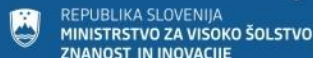


EOSC in druge infrastrukture

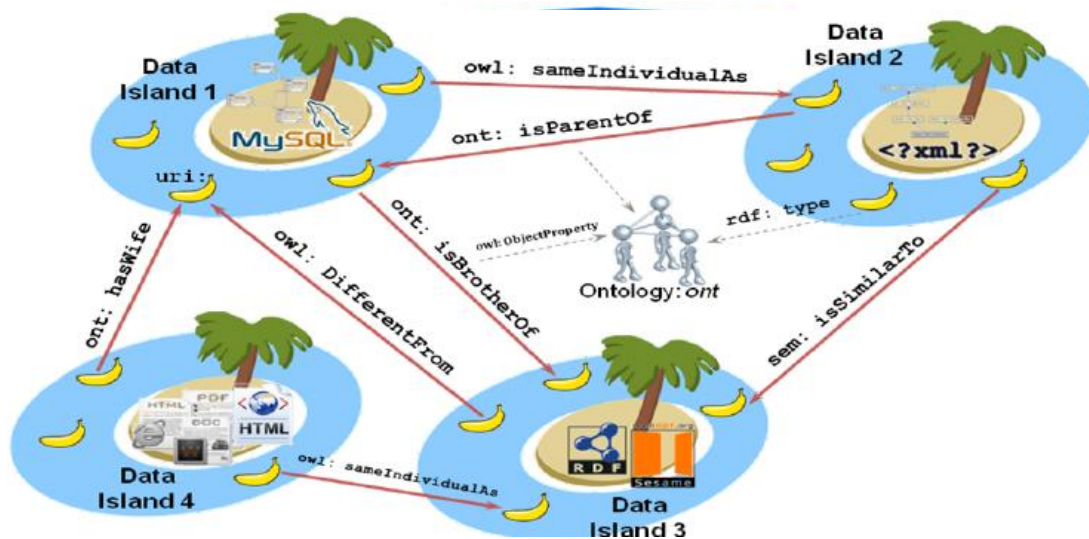
Milan OJSTERŠEK, Fakulteta za elektrotehniko, računalništvo in informatiko
Univerze v Mariboru

mag. Irena VIPAVC BRVAR, Arhiv družboslovnih podatkov, Fakulteta za
družbene vede Univerze v Ljubljani

Ljubljana in online, Centralna tehniška knjižnica Univerze v Ljubljani,
Usposabljanje podatkovnih strokovnjakov, 14. – 17. 10. 2024



Kako zagotoviti interoperabilnost med podatkovnimi otoki?



Principi interoperabilnosti za (meta)podatke:

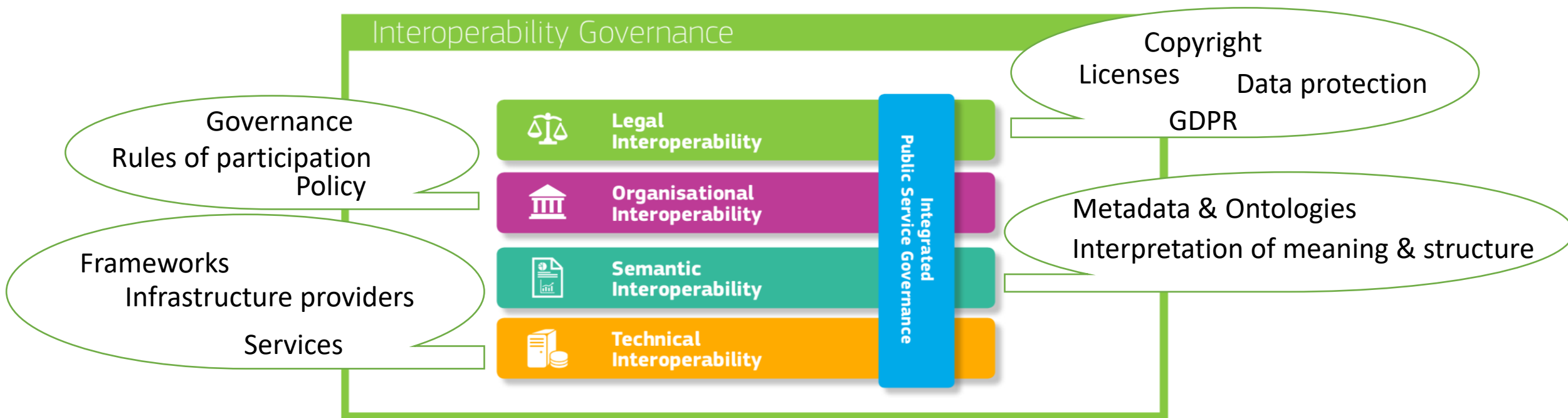
- (Meta)podatki so opisani v formalnem, standardiziranem in široko uporabljenem jeziku za predstavitev znanja.
- (Meta)podatki uporabljajo slovarje, ki upoštevajo načela FAIR.
- (Meta)podatki vključujejo kvalificirane reference na druge (meta)podatke.

Vir: Wilkinson, M. D. et al. The FAIR Guiding Principles for scientific data management and stewardship. Sci. Data 3:160018 doi:10.1038/sdata.2016.18 (2016)

Vir: https://commons.wikimedia.org/wiki/File:Islands_Of_Data.svg

Vir: https://www.researchgate.net/publication/267692879_Towards_Executable_Reality_Business_Intelligence_on_Top_of_Linked_Data/figures?lo=1

Nivoji interoperabilnosti



Vir: [The European Interoperability Framework four levels of interoperability](#)

Kdo vpliva na interoperabilnost digitalnih objektov in infrastruktur v Evropi?

- [European Open Science Cloud \(EOSC\)](#)
- [EU research infrastructures](#) ([ELIXIR](#), [CLARIN](#), [CESSDA](#), [DARIAH](#), [BBMRI](#),)
 - [European Strategy Forum on Research Infrastructures \(ESFRI\)](#)
 - [European Research Infrastructure Consortium \(ERIC\)](#)
- [Pan-European e-Infrastructures](#) ([GEANT](#), [EUDAT](#), [OpenAire](#), [EGI](#), [EuroHPC](#), [RDA](#), [PRACE](#)...)
- EU in [EOSC projekti](#): [FAIRsFAIR](#), [EOSC Enhance](#), [EOSC Pilot](#), [EOSC hub](#), [FAIRCORE4EOSC](#), [EOSC Future](#), [DICE](#), [EGI-ACE](#), [OpenAIRE Advance](#), [OpenAire-Nexus](#), [EOSC FOCUS](#), [FAIR IMPACT](#), [Skills4EOSC](#), [FAIR-EASE](#), [ByCOVID](#), [ExPaNDS](#), [Blue-Cloud 2026](#), [WorldFAIR](#), [EOSC RAISE](#), [OSCARS](#), [EOSC Beyond](#), [EVERSE](#), [Ostrails](#), [EOSC SIESTA](#), [TITAN](#), [EOSC ENTRUST](#)...
- [EU znanstveni grozdi](#): [ENVRI-FAIR](#) (znanosti o okolju), [EOSC-Life](#) (biomedicinske znanosti), [ESCAPE](#) (astronomija in fizika delcev), [SSHOC](#) (dužboslovne in humanistične znanosti), [PaNOSC](#) ([fotonski in nevtronski oblak odprte znanosti](#)).
- EU in globalne iniciative([CODATA](#), [FAIR digital object forum](#), [GoFAIR](#), [DDI](#), [COAR](#), [IVOA](#)...).

Pan evropske e- infrastruktura



AARC: Authentication and Authorisation for Research and Collaboration

www.aarc-project.eu



BlueBRIDGE: Building Research environments fostering Innovation, Decision making, Governance and Education to support blue growth

www.bluebridge-vres.eu



EarthServer2: Big Earth Data at your fingertips

www.earthserver.eu



EDISON: Building the data science profession

www.edison-project.eu



OpenAIRE: Science set free

www.openaire.eu



OpenDreamKit: Open Digital Research Environment Toolkit for the Advancement of Mathematics

www.opendreamkit.org



OpenMinted: Open Mining Infrastructure for Text and Data

www.openminted.eu



PhenoMeNal: Phenome and Metabolome analysis

www.phenomenal-h2020.eu



EGI-Engage: Engaging the Research Community towards an Open Science Commons

go.egi.eu/engage



e-IRG: Paving the way towards a general purpose European e-Infrastructure

www.e-irg.eu



EUDAT: European Data Infrastructure

www.eudat.eu



EVER-EST: A Virtual Research Environment for the Earth Sciences

www.everest-eu.eu



PRACE: Partnership for Advanced Computing in Europe

www.prace-ri.eu



RDA: Research Data Alliance

www.rd-alliance.org



READ: Recognition and Enrichment of Archival Documents

read.transkribus.eu



SESAME Net: Supercomputing Expertise for Small And Medium Enterprises

www.sesametwork.eu



GÉANT Project (GN4-1): Accelerating research, driving innovation and enriching education

www.geant.org/geantproject



INDIGO-DataCloud: INtegrating Distributed data Infrastructures for Global Exploitation

www.indigo-datacloud.eu



LEARN: LEaders Activating Research Networks

www.learn-rdm.eu



MuG: Multi-scale complex Genomics

www.multiscalegenomics.eu



THOR: Technical and Human infrastructure for Open Research

www.project-thor.eu



VI-SEEM: Virtual Research Environment (VRE) for regional Interdisciplinary communities in Southeast Europe and the Eastern Mediterranean

www.vi-seem.eu



VRE4EIC: A Europe-wide Interoperable Virtual Research Environment to Empower Multidisciplinary Research Communities and Accelerate Innovation and Collaboration

www.vre4eic.eu



West-Life: World-wide E-infrastructure for structural biology



SCIENCE-CLUSTERS.eu
Research Infrastructures for Open Science

SP^oZNAJ
PODPORA PRI UVAJANJU NAČEL ODPRTE ZNANOSTI V SLOVENIJI

SCIENCE-CLUSTERS.eu: Cross-Domain Research Infrastructure Collaboration for Open Science

Research Infrastructures and Communities

The science clusters have grown out of five collaborative projects funded by the European Union in 2019 to link ESFRI and other world-class Research Infrastructures (RIs) to the European Open Science Cloud (EOSC). The services developed by the clusters and other outcomes of the projects are cornerstones of the emerging EOSC fabric and support both disciplinary communities and multidisciplinary initiatives with harmonised models for access to data, tools, workflows and training. Each cluster unites multiple RIs in their specific scientific domain.



ASTRONOMY AND
PARTICLE PHYSICS

Learn more [↗](#)



ENVIRONMENTAL
SCIENCE

Learn more [↗](#)



LIFE SCIENCE

Learn more [↗](#)



PHOTON AND
NEUTRON SCIENCE

Learn more [↗](#)



SOCIAL SCIENCES
AND HUMANITIES

Learn more [↗](#)

VIR



EOSC Life

EOSC-Life: Building a digital space for the life sciences



The EOSC-Life project aims to:

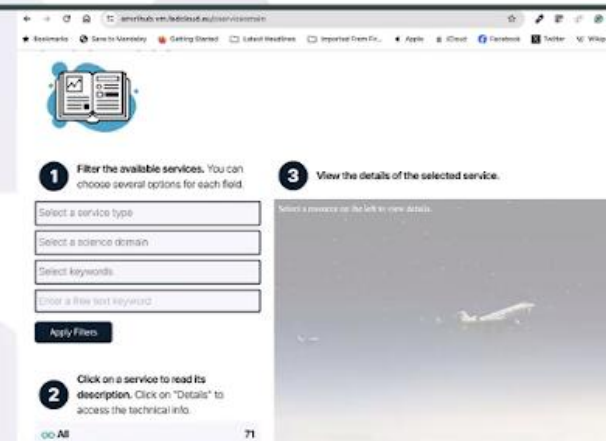
- **Establish** EOSC-Life by publishing FAIR life science data resources in EOSC
- **Provide** the policies, guidelines and processes for secure and ethical data reuse
- **Populate** an ecosystem of innovative life-science tools in EOSC
- **Enable** data-driven research in Europe by connecting life scientists to EOSC via open calls for participation

RIs in environmental and earth sciences



- Catalogue of individual RI
- ENVRI Service Catalogue
 - <https://envrihub.vm.fedcloud.eu/cservicesmain>

ENVRI Catalogues (data and services)



eLTER
catalogue



EPOS
catalogue



LifeWatch
catalogue



SeaDataNet
catalogue



EuroArgo
catalogue



ICOS
catalogue



...
catalogue



....

ESCAPE: European Science Cluster of Astronomy and Particle Physics



Consortium of 31 members, including:

- 10 ESFRI projects & landmarks: **CTA, EST, FAIR, HL-LHC, KM3NeT, SKA, LSST, VIRGO, ESO, JIVE**
- 2 pan-European International Organizations: **CERN and ESO**
- 2 European Research Infrastructures: **EGO and JIV-ERIC**
- 4 supporting European consortia: **APPEC, ASTRONET, ECFA and NuPECC**

Budget: **15.98 M€**

Duration: **48 months** (1/2/2019 -31/1/2023)



Evropski oblak odprte znanosti (EOSC)

Evropski oblak odprte znanosti (EOSC) si prizadeva ustvariti enoten digitalni prostor, ki bo omogočil odprt dostop do, uporabo in ponovno uporabo raziskovalnih podatkov, virov in storitev po vsej Evropi.

Glavni cilji EOSC so:

- Omogočiti vsem raziskovalcem, ne glede na njihovo pripadnost ali finančne zmožnosti, dostop do raziskovalnih podatkov, storitev, programske opreme in drugih rezultatov znanosti.
- Zagotoviti, da so raziskovalni podatki in rezultati raziskav dostopni, preverljivi in ponovno uporabni.
- S povezavo raznolike skupnosti raziskovalcev, podjetij in javnih institucij spodbuditi sodelovanje in hitrejši razvoj novih znanstvenih spoznanj in tehnologij.
- Spodbuja najdljivost, dostopnost, interoperabilnost in ponovno uporabo raziskovalnih podatkov in drugih digitalnih objektov v skladu z načeli FAIR, s ciljem povečati produktivnost, inovacije in zaupanje v raziskave EU.



EOSC tristransko upravljanje

EOSC skupaj upravljajo:

- Evropska komisija (Directorates-General for Research and Innovation [DG RTD] and for Communications Networks, Content and Technology [DG CNECT]),
- Združenje EOSC ([EOSC association](#)) in
- Skupina ekspertov (EOSC Steering Board), katere člani so delegirani iz držav članic EU, ki sodelujejo v programu Obzorje Evropa.

Ti organi sprejemajo odločitve glede ključnih strateških ciljev EOSC s konsenzom.



Univerzitetna knjižnica Maribor

Dan odprte znanosti 2022, 2023, 2024

Dan odprte znanosti 2023 naslovlil izzive in dobre prakse z vidika vrednotenja znanosti kot tudi infrastrukturnih rešitev

- odprtaznanost.si
- SSOZ – Slovenska skupnost odprte znanosti
- UKM

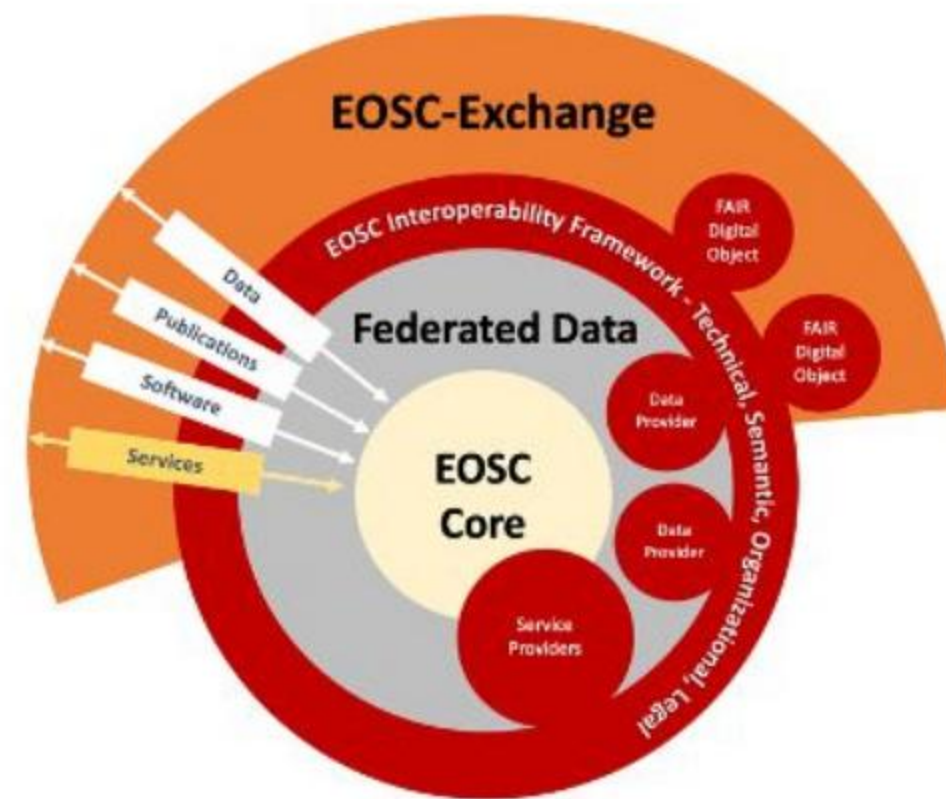


eosc NTE 2023

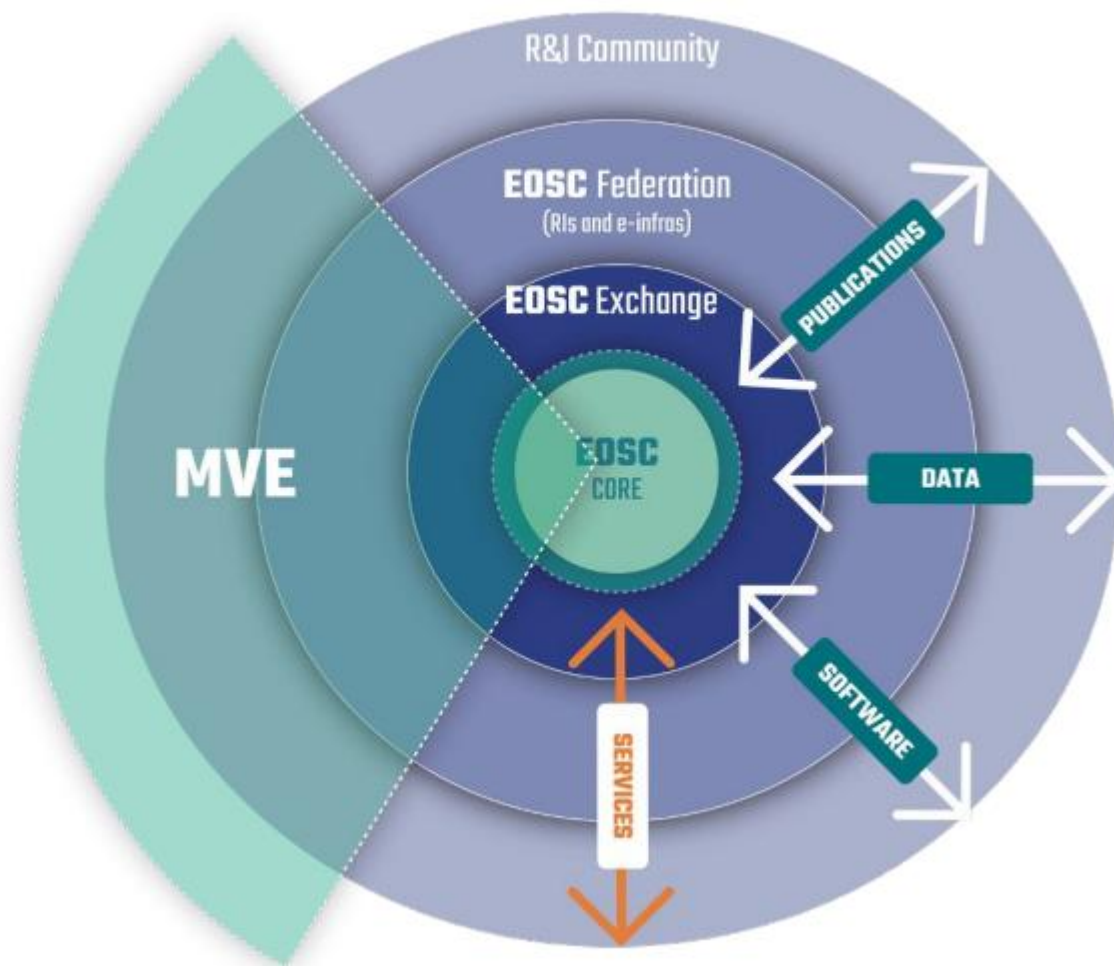
Switzerland, Bern 06.03.2023 Formal report 100 Attendees 21 Speakers & Participants	Bulgaria, Sofia 20.03.2023 Formal report 90 Attendees 18 Speakers & Participants	Netherlands, Utrecht 11.04.2023 Formal report 50 Attendees 17 Speakers & Participants	Czech Republic, Prague 01-02.06.2023 Formal report 150 Attendees 22 Speakers & Participants	France, Montpellier 13-14.06.2023 Formal report 75 Attendees 18 Speakers & Participants	Ireland, Dublin 03.11.2023 Formal report 45 Attendees 9 Speakers & Participants	Slovenia, Ljubljana 14.11.2023 Formal report 186 Attendees 35 Speakers & Participants
Hungary, Budapest 23.03.2023 Formal report 50 Attendees 12 Speakers & Participants	Croatia, Zagreb 30.03.2023 Formal report 100 Attendees 17 Speakers & Participants	Slovakia, Bratislava 31.03.2023 Formal report 73 Attendees 17 Speakers & Participants	Italy, Rome 05.06.2023 Formal report 240 Attendees 24 Speakers & Participants	Spain, Madrid 16.09.2023 Formal report 66 Attendees 20 Speakers & Participants	Poland, Krakow 06.11.2023 Formal report 50 Attendees 40 Speakers & Participants	208 Online Participants

Ključne komponente EOSC

- Mreža FAIR digitalnih objektov in storitev.
- Integracija obstoječih in novih infrastruktur ter storitev v enotno, virtualno raziskovalno okolje.
- Uporaba mednarodno priznanih standardov za zagotovitev interoperabilnosti in trajnosti implementiranih storitev.
- Usposabljanje in izobraževanje uporabnikov.



Minimal Viable EOSC



Vir: [EOSC Core](#)

- Core Services
- EOSC Portal & Market Place
- Interoperability Framework
- Support Service

EOSC Partnership



EOSC Tripartite collaboration

(European Commission, the EOSC Association, and the Member States and Associated Countries)

- PID policy and implementation
- Researcher engagement and adoption
- FAIR metrics and data quality
- Semantic interoperability
- Technical interoperability of data & services
- Long-term data preservation

European, Regional & National Initiatives - engaging nationally and internationally

Regional EOSC Projects & Structures

- EOSC ongoing 5b projects
- EOSC National Structures
- National Open Science Cloud Initiatives (NOSCI)
- National Research Data Infrastructure (NFDI)

Trustworthy Digital Repositories



Open Science initiatives



Building an EOSC in practice - engaging with solution providers

HORIZON-INFRA 2021 projects



HORIZON-INFRA 2022 projects



European Research Infrastructures supporting projects (HORIZON.1.3)



Open Science Projects



European food consumer science



EOSC Technical Core



EOSC Providers



Individuals



- HLAC
- FAIR Champions
- EOSC Ambassadors

Journals and Publishers



April 2024

EOSC ponudniki



e-Infrastructures

Ex: EUDAT, EGI, national e-Infrastructures (e.g. national research clouds), OpenAIRE, PRACE, FENIX, D4Science

- ✓ Software & other research products
- ✓ Storage
- ✓ Computing
- ✓ Services
- ✓ Training



Research Infrastructures

Ex: ERICs, ESFRIs, EMODnet, Copernicus, DIAS (Data and Information Access Services), clusters

- ✓ Software & other research products
- ✓ Storage
- ✓ Datasets
- ✓ Computing
- ✓ Services
- ✓ Training



Higher Education Institutes (HEIs)

- ✓ Software & other research products
- ✓ Publications
- ✓ Services
- ✓ Storage
- ✓ Datasets



Research Institutes

Ex: Research performing organisations, universities, research centres

- ✓ Software & other research products
- ✓ Datasets
- ✓ Publications



Archives & Repositories

Ex: Institutional thematic and national repositories, archives and aggregators

- ✓ Software & other research products
- ✓ Datasets
- ✓ Publications



Computing & Data Centers

Ex: BCS, CSC, PSNC, CERN

- ✓ Software & other research products
- ✓ Storage
- ✓ Computing
- ✓ Services
- ✓ Training



Publishers & Journals

- ✓ Publications



Libraries

Ex: University libraries, institutional libraries, national libraries, LIBER

- ✓ Publications
- ✓ Datasets
- ✓ Training



Commercial Providers

- ✓ Software & other research products
- ✓ Storage
- ✓ Datasets
- ✓ Computing
- ✓ Services
- ✓ Training
- ✓ Publications



EOSC EU Node

Evropsko EOSC vozlišče bo nastalo v okviru implementacije storitev iz razpisa EU, katerega rezultati so bili objavljeni na <https://eosc.eu/news/2023/11/european-commission-announces-results-of-the-eosc-procurement/>

Storitve so/bodo:

- [Iskalnik rezultatov raziskav.](#)
- [Vnaprej pripravljena virtualna okolja.](#)
- [Sinhronizacija in deljenje datotek.](#)
- [Prenos velikih datotek.](#)
- [Prenos velike količine podatkov.](#)
- [Interaktivne raziskovalne beležke.](#)
- [Oblachna platforma za izvajanje aplikacij, ki so implementirane s pomočjo vsebnikov.](#)



European Open Science Cloud - EU Node

Polno delujoč po 23 oktobru 2024!

EOSC EU Node - Your Gateway to Open Science



A federated, multidisciplinary
network of distributed nodes



EOSC delovne skupine

- [Delovne skupine od 2021 – 2023](#)
- Delovne skupine od 2024 – 2025:
 - [Technical and Semantic Interoperability](#)
 - [FAIR Metrics and Digital Objects](#)
 - [Health Data](#)
 - [Long-Term Data Retention](#)



EOSC področne skupine

✓ OA Expert Group 1
Persistent Identifiers

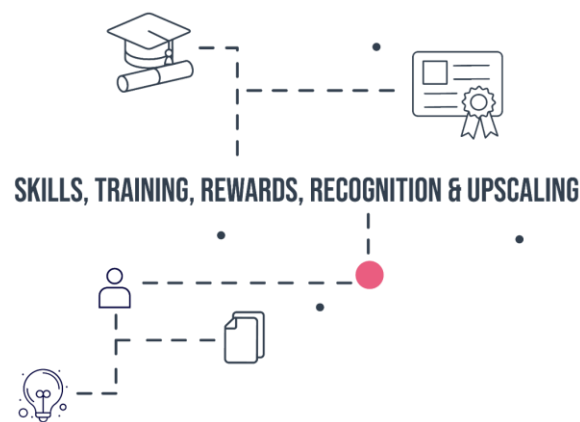
✓ OA Expert Group 2
**Metadata,
Ontologies and
Interoperability**

✓ OA Expert Group 3
**FAIR Assessment and
Alignment**

✓ OA Expert Group 4
**User and Resource
Environments**

✓ OA Expert Group 5
**Skills, Training,
Rewards,
Recognition &
Upscaling**

✓ OA Expert Group 6
**Open Scholarly
Communication**



Glavne teme OA5:

1. Training material, Learning Paths, Curriculum

- Support the development of a harmonised & certified data steward curriculum in Europe (MAR2025-2027)
- Support the visibility of Competence Centres working closely with Skills4EOSC and OSCARS
- Align existing learning paths methodologies
- Ensure long-term sustainability of developed EOSC related training resources

2. Training Catalogue/Training Infrastructure

- Ensure findability and accessibility of EOSC related training resources, a.o. by advocating and adopting the RDA developed minimal metadata standards
- Explore Training as an EOSC Service

3. Engagement

- Support engagement and upskilling of National/thematic communities
- Connect user support networks to enable professionals to come together and exchange knowledge, best practices and to foster lifelong learning

4. Accreditation/Recognition/Assessment

- Support EOSC-A and relevant EOSC projects to reach CoARA objectives
- Work towards a quality assurance framework and certification mechanisms for trainers and trainees

5. EOSC Skills & Training Strategy

- Work towards a mechanism to provide strategic oversight, coordination and governance of EOSC Training elements

Winter School 2025

The week of
20 - 24 January 2025 / Spain

Save the date!

Pomembni dokumenti

- EOSC Strategic Research and innovation agenda: <https://eosc.eu/sria-mar/>
- EOSC interoperability framework: <https://op.europa.eu/sl/publication-detail/-/publication/d787ea54-6a87-11eb-aeb5-01aa75ed71a1> and <https://doi.org/10.2777/620649>
- EOSC architecture working group view on the minimum viable EOSC. Report from the EOSC Executive Board Working Group (WG) Architecture: <http://doi.org/10.2777/492370>
- Eriksson, van de Sanden, Kurowski, Coppens, Corcho, & Ojsteršek. (2021, January 5). EOSC Interoperability Framework Reference Architecture (Version 1.0). Zenodo. <http://doi.org/10.5281/zenodo.4420096>
- Graber-Soudry, Ohad, Minssen, Timo, Nilsson, Daniel, Corrales, Marcelo, Wested, Jakob, & Illien, Bénédicte. (2021, January 27). Legal Interoperability and the FAIR Data Principles (Version 1.0). Zenodo. <http://doi.org/10.5281/zenodo.4471312>
- [Licentia](#) a web service application with the aim to support users in licensing data. Their goal is to provide a full suite of services to help in the process of choosing the most suitable license depending on the data to be licensed.
- [ODRL representation of public licences](#)
- EOSC rules of participation: <http://doi.org/10.2777/30541>
- Wilkinson, M. D. *et al.* The FAIR Guiding Principles for scientific data management and stewardship. *Sci. Data* 3:160018 doi: 10.1038/sdata.2016.18 (2016).

- Rezultati projekta FAIRSFair: <https://www.fairsfair.eu/reports-deliverables>
- Rezultati SSHOC: <https://sshopencloud.eu/publications/deliverables>
- PID architecture for EOSC: <https://op.europa.eu/sl/publication-detail/-/publication/3136c3e6-4f07-11eb-b59f-01aa75ed71a1/language-en/format-PDF/source-search> and <http://doi.org/10.2777/525581>
- A Persistent Identifier (PID) policy for the European Open Science Cloud (EOSC): <http://doi.org/10.2777/926037>
- EOSC Authentication and Authorization infrastructure (AAI): <https://op.europa.eu/sl/publication-detail/-/publication/d1bc3702-61e5-11eb-aeb5-01aa75ed71a1/language-en/format-PDF/source-search> and <http://doi.org/10.2777/8702>
- AARC Blueprint architecture: <https://aarc-project.eu/architecture/>
- EOSC Future provider days: <https://eoscfuture.eu/eventsfuture/provider-days/>
- WG DataIO: Data interoperability landscape references - <https://docs.google.com/document/d/1q4L-nxDYQYES5qKaB3z-sRTRI4diKAPY/edit>



EuroHPC Joint Undertaking

#EuroHPC Joint Undertaking

The European High Performance Computing Joint Undertaking (EuroHPC JU) will pool European resources to develop top-of-the range exascale supercomputers for processing big data, based on competitive European technology.

Member countries are Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Türkiye and United Kingdom.







Kaj je RDA?

RDA je mednarodna **članska organizacija**, ki se osredotoča na razvoj infrastrukture in podpira dejavnosti za zmanjševanje ovir pri deljenju in izmenjavi podatkov ter po vsem svetu pospešuje na podatke temelječe inovacije.

RDA ima več kot 14.000 članov iz 152 držav. Združuje **raziskovalce, znanstvenike in strokovnjake podatkovne znanosti**, ki delujejo na različnih področjih, strokah in disciplinah ter prihajajo iz različnih tipov organizacij z vsega sveta.

RDA gradi družbene in tehnične povezave, ki omogočajo odprto deljenje in ponovno rabo raziskovalnih podatkov s ciljem, da bi odprto deljenje podatkov omogočilo naslavljanje največjih družbenih izzivov brez tehnoloških, strokovnih in državnih omejitev.





Vizija

Raziskovalci in inovatorji z odprtim deljenjem in **ponovno rabo** podatkov naslavljajo največje družbene izzive brez tehnoloških, disciplinarnih in državnih omejitev.

Poslanstvo

RDA gradi **družbene in tehnične povezave**, ki omogočajo odprto deljenje in **ponovno rabo** raziskovalnih podatkov.

THE RESEARCH DATA ALLIANCE

www.rd-alliance.org

building the social and technical bridges that enable open sharing and re-use of data

72 PODPRTIH REZULTATOV

vključno z 8 tehničnimi
specifikacijami IKT

>200 PRIVZEMNIH PRIMEROV

v več strokah, institucijah
in državah

89 SKUPIN NASLAVLJA GLOBALNE IZZIVE PODATKOVNE INTEROPERABILNOSTI

35 delovnih skupin
53 interesih skupin
1 skupnost prakse

14.251 ČLANOV IZ 152 DRŽAV

70% raziskovalcev in akademskega osebja
14% javnih uslužbencev
13% podjetnikov in gospodarstvenikov

67 INSTITUCIONALNIH ČLANIC 13 PRIDRUŽENIH INSTITUCIJ



rd-alliance.org



@resdatall | @rda_europe | @rda_us

32





S čim se ukvarja RDA?

Člani se na lastno pobudo prostovoljno povezujejo v ciljno usmerjene delovne skupine ali v raziskovalne interesne skupine, kjer med seboj delijo spoznanja, se posvetujejo o preprekah in možnostih, raziskujejo in opredeljujejo pristope ter testirajo in usklajujejo standarde, ter s tem na svetovni ravni spodbujajo in podpirajo deljenj in ponovno rabo podatkov.

Člani RDA z vsega sveta naslavljajo infrastrukturne izzive pri deljenju podatkov:

- 🌐 Ponovljivost raziskav
- 🌐 Ohranjanje podatkov
- 🌐 Dobre prakse za področne repozitorije
- 🌐 Pravna medopравilnost
- 🌐 Navajanje podatkov
- 🌐 Registri podatkovnih vrst
- 🌐 Metapodatki
- 🌐 in številne druge teme.





Podatkovno svetovanje

Skupine:

[Professionalising Data Stewardship IG](#)

[Engaging Researchers with Data IG](#)

[Discipline-specific Guidance for Data Management Plans WG](#)

...

Glej tudi: Dolinar, M. 2022, *Viri in usposabljanja v RDA*, Dogodek RDA vozlišča Slovenija: Podatkovno svetovanje v Sloveniji, 17. junij 2022, https://www.rd-alliance.org/wp-content/uploads/2024/05/Dolinar_Viri_in_usposabljanja_v_RDA_06_2022.pdf

Rezultati in viri:

- Jetten, M. et al. (2021). [Professionalising data stewardship in the Netherlands. Competences, training and education. Dutch roadmap towards national implementation of FAIR data stewardship](#) (1.0).
- Ayres, B., Lehtsalu, L., Parton, G., Ádám Száldobágyi, Warren, E., Whyte, A., & Zimmer, N. (2022). *RDA Professionalising Data Stewardship – Current Models of Data Stewardship: Survey Report*. Research Data Alliance. <https://doi.org/10.15497/RDA00075>
- Mapping the Landscape of Digital Research Tools. (2024) [10.15497/RDA00125](https://doi.org/10.15497/RDA00125)
- ...





CODATA



Committee on Data (CODATA) je ena od organizacij [International Science Council \(ISC\)](#), katere vizija je, da je pospeševanja razvoja znanosti, kot javne dobrine. CODATA to počne s spodbujanjem mednarodnega sodelovanja za spodbujanje odprte znanosti ter izboljšanje razpoložljivosti in uporabnosti podatkov za vsa področja raziskav.

- [Delovne skupine](#)
- [Global Open Science Cloud \(GOSC\)](#)

Data Ethics



CODATA



CODATA and the Australian Research Data Commons (ARDC) announce the CODATA Research Data Management Terminology (RDMT)

VIR

- Authenticity metadata
- Big data
- Bit sequence
- Bit stream
- Born digital**
- Boundary value
- Canonical data
- CARE Principles for Indigenous Data Governance

Born digital

IRI: <https://terms.codata.org/rdmt/born-digital>

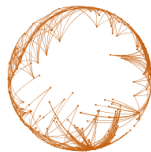
Definition: Digital materials that were originally created in digital form, as distinct from those created as a result of digitising analogue originals.

[View details](#)



FAIR digital object forum

- Delovne skupine
- FDO knjižnica
- FDO specifikacije

FAIR DIGITAL OBJECTS  FORUM



GOFAIR

- Implementacijska omrežja:
 - GO BUILD – osredotoča se na tehnologije
 - GO CHANGE – osredotoča se na politike, prednostne naloge in spodbude za implementacijo načel FAIR
 - GO TRAIN – osredotoča se na ozaveščanje o FAIR in na usposabljanja za pridobivanje kompetenc na področju FAIR



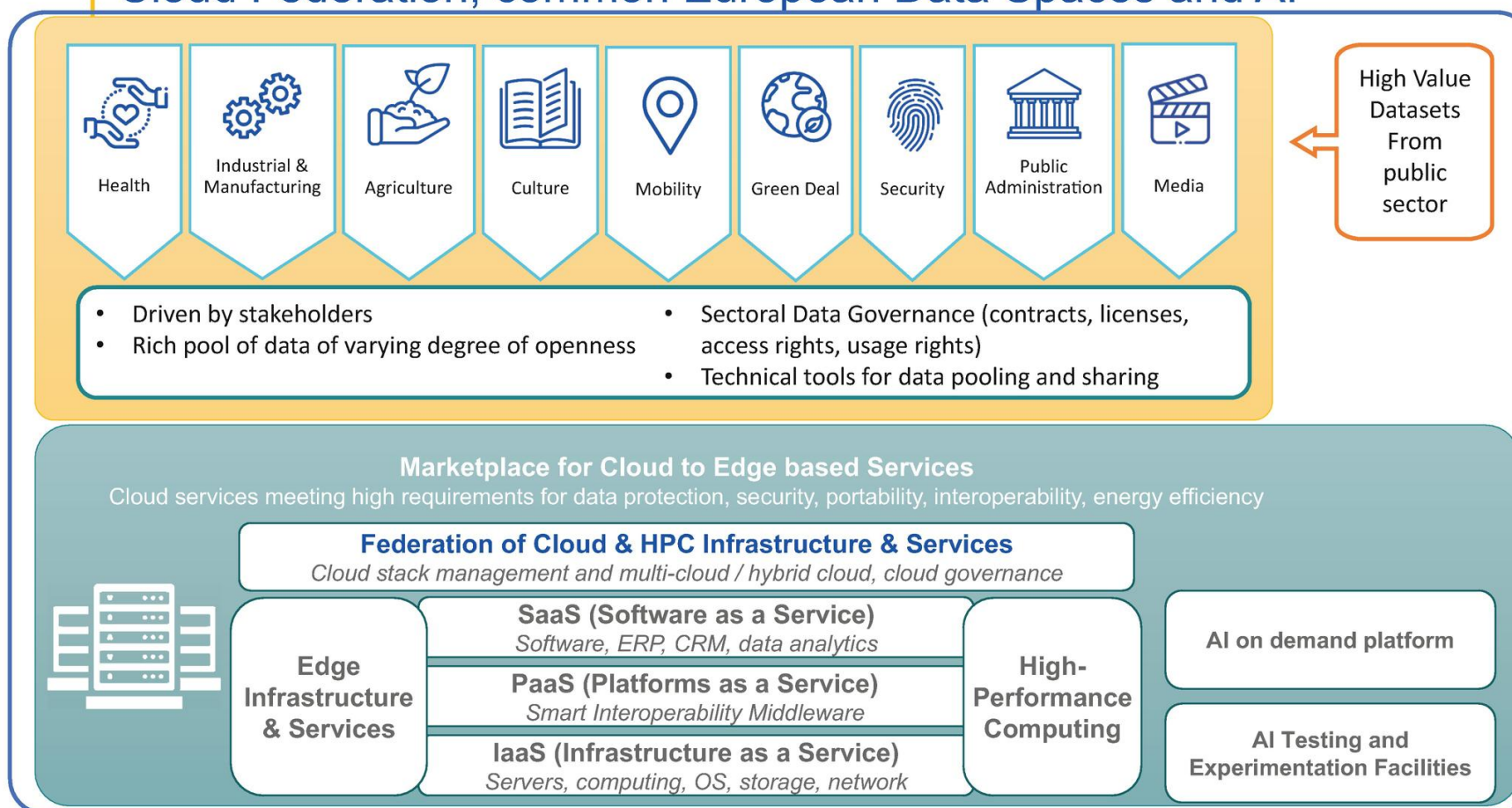
Katalogi in navodila

- [OpenAire \(guidelines\)](#)
- [B2Find](#)
- [CESSDA data catalogue](#)
- [NI4OS Europe catalogue](#)
- [FAIRsharing](#)
- [Agroportal](#)
- [Bartoc](#)
- [re3data.org](#)
- [WorkflowHub](#)
- [Dockerhub](#)
- [ECRIN Clinical Research Metadata Repository](#)
- [BBMRI-ERIC Sample Directory](#)
- [SSHOC service catalogue](#)
- [Social Sciences & Humanities Open Marketplace](#)
- [PaNOSC federated dataset catalogue](#)
- [IVOA Registry of Registries](#)
- [ELIXIR Core data resources](#)



Common European data spaces

Cloud Federation, common European Data Spaces and AI



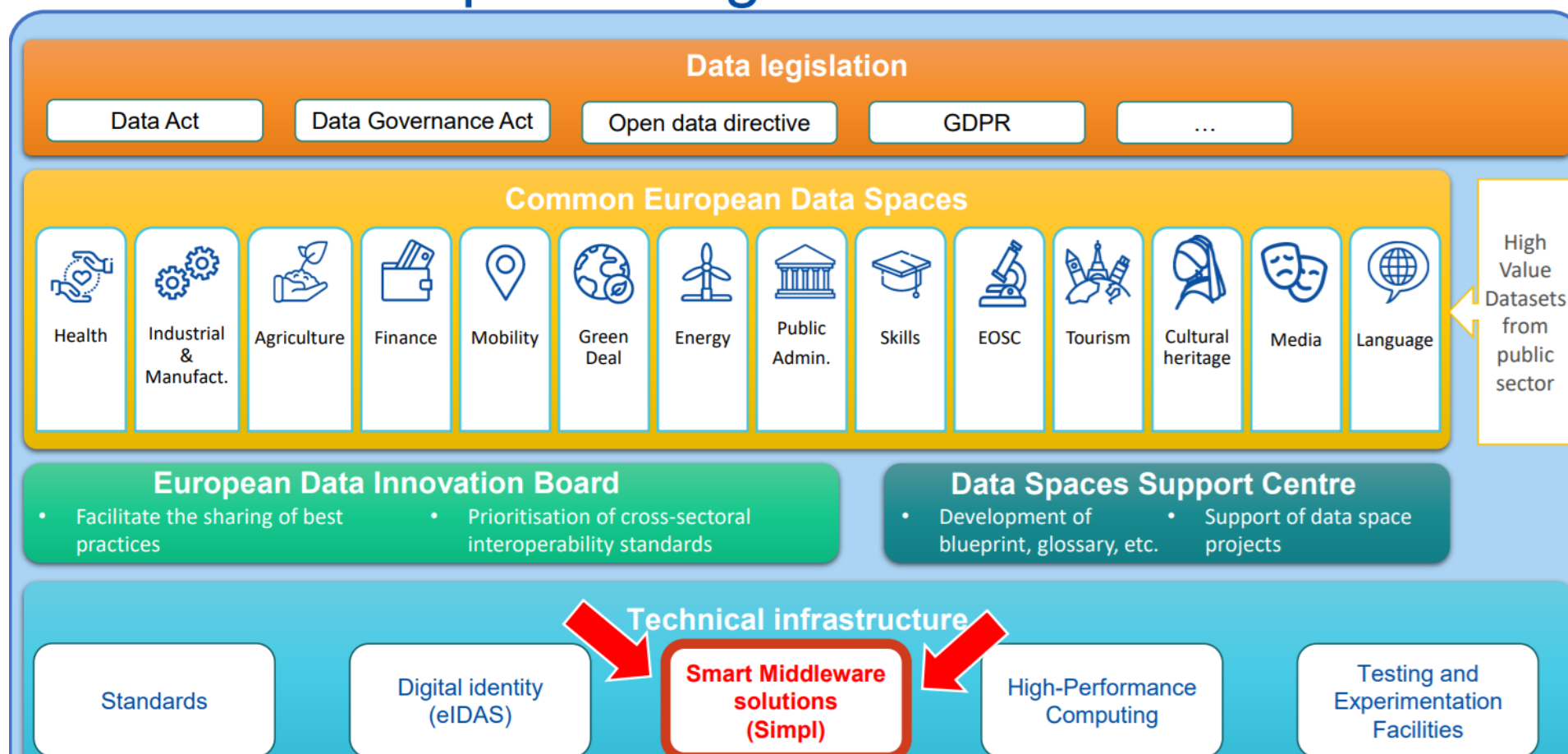
Vir: [Common European data spaces](#)



Enotni evropski trg podatkov

European Single Market for Data

Vir:
[Simpl](#)





Simpl

SIMPL-Open

The core product of SIMPL

An open-source software stack that powers data spaces and other cloud-to-edge federations initiatives.



Playground and demonstration environment for SIMPL-Open

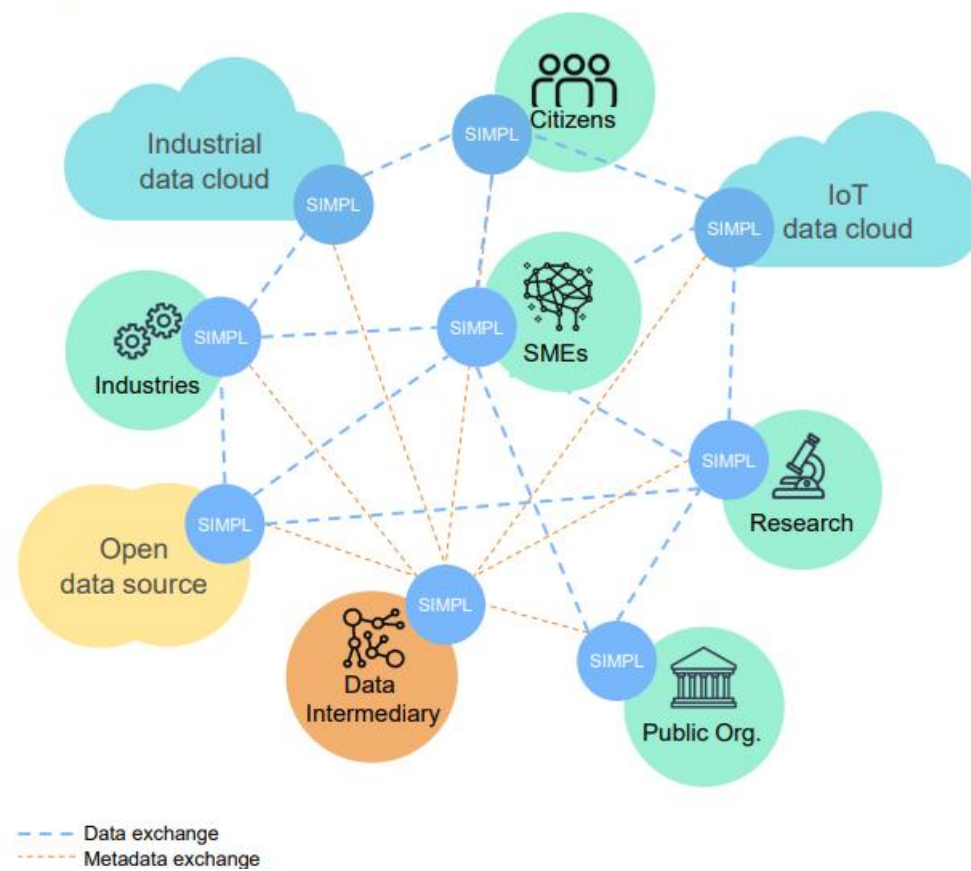
An environment for data spaces to experiment with the open-source software and assess their level of interoperability with Simpl.

SIMPL-Labs

SIMPL-Live

Instances of SIMPL-Open for sectoral data spaces

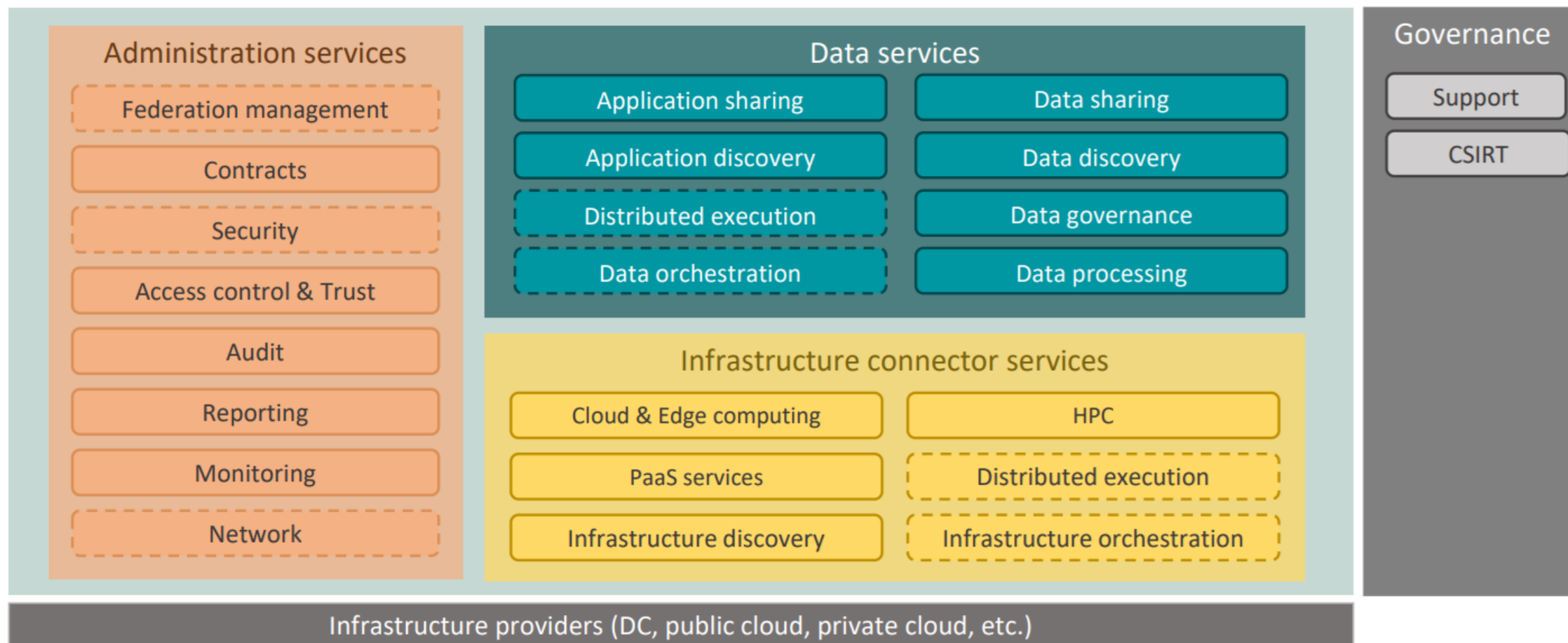
The deployment of SIMPL-Open for selected Data Spaces.



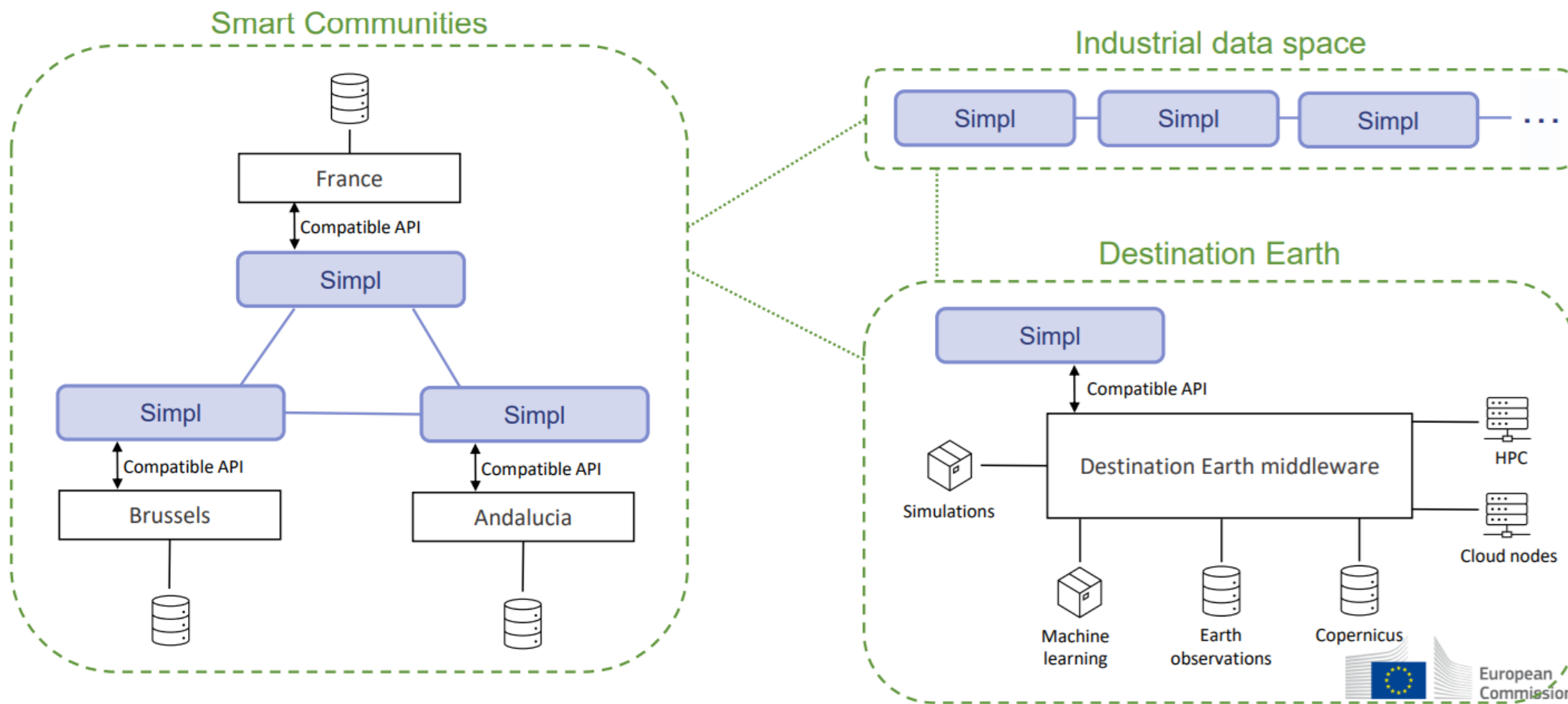
Vir: [Simpl](#)



Konceptualna arhitektura od Simpl



Povezovanje različnih podatkovnih prostorov s pomočjo vmesne programske opreme Simpl



Centralna tehniška knjižnica Univerze v Ljubljani
Central Technical Library at the University of Ljubljana
Trg republike 3, SI-1000 Ljubljana
Slovenija / Slovenia

Hvala za pozornost!



Univerza v Ljubljani

