

Charter of the Core Services Working Group

Version 2.0 of 5.1.2024; by Michal Růžička (ruzicka@ics.muni.cz) and the collective of the working group.

1 Introduction

One of the main pillars of implementing the European Open Science Cloud (EOSC) in the Czech Republic is the establishment of the National Repository Platform (NRP) for scientific data. It is a separate part of the National Data Infrastructure (NDI). It is to serve as one of the basic elements of the infrastructure for scientific data in the Czech Republic, together with an environment for storing unstructured data, a computing environment, and a collaboration environment.

The Core Services Working Group (ZS WG) aims to define the core services of the NDI for efficient work with scientific data in the Czech Republic. The proposal is mainly based on the need to support data work as defined in the EOSC Strategic Research and Innovation Agenda (SRIA). Other resources have also been used, e.g.:

- EOSC Task Forces implemented at the European level,
- RDM themes identified by WG-RDM.cz,
- themes from the discussions around the ESOC WG at the MoE.

The group aims to analyse the current environment, standards, and trends in the daily work with scientific data in the Czech Republic, EU, and worldwide and, on this basis, to prepare standards, policies, recommendations, and proposals for technical solutions for the NRP Core Services that will support the principles of FAIR data (Findable, Accessible, Interoperable, and Reusable Data). These may include, for example, persistent identifiers (PIDs) and their handling, support for data discovery and access, user, and identity management (Authentication and Authorization Infrastructure [AAI]), support for scientific data management planning (Data Management Plan[ning], DMP), FAIRification of research data, etc.

The functional and quality requirements for the NRP, defined also in cooperation with other WGs, will be mainly implemented by the National Data Infrastructure Architecture (ANDI) WG. An essential task of the WG ZS will also be to provide expert support to all interested parties in standards for working with research data in the Czech Republic. Recommendations of the ZS WG will be binding for the infrastructure after approval by the steering committee.

2 Objectives

The WG will address the definition of the core NRP services to support the work with (FAIR) data:

- Services to support work with persistent identifiers (PIDs),
- requirements for access control and user authorization services to support user collaboration via NRP,
- services to support research data management planning,
- services for FAIRification of research data, etc.

More specifically, the PS ZS will deal with e.g.:



- Requirements for quality of service (availability, speed, response, ...) in NRP.
- Cooperation in defining functional requirements for technical implementation in NRP with the ANDI WG.
- Working with persistent identifiers (PIDs):
 - Selection and recommendation of a specific standard or standards for PIDs.
 - Compatibility with [EOSC PID Policy and Architecture](#) will be considered.
 - Primarily for NRP needs, but also applicable to "external" PID stakeholders.
 - Definition of requirements for working with PID within NRP (including e.g. machine call/processing capabilities, integration with data management, etc.).
 - Long-term support/development of PID services within NRP (continuous support for adding new entity types, e.g., software containers, workflows, ..., monitoring and adaptation of new technologies).
- User access control/authorization to support collaboration:
 - Definition of user authentication requirements (e.g., requirements for integrating existing national and international AAI systems in academia).
 - Definition of requirements for controlling access to both data and metadata in the NRP (e.g., requirements for owner control functions over data sharing).
- Research data management planning:
 - Definition of data handling policies within the NRP for different areas (e.g., PID, backup, security, ...).
 - Definition of services to support research data management planning (e.g., support for DMP creation, support for measuring FAIR attributes of data in NRP, etc.).
- Services for FAIRification of research data:
 - Analysis of options for fulfilling/supporting FAIR principles within the NRP (e.g., data traceability via the Metadata Directory, assignment of PIDs to different types of entities, recommended data formats, etc.).
 - Based on this, recommendations for policies, standards, etc. + recommendations for implementation in the NRP.
 - Definition/recommendation of FAIR metrics.

In the future, the ZS WG activities may be expanded to include other areas as needed.

3 Outputs and their applications

The outcomes of the WG confirmed by the steering committee will be binding for the implementation of the infrastructure and all those interested in using its services.

4 Membership and expected members

The WG is open to interested members with experience in working with and managing scientific data at a larger academic institution - meeting the data requirements of researchers and research groups:

- Storage and active processing of data (even larger volumes),
- data access management,
- sharing with other groups,
- public publishing of processed data,
- data curation - data management planning, metadata description, choice of appropriate formats/data conversion, PID provisioning.



There is no limit to the number of WG members. It actively cooperates with the relevant Czech Republic, EU, and worldwide projects. It is loosely based on the [activities](#) of the open group [WG-RDM.cz](#). The aim is to obtain an expert group representing, to the maximum extent, the entities working with research data in the Czech Republic. The organization of the WG, including the election of the leader and his/her deputy, is subject to the Statutes and Rules of Procedure of the WG of the EOSC Initiative in the Czech Republic.

