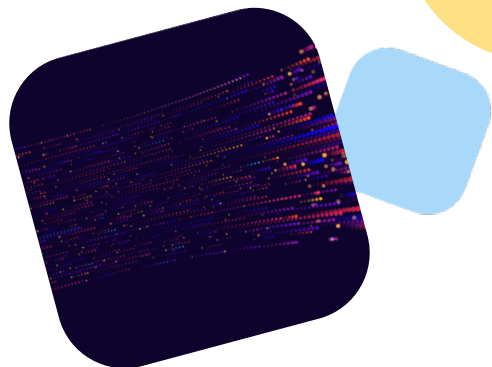


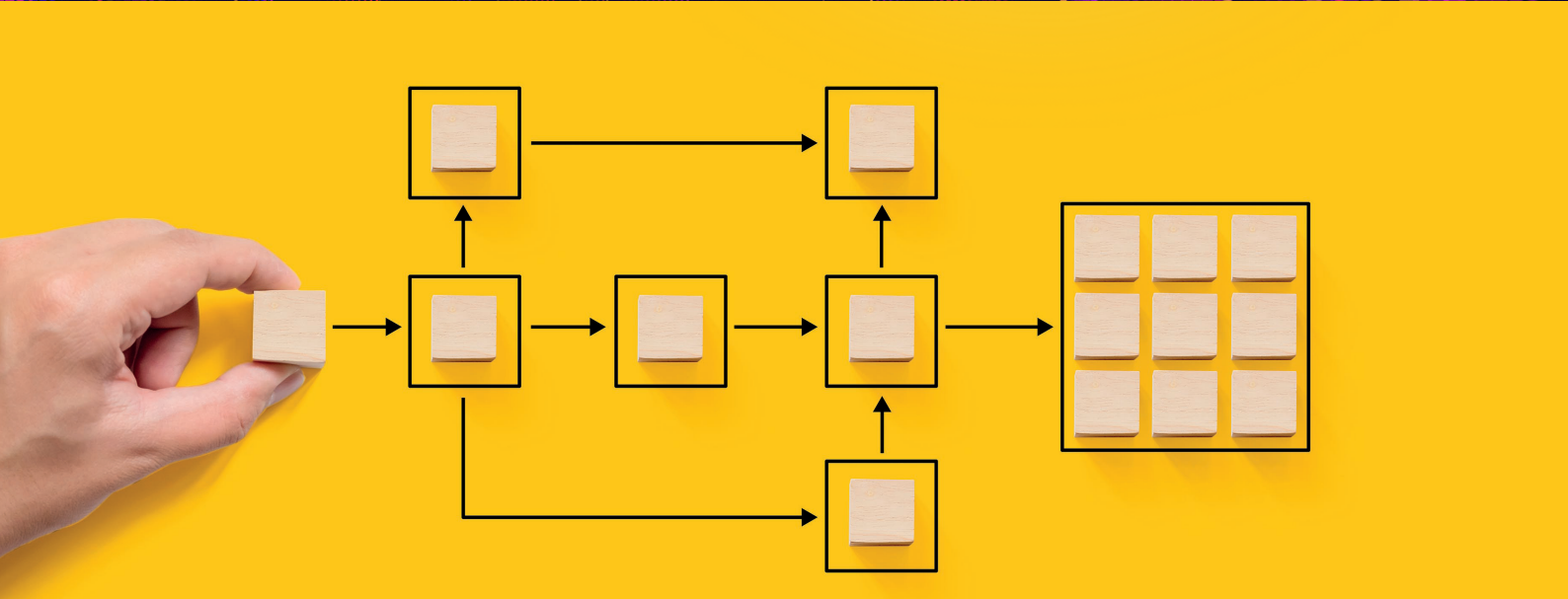
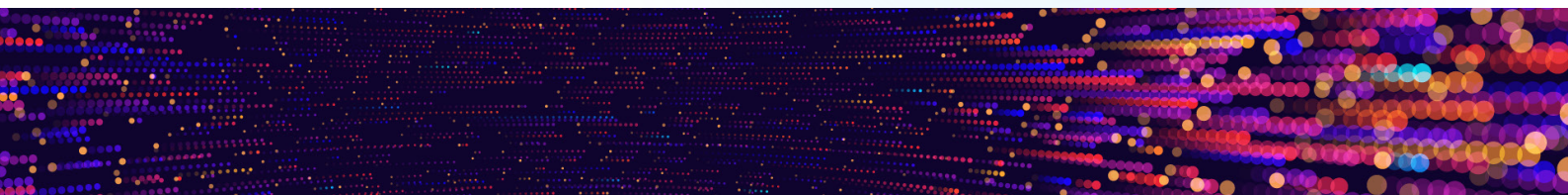


FAIRSFair

Fostering Fair Data Practices in Europe



Improving metadata, harvesting, and more at the OpenUNS Institutional Repository of the University of Novi Sad



Authors names, affiliations and ORCIDs:

- Tatjana Zubic (University of Novi Sad),
<https://orcid.org/0000-0003-4725-8765>
- Tatjana Tosic (University of Novi Sad),
<https://orcid.org/0000-0002-6526-8724>
- Sandra Boerman (Danish e-Infrastructure Consortium (DeiC)),
<https://orcid.org/0000-0002-6578-1210>
- Maaïke Verburg (Data Archiving and Networked Services (DANS)),
<https://orcid.org/0000-0001-9408-3190>

Support programme:

FAIR-IMPACT's Support Programme for Repositories and Data Service Providers aimed to help participants better understand their drivers for becoming more FAIR-enabling, self-assess their current FAIR-enabling capacity, develop an action plan with considerations for stakeholder engagement, and to work on implementing this. The support programme ran between January and September 2024, during which seven virtual workshops and continuous dedicated and tailored mentoring support was offered to help participants identify and establish their unique journey toward becoming more FAIR-enabling. This FAIR Implementation Story outlines the specific aims and actions of the University of Novi Sad in relation to their participation in this Support Programme.

Keywords:

Repository, FAIR principles, National connection, metadata

Summary:

The University of Novi Sad developed an action plan to implement improvements to their institutional repository. Improvements were planned to the repository service and data to become more aligned with the FAIR principles.



■ Introduction:

The University of Novi Sad is one of the largest educational and research centres in Central Europe¹. It belongs to the group of comprehensive universities, which cover nearly all fields of science and higher education. Specialists at the IT department participated in the Support Programme for Repositories and Data Service Providers, where they developed a FAIR Implementation Action Plan to further improve functionality and align the university's institutional repository² to the FAIR principles.

For the team at the University of Novi Sad, becoming more FAIR-enabling meant making their system and data more compatible with the FAIR principles, in order to enhance their usability and value. Becoming more FAIR-enabling also included that research outputs would be more open, transparent, and easily usable for both humans and machines, by means of adopting standards, using FAIR tools, and improving metadata.

By participating in the FAIR-IMPACT support programme, they expected to gain practical insights into using specific tools, and approaches that could be used in the improvement of their repository.

■ Approach taken:

The following objectives were prioritised in the action plan created:

- ☐ Improving the quality of metadata
- ☐ Enabling metadata harvesting by the national scientific portal eNauka
- ☐ Storing digital research objects
- ☐ Engaging with community

Improving the quality of metadata

The librarians of two faculty collections completed metadata verification and enrichment. The differences between national portal metadata recommendations and their system's metadata schema were analysed. Adjustments to the local metadata schema are still being tested, and the team is currently working on synchronising metadata with the national portal eNauka.

Enabling metadata harvesting by the national scientific repository eNauka

The eNauka portal is the national register of researchers, research organisations, and research outputs in the Republic of Serbia³. Enabling metadata harvesting through the OAI-PMH protocol allows the data from the University of Novi Sad to be findable and reusable. Data from two collections has been successfully harvested regularly by the eNauka portal.

Storing digital research objects

Because the University of Novi Sad covers almost all scientific disciplines, many different object types are encountered and need to receive the right storage and curation. Storage of various research object data types was tested, and librarians can now store research objects in the repository.

Engaging with community

Before the project started, the team reached out to library colleagues and introduced them to the project and highlighted the importance of incorporating the FAIR principles into data maintenance. Throughout the project

1 <https://www.uns.ac.rs/index.php/en/>

2 <https://open.uns.ac.rs/>

3 <https://enauka.gov.rs/?locale=en>



there has been input from different stakeholders – mainly librarians and the national repository, but also from researchers who made suggestions to their own metadata. The level of communication with the national portal team has greatly improved. Regarding internal communication, work has also been done to create guidelines for librarians and researchers on how to interact with the repository and each other.

Challenges encountered and addressed: During the development of the FAIR Implementation Action Plan, the biggest challenge was defining the deadlines. Since both internal and external stakeholders had responsibilities for contributing to and executing actions, good communication was essential for a smooth and effective process. In practice this meant the plan had to be adjusted, objectives and actions refined, and deadlines changed to accommodate unforeseen delays. Having some flexibility in the deadlines was helpful.

Another concern was the lack of resources (time and staff to be engaged in software maintenance, communication, support for researchers, etc.) There is now financing for developers to make functionality changes, and the problem is solved. The case was made that changes to the repository were necessary.

Despite busy schedules, all expectations were fulfilled. It was very useful to have meetings with mentors, and to focus on the Action Plan as it made it clear what had to be done, and what decisions needed to be made. The FAIR Implementation Catalogue of resources⁴ also proved useful as it simplified the process of finding the tools needed for certain FAIR-enabling improvements.

■ ■ Impact:

Participation in the FAIR-IMPACT project support programme provided the team with hands-on experience with the FAIR principles and available tools and resources. Developing and implementing the Action Plan has clarified team objectives and led to advancing the FAIR-enabling capabilities of the OpenUNS repository, especially in metadata management, data quality, and interoperability.

Improving the repository's FAIR capabilities is particularly significant for the organisation, which has committed to upholding the principles of open science and FAIR through adopted policies.

The team remains dedicated to continuous learning, improvement, and advocating for FAIR practices across the institution. Together with stakeholders, the plan is now to create a brief catalogue of essential FAIR resources and projects, which will be published on the University's Open Science webpage⁵. Additionally, at the local Hybrid Open Science Clustering Event (part of the BEAMING project⁶) the team presented the FAIR-IMPACT project and shared their experiences from the support programme.

■ ■ Future plans:

In the following months, the team will continue to implement planned activities, such as finishing the metadata schema mapping, synchronising metadata with the national portal eNauka, ensuring that metadata from more collections are harvested by the national portal, and completing the guidelines for librarians and researchers. Additionally, the team plans to expand tasks to include other activities that will enhance the FAIRness of the repository, such as increasing trustworthiness and potentially applying for CoreTrustSeal certification.

4 <https://catalogue.fair-impact.eu/>

5 <https://www.uns.ac.rs/index.php/en/science/open-science>

6 <https://beamingproject.eu>



■ ■ Key messages:

- Understanding all the necessary steps for ensuring a service that complies with the FAIR principles, as well as gaining insight into tools like the FAIR Implementation Action Plan, and resources like F-UJI, etc. is important.
- It is better to plan realistically than to be too ambitious. Knowing it may take more time, and having the flexibility to change deadlines is helpful.
- Remember that even small progress is progress. Celebrate your achievements and consider how each step leads to your overarching goal.
- Engagement with your community is important, and it needs time, resources and strategy.
- Communication is always the key. Know who to reach out to, and when.





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