



HORIZON 2020 CONTRIBUTIONS TO BUILDING THE EOSC

Joint CNECT-RTD project meeting & workshop

Presentation of the participant H2020 projects

**9-10 September 2019
Brussels**



Design and specification of a distributed, European SKA Regional Centre (ESRC) to support the astronomical community in achieving the scientific goals of the Square Kilometre Array (SKA)

EC Horizon 2020 (€3 million)

13 countries, 28 partners, SKAO, host countries, e-infrastructures (EGI, GÉANT, RDA), NREN's

Three year project (2017-2019)

Grant Number: 731016

Investigating:

- Computing and Processing Requirements
- Data Transport and Storage Topologies
- Data Access and Knowledge Creation
- User Services
- Governance scenarios

Final deliverable: preliminary ESRC Design and Implementation Plan

ESRC will pursue compliance with EOSC principles

- Open in design, participation and use
- Publicly funded & governed with a “commons approach”
- Research-centric with an agile co-design with researchers and research communities
- Interoperable with common standards for resources and services

ESRC will form part of a global network of SKA Regional Centres





GRANT NUMBER: 731001

AMOUNT OF EC FUNDING: EUR 2,837,375.00

PARTICIPANTS



KEY EXPECTED OUTPUTS RELATED TO EOSC:

- **Customised D4Science VREs for three (3) use cases & communities**
 - Agro-climatic and Economic Modelling (*Wageningen UR*)
 - Food Safety Risk Assessment (*BfR*)
 - Food Security (*INRA*)
- **AGINFRA scientific big data platform for agri-food**
 - domain-specific components, workflows & tools
 - evolving work from FP7 agINFRA, FP7 SemaGrow, H2020 OpenMinTeD, H2020 BigDataEurope, H2020 eROSA
- **Ecosystem of tech services & tools interoperable with EOSC**
 - Includes tools & services from SMEs (*Agroknow, Pensoft*)
 - Sharing results with international food & water security projects such as CGIAR's Big Data Platform & BM Gates Water Pathogen Project

ARCHIVER Pre-Commercial Procurement

Goal: R&D in Archiving and Data Preservation Services using commercial cloud services, to be available via the EOSC

Procurement Budget: 3.4M euro

Starting Date: 1st of January 2019

Duration: 36 Months

Coordinating Partner: CERN

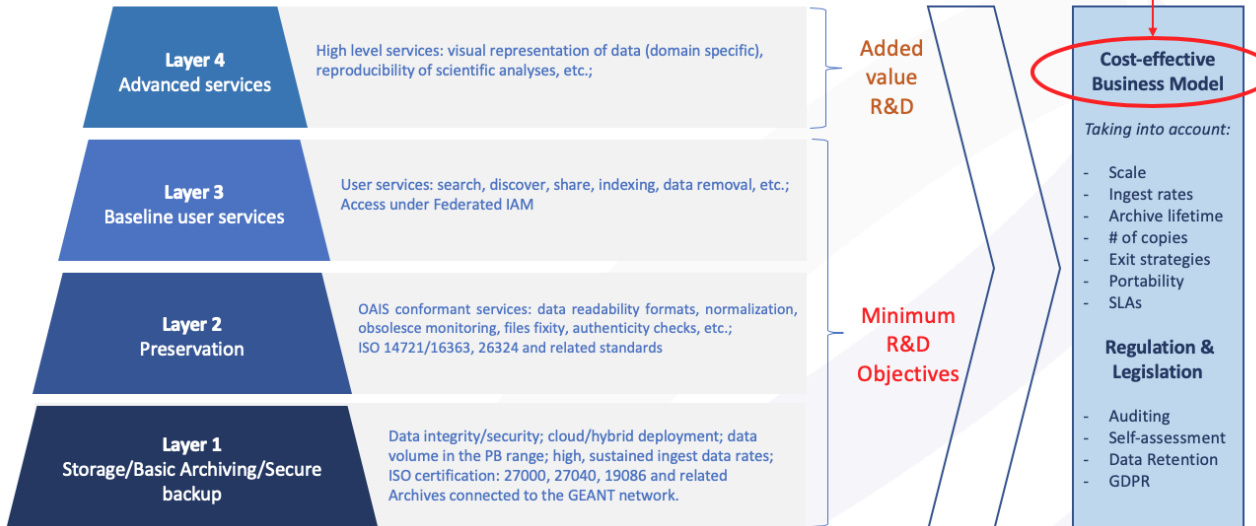
Grant Agreement: 824516

R&D Challenge

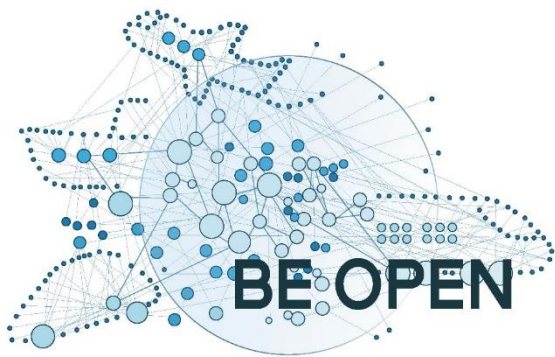


ARCHIVING AND PRESERVATION FOR RESEARCH ENVIRONMENTS

Fundamental aspect of the challenge



The Consortium includes Buyers and Experts in the preparation, execution and promotion of the Procurement of R&D



The BE OPEN project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under **Grant Agreement No 824323**



TRANSPORT FORUM/OBSERVATORY FOR PROMOTING OPEN SCIENCE

T O P O S

Promote, regulate and standardise Open Science (OS) in Transport

European forum and oBsErvatory for OPEN science in transport

The Team

	 CENTRE FOR RESEARCH & TECHNOLOGY HELLAS Coordinator				

(Third Parties)



Funded under: **H2020-EU.3.4.**
Overall budget: € 1 997 283,75

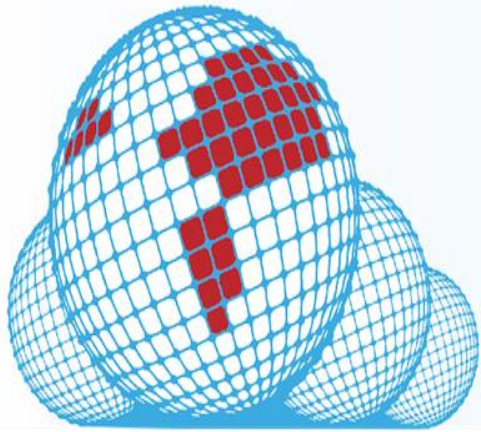
Catalogue of Research Infrastructure Services (CatRIS)

- Grant number: 824173
- Amount of EC funding : 1.5 M€
- Duration: January 2019 to June 2021 (30 months)
- Consortium: European Science Foundation (ESF), European Future Innovation System Centre, JNP Strategy and Management Consulting, National Kapodistrian University of Athens, National Hellenic Research Foundation – National Documentation Centre, EurOcean Foundation, Core Technologies for Life Science Association
- Key expected outputs related to EOSC:

CatRIS aims to develop an open, trusted and user-friendly Portal to a harmonised and aggregated Catalogue of Research Infrastructure Services and Resources offered at European and National levels, supporting and interoperable with the European Open Science Cloud Catalogue, focusing on Physical Research Infrastructures, Core Facilities and Shared Scientific Resources and making those findable and accessible by researchers, research groups, communities, projects, organisations, innovators and businesses, funders and policy makers.

- More information: <https://project.catris.eu>





CINECA

Common Infrastructure for National Cohorts in Europe, Canada, and Africa



www.cineca-project.eu



@CinecaProject

EC Funding: €6M

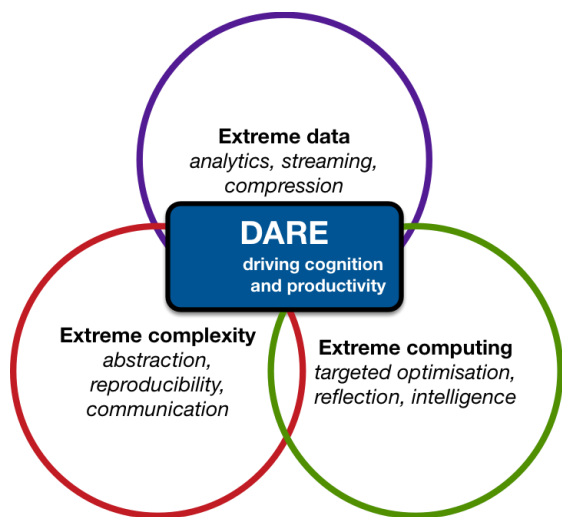


This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 825775

This project has received funding from the Canadian Institute of Health Research under grant agreement #404896



CIHR IRSC
Canadian Institutes of Health Research / Institut de recherche en santé du Canada



GA No: 777413

EC Contribution: 2,957,500 €

1 January 2018 – 31 December 2020

Key outputs relating to EOSC:

- Unified, EOSC-ready platform for research at data, computational and cognitive extremes
- Operational DARE platform and methodology for providing transparent access to EOSC e-infrastructures
- DARE services exposing workflows, methodology and provenance metadata

DARE Consortium:

1. NCSR “Demokritos”, EL (Coordinator)
2. INGV, IT
3. University of Edinburgh, UK
4. CERFACS, FR
5. KIT, DE
6. KNMI, NL
7. GRNET, EL
8. Fraunhofer SCAI, DE
9. ATHENA RIC, EL

- ▶ **Title:** Support to a Digital Health and Care Innovation initiative in the context of Digital Single Market strategy
- ▶ **Duration:** Jan '19 – Dec '20 (2 years)
- ▶ **Coordinator:** empirica, Germany
- ▶ **Consortium:** 17 partners
- ▶ **Instrument:** HORIZON 2020
- ▶ **Type:** Coordination & Support Action
- ▶ **Grant Agreement Number:** 826353
- ▶ **Acronym:** DigitalHealthEurope
- ▶ **Budget:** €3,999,993.75

▶ **Key expected outputs related to EOSC:**

Contribute to EC ambition to pool and share health data resources (data, infrastructures, expertise...) for targeted and faster research, diagnosis and treatment (one of 3 priorities of EC Communication on enabling the digital transformation of health and care in the Digital Single Market, COM(2018) 233 of 25 April 2018)

- Analysis of challenges encountered by regional, national and European **data infrastructures** handling personal and/or anonymous health data
- Recommendations to ensure **cross-border access to genomic data**
- Implications of the **GDPR** for reuse of health data for research purposes

Key achievement



Access to a Catalogue of 326 Services & Resources offered by 21 Service & Resource Providers listed in 163 catalogue records.

These 163 records/entries in the catalogue lead to:

-  246 Services (Networking, Compute, Storage, Security, Training, etc.)
-  33,081,876 Publications
-  4,336,196 Data(sets)
-  137,302 Software and Applications
-  3,006,627 Other Research Products

(NB: July data)

6



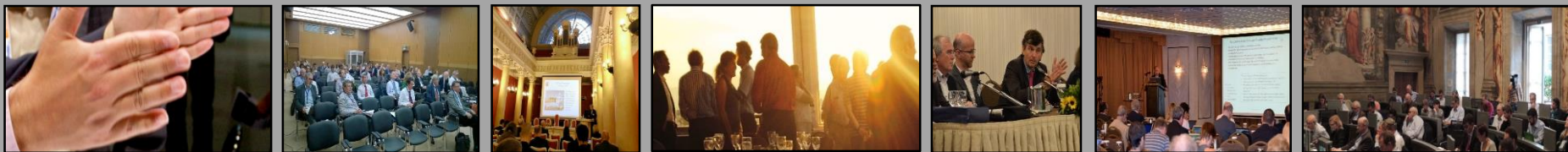
Key results



- Result 1:** The Scientific Resources Description Template (SDT) and Classifications
- Result 2:** The First Catalogue for the European Open Science Cloud
- Result 3:** APIs for enabling EOSC interoperability
- Result 4:** Online Services and Assets Representations
- Result 5:** A Set of Portal Cataloguing Functionality
- Result 6:** Registration services for onboarding in EOSC and analytics and visualisations
- Result 7:** A platform for providers to build their own EOSC-Compliant catalogue

7





e-Infrastructure Reflection Group Support Programme 6 e-IRGSP6



Leibniz
Universität
Hannover



Funding: 599.981,25 €

Duration: 30 month



Consortium:

Leibniz Universität Hannover,
Germany (coordinator)



Nederlandse Organisatie voor
Wetenschappelijk Onderzoek,
the Netherlands



Ethniko Diktyo Erevnas
Technologias AE, Greece

Innov-acts

Genias Benelux B.V., the
Netherlands

Innov-Acts Limited, Cyprus

About e-IRG

- a European self-regulated and independent body of national delegates
- recognised as an inter-governmental advisory group
- dealing with policies on electronic infrastructures (e-Infrastructures) for research, i.e. research networks, computing and data infrastructures, software/middleware

The mission of e-IRG is to support both coherent, innovative and strategic European e-Infrastructure policy-making and the development of convergent and sustainable e-Infrastructure services.

Objective 1. Support e-IRG and its governing structures

- Support e-IRG in facilitating the information and knowledge exchange between delegates and stakeholders of the e-Infrastructure/Research Infrastructures area, including ESFRI RIs, EOSC and EDI/EuroHPC.

Objective 2. Support e-IRG towards the implementation of EOSC and EDI, and the realisation of the e-Infrastructure Commons

- offering an independent view on the implementation of relevant EU policies;
- supporting all e-IRG Working Groups and Task Forces and its policy outputs, towards the e-Infrastructure Commons and beyond;
- providing inputs to e-IRG policy documents related to EOSC and EDI, as well as other policy and Commission documents.

Objective 3. Disseminate e-IRG and e-IRGSP6 results

- promote the Open Science concept and associated cultural change by liaising with e-IRG's various stakeholders, including EOSC, EDI/EuroHPC and ESFRI, fostering the cooperation between European research communities and e- Infrastructures.



@eirgeu <http://e-irgsp6.e-irg.eu>





EUROPEAN OPEN SCIENCE CLOUD

ENVRI-FAIR is the connection of the Environmental Research Infrastructure community to the European Open Science Cloud



ENVRI-FAIR brings together all Environmental Domain RIs listed on the ESFRI Roadmap but collaborates with the entire community of Environmental Research Infrastructures

Find us

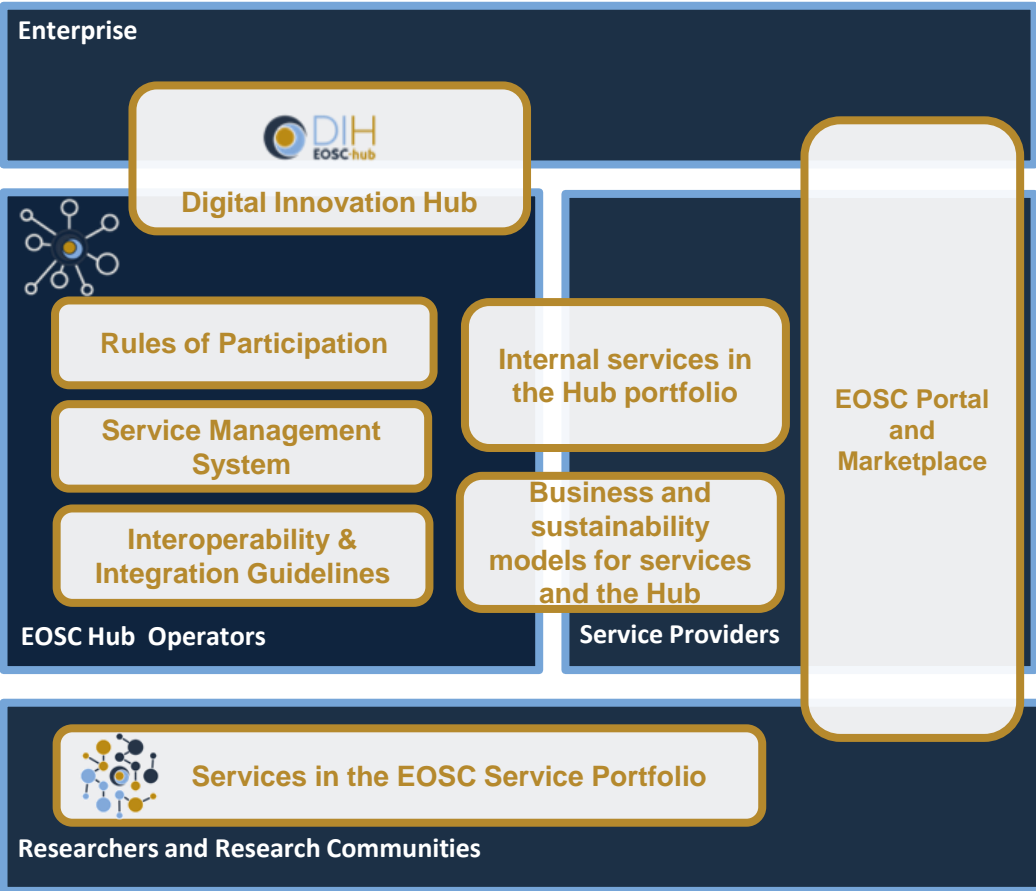
www.envri-fair.eu
 @ENVRIcomm
 ENVRI community
 facebook.con/ENVRIcomm

Coordination
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 Ari Asmi ✉ ari.asmi@helsinki.fi
 Daniela Franz ✉ d.franz@fz-juelich.de



Key Exploitable Result (KER)
Output which can be taken up, exploited and reused to support the future mature EOSC

Innovation Role
EOSC stakeholder taking up and benefiting from the KER



EOSC-hub: Integrating and managing services for the European Open Science Cloud

Grant Agreement ID
777536

EU Budget
€ 30 000 000

Coordinator
STICHTING EGI

Consortium
100 partners
53 countries



Key expected outputs related to EOSC

- Establish EOSC-Life by publishing FAIR life science data resources in EOSC
- Create an ecosystem of innovative life-science tools in EOSC
- Enable ground-breaking data driven research in Europe by connecting life scientists to interoperable European clouds via open calls for participation

<https://EOSC-Life.eu>

13 ESFRI Life Science Research Infrastructures

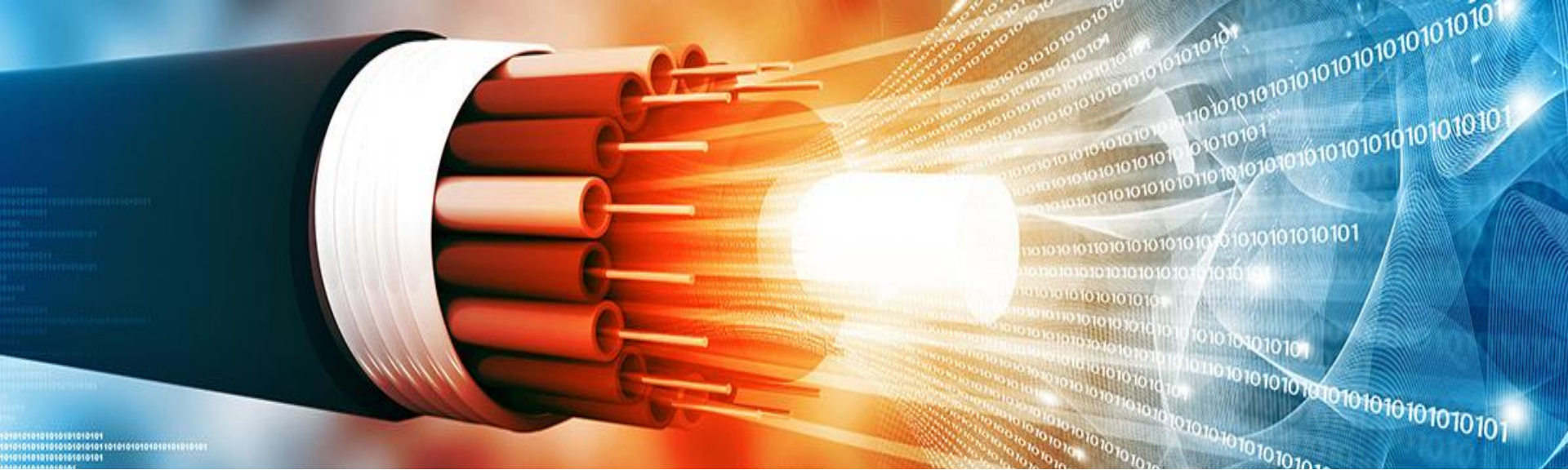
ELIXIR - Project Coordinator

46 Partners and 17 linked 3rd parties

Sourcing e-Infrastructure services from EOSC (Cloud, AAI, ...)

4 year Project, 24M€, #824087

 BBMRI-ERIC® gateway for health	 eatris	 ECRIN EUROPEAN CLINICAL RESEARCH INFRASTRUCTURE NETWORK
 elixir	 EMBRIC EUROPEAN MARINE BIOLOGICAL RESOURCE CENTRE	 EMPHASIS
 erinha European Research Infrastructure Network for Health	 EU-OPENSREEN Chemical keys for life's locks	 EURO-BIOIMAGING
 INFRAFRONTIER model disease models	 instruct ERIC	 ISBE Infrastructure for Systems Biology Europe
 MIRRI Molecular Infrastructure for Research in Regenerative Medicine		



Grant number: 857652 (INFRA EOOSC-5b)
Budget: 5.9M€
Coordinator: Gudmund Høst, NeIC Director
Participants: 24 partners (10 countries)
Project period: Sep, 2019 – Aug, 2022

24 Partners from 10 different countries

Iceland

- UNIVERSITY OF ICELAND

Norway

- NORDFORSK
- UNINETT SIGMA2 AS
- NORWEGIAN CENTER FOR RESEARCH DATA

Denmark

- DENMARK TECHNICAL UNIVERSITY
- UNIVERSITY OF SOUTHERN DENMARK
- DANISH NATIONAL ARCHIVES
- UNIVERSITY OF COPENHAGEN
- CAPITAL REGION OF DENMARK
- NORDUNET / AS

Netherlands
GoFair

Germany
DKRZ

Sweden

- UNIVERSITY OF UPPSALA
- SWEDISH RESEARCH COUNCIL
- UNIVERSITY OF GOTHENBURG

Finland

- CSC – IT CENTER OF SCIENCE
- UNIVERSITY OF HELSINKI
- UNIVERSITY OF TAMPERE
- UNIVERSITY OF EASTERN FINLAND
- FINNISH METEOROLOGICAL INSTITUTE

Estonia

- UNIVERSITY OF TARTU
- NATIONAL INSTITUTE OF CHEMICAL PHYSICS AND BIOPHYSICS

Latvia

- RIGA TECHNICAL UNIVERSITY

Lithuania

- UNIVERSITY OF VILNIUS

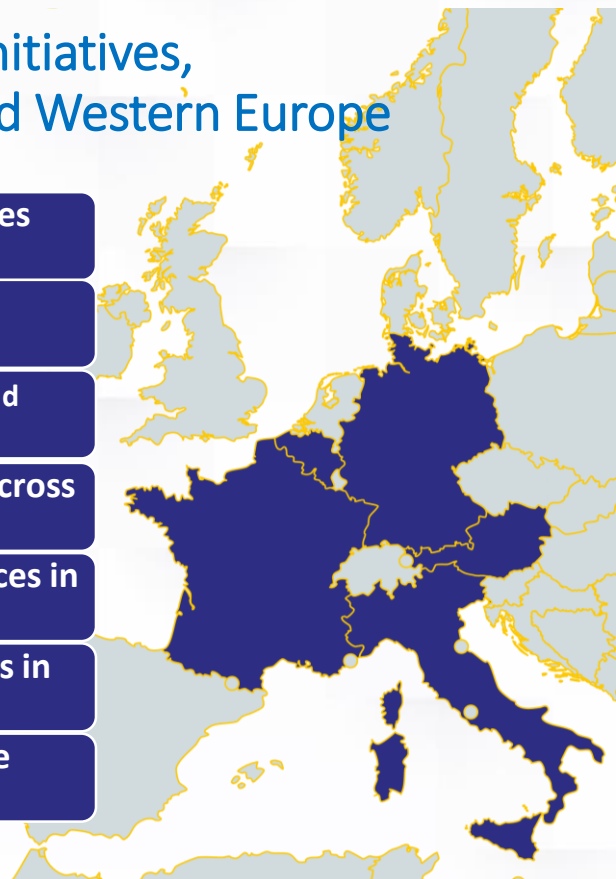
EOSC

 NORDIC

KEY EXPECTED OUTPUT

1. Recommendations to legal implementation of EOSC standards & policies
2. EOSC service compliance checklist and maturity model
3. A list of prospective EOSC service providers and candidate services to be integrated into EOSC portal
4. Hands-on support to service providers for integrating EOSC core components
5. Mapping of EOSC relevant repositories
6. Guidelines for improving datamanagement practices and FAIR metrics (incl. competence building)
7. Incentives for facilitating the uptake of FAIR practices
8. Foster discoverability and re-use of research data in EOSC
9. Facilitate the integration of community specific portals with large scale computing facilities across borders
10. Pilot DM planning tool to broker and manage services and data in a cross border & cross disciplinary setting
11. Demonstrate an orchestration mechanism that brings national secure servers together – allowing the analysis of personal data without moving data away from the custodian
12. Establishment of a Nordic & Baltic Knowledge Hub as a virtual competence center – plan to be sustainable beyond the project

Coordination and Harmonisation of National Initiatives, Infrastructures and Data services in Central and Western Europe



- I** Harmonised procedures for research data services delivery across countries
- M** Coordination with other initiatives to achieve harmonisation for an inclusive EOSC
- P** Full understanding of the state of national initiatives and compute and data services, supporting consolidation
- A** Increased FAIR data uptake at national levels and across scientific communities and borders
- C** Launch of new non-commercial transnational services in the EOSC Portal
- T** Active stakeholder community of EOSC supporters in each country
- S** New viable business models for the sustainable provision of transnational services

Website
www.eosc-pillar.eu

Grant agreement ID
857650

EU contribution
€ 6 880 965

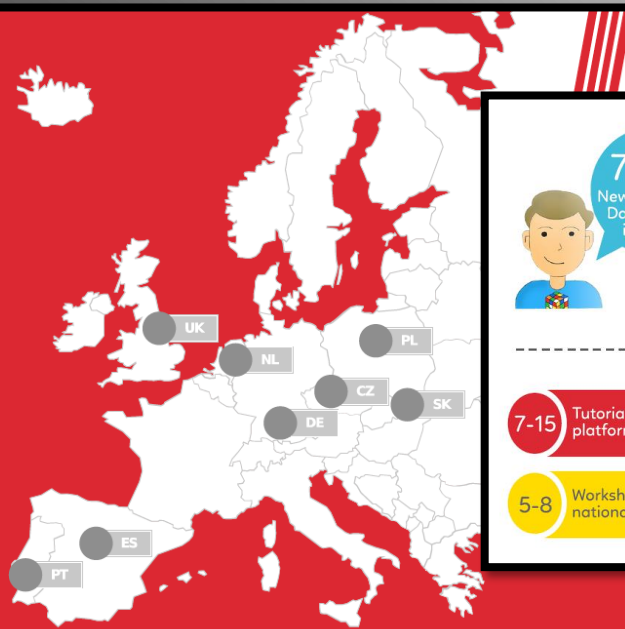
Coordinator
GARR

Partners
19





Spain
 Portugal
 UK
 Czech Republic
 Germany
 Slovakia
 Poland
 Netherlands



7 - 11 New federated Datacenters in EOSC

5 - 8 New services in the EOSC Portal

8 - 12 FAIR data collections

7-15 Tutorials available on the platform with real practices

5-8 Workshops co-organized with national and international actors

1 SQaaS

10-20 Certified Services

EC Funding: 5,5M€



Building Capacity
 Enlarging EOSC with a critical mass of computing and storage resources in such a way that resources can be seamlessly exploited via federation services.

Developing Capability
 Promoting EOSC adoption by the research communities by expanding and building knowledge on common interfaces, standards and best practices.

Software Quality as a Service: SQaaS
 Increasing EOSC adoption and facilitating the on-boarding of providers.



EOSC-synergy receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 857647.



www.eosc-synergy.eu

@EOSC_synergy

project-office@eosc-synergy.eu

ExPaNDS

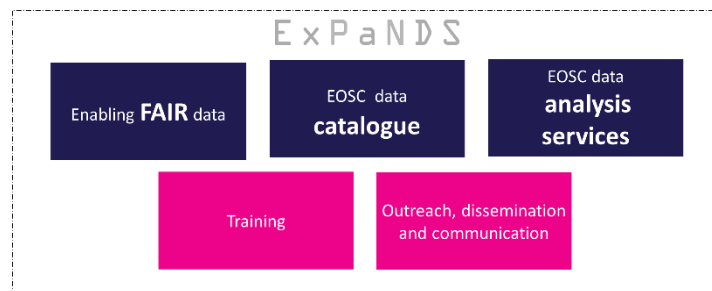
EOSC Photon and Neutron Data Services

Objectives

- Enable EOSC services and provide coherent FAIR data services for PaN RIs
- Connect PaN RIs through a platform of data catalogues and analysis services through the EOSC
- Enable researchers to make their PaN data FAIR
- Gather feedback and cooperate with the EOSC governance to develop EOSC
- Closely collaborate with PaNOSC, other INFRAEOSC and HORIZON 2020 projects to deliver a uniform and integrated EOSC environment



10 national Photon and Neutron RIs & e-Infrastructure



Call INFRAEOSC 5b **Start date** 1 September 2019
Duration 3y **Budget** 6 M€

Primary focus: National PaN Research Infrastructures and researchers exploiting data from PaN RIs

Scientific fields: biology, materials, chemistry, technology, nuclear physics, pharmacology, high-energy physics, cultural heritage and others





Health Research Organizations

Research Data Management

Business Actors

EXPECTED OUTPUTS RELATED TO EOSC

TECHNOLOGY
FAIRification process applied to health data

POLICIES
Guideline for Health Research Organisations to implement a FAIR data policy

RESEARCH

- i. eService for health researchers and healthcare providers
- ii. FAIR dataset including up to 5 mill. subjects

AWARENESS RAISING
Reports, dissemination materials and training on the FAIRification of health data

EC funding: **2,999,053.75 €** Grant Agreement **824666**

FAIRplus – fairplus-project.eu

Key expected outputs related to EOSC

- Value-based model to select and prioritise datasets for FAIRification
- FAIRification toolkit for life-science data used by industry and academia
- SME engagement (“associate partners”) and *Innovation and SME* events to foster an innovation ecosystem for FAIR open data that power future reuse, knowledge generation and societal value

Grant ID #: 802750
ELIXIR - Project Coordinator
Janssen - Project Leader

22 participants
12 academic, 7 EFPIA, 3 SME

€8.23M budget
€4M H2020 EC funding + €4.23M EFPIA in-kind

42 months



This project has received funding from the Innovative Medicines Initiative 2 Joint Undertaking under grant agreement No. 802750. This Joint Undertaking receives support from the European Union’s Horizon 2020 research and innovation and EFPIA companies.

FAIRsFAIR: Fostering Fair Data Practices in Europe

Grant number: 831558 | EC funding: €9,998,848

Key outputs related to EOSC:

- Improvement of interoperability of FAIR resources
- Increasing production and use of FAIR data
- Development of a capability maturity model towards FAIR certification
- Expansion of the network of Trusted Digital Repositories
- Establishment of a FAIR Competence Centre
- Embed FAIR data education in university programmes

Consortium:

- KNAW-DANS (coordinator)
- DCC (core partner)
- STFC (core partner)
- CSC (core partner)
- EUA (core partner)
- Trust-IT (core partner)
- RDA
- e-SDF
- SPARC Europe
- University of Amsterdam
- UKDA
- University of Helsinki
- INRIA
- CINES
- SURFsara
- DTL
- University of Bremen (PANGAEA)
- Georg-August-Universität Göttingen
- CODATA
- University of Minho
- University Carlos III Madrid
- Datacite



FAIRsFAIR
Fostering Fair Data Practices in Europe



FREYA: Connected Open Identifiers for Discovery, Access and Use of Research Resources

Grant Number 777523
EC funding up to €4998650

Consortium:

- UKRI-STFC (coordinator)
- British Library
- Australian Research Data Commons
- CERN
- DataCite
- EMBL-EBI
- University of Bremen (PANGAEA)
- PLOS
- Crossref
- ORCID Inc
- KNAW-DANS
- Hindawi

Key outputs related to EOSC:

- Extended PID infrastructure and services, including PID Services Registry
- PID Graph of connected resources (people, organizations, publications, datasets, etc.) with use cases, standards, APIs and pilot applications
- PID Commons (sustainability and governance)
- PID Forum community platform, knowledge Hub and training material

GN4-3 / GN4-3N

- **Grant number:** 856726 / 856728
- **Duration:** 48 months
- **Start Date:** 01 Jan 2019
- **Estimated Project Cost:** €185M
- **EU Contribution:** €128M
- **Partners:** GÉANT Association, European NRENs, NORDUnet (39 partners)
- Together with the NRENs provides the underlying network connectivity, network services, AAI and security services towards EOSC.
- Liaises and works/co-creates with other e-infrastructures and within the EOSC framework to ensure a seamless environment for end-users, and to identify future requirements.
- Includes coordination mechanisms with other EOSC projects, and prepares an integration plan for GÉANT above-the-net services suitable for inclusion into the EOSC.
- Improves the integration and consolidation of e-infrastructure platforms supporting European policies and research and education communities contributing to make a success of the projects defined under the EOSC and European data infrastructure programmes.

NI4OS-Europe: National Initiatives for Open Science in Europe



- ❑ Grant number 857645
- ❑ Amount of EC funding 5,599,475 euro
- ❑ Key EOSC outputs:
 - ❑ Development and inclusion of the national Open Science Cloud initiatives in 15 Member States and Associated Countries
 - ❑ Spread the EOSC and FAIR principles in the community and train it
 - ❑ On-boarding of the existing and future services into EOSC

1	Ethniko Diktyo Erevnas Technologias AE	GRNET	GR
2	ATHINA-Erevnitiko Kentro Kainotomias stis Technologies tis Pliroforias, ton Epikoinonion kai tis Gnosis	ATHENA	GR
3	The Cyprus Institute	CYI	CY
4	University of Cyprus	UCY	CY
5	Institute of Information and Communication Technologies	IICT	BG
6	Sveuciliste u Zagreb - Sveucilisni Racunski Centar	SRCE	HR
7	Ruđer Bošković Institute	RBI	HR
8	Kormanyzati Informatikai Fejlesztési Ugyvisek	KIFU	HU
9	Debreceni Egyetem	UD	HU
10	Institutul National de Cercetare-Dezvoltare in Informatica – ICI Bucuresti	ICI	RO
11	Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii	UEFISCDI	RO
12	Akademsko raziskovalna mreza Slovenije	ARNES	SLO
13	Univerza v Mariboru, Univerzitetna knjižnica Maribor	UMUKM	SLO
14	Institut za fiziku	IPB	RS
15	Univerzitet u Beogradu	UOB	RS
16	Qendra Nderuniversitare e Sherbimeve Dhe Rrjetit Telematik	RASH	AL
17	Univerzitet u Banjoj Luci	UNI BL	BA
18	Ss. Cyril and Methodius University in Skopje	UKIM	MK
19	Javna Ustanova Univerzitet Crne Gore Podgorica	UOM	ME
20	Research and Educational Networking Association of Moldova	RENAM	MD
21	Institute for Informatics and Automation of the Academy of Sciences of Armenia	IIAP	AR
22	Georgian Research and Educational Networking Association	GRENA	GE



OCRE

Open Clouds for Research Environments

Website: www.ocre-project.eu
 Grant agreement ID: **824079**
 EU contribution: **€ 12 000 000**
 Coordinator: **GEANT**
 Partners: **4**



CONTRIBUTIONS TO EOSC



Onboard successful commercial cloud and digital EO services from the OCRE Tender in the EOSC



Develop a Business Management Platform, with a consumption & usage dashboard, as part of the EOSC ecosystem



Propose legal and technical mechanisms to integrate these supplementary commercial services into the EOSC



Support commercial providers in understanding the opportunities in EOSC and the requirements they need to comply with



Contributions for EOSC

Governance: 34 National Open Access Desks embedded in national infrastructures

Access: OpenAIRE Guidelines for content providers - literature, data, software, methods, experiments

Shared resource: Open Research Graph

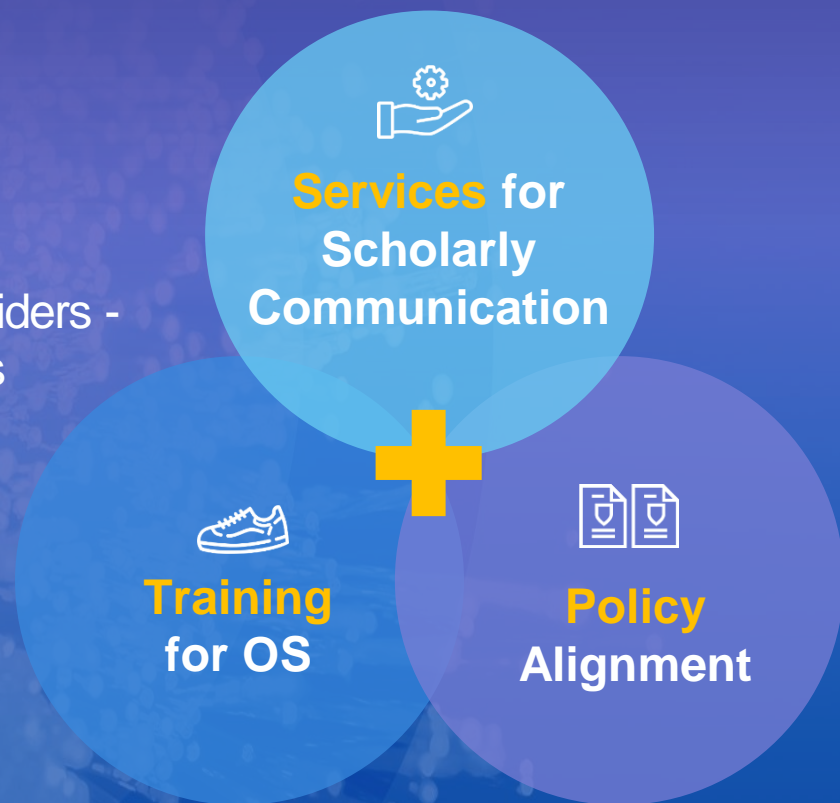
Services: Zenodo – Amnesia – OpenDMP – Monitoring

Budget: 10 million

Coordinators: UoA, CNR, UGOE

Consortium: 47 Partners

Grant no: 777541



OpenRiskNet, an open e-infrastructure to support data sharing, knowledge integration and *in silico* analysis and modelling in predictive toxicology and risk assessment (Grant number: 731075)

OpenRiskNet

RISK ASSESSMENT E-INFRASTRUCTURE

How?



Easily accessible, standardised, harmonised, scalable and robust infrastructure

For whom?



Researchers
Risk assessors
Regulators
Informed public

To what end?



Improvement of industrial risk assessments
Prototyping of new services and apps
Access to integrated resources
Complete and qualified system
Support for innovative product development

H2020-EINFRA Call

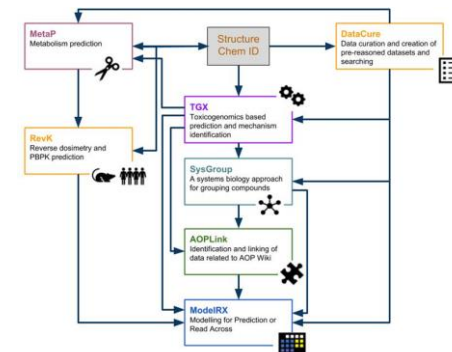
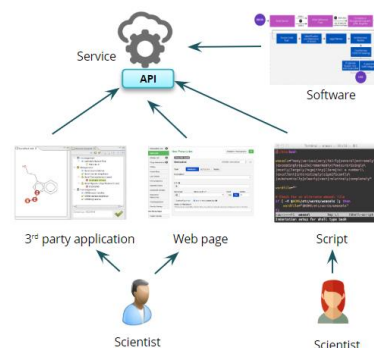
2016-2019 3 years project

3 mil Total funding

11 Partner Organisations

14 Associated Partners

7 Case studies



- P1 Edelweiss Connect GmbH, Switzerland (EwC)
- P2 Johannes Gutenberg-Universität Mainz, Germany (JGU)
- P3 Fundacio Centre De Regulacio Genomica, Spain (CRG)
- P4 Universiteit Maastricht, Netherlands (UM)
- P5 The University Of Birmingham, United Kingdom (UoB)
- P6 National Technical University Of Athens, Greece (NTUA)
- P7 Fraunhofer Gesellschaft Zur Foerderung Der Angewandten Forschung E.V., Germany (Fraunhofer)
- P8 Uppsala Universitet, Sweden (UU)
- P9 Medizinische Universität Innsbruck, Austria (MUI)
- P10 Informatics Matters Limited, United Kingdom (IM)
- P11 Institut National De L'environnement Et Des Risques INERIS, France (INERIS)
- P12 Vrije Universiteit Amsterdam, Netherlands (VU)

E-infrastructure providing resources and services to a variety of communities requiring risk assessment, including **chemicals, cosmetic ingredients, therapeutic agents and nanomaterials:**

- **Harmonising** access to data and facilitating **interoperability** of software,
- Easily **deployable** to single computers, public and in-house cloud solutions,
- Addressing the needs of **industry and academic researchers, risk assessors and regulators.**



PaNOSC project



Call: Horizon 2020 InfraEOSC-04 **Coordinator:** ESRF
Partners: ESRF, ILL, XFEL.EU, ESS, CERIC-ERIC, ELI-DC, EGI
Description: cluster of ESFRI Photon and Neutron sources
Observers/non-funded: GÉANT, EUDAT, national PaN RIs
Linked 3rd parties via EGI: DESY, STFC, CESNET
Status: Started 1/12/2018 **Duration:** 4 years **Budget:** 12 M€
Github: <https://github.com/panosc-eu>
Home page: <https://panosc.eu>
Twitter: @PaNOSC_eu #PaNOSC

Goals:

1. Make all PaN scientific data fully FAIR compliant,
2. Provide innovative data services at RIs and as part of EOSC
3. Help shape the EOSC core services for our users needs
4. Share and generalise best practices for open data policies
5. Increase the impact of RIs by encouraging data reuse
6. Work closely with the other related project to build EOSC and share the outcomes, specifically with the national PaN sources (ExPaNDS project)

Types of source: synchrotrons, reactors, x-ray FEL, lasers, electron microscopes, spallation sources

Scientific fields: hard condensed matter, applied material science, engineering, chemistry, soft condensed matter science, life sciences, structural biology, medicine, earth and science, environment, cultural heritage, ...

Users community: 30 000+ users / year

Developments: AAI, metadata catalogues, common data search api, Jupyter notebooks, experiment simulation, data transfer, sustainability

Data volumes: 13 Petabytes in 2018
(growth rate of 100% / year ...)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 823852

PRedictive *In-silico* Multiscale Analytics to support cancer personalized diaGnosis and prognosis, Empowered by imaging biomarkers

Project details

Grant Agreement: 826494

Budget: 10,3M €
Dec'18)

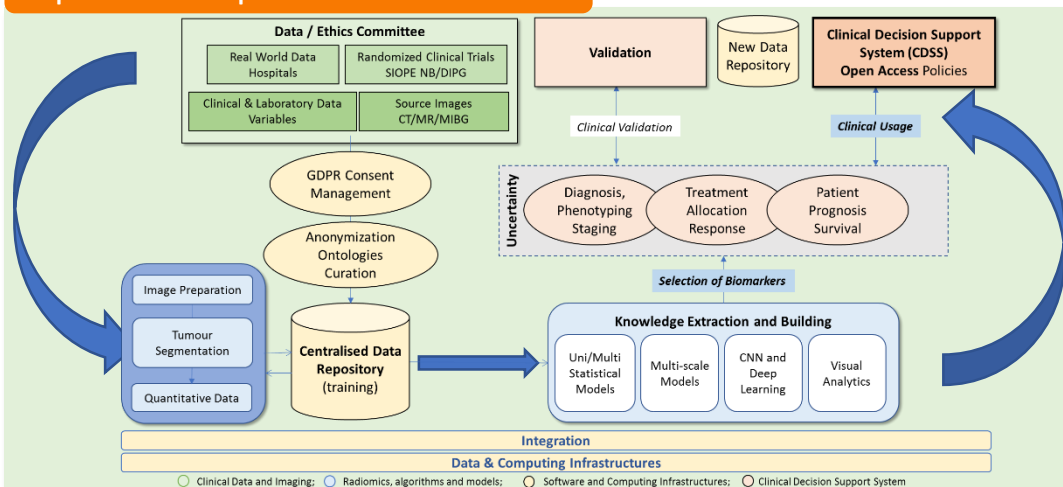
Duration: 4 years (from

Coordinator: Dr. Marti-Bonmatí, Head of Medical Imaging Department, at **Health Research Institute – Hospital La Fe** in Valencia (Spain). Dr. Cañete, Head of the Paediatric Oncology Unit from the same hospital, is leading the clinical part.

Consortium: Partners from **16 European institutions**, including Hospitals, R&D Centres, Medical Associations, Private Companies and Universities from 8 European countries (Spain, Germany, France, Austria, United Kingdom, Belgium, Poland and Italy).

Expected Outcome: To integrate and validate **functional prototype of PRIMAGE cloud-based platform offering predictive tools** to assist management of Neuroblastoma and DIPG pediatric cancers, from **diagnosis to prognosis, therapies choice and treatment follow up**, based on the use of novel imaging biomarkers, tumor growth models and advanced visualization of predictions.

Expected Outputs related to EOSC



Some expected outputs:

- **Software to identify imaging biomarkers from MRI data.**
- **Software to perform automatic registration of medical imaging data.**
- **Model Execution Environment (MEE)** An environment for executing *in-silico* simulations on patient data. MEE is integrated with the PLGrid Infrastructure and uses the Prometheus supercomputer to run the calculations.
- **New combined services for the medical imaging process.**
- **PRIMAGE Platform** to perform a personalized diagnosis in NB and DIPG diseases to support the decision-making process by clinical practitioners.

PROviding Computing solutions for ExaScale Challenges



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 777533.

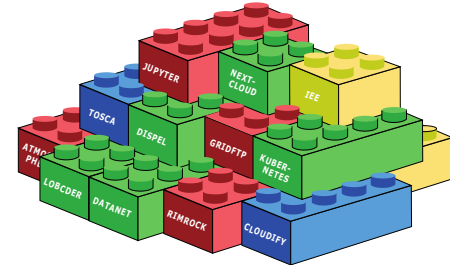
**EINFRA-21-2017
G.A. No 777533**

Nov 2017 - Oct 2020

**Overall Budget:
2,972,250 Euro**

PROCESS will deliver

- a comprehensive set of **mature service prototypes and tools**
- developed to enable **extreme scale data processing**
- together with **enhanced use cases** from **academia and industry**



Consortium



Ludwig-Maximilians-Universität
München, Germany



Lufthansa Systems GmbH & Co. KG,
Germany



Universiteit van Amsterdam,
The Netherlands



Inmark Europa SA, Spain



Stichting Netherlands eScience
Center, The Netherlands



Ústav informatiky, Slovenská Akadémia
Vied, Slovakia



Haute école spécialisée de
Suisse occidentale, Switzerland



Akademia Górniczo-Hutnicza im.
Stanisława Staszica w Krakowie, Poland



RDA Europe 4.0

With over 8800 members (50% from Europe) and 86 working & interest groups (of which 25+ domain specific), RDA is **the strategic partner to represent the research data community for EOSC** and to achieve **progress in thematic areas** that necessitate a global approach in a common framework

RDA is the context where existing and new EOSC initiatives can **collaborate on best practises, guidelines and standards** with international partners, and **EOSC approaches can be promoted globally.**

[COMPLETE OUR SURVEY](http://rd-alliance.org/eoscsurvey)
rd-alliance.org/eoscsurvey

Via the consolidated process of the RDA ICT Tech Specs (8 approved to date) RDA facilitates **the creation and approval of technical solutions for EOSC implementation**

As an **international community-driven initiative** with strong European roots, RDA can support in creating a bridge to data experts from global, to European, to local

The International Research Data Community contributing to EOSC

This EOSC Event at the RDA Helsinki Plenary is an integral part of the EOSC Stakeholder Forum

22nd October 2019, 9:00 - 17:00
Helsinki, Finland

REGISTER NOW!

Registration closes 1st of October @ 6PM CET

www.eoscsecretariat.eu/international-research-data-community-contributing-eosc

RDA Europe 4.0
Grant Agreement ID
777388

EU Budget
€ 3.500 000

Coordinator
TRUST-IT
Consortium
Digital Curation Centre
Digital Repository of
Ireland
University of Goettingen
RDA Foundation

19 national nodes
A, CZ, DE, DK, ES, FI,
FR, GR, HR, HU, IE, IT,
LT, NL, NO, PT, SE, SLO,
TR, UK





SSHOC pools and harmonises the tools and services that unlock heterogeneous SSH data collections across Europe. This makes data easy to process, enrich, analyse and compare.

Main impacts

The Social Sciences and Humanities are seamlessly integrated in the **European Open Science Cloud**

Availability of an EU-wide, easy-to-use **SSH Open Marketplace**, where tools and data are openly accessible

EU-wide availability of high quality "cloud ready" **SSH tools** and high quality **SSH data**

EU-wide availability of **trusted and secure access mechanisms** for SSH data, conforming to EU legal requirements

State of the art Research Infrastructure in several pilot domains advanced through **dedicated SSH data pilots cluster projects**

Maximising reuse through **Open Science and FAIR principles** (standards, common catalogue, access control, semantic techniques, training)

Partners: 47 (20 beneficiaries + 27 LTPs)

SSH ESFRI Landmarks and Projects & international SSH data infrastructures



SSHOC & EOSC is one of five cluster projects which provide thematic gathering points for the activities required to make the EOSC a reality.

Duration: 40 months
(January 2019 – 30 April 2022)

Project budget: € 14,455,594.08

Join our community

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[/company/sshoc](https://www.linkedin.com/company/sshoc)





Logo

Name

VirtualBrainCloud

Grant Number

826421

Amount of Funding

€15 016 343.10

Consortium information

Dec-2018 - Nov-2022 / 17 EU Partners
Lead: CHARITE Universitätsmedizin Berlin

Key expected outputs related to EOSC

Cloud-based brain simulation platform that integrates data from many centers and in the future serves as clinical decision engine