpose	The national OSC initiative (NOSCI) is established in the frame of NI4OS-Europe project, through bottom-up approach, where University of Montenegro (UoM), as a local project partner, coordinates NOSCI activities. The aims of NOSCI in Montenegro are in accordance with the strategic vision of research activities in Montenegro, based on the principles of open science, presented in the national document "Program for the implementation of the principles of" Open Science "in Montenegro with the Action Plan (2020-2022), adopted by the Government of Montenegro in June 2020.
Objectives	<ul style="list-style-type: none"> • Creation of infrastructure at the national level, with associated data and services ("Open Science Cloud in Montenegro"), which will be the basis for joining the EOSC. • Promotion of the concept of open science at the national level and inclusion of other relevant research institutions in the National Open Science Cloud Initiative in Montenegro ("NIOON"). • Participation in the European vision and activities in the field of open science, which increases the possibility of participation of the research community of Montenegro in Horizon Europe and other similar programs. • Promotion of national research and innovation capacity. • Providing professional assistance and training in the field of Open Research Data Management (ORDM) to researchers from institutions signatory to the Memorandum
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Coordinating EOSC activities at national level
Governance structure:	Consortium
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	No Up to now, UoM, which coordinates activities in national OSC initiative, has applied to be an observer in EOSC Association.

What is / will be the relation between the EOSC national structure and the EOSC Partnership?	University of Montenegro has applied to join the EOSC Association as an observer.
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	No, it can be discussed with the partners within initiative, but it is not necessary that the initiative represent the Member State in the EOSC Partnership.
Profile of the EOSC national structure:	Research performing organisation
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	University of Montenegro has applied to join the EOSC Association as an observer and is currently leading the formation of the national initiative.
Direct links with other EOSC/OS initiatives active in the country	GEANT
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	Hybrid approach Main drivers triggering the set up of the national structure <ul style="list-style-type: none"> • Improved research efficiency • Open access to research results, data and services and possibility to use resources of other research institutions and labs • Promotion of researchers, research and innovation capacities • Improved visibility of Montenegrin researchers and inclusion in ERA
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes. Establishment of a Coordination body for the implementation of activities is foreseen by MoU, consisting of representatives of the institutions signatory to the MoU.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Organisation of public webinars/events to: <ul style="list-style-type: none"> ○ inform national stakeholders about the EOSC latest developments ○ collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) ○ discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.)
EOSC national structure target stakeholders overview	Stakeholder's list is under formation. At the moment there are confirmation from several units from UoM, 2 units from other private universities, research institutes, etc. .
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • Incentives and rewards for researchers practising Open science • Service adoption by research community • Dissemination • Support of research funding organizations

<p>Success factors for the set up/operation/sustainability of the national structure</p>	<p>Set-up</p> <ul style="list-style-type: none"> • Coordinating institution • Dissemination among research community • Support of key stakeholders (policy makers, research funding organisations, research institutions...) <p>Operation</p> <ul style="list-style-type: none"> • Rewards policy for practising Open science • Services attractive to researchers • Human resources <p>Sustainability</p> <ul style="list-style-type: none"> • Support of public authorities • Support of funding organisations • Participation at EU level projects in this area
<p>Main challenges</p>	<p>Stakeholder engagement at national level</p> <ul style="list-style-type: none"> • Unwillingness to adopt new research approach and data management plans • Incentives and rewards are only related to publishing research results in journals with impact factor, so practising open science is not yet recognized in research career • Internal institutions' rules in using research infrastructure and resources <p>national initiative set-up/ operation/ maintenance</p> <ul style="list-style-type: none"> • not so clear direct benefits for institutions joining national initiative • lack of human resources ready to dedicate time for tasks in realisation of national open science cloud initiative
<p>Main benefits of EOSC national engagement</p>	<p>For the country</p> <ul style="list-style-type: none"> • Improved research environment through availability of different EOSC research services and infrastructures • Possibility for creation of new partnerships at EU level • Awareness of novel facilities and other benefits that EOSC provide to researchers • Raised awareness of benefits that open science brings to research community and whole society <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Possibility to include main research results/data/services from Montenegrin research community through single connection point
<p>Main benefits of the presence of an EOSC national structure</p>	<p>For the country</p> <ul style="list-style-type: none"> • Promotion of Open science • Coordination of activities related to Open science among the interested stakeholders • Improved visibility of research results of Montenegrin researchers and enabled access to research infrastructure <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • EOSC promotion at the national level • Novel EOSC service providers • Direct/indirect inclusion of relevant national stakeholders to EOSC Association
<p>Is there anything that you would like to point to the attention of the EOSC</p>	<p>Support in technical issues.</p>

Association or the EOSCsecretariat.eu project?	
--	--

North Macedonia

Country: NORTH MACEDONIA <i>Information validated by: Ss. Cyril and Methodius University in Skopje (UKIM)</i>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Available, in place.
Name of the EOSC national structure	National Open Science Cloud Initiative in North Macedonia (NOSCI.MK)
Established on / Estimated start	15.03.2021
Duration of the mandate	Aiming for Permanent
Main purpose	The aim of NOSCI.MK is to bring together all stakeholders belonging to the research community in the country to promote openness at the national level and disseminate the open science principles. The purpose is to support and emphasize openness as a fundamental value for raising the quality of research and the autonomy of researchers so they can be more closely linked to the rest of society and influence its development. NOSCI.MK aims to build a partnership with the Ministry of Education and Science to contribute to the development and upgrading of national legislation and the incorporation of the open science principles.
Objectives	<ul style="list-style-type: none"> • Participation in the EOSC governance and policy making representing the national views and open science development strategies. • Promotion of the national EOSC-related services that can be onboarded to EOSC and thus achieve greater international visibility. • Promotion of the EOSC on-boarded services that are relevant to the research and wider community in the country. • Adoption of the open science principles and their integration in the national legislation and strategies.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Offering a channel to connect the national stakeholders with the EOSC governance • Coordinating EOSC activities at national level
Governance structure:	<ul style="list-style-type: none"> • A consortium (UKIM, SEEU, UKLO, UNITE, UGD, UIST, NUBSK, MANU) • A task force consisting of representatives of the research community undertook the composition of the “Declaration on Open Science Cloud Research”. • The institutions that joined the task force are (UKIM, SEEU, UKLO, UNITE)

Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	No, Currently UKIM is the only national member of EOSC, and has applied to get the mandate from the relevant ministry
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	University Ss Cyril and Methodius in Skopje, Faculty of Computer Science and Engineering (FCSE-UKIM) is currently coordinating the NOSCI.MK initiative formation and thus plays the role of a focal point for interaction between the NOSCI.MK members and the EOSC Association and Steering Board.
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	No, NOSCI.MK is not a legal entity, and has only advisory role to the Ministry that decided who will be the mandated organisation. If UKIM becomes the mandated organisation than it will represent the NOSCI.MK members accordingly.
Profile of the EOSC national structure:	Research performing organisation
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Yes FCSE-UKIM has currently joined the EOSC Association as a member and is coordinating the initiative formation.
Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • OpenAIRE • NGI • GEANT
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>Hybrid approach.</p> <p>Main drivers triggering the set up of the national structure</p> <ul style="list-style-type: none"> • Drafting the “Declaration on Open Science Cloud Research” • Running an open call for signing the declaration • Doing a cost-benefit analysis requested from the Ministry of Education and Science • Building partnership with the Ministry of Education and Science to support the inclusion of open science cloud in the national legislation
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes. It is current being structured.
Funding/revenue stream model	NOSCI.MK is currently not being funded and runs on voluntary based basis.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations into the EOSC Association • One to one support to organisations to better understand the EOSC landscape, to discuss the benefits of joining the Association, etc.

EOSC national structure target stakeholders overview	The “Declaration on Open Science Cloud Research” is open to all stakeholders (individuals and organisations) contributing to the research lifecycle (i.e. researchers, RPOs, service providers, librarians, policy makers, publishers, society as a whole) in the country to promote openness at the national level.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • Adoption by research community • Support from policy makers • Achieve wide NOSCI.MK membership from all relevant stakeholders
Success factors for the set-up/operation/sustainability of the EOSC national structure	<p>Set-up</p> <ul style="list-style-type: none"> • Cost-benefit analysis performed • Open call for participation <p>Operation</p> <ul style="list-style-type: none"> • Signing declaration by individuals and organisations • Adoption of open science principles in everyday work <p>Sustainability</p> <ul style="list-style-type: none"> • Funding mechanisms • Support and recognition from the Ministry
Engagement best practices	Approaching stakeholders on individual level initially and then creating a critical mass so that the organisations can officially adopt the declaration and adapt to open science principles. Practice openness and transparency from the start
Main challenges	<p>Stakeholder engagement at national level</p> <ul style="list-style-type: none"> • Low response rate • Lack of awareness <p>national structure set-up/ operation/ maintenance</p> <ul style="list-style-type: none"> • Support from Ministry • Lack of funding
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • Active participation in EOSC policy making • Wider promotion of research outcomes <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Sharing national experience and specific use cases
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • Convergence of efforts related to open science practices • Creation of advisory body on the highest level of national policy making • Identifying specific needs of the NOSCI members <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • More transparent and immediate dissemination of EOSC related practices and services
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	Provide an EOSC incentives short document (“What EOSC can do for your country”) that can be used to convince policy makers to recognise the importance of being part of EOSC and provide national EOSC related investments and funding

Norway

Country: NORWAY <i>Information validated by: Ministry of Education and Research, Research Council of Norway</i>	
Status of the EOSC national structure	<input type="checkbox"/> Not available yet, but planned
Name of the EOSC national structure	Name under definition
Established on / Estimated start	N. A.
Duration of the mandate	Permanent
Main purpose	The Ministry of Education and Research see EOSC as an opportunity to strengthen the implementation of our national strategy on access to and sharing of research data. The main purpose of our commitment to EOSC is to facilitate Norwegian researchers' and research institutions' engagement with European research data and research communities, as well as bringing Norwegian priorities, work methods, and research data into the European community. The national initiative was established to engage national stakeholders and coordinate Norwegian efforts with respect to EOSC.
Objectives	Mobilise Norwegian institutions with (national) research infrastructures to become member of EOSC AISBL and contribute to the implementation of EOSC.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Coordinating EOSC activities at national level
Governance structure:	A single organisation. Most likely the mandated organisation.
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	Yes
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	The Norwegian delegate to the EOSC Steering Board will participate in activities facilitated by the national initiative, and will consult with the representatives from the national initiative in preparing Norwegian positions for the Steering Board.
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	Yes
Profile of the EOSC national structure:	Research funding organisation
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Not clear yet.

Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	Hybrid approach
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	To be decided

Poland

Country: POLAND <i>Information validated by: National Science Center</i>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Set-up in progress
Name of the EOSC national structure	“EOSC Network – Poland”
Established on / Estimated start	16 July 2021
Duration of the mandate	Permanent
Main purpose	“EOSC Network – Poland” has been established to support development of EOSC, coordinate and strengthen EOSC-related activities at national level and embed them in the international context of EOSC.
Objectives	<ul style="list-style-type: none"> • Coordination of EOSC-related activities at national level • Providing a platform for engagement of national stakeholders • Delivering a forum for exchanging information and best Open Science practices • Developing and strengthening EOSC-related capacities (skills, knowledge, resources) • Embedding EOSC in open data initiatives at international and national level • Creating international liaisons to support well-aligned development of EOSC • Increasing awareness of EOSC • Providing support for mapping EOSC-related initiatives at national, regional and institutional level
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Coordinating EOSC activities at national level
Governance structure:	<p>“EOSC Network – Poland” is an informal group. Currently its composition is based on members and observers of EOSC Association. The members include:</p> <ul style="list-style-type: none"> • National Science Centre – a mandated organisation to EOSC Association, a national representatives to EOSC Steering Board, • Ministry of Education and Science – an alternate national representative to EOSC Steering Board, • Adam Mickiewicz University – EOSC Association, • Gdańsk University of Technology - EOSC Association,

	<ul style="list-style-type: none"> • Institute of Geophysics, Polish Academy of Sciences – EOSC Association, • Poznan Supercomputing and Networking Centre, Institute of Biochemistry Polish Academy of Sciences – EOSC Association. <p>The group will be open to any institutions engaged with EOSC / Open Science. We have already received requests from other RPOs (who are not members of EOSC Association) to join the Network.</p>
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	No, EOSC mandated organisation has been already appointed. The “EOSC Network-Poland” is an informal group, and its main purpose is to coordinate the activities nationally.
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	Yes, there are strong links with the EOSC Partnership. “EOSC Network – Poland” includes a mandated organisation to EOSC Association, both national representatives to EOSC Steering Board and EOSC Association national members and observers.
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	No. The representatives to EOSC SB (who have a mandate to represent the Member State) have already been appointed. The “EOSC Network-Poland” is an informal group, and its main purpose is to coordinate the activities nationally.
Profile of the EOSC national structure:	An RFO, a representative of the Ministry of Education and Science and RPOs are the founding members of the Network. However, it will be open to service providers and other stakeholders engaged in EOSC related activities. It is coordinated by an RFO.
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	All national members and observers to EOSC Association are included in the “EOSC Network – Poland”. They will provide relevant expertise and be involved in working groups.
Direct links with other EOSC/OS initiatives active in the country	<p>Yes, the Network has links with a bottom-up initiative run by major EOSC stakeholders (RPOs), who prepared a “Report on research data opening in Poland in perspective of EOSC development until 2030”. Members of the Network are involved in open data advisory group attached to the Ministry of Education and Science. Role of the latter is to provide expertise in developing national policies and strategies relating to Open Science.</p> <p>Members of the Network are also involved in many EOSC-related initiatives (projects) at the regional and European level.</p>
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>Hybrid. Main drivers triggering the set-up of the national structure:</p> <ul style="list-style-type: none"> • defining investment needs, • developing skills and competences in terms of Open Science, • national coordination of activities, • networking
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	No. The informal group is coordinated by National Science Centre, who is a national representative to EOSC SB and a mandated organisation to EOSC Association.
Funding/revenue stream model	Functioning of the Network will be based on in-kind contributions of all members of the Network, who will provide relevant expertise, be

	engaged with respective works and provide storage for developed data and documents.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • Strengthening EOSC awareness at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share EOSC experiences and increase Open Science competences at national level • Increasing the engagement in EOSC Association • Organisation of public webinars/events to: <ul style="list-style-type: none"> ○ inform national stakeholders about the EOSC latest developments ○ collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) ○ discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.) • One to one support to organisations to better understand the EOSC landscape, to discuss the benefits of joining the Association, etc.
EOSC national structure target stakeholders overview	Currently, the Network includes an RFO, a representative of the Ministry of Education and Science and RPOs. The invitation to join the Network will be extended to other organisations (i.e. RFOs, RPOs, Rectors' conferences, service providers). We assume that in the first operational phase the Network will be composed of representatives of max. 2 RFOs, 10 RPOs, 1 Rectors' conference, 1-2 service providers. Once, the Network is fully operational (this should be reached by mid-2022), it will be open to broader groups of potential stakeholders, who will be invited to participate in working groups relevant to their expertise.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • Integration of existing national infrastructures and services into EOSC • Development of EOSC-related activities that would be based on complementarity and avoid redundancy • Productive, regular communication among the stakeholders • Involvement of end-users in the EOSC activities, provide them with trainings on how to open the research data and how to re-use existing data in accordance with FAIR principles
Success factors for the set-up/operation/sustainability of the EOSC national structure	<p>Set-up</p> <ul style="list-style-type: none"> • Identification and engagement of key stakeholders, who possess capacity to provide significant contribution at different stages of the Network's development • Identification of specific experts, who will be ready to provide regular contribution to the Network • Set-up of the working groups that on the hand will cover the main areas of EOSC and on the other include highly engaged members <p>Operation</p> <ul style="list-style-type: none"> • Increasing awareness of EOSC in the broader research community • Increasing the uptake of EOSC-related investments by the research community • Development of EOSC interoperable services and thematic hubs, which would increase the engagement of end-users • Adjustment of governance structure to the extended Network <p>Sustainability</p>

	<ul style="list-style-type: none"> • Creating incentives for active and regular contributions to the Network • Recognition and credit for Open Science practices in research assessment
Engagement best practices	One of the best national practices was to incorporate Data Management Plan in the NCN's grant application and a requirement to share FAIR data related to publications funded by the NCN. It is foreseen that the adoption of the DMP will increase the uptake of EOSC-relevant investments by the research community.
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • high-quality support in the field of Open Science (especially Open Data) for end-users • increased knowledge, skills and competences in the area of data sharing and re-using • higher level of research data sharing • increased research impact <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • increased commitment of the stakeholders in EOSC Governance and future EOSC developments • increased EOSC awareness • increased uptake of best practices in Open Science (in accordance with FAIR principles) • providing relevant expertise • providing support for well-aligned monitoring and mapping of EOSC initiatives and activities
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • better aligned (complementary) investments in Open Science • increased engagement of Polish EOSC stakeholders providing a network for discussion that will engage different stakeholders (RPOs, RFOs, service providers and policy-makers), which will contribute to better alignment of various open science / EOSC aspects • developing Open Science best practices and promoting them <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • providing relevant expertise • providing a forum for ideas and opinions exchange, which will also include perspectives of stakeholders who are not members of EOSC Association • providing consistent stream of information regarding EOSC developments • providing information related to EOSC governance, SRIA, MoU • disseminating results of Task Forces' works and incorporate them in the best practices
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	<ul style="list-style-type: none"> • This mapping is a very good starting point for collecting information on the EOSC-related initiatives; this is very much needed in order to create convergent approaches towards future EOSC; • It is very important to help stakeholders / national initiatives to get liaised. Maybe a platform / tool (with contact points) could be created for joint activities? For instance, it could help the stakeholders identify potential partners for national activities -

	webinars, conferences, trainings, EOSC cafes, but also find suitable partners for planned HE project consortia.
--	---

Portugal

Country: PORTUGAL <i>Information validated by: FCCN and FCT</i>	
Status of the EOSC national structure	<input type="checkbox"/> Not available yet, but planned
Name of the EOSC national structure	Name under definition
Established on / Estimated start	2022
Duration of the mandate	Aiming for permanent
Main purpose	The European Open Science Cloud (EOSC) initiative aims to offer researchers a virtual environment with open and seamless services for storage, management, analysis and re-use of research data, across borders and scientific disciplines by federating existing data infrastructures. EOSC is being co-created in a series of funded projects and initiatives from Member States and Associated Countries. Portugal wants to engage with EOSC to enable open science, open innovation and digital transformation of science. We aim to contribute to the access and reuse of publicly funded research data in Europe, through the federation of Portuguese research infrastructures.
Objectives	<ul style="list-style-type: none"> • Engaging scientists with open science enabling them to do better and more rewarded research; • Enriching publications, data and software in order to make them usable by machines and scientists; • Federating infrastructures in order to make them all available to scientists across borders and across disciplines.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Coordinating EOSC activities at national level
Governance structure:	A consortium or a national program. In any case potential members would be those who have competencies on: <ul style="list-style-type: none"> • Computing Infrastructures; • Data Infrastructures; • Network; • Training • AAI • EOSC integration services • Research infrastructures (mainly from the national roadmap)
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	It is likely that FCT, as a mandated organisation in the EOSC Association, will be the or one of the coordinating bodies.

What is / will be the relation between the EOSC national structure and the EOSC Partnership?	FCT has representatives in both the EOSC Association and EOSC Steering Board.
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	Most likely yes.
Profile of the EOSC national structure:	<ul style="list-style-type: none"> • RFO, namely FCT • RPOs • Service providers for research, such as e-infrastructures.
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	University of Coimbra, EOSC association member, is not, at this stage, involved in the national initiative, as this initiative has not been created. The goal is to include all members/observers.
Direct links with other EOSC/OS initiatives active in the country	Please refer to section 1.2 of EOSC-SYNERGY Landscaping Country Report Portugal ²⁷
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>We would prefer a hybrid approach. There is ongoing adoption of EOSC (bottom-up). We would like to have a layer of coordination to make it more effective and to address “long tail” initiatives and national roadmap infrastructures that do not have connection with European “equivalent”.</p> <p>Main drivers triggering the set-up of the national structure:</p> <ul style="list-style-type: none"> • Political commitment • Engagement of stakeholders at national level into EOSC • Funding • Staff
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	<p>Traditionally, these kinds of initiatives tend to be rather centralized, however we are open to consider other governance models. More formal or not, a potential approach might be:</p> <ul style="list-style-type: none"> • Forum - Advisory body comprising members of the community and society • General Assembly - Approves the strategy, the plan of activities and the budget. Also, appoints the executive board. • Coordinating Committee - Proposes the strategy and plan of activities. Supervises the initiative.
Funding/revenue stream model	The national initiative will most likely be supported by public (governmental, regional and European) funds.
Main activities performed by the EOSC national structure	<p>Most likely, the initiative’s main activities will focus on:</p> <ul style="list-style-type: none"> • EOSC Awareness creation at national level; • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level; • Engagement of organisations into the EOSC Association; • Organisation of communication and dissemination activities; • Provision of incentives to increase the engagement in EOSC (e.g. financial support for event participation via Open Calls).

²⁷ [https://comum.rcaap.pt/bitstream/10400.26/32849/1/EOSC Synergy Landscape Analysis Portugal - Final.pdf](https://comum.rcaap.pt/bitstream/10400.26/32849/1/EOSC_Synergy_Landscape_Analysis_Portugal_-_Final.pdf)

EOSC national structure target stakeholders overview	<p>Most likely:</p> <ul style="list-style-type: none"> • Research infrastructures and units; • Academia; • Service providers; • RFO; • Enterprises.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • Strong commitment and involvement from the political and coordinating Committee entities; • Funding, namely to the set-up of the initiative; • Engagement of the main stakeholders; • Sustainability.
Success factors for the set-up/operation/sustainability of the EOSC national structure	<p>Set-up</p> <ul style="list-style-type: none"> • Funding; • Governance structure; • Policies and regulations; • Engagement of main stakeholders. <p>Operation</p> <ul style="list-style-type: none"> • Centres of expertise / service providers; • stakeholders involvement; • Funding. <p>Sustainability</p> <ul style="list-style-type: none"> • ROI, EOSC Added value; • Funding; • Continued collaboration between stakeholders; • Users demand.
Engagement best practices	Open science practice, namely through open data.
Main challenges	<p>Stakeholder engagement at national level:</p> <ul style="list-style-type: none"> • lack of resources; • lack of commitment. <p>National initiative set-up/ operation/ maintenance</p> <ul style="list-style-type: none"> • lack of resources; • lack of commitment.
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • Cutting edge research environment and practices; • Alignment with standards, procedures and tools; • Sharing of experiences and best practices. <p>For the EOSC Governance/future developments:</p> <ul style="list-style-type: none"> • Have national contact points to provide information on the country status.
Main benefits of the presence of an EOSC national structure	<p>For the country:</p> <ul style="list-style-type: none"> • Involvement of main stakeholders; • Dissemination of EOSC services; • Awareness; • Research community engagement. <p>For the EOSC Governance/future developments:</p> <ul style="list-style-type: none"> • Have national contact points to provide information on the country status.

Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	<ul style="list-style-type: none"> • Share information on other countries' initiatives; • Provide support on the set-up phase; • Contribute to communication and dissemination activities.
--	---

Republic of Cyprus

Country: REPUBLIC OF CYPRUS <i>Information validated by: CYI, UCY</i>	
Status of the EOSC national structure	<input type="checkbox"/> Set-up in progress
Name of the EOSC national structure	Cyprus Open Science Initiative
Established on / Estimated start	1st meeting 15th June 2021
Duration of the mandate	Aiming for permanent
Main purpose	The country aims to be a core contributor to the European Open Science Cloud (EOSC) service portfolio, commit to EOSC governance and ensure inclusiveness on the European level for enabling global Open Science.
Objectives	<ul style="list-style-type: none"> • Support the development and inclusion of the national Open Science Cloud initiative in the EOSC governance. • Provide technical and policy support for on-boarding of service providers into EOSC, including generic services (compute, data storage, data management), thematic services, repositories and data sets.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Offering a channel to connect the national stakeholders with the EOSC governance • Coordinating EOSC activities at national level
Governance structure:	Consortium. National Open Science Committee and subcommittees
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	Not defined yet
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	Not defined yet
Profile of the EOSC national structure:	Research performing organisation Deputy ministry of Research, Innovation and Digital policy
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	There are currently no EOSC Association members/observers in the country
Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • OpenAIRE • NI4OS EUROPE

	<ul style="list-style-type: none"> • GEANT
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>Top-down approach. The National Open Science Committee was established under the auspices of the Deputy Ministry of Research, Innovation and Digital Policy. Invitations to join the initiative were sent top-down by the Committee.</p> <p>Main drivers triggering the set up of the national structure: Frequent OpenAIRE NOAD – NI4OS PARTNERS contacts with the deputy ministry.</p>
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes. It is currently under formation
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Organisation of public webinars/events to: <ul style="list-style-type: none"> · inform national stakeholders about the EOSC latest developments · collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) · discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.) • Revision of the national policy • Creation of a national Open Science repository
EOSC national structure target stakeholders overview	Representatives of almost all local Universities and their research services attended the 1st meeting of the Initiative. Also the president of the local council of Rectors and the representative of the local library consortium and a representative of the governmental body responsible for Open Data (PSI).
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • National policy or law or directive • Awareness activities • Promotion of best practices
Success factors for the set-up/operation/sustainability of the EOSC national structure	<p>Set-up</p> <ul style="list-style-type: none"> • Stakeholder engagement • Incentives to participate • Clear definitions and terms <p>Operation</p> <ul style="list-style-type: none"> • Reporting • Guidance • Interest from all parties <p>Sustainability</p> <ul style="list-style-type: none"> • Engagement with a MoU or similar • Frequent meetings • Reporting
Main challenges	<p>Stakeholder engagement at national level</p> <ul style="list-style-type: none"> • Changing the “culture”

	<ul style="list-style-type: none"> • Unawareness of the topic • Unawareness of the benefits • Not willing to participate National structure set-up/ operation/ maintenance <ul style="list-style-type: none"> • Lack of interest • Lack of stakeholders' interest • Lack of engagement
Main benefits of EOSC national engagement	For the country <ul style="list-style-type: none"> • Participation/being part of the developments • Access to infrastructure and services • Collaboration and funding opportunities
Main benefits of the presence of an EOSC national structure	For the country <ul style="list-style-type: none"> • Coordination of actions • Central and coordinate Representation to EOSC • Correct transfer of Knowledge
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	Promoting best practices/examples of already established initiatives

Romania

Country: ROMANIA <i>Information validated by: ICI Bucharest - National Institute for Research & Development in Informatics, UEFISCDI</i>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Available, in place.
Name of the EOSC national structure	Romanian Open Science Cloud Initiative (RO-NOSCI)
Established on / Estimated start	June 17th, 2021
Duration of the mandate	Temporary, with possibility to renew
Main purpose	At the European level, EOSC provides the main support for building the Open Science ecosystem in a predictable, consensual, and integrated manner. Institutions and researchers have the possibility to access a shared pool of infrastructure services, data sets, and thematic services which makes it possible to compensate existing gaps and to identify opportunities for transnational and cross-domain scientific collaboration. RO-NOSCI was established to connect the national stakeholders for their participation into the EOSC Ecosystem and for the coordination of the activities at national level that enable interconnection with the EOSC at technical, policy and governance levels.
Objectives	According to its MoU, RO-NOSCI has 3 main objectives: <ul style="list-style-type: none"> • To contribute to the identification and capitalization of technical modalities and means dedicated to the establishment and administration of a national OSC specific infrastructure of resources and services compatible with EOSC, for the benefit of the research and innovation community;

	<ul style="list-style-type: none"> • To create synergy at national level between organizations demonstrating interest and playing an active role in the EOSC area, to optimize and coordinate national activities dedicated to share and integrate national infrastructures and services in the EOSC; • To provide support to the academic and research community in defining and implementing "Open Science" and "Open Science Cloud" policies aligned with relevant European recommendations and policies, and capacity building.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Offering a channel to connect the national stakeholders with the EOSC governance • Coordinating EOSC activities at national level
Governance structure:	<p>A consortium RO-NOSCI is coordinated by 3 organizations, each one being in charge with one objective, as following:</p> <ul style="list-style-type: none"> • the National Institute for R&D in Informatics (ICI Bucharest); • the “Horia Hulubei” National Institute for R&D in Physics and Nuclear Engineering (IFIN-HH); • the Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI). <p>An updated list of involved organisations may be found here https://uefiscdi.gov.ro/ro-nosci</p>
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	No. Currently the mandated organisation is ICI Bucharest which is co-initiator and one of the coordinating organizations of RO-NOSCI.
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	All current members of the EOSC Association are part of RO-NOSCI, i.e. UEFISCDI, ICI Bucharest and University ”Politehnica” of Bucharest (UPB)
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	No. The nomination of the current mandated organization was decided before the RO-NOSCI set up. The current mandated organization is one of the coordinators and a member of RO-NOSCI.
Profile of the EOSC national structure:	<ul style="list-style-type: none"> • Research funding organisation • Research performing organisation • Service provider for research
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	<p>Yes. UEFISCDI and ICI Bucharest are co-initiators and coordinators of RO-NOSCI.</p> <p>UPB is member of RO-NOSCI and as a largest technical university in the country has an extended experience in administrating large scale computing infrastructures, including cloud computing ones.</p>
Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • Open Science Knowledge Hub Romania – UEFISCDI hosting OpenAIRE NOAD, RDA NODE • EGI • EuroHPC <p>UEFISCDI through its Open Science Knowledge Hub Romania is also involved in offering open science policies support and collaborates with</p>

	<p>Science Europe, CoNOSC and the UNESCO Chair for Science and Innovation Policies – SNSPA (Open Science Lab)</p> <p>IFIN-HH is the national representative in EGI and currently is partner in the EGI-ACE project.</p> <p>ICI Bucharest is the national representative in the EuroHPC Joint Undertaking and its representatives are appointed to the Governing Board of EuroHPC JU.</p>
Main drivers and approach to set up a EOSC national structure	<p>Hybrid.</p> <ul style="list-style-type: none"> • Support from RDI funding and policy making organizations, i.e. the Ministry of Research, Innovation and Digitalization and UEFISCDI (which is also one of the RO-NOSCI coordinators); <ul style="list-style-type: none"> • 11 ongoing structural fund projects for cloud computing and massive data infrastructures, connected to the European networks and dedicated to support researchers' access to European and international scientific publications and databases; • Interest and relevance of the identified stakeholders • Methodological support provided by the NI4OS Europe project.
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	<p>Yes. The RO-NOSCI governance structure includes: the General Assembly and the Executive Committee. The General Assembly is composed of one delegate per Member with voting rights and one delegate per Observer without voting rights. The Executive Committee is composed of representatives from 3 RO-NOSCI co-ordinating organizations and has the mandate to implement the General Assembly decisions and to coordinate current activities at the RO-NOSCI level. The governance structure is regulated by MoU.</p>
Funding/revenue stream model	<p>Currently, RO-NOSCI is not financially supported and the membership does not imply any financial commitment.</p>
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations into the EOSC Association • Organisation of public webinars/events to: <ul style="list-style-type: none"> · inform national stakeholders about the EOSC latest developments · collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) · discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.) • Identification of specific OSC generic, thematic and data services at national level, providing technical assistance to ensure their compatibility with EOSC requirements and recommendations; • Identification of infrastructure resources from Cloud computing centers developed in institutions belonging to the national RDI system, with interconnection potential under the auspices of RO-NOSCI;

	<ul style="list-style-type: none"> • Coordination of collaboration for the development of operation and monitoring solutions for the RO-NOSCI infrastructure, based on EOSC compatible federative tools; • Contribution to the development and implementation of the national strategic framework on "Open Science" and "Open Science Cloud", to align the national context with the major European recommendations and initiatives in the field
EOSC national structure target stakeholders overview	<p>RO-NOSCI currently includes 20 members and 1 observer:</p> <ul style="list-style-type: none"> • 11 universities from 7 large university centers: Bucharest, Cluj-Napoca, Iasi, Constanta, Craiova, Brasov and Galati; • 7 research organizations, including 6 national R&D institutes (in Informatics, Nuclear Physics, Marine Geology and Geo-ecology, Earth Physics, Chemical-Pharmaceutical, Industrial Ecology) and the Institute for Space Science; • one RDI funding organization – UEFISCDI; • Romanian Digitalization Authority; • one emergency clinical hospital.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • governmental support; • awareness level at the research community level about the EOSC benefits and its implementation roadmap; • participation in EOSC related European projects; • RO-NOSCI involvement.
Success factors for the set-up/operation/sustainability of the EOSC national structure	<p>Set-up</p> <ul style="list-style-type: none"> • Engagement of main stakeholders. • Governance structure <p>Operation</p> <ul style="list-style-type: none"> • Stakeholders' involvement <p>Sustainability</p> <ul style="list-style-type: none"> • Presence of funding mechanisms • Continued enlargement of RO-NOSCI and collaboration between stakeholders
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • EOSC makes easier the sharing and re-use research data, which increases quality and reliability of science and productivity of researchers. • Connects to stakeholders from other regions of Europe • Supports decentralisation and regional growth. • Sharing of experiences and best practices. <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Facilitates the sharing of knowledge and experiences. Countries that are already advanced in FAIR data and Open Science policies can share their best practices.
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • National stakeholders will have the opportunity to co-shape the overall strategic agenda for research EU, which is a de facto reality for all, independently whether they participate in EOSC or not. • National stakeholders will have the opportunity to implement the SRIA, which is the basis for developing the

	<p>priorities for the next EC work programme Horizon Europe (2021-2027).</p> <ul style="list-style-type: none"> • Researchers will have easier access to information about Horizon Europe funding (being part of the developments, collaborating in consortia, etc.) <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Centralises point(s) of contact per country. • May boost EOSC presence and voice in the local communities. • Eases dissemination at National level.
--	--

Serbia

<p>Country: SERBIA <i>Information validated by: UoB, IPB</i></p>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Set-up in progress
Name of the EOSC national structure	TONus - Team for Open Science in Serbia
Established on / Estimated start	Probably November, 2021. The Ministry officially formed TONuS as a task force in January, 2020, but the NOSCI has not been officially established)
Duration of the mandate	Aiming for Permanent
Main purpose	<p>The Open Science Platform (2019) and the inclusion of Open Science in the Law on Science and Research (2019) reflect the awareness of the importance of European developments in the area of Open Science and readiness to integrate the local research community and infrastructure into the European context. In a small country with limited resources, it is crucial to provide access (for the local research community) to relevant services, but also to ensure that the local services follow commonly accepted standards and are interoperable with international infrastructures.</p> <p>The purpose of the national initiative is to implement Open Science principles in Serbia by coordinating policy and infrastructure development, as well as training, advocacy and collaboration in the area of Open Science. The national initiative should also prepare stakeholders to interact with the EOSC ecosystem.</p>
Objectives	<ul style="list-style-type: none"> • Integration of national infrastructures into the EOSC ecosystem; • Ensuring long-term sustainability for the national infrastructure; • Maximizing the adoption of Open Science principles in the local research community; • Maximizing the access of the local research community to data, services and infrastructure.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Coordinating EOSC activities at national level
Governance structure:	<p>A consortium</p> <p>Currently the following research institutions are taking part.</p> <ul style="list-style-type: none"> • Ministry of Education, Science and Technological Development

	<ul style="list-style-type: none"> • University of Belgrade (Rector's Office) • University of Belgrade Computer Centre • University of Novi Sad • University of Niš • Svetozar Marković University Library • KoBSON (National Library Consortium) • Centre for the Promotion of Science • Fund for Science
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	yes
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	Members of the national structure are involved in the EOSC association and Steering Board
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	yes
Profile of the EOSC national structure:	It will be a consortium of research performing organizations, service providers, research infrastructures and research funders.
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Yes, IPB which is member in the EOSC Association is already participating in the formation of the national initiative.
Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • OpenAIRE (infrastructure development, training, expert support in the process of drafting the national Open Science policy, plans for new projects) • NI4OS-Europe (main activities towards establishing a NOSCI are conducted through this project; training on FAIR and ORDM) • EOSC Secretariat, though the co-creation programme (a project to support RDM activities in Serbia was funded; a RDM initiative and a knowledgebase were established) • OPERAS (as a member of OPERAS, the Centre for Evaluation in Education and Science was involved in drafting OPERAS white papers) • NGI • GEANT • Erasmus+ (Erasmus+ project BE-OPEN supported the work on the national Open Science Platform) • University Alliances (Circle-U) • CESSDA (the CESSDA representative in Serbia is a member of TONuS)
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>Approach not defined yet.</p> <p>Main drivers triggering the set up of the national structure</p> <ul style="list-style-type: none"> • Implementation of Open Science principles in Serbia in all spheres of the research ecosystem • Building interoperable and sustainable research and e-infrastructure for Open Science

	<ul style="list-style-type: none"> Engaging local stakeholders in the EOSC ecosystem Building the national capacity for Open Science
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes, under discussion, will be set up with MoU agreement.
Funding/revenue stream model	So far, activities related to the establishment of the national initiative have been financially supported by the European Commission, through international projects. Advocacy and training activities have also been supported by in-kind contributions (hosting for websites, space for meetings and training) from various institutions and volunteer work of individual librarians and researchers.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> EOSC Awareness creation at national level Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level Engagement of organizations into the EOSC Association
EOSC national structure target stakeholders overview	Along with the Secretary of State and all Assistant Ministers responsible for science, TONuS includes a broad group of experts in this field: 6 decision-makers, 17 researchers, 6 librarians and research-support staff members.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> Government involvement and support Awareness on the part of stakeholders NOSCI involvement and support Investment in research and e-infrastructure Development of relevant professional profiles and skills
Success factors for the set-up/operation/sustainability of the EOSC national structure	<p>Set-up</p> <ul style="list-style-type: none"> Open Science must be given a higher priority in national plans and policies Initiatives, procedures and actions should be less dependent on personnel changes in decision-making bodies <p>Operation</p> <ul style="list-style-type: none"> IT staff and other qualified staff is available National and institutional policies and action plans are adopted <p>Sustainability</p> <ul style="list-style-type: none"> Infrastructure maintenance is ensured Funding is allocated
Engagement best practices	Great dedication on the part of a group of IT experts, librarians, and researchers from various institutions in the process of building the repository infrastructure has significantly contributed to the greater visibility of institutions and adoption of FAIR principles.
Main challenges	<p>Stakeholder engagement at national level</p> <ul style="list-style-type: none"> Passive approach on the part of the Ministry and the lack of interest on the part of the Fund for Science; Poor understanding of FAIR data practices within the research community <p>national structure set-up/ operation/ maintenance</p> <ul style="list-style-type: none"> Ministry support

	<ul style="list-style-type: none"> • The inclusion of local initiatives and services in the EOSC • lack of financial support for infrastructure development
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • Better visibility of local research • Greater interoperability and sustainability of researcher and e-infrastructure • Making it easier for local researchers to comply with the requirements of EU projects • Support to citizen science <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Greater inclusivity for small countries • Greater diversity of research and services
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • Providing a one-stop shop for data and services • Better insight into various international initiatives • More efficient and easier communication among stakeholders • Coordinated decision-making <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Ability to adjust strategies and approaches based on local input • Easier access to information from the national environment • Better coordination of activities

Slovakia

Country: SLOVAKIA <i>Information validated by: Slovak Centre of Scientific and Technical Information (CVTI SR)</i>	
Status of the EOSC national structure	■ Available, in place.
Name of the EOSC national structure	National EOSC working group
Established on / Estimated start	January 2020
Duration of the mandate	Permanent
Main purpose	The National Working Group will serve as a professional strategic and advisory body for the formation of opinions and positions of the Slovak Republic within the EOSC initiative.
Objectives	<ul style="list-style-type: none"> • To formulate a common vision for the country • To disseminate the information at country level especially to universities & research communities • To support the engagement of national stakeholders in EOSC related initiatives (e.g. co-creation)
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Coordinating EOSC activities at national level
Governance structure:	A consortium

	<ul style="list-style-type: none"> • Slovak Centre of Scientific and Technical Information (CVTI SR) - coordinator • Ministry of Education, Science, Research and Sport of the Slovak Republic • Slovak Academy of Sciences, Institute of Informatics • Slovak Academy of Sciences, Institute of Experimental physics • SANET (Slovak Academic Network)
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	No. The National Working Group is not the mandated organisation for Slovakia, but the organisation coordinating it, CVTI SR, is nominated as a mandated organisation on behalf of Slovakia within the EOSC association and CVTI SR brings into the Association the view of the country.
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	<ul style="list-style-type: none"> • EOSC Association - CVTI SR is nominated as a mandated organisation on behalf of Slovakia within the EOSC association • EOSC Steering Board – representatives of CVTI SR are nominated in the EOSC Steering Board Both are involved in the National Working Group
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	No.
Profile of the EOSC national structure:	<ul style="list-style-type: none"> • Research performing organisation • Service provider for research • National Information centre for Science and Technology in Slovakia (CVTI SR)
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	<ul style="list-style-type: none"> • As of 9.6.2021 there is only 1 institution from Slovakia in the EOSC Association – CVTI SR. • Probably other Slovak organisations will decide to join the association in the future and they will be brought on board in to the National Working Group.
Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • There are strong links with the OS initiative. • National Reference Point for Open Access is an organisational unit of CVTI SR. Recently have been elaborated these strategic documents: <ul style="list-style-type: none"> ○ National Strategy on Open Science²⁸ ○ Action Plan for Open Science 2021-2022²⁹
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	Hybrid. Main drivers triggering the set-up of the national structure: <ul style="list-style-type: none"> • complexity of EOSC as such and a need to understand the EOSC building from more perspectives • a national interest to participate in the EOSC • spreading of information on the EOSC development towards national stakeholders • decision of the Ministry to delegate the EOSC-related issues on CVTI SR

²⁸ <https://openaccess.cvtisr.sk/narodna-strategia-otvorenej-vedy/>

²⁹ <https://openaccess.cvtisr.sk/narodna-strategia-otvorenej-vedy/>

Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Not yet.
Funding/revenue stream model	in-kind contributions – from the coordinator CVTI SR in a form of personnel costs allocated on this purpose
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations into the EOSC Association • Information service (website, emails, newsletters) to: <ul style="list-style-type: none"> ○ inform national stakeholders about the EOSC latest developments ○ collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) ○ discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.)
EOSC national structure target stakeholders overview	Slovak R&D community, the main Slovak universities and research institutes
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • joint effort of national stakeholders • a good understanding of EOSC • well-working communication channel from EOSC level to national stakeholders
Success factors for the set-up/operation/sustainability of the EOSC national structure	<p>Set-up of the initiative</p> <ul style="list-style-type: none"> • interest of stakeholders to be involved in EOSC • interest of the Ministry to deal with EOSC on national level • strong engagement of a coordinator to realize this initiative <p>Operation</p> <ul style="list-style-type: none"> • a good communication flow • a good cooperation between members • regular meetings of members • good conditions for working (technical, HR) <p>Sustainability</p> <ul style="list-style-type: none"> • funding • strong involvement of members organisations management • strong involvement of the respective Ministry
Engagement best practices	As a result of the EOSC-initiatives promotion on national level there has been supported an interesting project from the EOSC secretariat co-creation budget: Project VIR-SCAN – Wastewater Monitoring Data as an Early Warning Tool to alert COVID-19 in the Population, coordinated by the Faculty of Chemical and Food Technology, Slovak University of Technology in Bratislava. Thanks to the project the faculty could buy a necessary equipment for SARS-CoV-2 monitoring form wastewater. Thus, the EOSC secretariat helped to contribute to elaboration of effective measures for monitoring or recurrence of COVID-19 in the population.
Main challenges	<ul style="list-style-type: none"> • misunderstanding what EOSC is

	<ul style="list-style-type: none"> • presumption that EOSC = Open Access • misunderstanding on how to get involved into EOSC initiative
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • stakeholders interested in EOSC-related initiatives are informed about the news and last progress and thus can participate in common initiatives • participating in the EOSC Association and EOSC Steering Board there is covered information reception from EU level <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Slovakia will be active in EOSC structures and initiatives
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • to unify efforts on national level • enable various stakeholders to get involved in EOSC initiatives • all stakeholders are well informed about the last progress and achievements within EOSC <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • we are able to communicate our joint requirements, needs, positions • more the community is informed = bigger involvement in EOSC • better involvement in the EOSC partnership
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	Information webinars / events on EOSC progress would help

Slovenia

Country: SLOVENIA <i>Information validated by: ARNES, UMUKM</i>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Set-up in progress
Name of the EOSC national structure	Slovenian Open Science Community
Established on / Estimated start	Estimated to have the MoU signed in August/September 2021
Duration of the mandate	Aiming for Permanent
Main purpose	The main purpose of the initiative is to connect all stakeholders in the field of open science in Slovenia in a comprehensive and transparent system that will operate professionally in a complementary way by taking over the tasks of partners in the community. The aim is to establish a unified, complementary system of open science in Slovenia, in the field of services, infrastructures and training, in order to improve the working conditions of researchers, encourage the dissemination, exchange and reuse of knowledge through open access, develop open science related skills and set up a training system for target users.
Objectives	<ul style="list-style-type: none"> • Participation in the formation and exchange of a strategic vision with the aim of cooperation of the Slovenian research community in the development of European and international initiatives, especially the European Open Science Cloud and others; • Promoting cooperation in pan-European (ESFRI) and international research infrastructures, giving priority to access to and processing

	<p>of data and data management services generated by these infrastructures;</p> <ul style="list-style-type: none"> • Promoting participation in EOSC and EDI related projects; • Establishment of a comprehensive national and EOSC-related helpdesk and catalogue of Slovenian services in a national EOSC-like marketplace
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Offering a channel to connect the national stakeholders with the EOSC governance
Governance structure:	<p>A consortium</p> <ul style="list-style-type: none"> • The community will consist of signatories of the cooperation agreement: University of Maribor Library; ARNES; other invited organisations – TBD (ca. 30 institutions and 25 national RI nodes/initiatives will be invited) <p>A national programme</p> <ul style="list-style-type: none"> • The new proposal of the Resolution on the National Research and Development Programme 2021-2030 foresees that the national open science community will be established in cooperation and agreement with all stakeholders to introduce and monitor open science in Slovenia and participate in the ERA and beyond.
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	Yes. The Academic and Research Network of Slovenia (ARNES) is the mandated organisation and is involved in coordinating the initiative formation in cooperation with the University of Maribor Library.
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	<ul style="list-style-type: none"> • The Academic and Research Network of Slovenia (ARNES) is the mandated national representative of Slovenia in the European Open Science Cloud and coordinates the initiative in cooperation with the University of Maribor Library. • The initiative aims to collaborate with the national representative in the EOSC Steering Board.
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	Yes
Profile of the EOSC national structure:	<ul style="list-style-type: none"> • Research funding organisation • Research performing organisation • Service provider for research
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Currently, there are 3 Slovenian EOSC Association members: ARNES, the University of Maribor (on behalf of the HPC RIVR consortium) and the National Institute of Biology. All national EOSC Association members will be invited to join the initiative and appoint a representative to the initiative's members council. The coordinators of the initiative are the University of Maribor Library and ARNES.
Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • OpenAIRE National Open Access Desk • national ESFRI nodes • Slovenian RDA Node • EuroHPC (HPC RIVR consortium)

	<ul style="list-style-type: none"> • EuroCC • EGI • GÉANT • PRACE • NI4OS-Europe • EOSC Future
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>Top-down approach - National Contact Point for Research Infrastructures from the Ministry of Education, Science and Sport</p> <p>Main drivers triggering the set up of the national structure:</p> <ul style="list-style-type: none"> • to represent Slovenian research organizations in the EOSC Association in an inclusive and transparent manner • to connect the key stakeholders of open science in Slovenia with the aim of establishing a modern, internationally important and competitive scientific system based on the principles of open science, which is harmonized and connected with the European Research Area and relevant European initiatives. • to coordinate EOSC activities at national level • to onboard Slovenian services into EOSC and offer support to the service providers
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	<p>Yes. The University of Maribor Library, as the coordinator of the initiative, will provide legal and administrative support to the initiative community and ensure transparent information to the members council on activities in international organizations and infrastructures, project cooperation and information from the Ministry of Education, Science and Sport.</p> <p>The Academic and Research Network of Slovenia is the national representative of Slovenia in the European Open Science Cloud and will coordinate the initiative in cooperation with the University of Maribor Library.</p> <p>The initiative will be governed by a members council. Each member of the initiative will appoint a legal representative of the signatory or an authorized person to the council. It is expected that different working groups will be formed.</p>
Funding/revenue stream model	After the end of NI4OS-Europe the initiative will be supported by the Ministry of Education, Science and Sport
Sustainability Plan	As per the action plan of the new Resolution on the National Research and Development Programme 2021-2030, the Ministry will support the initiative. The new proposal of the Resolution foresees that the national open science community will be established in cooperation and agreement with all stakeholders to introduce and monitor open science in Slovenia and participate in the ERA and beyond.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations into the EOSC Association • Organisation of public webinars/events to: <ul style="list-style-type: none"> ○ inform national stakeholders about the EOSC latest developments

	<ul style="list-style-type: none"> ○ collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) ○ discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.)
EOSC national structure target stakeholders overview	The aim is to target funders, universities, research institutes, university libraries and publishers, national RI nodes, service providers, NREN, individuals, national open science facilitators. About 30 institutions and 25 national RI nodes/initiatives will be targeted.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> ● adoption by the research and research infrastructure/service provider communities ● government support ● engagement of the initiative members ● inclusiveness and transparency
Success factors for the set-up/operation/sustainability of the EOSC national structure	<p>Set-up of the initiative</p> <ul style="list-style-type: none"> ● governance model ● engagement by different stakeholders ● government support <p>Operation</p> <ul style="list-style-type: none"> ● engagement by different stakeholders ● vertical and horizontal inclusiveness ● digital tools for promotion, awareness-raising, empowerment, communication, collaboration ● uptake by the community <p>Sustainability</p> <ul style="list-style-type: none"> ● complementary efforts in the Slovenian open science research sphere - active cooperation of all stakeholders ● funding ● digital skills upkeep of staff, training and formal education programmes
Main challenges	<p>Stakeholder engagement at national level</p> <ul style="list-style-type: none"> ● promotion of benefits to stakeholders <p>National initiative set-up/ operation/ maintenance</p> <ul style="list-style-type: none"> ● full-time technical and administrative support ● incentives for active engagement of stakeholders
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> ● dissemination of national outputs ● transborder cooperation and opportunities ● increased research productivity <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> ● Slovenian knowledge and innovation contribution ● sharing of experiences
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> ● complementary efforts and distributed competences in the Slovenian open science research sphere ● connections between different stakeholders, vertically and horizontally ● stakeholders can contribute to the developments of the EU research agenda and EOSC policies

	<p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • a single national contact point • EOSC services uptake in the local research community
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	Provide clear and concrete information on the benefits for all types of stakeholders.

Spain

<p>Country: SPAIN <i>Information validated by: UPV</i></p>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Set-up in progress
Name of the EOSC national structure	<p>Spanish Network for e-Science, a network funded by the ministerial act CIN/658/2020, of July the 13th, 2020. This is a network aimed at promoting and coordinating the development of e-Science in Spain, including the areas related to EOSC.</p> <p>The network has been also supported by the Spanish Thematic Network in the field of Open e-Science (REEC - RED2018-102377-T), a project funded by the national programme of knowledge generation and scientific and technological development of the Ministry of science and Innovation.</p>
Established on / Estimated start	13/7/2020
Duration of the mandate	Permanent
Main purpose	<p>The interest of Spanish institutions in EOSC is high. 32 Spanish institutions have applied to be members of the EOSC-A and in 50% of the projects funded in the INFRAEOSC calls appear Spanish institutions. The Spanish Network of e-Science tries to sustain the effort performed in the Spanish Network for Open e-Science (RED2018-102377-T) which gathers major stakeholders in the area of EOSC in Spain, who participated in key groups that have collaborated in the definition of the EOSC SRIA. Therefore, the Spanish Network for e-Science tries to maintain and reinforce the participation of Spanish institutions in the initiative.</p>
Objectives	<p>The main objectives are:</p> <ul style="list-style-type: none"> • To promote and coordinate the development of e-Science in Spain. • To encourage the cooperation of the agents of the Spanish R+D+i system, among themselves and with other national and international e-Science programs and initiatives. • To promote the coordination of the scientific and technical e-Science infrastructures, particularly the RedIRIS and the Spanish Supercomputing Network, among others. <p>The network will pursue the following actions:</p> <ul style="list-style-type: none"> • To analyze the various aspects of e-Science at national and international levels and their impact on the Spanish and international R+D+I systems, • To advise on possible actions to enhance the development of e-Science in Spain.

	<ul style="list-style-type: none"> • To collaborate in the design and implementation of strategies, action plans and coordination protocols in specific areas. • To carry out other advisory tasks in the field of e-Science requested by the General Secretariat for Research. • To set up working groups for the development of e-Science.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Disseminating and promoting EOSC at national level • Offering a channel to connect the national stakeholders with the EOSC governance • Coordinating EOSC activities at national level
Governance structure:	<p>A consortium.</p> <ul style="list-style-type: none"> • The Ministry of Science and Innovation, through the Sub-Directorate General of Unique Scientific-Technological Infrastructures, the Sub-Directorate General of Science and Innovation Internationalization, the Secretary General of Research and the National Agency of Research. • The Spanish Research Council (CSIC). • The Spanish Centre in Energy, Environment and Technological Research (CIEMAT). • The Spanish NREN (RedIRIS, hosted by RED.ES). • The Spanish Network of Supercomputing (RES) • The Spanish centre for Industrial and Technological Development (CEDTI) • The Spanish Association of University Rectors (CRUE).
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	The mandated organisation for Spain is CSIC that also participates in the Spanish Network for e-Science.
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	<ul style="list-style-type: none"> • The EOSC Association - CSIC, that is the mandated organisation for Spain is part of the Spanish Network of eScience as well as other members of the EOSC Association such as several members of the RES (BSC-CNS, CESGA and SCAYLE), CIEMAT, CRUE, RED.ES.. Finally, the coordinator of the Spanish Network for e-Science is Ignacio Blanquer, member of the board of directors of the EOSC-A.. • The EOSC Steering Board, through the participation of the Sub-Directorate General of Science and Innovation Internationalization of the Ministry of Science and Innovation.
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	No. The mandated member is CSIC, although this institution is deeply involved in the Spanish Network of e-Science.
Profile of the EOSC national structure:	<ul style="list-style-type: none"> • Research funding organisation, through the participation of different sub-directorates of the Ministry of Science and the Spanish Agency for Research. • Research performing organisation, represented by the CSIC, CIEMAT and the CRUE, as well as by some members of the RES. • Service provider for research, including the Spanish NREN and the RES.
Are all the EOSC Association members/observers in the country	No. The network gathers major stakeholders and institutions that represent many other institutions.

participating in the EOSC national structure and how?	
Direct links with other EOSC/OS initiatives active in the country	<ul style="list-style-type: none"> • CSIC is leading EOSC-SYNERGY (https://www.eosc-synergy.eu/), which aims at expanding the capacity of EOSC in Spain. CSIC also participates in EGI-ACE (https://www.egi.eu/projects/egi-ace/) and in EOSC-Future. • Several institutions of the Network participate in EGI through the Spanish Research Council. • Spain has a Joint Research Unit in the area of Distributed Computing RIs that was created to set up the National Grid Initiative in 2007, with 14 signatory institutions. • Spain also has an important position in PRACE through BSC-CNS. • BSC-CNS is a key member in EuroHPC Joint Undertaking and contributes to EUDAT • The alignment of the EOSC activities with the Spanish Initiative in Artificial Intelligence, which states in its fifth priority to develop a digital data ecosystem and to valorize infrastructures for its treatment: https://www.ciencia.gob.es/stfls/MICINN/Ciencia/Ficheros/Estrategia_Inteligencia_Artificial_IDI.pdf
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<ul style="list-style-type: none"> • Top-down approach (central decision of the related ministry or national research funding organisation) for the creation of the Spanish Network for e-Science. • Other supporting initiatives have followed a bottom-up approach, like the participation in the EOSC-A or in EOSC-related projects. • On the other side, Spanish policies in Open Science and Research Infrastructures are aligned with EOSC EU Policies, with special emphasis on strengthening, planning and coordination of the Spanish ESFRIs and ICTS and considering EOSC as an opportunity to strengthen development or improvement of data infrastructures. Spain plans to align national initiatives related to EOSC and contribute to the EOSC design and implementation by providing services, data and resources.
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	No. The network is a consultative organ of the Ministry.
Funding/revenue stream model	The initiative is not financially supported and the members contribute in-kind. Members use other sources of funding through participation in national and European projects. The in-kind contribution is provided through participation in the bodies, expert groups and the provision of resources and services for the storage and processing of the data.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level. • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level. • Engagement of organisations into the EOSC Association. • Organisation of public webinars/events to: • Inform national stakeholders about the EOSC latest developments

	<ul style="list-style-type: none"> • Collecting feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) • Discussing EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.) • Engagement of experts in the Advisory Groups of the EOSC Secretariat project and of the EOSC-A in the future. • One to one support to organisations to better understand the EOSC landscape, to discuss the benefits of joining the Association, etc. • Provision of support to increase the engagement in EOSC. <p>In general, the expectations of Spain in EOSC are mainly focused on three directions:</p> <ul style="list-style-type: none"> • To align the national initiatives related to EOSC by adopting European Best Practices and contribute to the EOSC design with the perspective of Spain. • To contribute to the implementation of EOSC by providing services, data and resources through the Spanish RIs. • To boost the international positioning of Spanish researchers by exposing their services to a wider audience and to leverage other institution's services, data and resources to improve their research.
EOSC national structure target stakeholders overview	The composition of the Spanish Network for e-Science and the type of member has been described previously.
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • Sustainability of the service provisioning. The storage of the research data and the support of processing resources for such data implies operating costs that are not addressed in most calls. Models such as Virtual Access provide limited support, covering only the new communities. • Engagement of mature vertical communities. There are research communities highly developed that have organized themselves and may not find the need to put the effort to adapt to the interoperability guidelines and the architectural design. • Seamlessly integration of services and data. The availability of data per se is not sufficient to facilitate its exploitation. The availability of thematic services that consume and process this data is key. • Quality of data and services. The quality of the data and the services should be evaluated to ensure a high level of user satisfaction.
Success factors for the set-up/operation/sustainability of the EOSC national structure	<p>Set-up</p> <ul style="list-style-type: none"> • The participation of key stakeholders, covering all the profiles (research performing, funding, policy makers and service providers). • The awareness of the EOSC initiative and the practical concept to representative and major research performing organizations. • The alignment with international policies to reduce the duplication of efforts. <p>Operation</p> <ul style="list-style-type: none"> • The integration of services to properly consume the data. • The involvement of EOSC champions that could pilot the adoption of the EOSC services in the research community. • The involvement of mature Research Infrastructures. <p>Sustainability</p> <ul style="list-style-type: none"> • The availability of funding models to cover the operational cost of resources and operations.

	<ul style="list-style-type: none"> • The inclusion of EOSC principles as recommendations in competitive calls. • The recognition of OS in the research careers.
Engagement best practices	The joint research units and joint undertakings provided a good experience on the coordination of the participation in projects and initiatives. Multidisciplinarity is also key.
Main challenges	<p>Stakeholder engagement at national level</p> <ul style="list-style-type: none"> • Lack of awareness of the EOSC concept. • Unclear benefits and potential contributions. • Highly organized vertical communities are reluctant to evolve covering additional standards and procedures. <p>national initiative set-up/ operation/ maintenance</p> <ul style="list-style-type: none"> • Resource operation costs. • Best efforts for human resources. • Complex alignment of different interests.
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • The integration of infrastructure providers and research performing organizations. • The capability of reaching a wider audience. • The coordination of delegates in strategic groups. <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • The experience on coordination with distributed and international initiatives. • The experiences on resource sharing and user's engagement and support.
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • Clarification and alignment of procedures for the onboarding of services and data. • Support on internationalization of the research and relevance of the institutions. • Coordination of efforts to reduce repeating the work. <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Higher level of awareness of actions leveraging the capillarity of the initiative at country level. • Self-coordination of the participation in groups and actions by the members of the national initiative, facilitating the balance and the participation of experts in groups, for example. • Higher capacity for the implementation of the EOSC.

Sweden

Country: SWEDEN <i>Information validated by: Swedish Research Council</i>	
Status of the EOSC national structure	■ Available, in place.
Name of the EOSC national structure	National Reference Group for EOSC
Established on / Estimated start	December 2020
Duration of the mandate	Indeterminate

Main purpose	<ul style="list-style-type: none"> • Engagement provides opportunities for researchers and open science and synergies between EOSC and Sweden’s national objective of transitioning to open access to research data offer opportunities for a coordinated approach of open access and FAIR. • A National EOSC reference group was established to support the Swedish Research Council (SRC) as a mandated organisation and aims to ensure that stakeholders’ perspectives are represented in EOSC governance. • The SRC’s reference group for Open Access to Research Data and EOSC integrates the EOSC reference group and supports SRC’s OA engagement -in our assignment to nationally coordinate the transition to open access to research data and in ensuring alignment between our national and international engagement.
Objectives	<ul style="list-style-type: none"> • Create opportunities to discuss and exchange information about EOSC-related activities and engagement at national level. • Facilitate a discussion on the priorities for EOSC engagement by national stakeholders • Enable information and dialogue on the priorities in the national engagement in the EOSC partnership (EOSC Association, Task Forces, Board of Directors, EOSC Steering Board) • Enable the mandated organisation to represent the collective national interest in the EOSC Governance
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Offering a channel to connect the national stakeholders with the EOSC governance • Engaging stakeholders at national level in EOSC • Exploring common priorities for national engagement on EOSC
Governance structure:	The Swedish Research Council convenes and chairs the group
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	The National Reference Group for EOSC was set up by the SRC to enable discussions on national priorities and that stakeholders’ views, knowledge and experiences were represented in SRC’s role as a mandated organisation in EOSC.
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	<p>The National Reference Group for EOSC is convened and chaired by the mandated organisation in the EOSC Association (SRC).</p> <p>The group gathers all (8) national organisations that are members of the EOSC Association and members of EOSC task forces are also invited to join the group.</p> <p>As the chair of the group is also deputy representative in the EOSC Steering Board, a channel to exchange of information between the two groups is secured.</p>
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	No. The initiative in itself does not have a mandate to represent Sweden in either body of the EOSC governance. The Ministry of Education and Research has the official mandate to represent the Sweden in the Steering Board. The Swedish mandated organisation participates in the SB in the role as the deputy representative. The initiative (the reference group) ensures that there is link between the stakeholder group, the mandated organisation, and the MS representation in the Steering Board. The participation of the mandated organisation in the Association and in the Steering Board facilitates the exchange of information on discussions on priorities in both bodies of EOSC governance.

<p>Profile of the EOSC national structure:</p>	<p>The Swedish Research Council (research funding organisation) coordinates the National Reference Group for EOSC. The categories of members that represented in the reference groups includes:</p> <ul style="list-style-type: none"> • Research funding organisations: SRC and Formas • Research performing organisations: six universities (Chalmers University of Technology, Gothenburg University, Karolinska Institute, Stockholm University, Umeå University, Uppsala University) • Service provider for research (SND - through Gothenburg University) <p>The National Reference Group for EOSC is integrated into a larger Reference group for OA and EOSC, where 18 organisations take part. In addition to the above members, these include</p> <ul style="list-style-type: none"> • Public research funding organisations (Forte, Vinnova) • Representatives for the researcher community (Royal Academy of Sciences, Young Academy of Sweden) • Research performing organisations (in addition to the above, universities represented through the Association of Swedish Higher Education Institutions (SUHF), and SUHF's reference group on EOSC: Universities of Linköping, Linneaus and Lund). • Research infrastructures (Swedish National Data Service, • SND/Gothenburg University; Swedish National Infrastructure for Computing, SNIC) • Other public agencies: National Archives of Sweden
<p>Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?</p>	<p>Yes. All the Swedish EOSC Association members are participating in the National Reference Groups for EOSC. The group is also integrated into the broader OA/EOSC reference group. (There are no current Swedish organisations with observer status in the Association.)</p> <p>The role of the reference group (as broadly outlined in a Terms of Reference) is to:</p> <ul style="list-style-type: none"> • From the perspective of their organisations, contribute to identifying priorities and issues for the implementation of open access within the partnership. • Contribute to discussions on priorities for Swedish stakeholders within the EOSC collaboration with a focus on the Association's activities • Inform other members about activities relevant to EOSC within their organisations and networks. <p>The National Reference Group for EOSC is a forum for EOSC Association members to exchange information on their current EOSC engagement and to discuss topics and priorities relevant to EOSC governance and work in task forces.</p>
<p>Direct links with other EOSC/OS initiatives active in the country</p>	<p>The Association of Swedish Higher Education Institutions (SUHF) is represented in the initiative. SUHF plays an important role in coordinating the engagement and implementation of EOSC and open access at Swedish universities. They also have a reference group for coordination of universities' EOSC engagement and roadmap to open access.</p> <p>The thematic mandate of the Swedish Research Council's Reference group on OA/EOSC, in which the National Reference Group for EOSC is integrated, is broader than EOSC. This reference group, integrating both EOSC and the work with the SRCs government assignment of</p>

	<p>transitioning to open access to research data, has direct links to the broader national ecosystem on Open Access.</p> <p>Other public agencies with national assignments and with whom we consult include: National Library (government coordination assignment on Open publications) and DIGG (Agency for Digital Government, government coordination assignment on Open public data)</p>
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>Top-down approach (central decision of the related ministry or national research funding organisation)</p> <p>Main drivers triggering the set up of the national structure:</p> <ul style="list-style-type: none"> • SRC seeking stakeholder engagement to support its role as mandated organisation in the EOSC Association. • To create a forum for ensure that stakeholders' views, knowledge and experiences feed into national EOSC engagement. • To create a forum for information exchange on national EOSC engagement
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	<p>Yes. The reference group is chaired by the SRC. Terms of Reference have been developed and consulted with the members of the group.</p>
Funding/revenue stream model	<p>The SRC is supported by public funds and no specific funding is earmarked for the initiative. The estimated time provided for EOSC-specific administration on behalf of the agency was 1.5 FTEs in 2020. All organisations contributing to the National Reference Group participate with in-kind contributions to the group (i.e. working time).</p>
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • A national EOSC community including different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations in the EOSC Association • Organisation of meetings to: <ul style="list-style-type: none"> ○ inform national stakeholders about the EOSC latest developments ○ collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) ○ discuss EOSC-related topics at national level
EOSC national structure target stakeholders overview	<p>The National Reference Group for EOSC is convened by the Swedish Research Council (research funding organisation). The categories of members that are represented in the reference groups includes:</p> <ul style="list-style-type: none"> • Research funding organisation (SRC and Formas) • Research performing organisation (Six universities: Chalmers, Gothenburg, Karolinska Institute, Stockholm, Umeå, Uppsala) • Service provider for research (SND - through Gothenburg University) <p>The National Reference Group for EOSC is integrated into a larger Reference group for OA and EOSC, where 18 organisations take part. In addition to the above members, these include</p> <ul style="list-style-type: none"> • Public research funders (Forte, Vinnova) • Representatives for the researcher community (Royal Academy of Sciences, Young Academy of Sweden) • Research performing organisations (in addition to those above,

	<p>universities represented through the Association of Swedish Higher Education Institutions, SUHF, and SUHF's reference group on EOSC).</p> <ul style="list-style-type: none"> • Research infrastructures (SND/Gothenburg University, SNIC) • Other public agencies: National Archives of Sweden <p>Other public agencies from the open data/open science ecosystem with whom we consult include: National Library (government coordination assignment on Open publications) and DIGG (Agency for Digital Government, government coordination assignment on Open public data)</p>
<p>Success factors for the EOSC engagement at country level</p>	<p>What's working well:</p> <ul style="list-style-type: none"> • Established structure and explicit national goal of open science. • Good knowledge of OA landscape/stakeholder community • Growing commitment and coordination of research performing organisations (i.e. possibility to engage the researcher community) <p>For EOSC engagement to become more successful, there is potential to further develop:</p> <ul style="list-style-type: none"> • Community engagement (universities and researchers) • Commitment at all levels • Discussions of roles and responsibilities of stakeholders at different levels: political, institutional, leadership, researchers.
<p>Success factors for the set-up/operation/sustainability of the EOSC national structure</p>	<p>Set-up</p> <ul style="list-style-type: none"> • Commitment to seek stakeholder engagement • Established network/identification of key players • Establishment of a Terms of Reference <p>Operation</p> <ul style="list-style-type: none"> • Establishment of a Terms of Reference • Will to engage by the main OA/EOSC stakeholders at national level • Involvement of a broad range of stakeholders • Synchronisation with stakeholders from related areas (PSI, open access to publications, national archives, ...) • Coordination of research stakeholders with policy-makers <p>Sustainability</p> <ul style="list-style-type: none"> • Integration in national coordination assignment to SRC on open access to research data • Indirectly supported by public funds
<p>Engagement best practices</p>	<p>Integrating EOSC engagement with the national coordination of introducing open access to research data, including the establishment of a common reference group for OA/EOSC and a National Reference Group for EOSC facilitates a broader participation of key stakeholders and promotes synchronisation between national and international engagement on research data, access and research data practices. This increases possibilities for coordination and contributes to the alignment of practices and interoperability, on national and international level.</p> <p>The participation in the reference group of all national stakeholders engaged at the different levels of the EOSC governance (Steering Board and Association) and implementation (Task Forces), promotes information exchange and benefits national engagement.</p> <p>The National Reference Group was established shortly ahead of the first GA of the EOSC Association and its current focus has been on establishing a forum for the major key players. Success is in a broad</p>

	participation and awareness - we therefore see potential to broaden the community engagement as the initiative progresses.
Main challenges	<p>Stakeholder engagement at national level</p> <ul style="list-style-type: none"> • Raising awareness of EOSC and related issues like FAIR data/open access to research data among the researcher community. <p>National initiative set-up/ operation/ maintenance</p> <ul style="list-style-type: none"> • For EOSC engagement to become more successful, there is potential to further develop community engagement and commitment at all levels <p>Sustainability</p> <ul style="list-style-type: none"> • None currently
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • Alignment of national and international standards for data sharing, FAIR principles and open science practices. • More efficient research data sharing, enabling international and interdisciplinary collaborations • Promoting quality and transparency of research results <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Structured inputs by the national stakeholder community to EOSC AISBL, contributing to solutions that are fit for the broader European community • Coherent approach of national stakeholders to EOSC
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • Provides a forum to share information, discuss priorities and increase engagement in EOSC, allowing to come to a better understanding of the views and priorities of national stakeholders on EOSC • Finding a joint consensus on national priorities for the EOSC partnership, which enables a stronger national voice in EOSC Governance <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • National agreement contributes to ensuring coherent inputs and statements from national stakeholders • National coordination contributes to a more effective uptake of implementation and practices. • Effective national engagement contributes to ensuring that development in EOSC are useful to and interoperable across members states

Switzerland

Country: SWITZERLAND <i>Information validated by: ETH Zurich</i>	
Status of the EOSC national structure	<input checked="" type="checkbox"/> Set-up in progress
Name of the EOSC national structure	Swiss National Strategy for Open Science (Open Access and Open Research Data)
Established on / Estimated start	Open Access started in 2017 Open Research Data started in 2020

Duration of the mandate	Temporary
Main purpose	Switzerland is currently developing its national strategy for Open Science, including an action plan for the implementation of Open Access and Open Research Data. The national strategy should consider the potential for connection to international initiatives in the field of Open Science. Where necessary, the strategy should outline where a link to the relevant initiatives can be established. The State Secretariat for Education, Research and Innovation (SERI) has commissioned swiss universities to develop the strategy and the corresponding plan of actions.
Objectives	The Swiss National Strategy for ORD thus aligns with other national guidelines as well as international recommendations and initiatives related to Open Science (e.g. ESOC), which aim to integrate the research communities into different policy contexts. Cross-fertilization with other European actors also involved in EOSC will be ensured.
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC • Disseminating and promoting EOSC at national level • Coordinating EOSC activities at national level
Governance structure:	Not defined yet.
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	No, our mandated organization, the ETH ZH is a member of the Open Research Data Sounding Board, who is responsible for preparing the strategy.
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	<ul style="list-style-type: none"> • the EOSC Association: Members of the Open Research Data Sounding Board, namely ETH ZH, Swiss National Science Foundation and SWITCH are members of the EOSC Association. • the EOSC Steering Board: Swiss experts also involved in the development of the Swiss National Open Research Data Strategy are contributing to the current EOSC working groups
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	No, Our mandated organization, the ETH ZH is a member of the Open Research Data Sounding Board, who is responsible for preparing the strategy.
Profile of the EOSC national structure:	<ul style="list-style-type: none"> • Research funding organisation • Research performing organisation • Service provider for research • State Secretariat for Education, Research and Innovation (SERI) coordinates the EOSC Roundtable
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	No, Members of the EOSC roundtable, namely ETH ZH, Swiss National Science Foundation and SWITCH are members of the EOSC Association.
Direct links with other EOSC/OS initiatives active in the country	The Swiss National Strategy for Open Science, takes multiple international Open Science initiatives and guideline into account. Among those are: <ul style="list-style-type: none"> • The Declaration on Research Assessment (DORA)

	<ul style="list-style-type: none"> • Das Leidener Manifest • The European Code of Conduct for Research Integrity • The Amsterdam Call for Action on Open Science • European Open Science Cloud (EOSC) • FAIR-Prinzipien • Open Science Policy Platform Recommendations (OSPP-REC) • Plan S Initiative • UNESCO Recommendations on Open Science • Collective Benefit, Authority to control, Responsibility and Ethics (CARE) • Principles for Indigenous Data Governance
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>Hybrid.</p> <p>Main drivers triggering the set -up of the national structure:</p> <ul style="list-style-type: none"> • Open Science represents a cultural change in science and combines various aspects that enable open access to research. Sharing research data (Open Research Data), free access to scientific publications (Open Access) or an open peer review process make a significant contribution to promoting transparency and reproducibility of scientific research, as well as improved quality assurance of scientific work. • The importance of learning about EOSC in light of the development of Switzerland's national open science strategy.
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	<p>Yes. The governance should ensure the separation between overarching strategic and operational level. The ORD Strategy Council is responsible for the overall strategic governance.</p> <p>It is planned to set up a ORD Sounding Board that should be responsible for bringing together those involved in the operational implementation of ORD.</p>
Funding/revenue stream model	It is financially supported by the State Secretariat for Education, Research and Innovation
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase • EOSC competences at national level • Engagement of organisations into the EOSC Association • Organisation of public webinars/events to: <ul style="list-style-type: none"> ○ Inform national stakeholders about the EOSC latest developments ○ Collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) ○ discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.) • Define a national strategy and a plan of actions to be implemented at national level to ensure implementation.
EOSC national structure target stakeholders overview	The National Strategy for Open Science defines the strategy for Open Access and for Open Research Data including a plan of action to implement such a strategy.

Success factors for the EOOSC engagement at country level	<ul style="list-style-type: none"> • Clear and transparent rules of participation • Implementation of interoperability at all levels • Avoid technical solutions that apply only to certain communities or research fields. Engage in technical solutions that could be applicable to as many as possible communities and areas of research • Apply same rules across the communities and disciplines for overarching topics as how to deal with personal data. • Ensure sustainability also by engaging in the discussion with actors as soon as possible.
Engagement best practices	Involve stakeholders in the process of defining the overall strategy as well as in the process of defining the steps to implement the strategy.
Main challenges	<ul style="list-style-type: none"> • To ensure a clear understanding of what EOOSC is and is not, that allow stakeholders to find synergies with their own activities
Main benefits of EOOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • Establish a common platform to enable effective information flow and exchange between national stakeholders. <p>For the EOOSC Governance/future developments</p> <ul style="list-style-type: none"> • Motivate the best possible Swiss experts to contribute to the EOOSC activities, and so to the EOOSC shaping process • Crossfertilization e.g best practices, lessons learnt, etc • Contribute to bringing forward a European research culture based on Open Science principles
Main benefits of the presence of an EOOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • Ensure cross-fertilization and exchange of best practices • Elaborate common solutions to common problems <p>For the EOOSC Governance/future developments</p> <ul style="list-style-type: none"> • Sustainability • Avoid duplication of efforts

The Netherlands

<p>Country: THE NETHERLANDS <i>Information validated by: Ministry of Education, Culture and Science, Ministry of Economic Affairs and Climate Policy, Chair NPOS FAIR Data Table</i></p>	
Status of the EOOSC national structure	<input checked="" type="checkbox"/> Set-up in progress
Name of the EOOSC national structure	The National Programme Open Science (NPOS) FAIR Data Table
Established on / Estimated start	Early 2021
Duration of the mandate	Temporary
Main purpose	The National Programme Open Science (NPOS) is emerging as the overarching umbrella platform, connecting the Dutch government, science council, research performing organisations (RPOs), as well as research supporting organisations (RSOs)[1] around a common national strategy and agenda towards implementation of Open Science in the Netherlands. The NPOS is geared to move towards a more transparent, collaborative and inclusive way of operating science (“Science 2.0”) and

	<p>is structured in three connected actions lines: Open Access, FAIR Data and Citizen Science.</p> <p>Out of these, the FAIR data line is being organised as the coordinated Dutch effort to build a national “FAIR-compliant, federated data ecosystem in which data access across science domains and society is without unnecessary barriers”. This national data ecosystem will be consolidated as the Dutch chapter of the EOSC.</p>
Objectives	<p>The NPOS FAIR Data Table will act as the common coordination instrument to build a national agenda to realise the aspired FAIR-compliant, federated ecosystem. This data ecosystem is foreseen as a vivid and collaborative national data landscape with a well-supported federated digital infrastructure of interoperable local FAIR data resources at RPOs and RSOs, to strengthen data use and re-use across all science domains in the Netherlands. An important element will be the realisation of a strong community of professional data stewards to assist local implementation of high-quality machine-actionable FAIR data (and associated metadata). Here, we will build upon the strength of the Dutch FAIR expert community, including the international GOFAIR organisation hosted in Leiden, the Netherlands.</p> <p>Through the participation of current Dutch members and observers in the NPOS FAIR Data Table, it will also link institutional and national developments to the enrolling EOSC programme at the level of issues such as policy-development, organisation aspects, sustainability efforts and funding mechanisms, capacity and skill-building in FAIR-based data stewardship, FAIR implementation choices within science domains, metadata publishing, architecture of a federated digital infrastructure, FAIR-based analytics technology and underlying infrastructure services, harmonising data access, and public-private collaboration.</p>
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Coordinating EOSC activities at national level • Harmonising efforts and investments related to research data • Realisation of a national FAIR data ecosystem with the help of all relevant stakeholders, connecting digital infrastructures and establishing a learning network of professional data stewards across RPOs and RSOs.
Governance structure:	National programme
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	No
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	Dutch EOSC Association and Steering Board members and observers participate in the NPOS FAIR Data Table
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	No
Profile of the EOSC national structure:	<ul style="list-style-type: none"> • Research funding organisations • Research performing organisations

	<ul style="list-style-type: none"> • Service providers for research • Data stewards (emerging professional community)
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Yes. The current Dutch members and observers of the EOSC Association have agreed to align and communicate with other stakeholders on the EOSC development at the NPOS FAIR Data Table.
Direct links with other EOSC/OS initiatives active in the country	The FAIR Data Table operates under the NPOS, so there is clear and direct link to the national Open Science initiative.
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>Top-down approach (central decision of the related ministry or national research funding organisation).</p> <p>Main drivers triggering the set-up of the national structure:</p> <ul style="list-style-type: none"> • Under NPOS mandate, an analysis has been performed of the Dutch research data landscape. This has led to the establishment of the national FAIR Data Table under the auspices of NPOS in early 2021. • growing desire to reduce costs and duplication of efforts, remove data silos, realise interoperability across organisations and disciplines, harmonise data access regulations and make it easier for Dutch scientists to perform reproducible and data-driven research.
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	The NPOS FAIR Data Table is currently taking shape. The light-weight coordination among stakeholders organised under auspices of the NPOS national platform fits well to the Dutch research data landscape, richly filled with experienced stakeholders dealing with various topics and aspects of FAIR data stewardship, the digital infrastructure and related services in the research fields covered by Dutch academia, universities and institutes of applied sciences and private research institutes.
Sustainability Plan	Currently, a multi-annual plan for Open Science is being drafted to outline the vision, ambitions and planned efforts of the NPOS stakeholders to realise science 2.0 in the next decade. The NPOS2030 plan will be finalised Q4 2021 and subsequently published.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level
EOSC national structure target stakeholders overview	The NPOS FAIR Data Table will bring together all major actors in the rich and experienced Dutch data landscape. See the graph:

Main benefits of EOSC national engagement	National stakeholders assembled in the NPOS platform, and the experts gathered around the NPOS FAIR Data Table find it of importance to align at national level and harmonise efforts and investments related to research data. This is based in the growing desire to reduce costs and duplication of efforts, remove data silos, realise interoperability across organisations and disciplines, harmonise data access regulations and make it easier for Dutch scientists to perform reproducible and data-driven research. Engagement in EOSC processes will grow over time and is regarded important for European (and global) alignment on the above matters.
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • Reduce costs and avoid double work by harmonising efforts and investments • Broader and stronger engagement in EOSC processes at national level <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • More coherent messages and communication coming from the countries towards the EOSC Association and the Partnership

United Kingdom

Country: UNITED KINGDOM <i>Information validated by: JISC</i>	
Status of the EOSC national structure	■ Set-up in progress
Name of the EOSC national structure	Name under definition
Established on / Estimated start	Planning began in 2020; activity began March 2021; further activities will follow thereafter
Duration of the mandate	N. A.
Main purpose	The UK recognises the need for the national digital research infrastructure to interoperate with EOSC. We will initially build a national EOSC community to increase awareness of and engagement with EOSC and provide a forum for exchanging views and experiences relating to EOSC.

Objectives	<ul style="list-style-type: none"> • increase awareness of and engagement with EOSC • build a national EOSC community to exchange views and experiences • enable the UK research community to work with both national and European digital research infrastructures
Main priorities of the EOSC national structure (top 3):	<ul style="list-style-type: none"> • Engaging stakeholders at national level into EOSC 3 • Disseminating and promoting EOSC at national level 1 • Offering a channel to connect the national stakeholders with the EOSC governance 2 • Other: Different (and new) priorities are expected to apply in future, including coordinating EOSC activities at national level and offering training on EOSC specific topics at national level.
Governance structure:	We expect UK participation to take place through a number of different activities, with informal coordination
Does the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	No, the mandated organisation and national engagement initiatives are not the same thing. The mandated organisation will have a much broader scope.
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	When the UK associates to Horizon Europe and nominates a mandated organisation to join the EOSC Association, this organisation will play a leading role in UK engagement with EOSC. Jisc is currently an observer member of the EOSC Association which assists in aligning with Association activities, and providing access to relevant information to disseminate within our national initiative.
Does / Will the national structure have the mandate to represent the Member State in the EOSC Partnership?	No, the mandated organisation and national engagement initiatives are not the same thing. The mandated organisation will have a much broader scope.
Profile of the EOSC national structure:	RPOs, service providers, funders and policy bodies are all likely to take part in future
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Until the UK associates with Horizon Europe, UK organisations are/were not entitled to be full members of the EOSC Association. At the time of writing there are 4 UK observer members of the EOSC Association. The “national initiative” does not have a formal list of participants currently but its aims include strengthening UK engagement in the EOSC and therefore current Association members will be invited to participate in activities.
Direct links with other EOSC/OS initiatives active in the country	UKRI, Jisc and other UK organisations have been, and continue to be, participants in most of the Horizon 2020 INFRA-EOSC programme. UK participants in Horizon 2020 and Horizon Europe EOSC-related projects will be invited to take part in the initiative; coordination with other UK Open Science initiatives will be developed.
Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	<p>A mixture of top-down and bottom-up approaches will be used to set up the initiative.</p> <p>Main drivers triggering the set up of the national structure:</p> <ul style="list-style-type: none"> • Desire to realise benefits from EOSC for UK researchers and service providers

	<ul style="list-style-type: none"> • Desire for Jisc and UKRI to assist UK researchers and service providers in using and supplying to EOSC • Interest in encouraging engagement with EOSC Association and EOSC development
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	No, we expect UK participation to take place through a number of different activities, with informal coordination
Funding/revenue stream model	Currently the (minimal) costs of the initiative are covered by the participating organisations and from contributions from relevant national and European projects.
Main activities performed by the EOSC national structure	<ul style="list-style-type: none"> • EOSC Awareness creation at national level • Creation of a national EOSC community including all different types of stakeholders to discuss and share experiences on EOSC and increase EOSC competences at national level • Engagement of organisations into the EOSC Association • Organisation of public webinars/events, for example to: <ul style="list-style-type: none"> ○ inform national stakeholders about the EOSC latest developments ○ collect feedback from national players and feed them into the EOSC Governance & other EOSC activities (e.g. EOSC-related projects) ○ discuss EOSC-related topics at national/EU level (e.g. researchers incentives and rewards, etc.) • Organisation of EOSC Cafes' reserved to the members to answer questions about EOSC • One to one support to organisations to better understand the EOSC landscape, to discuss the benefits of joining the Association, etc. • Encourage UK RPOs to contribute their data and other resources to EOSC
EOSC national structure target stakeholders overview	UK RPOs, researchers, research data infrastructures, research infrastructures, e-Infrastructures, funders, policymakers
Success factors for the EOSC engagement at country level	<ul style="list-style-type: none"> • The benefits of EOSC are clearly articulated • The EOSC funding models to support provision of resources to EOSC are clearly-defined • Users/providers know what requirements they have to meet due to clear, practical Rules of Participation • Research support experts and training are available • EOSC goals and national goals are aligned, including organisational, technical, legal and ethical aspects
Success factors for the set-up/operation/sustainability of the EOSC national structure	<p>Set-up</p> <ul style="list-style-type: none"> • Substantial numbers of UK researchers are engaged with EOSC • UK researchers understand the benefits of EOSC <p>Operation</p> <ul style="list-style-type: none"> • UK digital infrastructure increasingly interoperates with EOSC • Coordinated UK approach to EOSC standards engagement • Availability of stable and sustainable services, which the researchers can depend upon <p>Sustainability</p>

	<ul style="list-style-type: none"> • EOSC onboarding and European use of UK services and resources (e.g. cloud consultancy)
Engagement best practices	The UK has developed a Concordat on open research data ³⁰ between relevant stakeholders
Main challenges	<p>Stakeholder engagement at national level</p> <ul style="list-style-type: none"> • Clarity of funding models to pay for use or provision of EOSC services • Few use cases illustrating benefits of EOSC • Shortage of concise materials providing clear description and explanation of EOSC • Difficulty in setting up access to services
Main benefits of EOSC national engagement	<p>For the country</p> <ul style="list-style-type: none"> • Increased use of EOSC, helping to boost Open Science practices • Increased UK engagement in EOSC • Increased benefits of EOSC for UK researchers • Better alignment between EOSC goals and national goals <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Increased service provision in EOSC • Increased use of EOSC • Increased engagement with future development of EOSC • Increased benefits of EOSC for researchers
Main benefits of the presence of an EOSC national structure	<p>For the country</p> <ul style="list-style-type: none"> • Development of a forum for exchanging views on EOSC • Support for using or providing to EOSC • Increased benefits of EOSC for UK researchers <p>For the EOSC Governance/future developments</p> <ul style="list-style-type: none"> • Feedback on experience of using or providing to EOSC and future requirements • Increased benefits of EOSC for researchers
Is there anything that you would like to point to the attention of the EOSC Association or the EOSCsecretariat.eu project?	<ul style="list-style-type: none"> • Provide use cases and user testimonies • Provide materials containing clear articulation of what EOSC is and how to use it • Expand the EOSC platform to include resources other than services (i.e. onboarding), and training • Clarify who or what organisation is responsible for the EOSC platform

Annex C - EOSC national structures template

All the country representatives have been asked to complete the following template.

Country: <i>Information validated by:</i>	
Status of the EOSC national structure	<input type="checkbox"/> Available, in place. / <input type="checkbox"/> Set-up in progress / <input type="checkbox"/> Not available yet, but planned / Not planned /

³⁰ <https://www.ukri.org/wp-content/uploads/2020/10/UKRI-020920-ConcordatonOpenResearchData.pdf>

Name of the EOSC national structure	
Brand of the EOSC national structure	
Online presence & contacts	Website / LinkedIn / Twitter / Youtube / Contact email /Other
Established on / Estimated start	Date
Duration of the mandate	Permanent / Temporary, with possibility to renew / Temporary
Main purpose	Why does the country engage with EOSC and why was the EOSC national structure established (max 100 words)
Objectives	Please describe the main objectives of engagement with EOSC by the EOSC national structure (max 150 words).
Main priorities of the EOSC national structure (top 3):	Please select the top 3 priorities from the list below: 1. Engaging stakeholders at national level into EOSC 2. Disseminating and promoting EOSC at national level 3. Offering a channel to connect the national stakeholders with the EOSC governance 4. Coordinating EOSC activities at national level 5. Offering training on EOSC specific topics at national level 6. Other (please specify)
Governance structure of the EOSC national structure (if applicable):	A consortium (please list the names of the involved organisations) / A single organisation (please specify the name) / A national programme / Other
Does / will the EOSC national structure also exercise the role of the EOSC mandated organisation in the EOSC Association?	Yes/No (If not please explain why)
What is / will be the relation between the EOSC national structure and the EOSC Partnership?	Please shortly describe if there are any links with the EOSC Association; the EOSC Steering Board (max 150 words)
Does / Will the EOSC national structure have the mandate to represent the Member State in the EOSC Partnership?	Yes/No (If not please explain why)
Profile of the EOSC national structure:	The EOSC national structure is / or the organisations part of it are Research funding organisation / Research performing organisation / Service provider for research / Other (Please specify)
Are all the EOSC Association members/observers in the country participating in the EOSC national structure and how?	Yes (If yes please briefly describe how they are participating) No (if not, please briefly describe why) (max 150 words)
Direct links with other EOSC/OS initiatives active in the country	Please list the EOSC/OS initiatives that are directly collaborating with the national initiative and briefly describe how (max 150 words)

Main drivers and approach (top-down/bottom-up) to set up a EOSC national structure	Please select the approach through used to set up the initiative: Top-down approach (central decision of the related ministry or national research funding organisation) / Bottom-up (initiative by researchers, OS stakeholders and actors in the country) / Hybrid (combination of previous two independent of who initiated it)
Does /Will the EOSC national structure have a governance structure in place? How is it regulated?	Yes/No (If yes, please briefly describe it – max 200 words)
Funding/revenue stream model	Please briefly report if the EOSC national structure is financially supported (Please specify by whom) / please list if there are any in-kind contributions / Please report if there are any revenue streams for the EOSC national structure
Sustainability Plan	If the EOSC national structure has a sustainability plan in place, please summarize the main points of it (max 200 words)
Main activities performed by the EOSC national structure	Please list the activities performed by the EOSC national structure (max 200 words)
EOSC national structure target stakeholders overview	Please briefly describe the EOSC national structure target stakeholders – max 100 words
Success factors for the EOSC engagement at country level	Please list at least 4 critical factors for the success of EOSC engagement at country level
Success factors for the set-up/operation/sustainability of the EOSC national structure	Please list up to 4 critical factors for the success of establishment of EOSC national structure s for the areas of Set-up/ Operation and Sustainability of the structure.
Engagement best practices	Please describe one best practice that you would like to highlight to the community (max 200 words). Best practices should be related to engagement of stakeholders (policy makers, research communities, etc.).
Main challenges	Please list as bullet points the main challenges that you have encountered / you are encountering with the stakeholder engagement at national level (max 4 bullet points) and the EOSC national structure set-up/ operation/ maintenance (max 4 bullet points)
Main benefits of EOSC national engagement	Please list the benefits (if any) that the EOSC national engagement is bringing/can bring to the country/national community and to the EOSC Governance and future developments
Main benefits of the presence of an EOSC national structure in the country	Please list up the benefits (if any) that the EOSC national structure is bringing/can bring to the country/national community and to the EOSC Governance and future developments
Especially for the EOSC national structure in the set up / planning phase	Is there anything that the EOSC Association or the EOSCsecretariat.eu project can do to facilitate the set-up of the EOSC national structure in your country?

Annex D - List of abbreviations

AC	Associated Countries - Third countries associated to Horizon Europe
AKA	Academy of Finland
ARNES	Academic and Research Network of Slovenia
ATHENA RC	Athena Research Center
BELSPO	Belgian Science Policy Office
CESSDA	Consortium of European Social Science Data Archives
CLARIN	Common Language Resources and Technology Infrastructure
CoSIN	French national committee for digital services and e-infrastructures
CVTISR	Slovak Centre of Scientific and Technical Information
CYI	Cyprus Institute
DE	University of Debrecen
DEIC	DeiC Danish e-Infrastructure Cooperation
DFG	German Research Foundation
EC	European Commission
EMBL	European Molecular Biology Laboratory
EOSC	European Open Science Cloud
EOSC AISBL	EOSC Association
FAIR	Findable, Accessible, Interoperable, Reusable
FCC	Federal Cooperation Commission
FCCN	Foundation for National Scientific Computing
FCT	Foundation for Science and Technology
FNRS	National Fund for Scientific Research
FWO	Research Foundation – Flanders
ICC	International Co-operation Commission
ICDI	Italian Computing Data Infrastructure
IIAP-NAS-RA	Institute for Informatics and Automation Problems of the Armenian National Academy of Sciences
IICT-BAS	Institute of Information and Communication Technologies/Bulgarian Academy of Sciences

IPB	Institute of Physics Belgrade
GRENA	Georgian Research and Educational Networking Association
GRNET	Greek Research and Technology Network
KIFU	Governmental Agency for IT Development
KPI	Key Performance Indicator
MEYS	Ministry of Education, Youth and Sports
MS	The European Union Member States
MoU	Memorandum of Understanding
NCN	National Science Center
NCOS	National Coordinator Open Science
NFDI	Nationale Forschungsdateninfrastruktur, National Research Data Infrastructure
NFU	Netherlands Federation of University Medical Centres
NPOS	National Programme Open Science
NOSCI	National Open Science Initiative
NWO	Dutch Science Council
OA	Open Access
OKM	The Finnish Ministry of Education & Culture
OS	Open Science
PSI Directive	Directive 2003/98/EC on the re-use of public sector information
RASH	Academic Network of Albania
RBI	Ruđer Bošković Institute
RDI	Research, Development and Innovation
REA TF	Researcher Engagement & Adoption Task Force of the EOSC Association
RENAM	Research and Educational Networking Association of Moldova
RFO	Research funding organisation
RPO	Research performing organisation
SRC	Swedish Research Council
SRCE	University of Zagreb Computing Center
SPSIN	Permanent secretariat mandated by CoSIN
SUHF	The Association of Swedish Higher Education Institutions

TSV	The Federation of Finnish Learned Societies
TU Graz	Graz University of Technology
TU Wien	Technical University of Vienna
UCY	University of Cyprus
UKIM	Ss. Cyril and Methodius University in Skopje
UMUKM	University of Maribor
UNIBL	University of Banja Luka
UNIVIE	University of Vienna
UoB	University of Belgrade
UoM	University of Montenegro
UPV	Polytechnic University of Valencia
WG	Working Group

