

Croatian Open Science Cloud – One Year After

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Srce

DEI 2024



The Croatian Open Science Cloud (HR-OOZ) Initiative

- The Initiative was launched in September 2021 with the support of the **Ministry of Science and Education** of the Republic of Croatia and the **Croatian Science Foundation** and gathered
 - all Croatian public universities,
 - Croatian institutions - coordinators of **ERIC's**
 - DARIAH-HR, HR-CLARIN, CERIC-ERIC, CROSSDA the public research data service and the national service provider for the CESSDA ERIC, and
 - **OpenAIRE NOAD**, **NGI** and national **RDA** node coordinators.



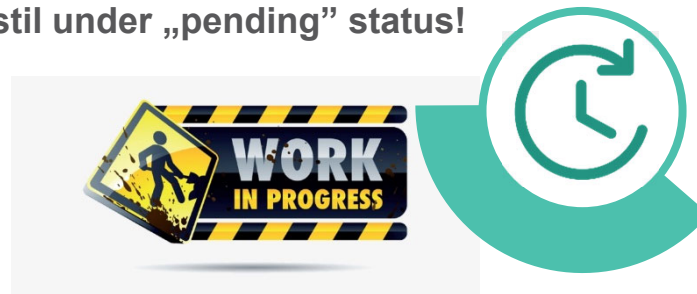
2021

Developments Since 1st NTE Croatia

HR-OOZ Goal 1: Establishment of NOSCI

- ✓ Defined organizational and governance structures (done)
- ✓ Technical components for the long-term sustainability of HR-OOZ (done)
- ✓ Define the principles and criteria for onboarding services in HR-OOZ (done)
- ✓ Establishment of HR-OOZ services catalog (done)

The whole Goal 1 is stil under „pending” status!



Developments Since 1st NTE Croatia

HR-OOZ GOAL 2: National Plan for Open Science

- ✓ First public presentation of the draft during the 1st NTE Croatia in March 2023
- ✓ Delivered by the Croatian Open Science Cloud (HR-OOZ) Initiative in April 2023
- ✓ Officially submitted the draft to the Ministry of Science and Education (MSE) for further processing in May 2023
- **Currently being adjusted and revised by the MSE – pending revision!**

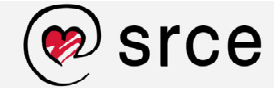


RP&FO Activities

- **Ministry of Science and Education** - Program funding for multi-year financing of public scientific institutes and higher education institutions from the state budget, incentivizing open science
- **Croatian Science Foundation Calls** – since July 2023 requires OA to publications, obligatory DMPs in national repository infrastructure DABAR, and datasets in FAIR repositories
- **Agency for Science and Higher Education** - since July 2023, includes open science as one of the quality criteria for evaluation of higher education institutions and research institutes



Community Activities - initiatives



- RBI – incentives by institutional financing of internal projects, required storing data in a digital repository in OA in accordance with FAIR principles
- University of Zadar – PubMet conference 2023
- University of Split – Open Science Policy (March 2023)
- University of Osijek – Open Science Policy (March 2024)
- SRCE – series of workshops and webinars for researchers and journal editors, new course on open science and licensing of research results
- HR ERICs coordinators promoting OS
- and many other local OS activities by ERIC HR coordinators
 - e.g. DARIAH-HR, CROSSDA, CLARIN-HR events...



Community Activities – projects and membership



National and University Library in Zagreb (NSK)

- Project Citizen-Enhanced Open Science in Southeastern Europe Higher Education Knowledge Hubs (CeOS_SE)

Ruđer Bošković Institute (RBI)

- Members of OpenAIRE AMKE, OpenAIRE NOAD for Croatia
- Project PATTERN - Piloting open and responsible Activities and Trainings Towards the Enhancement of Researchers Networks
- Project OStrails - Open Science Plan-Track-Assess Pathways

University of Zadar (UniZD)

- Core partner in the OPERAS research infrastructure, national OPERAS-HR
- Project OPERAS-PLUS
- Project DIAMAS – Developing Institutional Open Access Publishing Models to Advance Scholarly Communication
- Project CRAFT-OA - Creating a Robust Accessible Federated Technology for Open Access (with SRCE as partner as well)



Community Activities – projects and membership



University of Rijeka (UniRI)

- Project OPUS - Open and Universal Science (*in progress*)
- Project YUFERING - YUFE Transforming R&I through Europe (*finished*)
- Project DIOSI - Developing and Implementing hands-on training on Open Science and Open Innovation for Early Career Researchers (*finished*)

Institute of Ethnology and Folklore Research (IEF)

- DARIAH-HR projects that promote open science and open access:
 - Tezaurus.hr, DH register, Znameniti.hr
- DARIAH-EU projects:
 - Social Justice in the Digital Humanities: Diversifying the Curriculum, 2021-2023 (2024)
 - Performing Arts: Navigating through Digital Knowledge Models, 2024-2025

Ivo Pilar Institute (IPI) & CROSSDA

- Project COORDINATE - COhort cOmmunity Research and Development Infrastructure Network for Access Throughout EuropeOpenAIRE Advance

University of Zagreb University Computing Centre (SRCE)

- Project EOSC Beyond
- Project CRAFT-OA (with University of Zadar as partner as well)

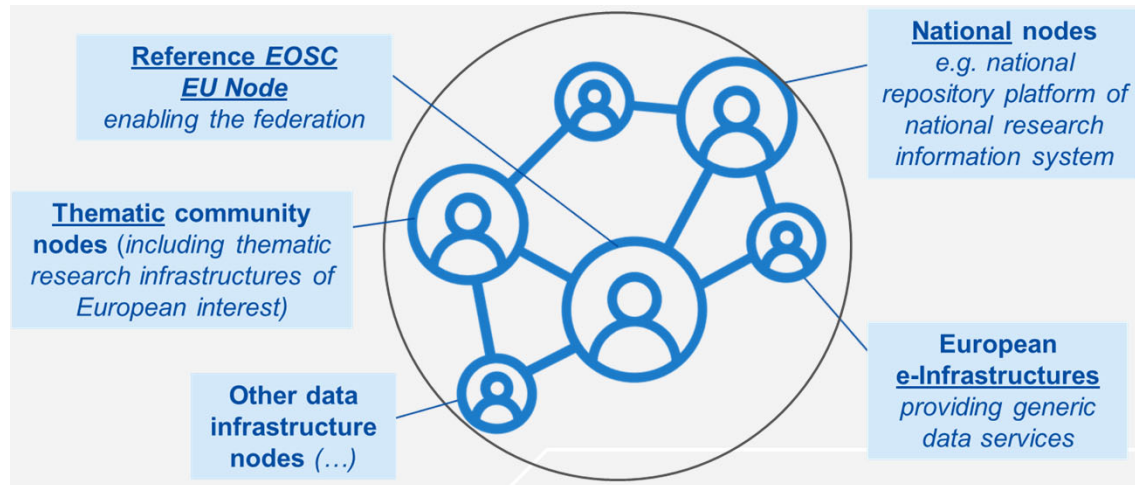
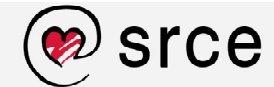


Croatia and EOSC

- Adding eduGAIN authentication to our services
 - PUH since 2022, DABAR soon / in 2024, Advanced computing
- Content providing - alignment with OpenAIRE guidelines leads to onboarding to the EOSC Portal Catalogue and Marketplace (HRČAK = 540+ OA journals, DABAR = 170+ repositories, national CRIS):
 - OpenAIRE Guidelines for Literature, Institutional, and Thematic Repositories
 - OpenAIRE Guidelines for Data Archives
 - OpenAIRE Guidelines for CRIS Managers
- Service providing for scientific publishing
 - service for automated conversion to machine-readable format JATS XML (strong recommendation of Plan S) will be offered in EOSC Marketplace in 2024
- Argos support (EOSC Core)



EOSC Federation and EOSC Nodes



EOSC policies and standards:** A baseline should be defined to ensure that each node can have a minimum working set of features and supports a minimum set of policies. It is important to mandate compliance with protocols and standards, but to give freedom to each node on how to support them.

EOSC Federation*: Open and trusted federation of collaborative, autonomous infrastructures applying agreed, consensus-based EOSC policies and rules of participation, combined into a system of systems to enable European researchers to store, share, process, analyse, and reuse research digital objects (e.g. data, publications and software)

EOSC Node*: Data infrastructure system of variable nature (national, regional, institutional or thematic) with consensus-based policies, transparent ownership and clear responsibility, connected to the EOSC Federation to share information and resources within the EOSC community and to leverage common services

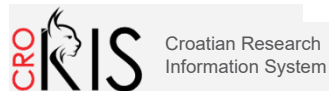
* Source: "EOSC operations and evolution post-2027" supporting document by the EOSC-SB Policy subgroup (November 2023)

** Source: GEANT and NREN's position on EOSC Nodes (October 2023)

Support for Open Science

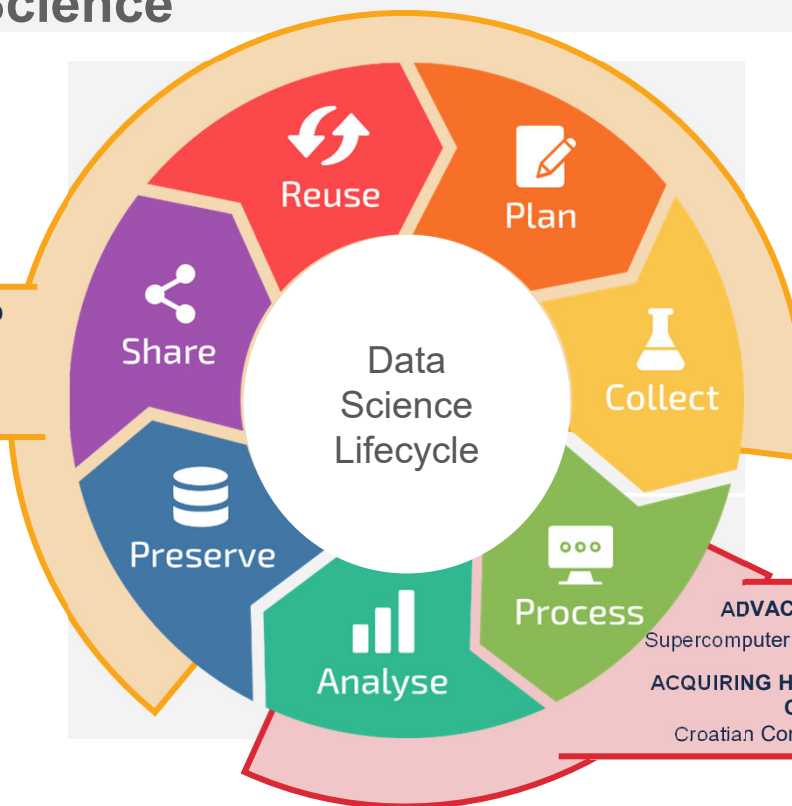


INFORMATION SUPPORT



DATA, REPOSITORY AND OPEN SCIENCE

Dabar | Hrčak | Puh
Support to Open Science



ADVANCED COMPUTING

Supercomputer Supek | resource Vrančić

ACQUIRING HPC COMPETENCE AND CONSULTING

Croatian Competence Center for HPC

Education and provision of specialized support in the use of digital resources and services

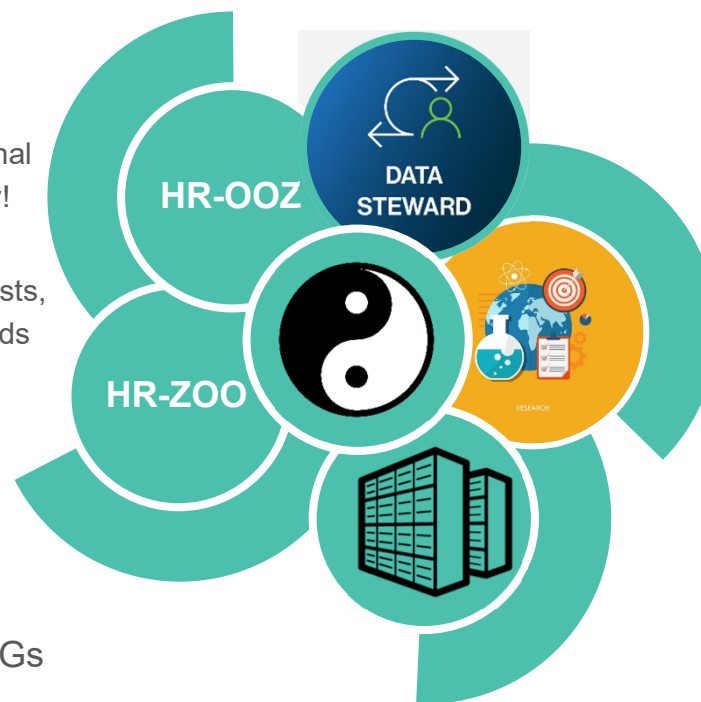
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Future actions

- Realization of the HR-OOZ working groups findings
- National data infrastructure project
 - Need for sustainable, strategic, domain-specific and distributed institutional support for researchers – skills and competencies development a priority!
 - Building a network of Data Competence Centres (institutional, thematic, national); HR-ZOO „e-scientists” as a good example – dedicated specialists, hired by institutions, providing long-term support in a form of data stewards and data curators,
 - Removing the „burden” from the researchers and making open science principles a reality.
- Croatian EOSC Node(s) candidates
- Research community contribution is crucial, but also input and support from RP&FOs; governance via HR-OOZ Council and WGs



EOSC post-2027

Guiding principles:

- The contribution of the research community;
- Funding and financial contribution of the MSs & ACs;
- Tripartite governance;
- Federation of nodes.

