National Czech Programme | eosc

Personas and Use Cases of Data Stewards in the Czech Republic

Authors

Karolína Menclerová (Masaryk University) https://orcid.org/0009-0003-5324-1094
Pavlína Špringerová (Masaryk University) https://orcid.org/0009-0007-0326-9645
Antonín Zita (Masaryk University) https://orcid.org/0009-0002-1049-107X
Matyáš Hiřman (Charles University) https://orcid.org/0000-0003-0153-9414

Co-funded by the European Union

MINISTRY OF EDUCATION, YOUTH AND SPORTS

National Repository Platform for Research Data (NRP)
CESNET, zájmové sdružení právnických osob
Mailing Address: Generála Píky 430/26, 160 00 Prague
info@eosc.cz; www.eosc.cz

Document Information

Title	Personas and Use Cases of Data Stewards in the Czech Republic
Project Registration Number	CZ.02.01.01/00/23_014/0008787
KA Number	KA6.3 User-centred implementation of NRP and NDI services
Responsible Person	Karolína Menclerová

Version History

Version	Date	Comment
1.0	10. 12. 2025	First release of the document

Table of Contents

Summary

This document presents three typical profiles of data stewards working in the Czech research environment and illustrates the tasks, competencies, and tools they use at the faculty, project, institutional, and national levels. The personas capture the key characteristics of each role and their contribution to researchers and institutions, while the use cases show concrete situations in which data stewards support research activities, projects, and organisational processes.

The findings are based on five in-depth interviews and a survey distributed to 85 Czech data stewards (47 responses). The analysis identifies three main role types: methodological/strategic roles (Faculty Data Steward – 43%), technical/practical roles (Project/Team Data Steward – 21%), and hybrid roles (Institutional Data Steward – 36%), which combine elements of both areas. The results confirm that research data management requires a broad range of expertise, and that data stewards often perform multiple types of work simultaneously, largely due to limited staffing capacity within institutions.

The aim of this document is to provide institutions and data stewards with a clear and accessible overview of roles, core activities, and competencies. It is intended as a basis for capacity planning, designing support for research teams, and strengthening the position of data stewardship within organisational structures. Finally, it may also serve as a resource for developing EOSC CZ services, training programmes, communication materials, IT tools, and strategic approaches to research support.

1 Introduction

Data stewardship is a rapidly developing area within the Czech research environment and brings together methodological support, technical expertise, and institutional coordination. Although the role of data stewards is expanding across institutions, it is not yet uniformly defined, and its scope varies significantly depending on the organisational context.

To better understand who data stewards are, what activities they perform, and what support they require, personas and use cases were developed. These serve as a tool for visualising different types of roles, simplifying orientation within the profession, and helping institutions and researchers understand the actual value that data stewardship brings.

2 Purpose of the document

This document summarises three typical profiles of data stewards and illustrates practical examples of their work within Czech research institutions. It serves as:

- a supporting resource for institutional planning,
- a basis for developing training, communication materials, and support tools,
- input for designing user-centred services within EOSC CZ,
- a reference for institutional leadership, researchers, and project teams.

What Personas Are and Why We Use Them

Personas are modelled yet realistic profiles based on interviews and survey responses from Czech data stewards. They are used to:

- show who data stewards are and how they work,
- describe their responsibilities, competencies, tools, and challenges,
- support the design of services that reflect real user needs,
- help institutions define job roles and plan workforce capacity.

Personas do not represent specific individuals, but rather typical role types found in the Czech context.

What Use Cases Are and Why They Are Important

Use cases translate personas into concrete practical situations and provide insight into:

- how data stewards solve specific tasks,
- which tools they use,
- which competencies are required when supporting researchers,
- what impact their work has on projects and institutions.

Use cases help illustrate when and how researchers can seek support from data stewards, and what added value this support brings.

How to Interpret Personas and Use Cases

Together, personas and use cases help:

- understand which types of data stewards operate within institutions,
- see the breadth of their work, from policy and methodology to technical support,
- set realistic expectations for the services provided,
- plan capacities, roles, and long-term development of support structures.

3 Methodology

The personas and use cases were developed based on:

- five in-depth interviews with Czech data stewards,
- a survey distributed to 85 individuals registered in the EOSC CZ Data Steward Map,
- 47 complete responses,
- analysis of job activities, competencies, and commonly used tools.

Role Distribution of Data Stewards in the Czech Environment

The research identified three main role types:

- 43% – methodological/strategic roles (Faculty/Department Data Steward)
- 21% – technical/practical roles (Team/Project Data Steward)
- 36% – hybrid roles (Institutional Data Steward)

Significantly, hybrid profiles highlight not only the combination of strategic, methodological, and technical competencies but also **limited institutional capacity** — as a result, data stewards often perform multiple roles simultaneously, ranging from administrative and methodological support to technical tasks and cross-department coordination across the entire institution.

4 Personas and Use Cases

**Percentages represent the proportion of respondents (n = 47) based on the focus of their work.*

Persona 1 Faculty/Department Data Steward

Lenka Novotná
Faculty/Department Data Steward

"My job is to show the bigger picture. I don't just teach researchers how to fill in a DMP, but why it matters."

Challenges: low awareness of the data steward role among researchers, high workload, lack of time, insufficient institutional capacity

My goal: researchers understand good data management, support the research community, strengthen the culture of Open Science

What I need: quality training materials, space for sharing experience with colleagues, institutional support

Job Description

I ensure that the entire faculty manages research data appropriately. I coordinate the policy of **Open Science**, provide methodological guidance, and connect communication between researchers, administration, and IT. My role is to create an environment where researchers understand FAIR principles, ensure that their data meet these standards, and recognise the added value of meaningful openness.

Example from practice

Coordination of a Data Management Plan (DMP) and FAIR Principles Training
I lead the creation of data management plans in new projects. I prepare methodological materials and train researchers on how to write a meaningful DMP rather than a purely formal document. I often collaborate with the project office and the library to ensure that DMPs are submitted on time and are usable in practice.
The result is a unified process across faculties and higher-quality datasets stored in institutional repositories.

MY PROFILE

PROXIMITY TO RESEARCH
Administration — Research

IT SKILLS
MS Office — Programming

SCOPE
Team — Institution

ROLE FOCUS
Working with data — Training

Main Tasks

- Development of data policies and guidelines
- Training in FAIR principles and DMPs
- Coordination of Open Science in projects
- Support for high-quality DMPs and correct repository submission
- Connecting the library, IT services, and faculty leadership

Tools and Competencies

Data Stewardship Wizard
DMPOnline
Zenodo
DSpace
Excel
Internal DMP templates

- Knowledge of Horizon Europe, GAČR, MŠMT
- FAIR principles & DMP methodology

Impact / Contribution

For researchers:
Saves time by ensuring functional, high-quality DMPs and helps make research data easily shareable and reusable.

For Institution:
Standardises processes and ensures alignment with European policies and strengthens the culture of data quality and Open Science.

Open Science Coordinator – strategic and methodological guidance across the faculty (represents approx. 43% of data stewards in the Czech Republic).

Use Case 1 Faculty/Department Data Steward

Use Case 1
Faculty/Department Data Steward

Supporting researchers in creating Data Management Plans (DMPs) and ensuring alignment with Open Science policies.

Role of the Data Steward

- **Helps** research teams create high-quality DMPs step by step and understand their purpose.
- **Coordinates** communication between researchers, the project office and the library.
- **Develops** methodologies and training materials that harmonise practices across faculties.
- **Acts as a mediator** between university strategy and everyday research practice.

Competencies

- Knowledge of funder requirements (Horizon Europe, GAČR, MŠMT).
- Ability to explain complex rules clearly and practically.
- Experience with training delivery, team coordination and creating methodological documents.

Tools

Data Stewardship Wizard	Excel
internal DMP plans	Zenodo
DMPOnline	DSpace

Scenario

The institution is preparing several projects for Horizon Europe funding. Each project requires a DMP that must comply with FAIR principles and funder expectations. The faculty/department data steward becomes involved from the very beginning. They help research teams understand what funders expect, translate administrative and methodological requirements into clear language, and guide researchers through the process.

During an initial workshop, the data steward introduces the DMP template created in the Data Stewardship Wizard, explains the difference between open and sensitive data, and works with teams to fill in the first parts of the form. Throughout the project, the data steward regularly checks whether the DMP meets current data policies and whether datasets are stored in appropriate repositories. The DMP is updated together with researchers as needed. The steward also prepares summary reports for institutional leadership that show how faculties fulfil their commitments to Open Science

Benefits for the Institution

Projects meet all requirements of funders regarding Open Science, helping the institution avoid administrative or legal risks.

Unified methodologies increase the efficiency and transparency of work across faculties.

Strengthens the culture of openness and data-sharing practices across the university.

FAIR improves the visibility and traceability of research outputs, increasing the institution's credibility with partners and funders.

Benefits for Researchers

More efficient workflows, discipline-specific support, and reduced risk of data loss.

Better understanding of licences, metadata and repositories leads to improved data publication and reuse.

Datasets stored in repositories become easier to find, access and reuse, enabling follow-up research.

Saves time and provides assurance that project requirements are met correctly.

Open Science Coordinator – strategic and methodological guidance across the faculty (represents approx. 43% of data stewards in the Czech Republic).

Persona 2 Team/Project Data Steward

Tomáš Havel
Team/Project Data Steward

"I like when data are truly of high quality. When a researcher opens a dataset and everything fits — formats, metadata, code."

Challenges: lack of institutional recognition for the technical role, fragmented practices across teams, high workload and time pressure

My goal: make data practically reusable, improve data quality and clarity

What I need: better connection between researchers and IT, space to share good practices

Job Description

I support research teams to ensure their data are high-quality, well-structured and reusable.
I work directly with teams at the faculty or on individual projects, providing technical support for FAIR principles, from data cleaning to repository setup.
I collaborate with IT services and the library to make sure workflows run efficiently and meet required standards.

Example from practice

Validation and Cleaning of Research Data
I contribute to processing large datasets within disciplinary research projects. I help researchers prepare data for sharing, check formats, enrich metadata and create simple scripts to automate repetitive tasks.
Outcome: a dataset that meets FAIR principles, is easy to publish and can be reused for further analysis.

MY PROFILE

PROXIMITY TO RESEARCH
Administration — **Research**

IT SKILLS
MS Office — **Programming**

SCOPE
Team — **Institution**

ROLE FOCUS
Working with data — **Training**

Main Tasks

- Preparation and validation of data
- Cleaning of datasets
- Repository setup and management
- Workflow automation
- Collaboration with research teams on data quality

Tools and Competencies

Python
R
GitHub
OpenRefine
Power BI

- FAIR principles
- Format validation and pipeline development
- Work with disciplinary repositories
- Team collaboration and communication with IT

Impact / Contribution

For researchers:
Helps prepare data that are clean, structured and ready to share, ensures datasets are readable, reliable, and FAIR-compliant.

For Institution:
Supports automation that increases efficiency and sustainability of data workflows, and strengthens compliance with FAIR standards.

Research Data Specialist – technical and practical support for research teams (represents approx. 21% of data stewards in the Czech Republic).

Use Case 2 Team/Project Data Steward

Use Case 2
Team/Project Data Steward

Role of the Data Steward

- **Supports** research teams with data preparation, cleaning and validation.
- **Translates** technical procedures into clear steps for researchers.
- **Automates** repetitive tasks and sets up workflows for data management.
- **Ensures** that data meet FAIR principles and are reusable.
- **Collaborates** with the library, IT, and project teams on repository management.

Competencies

- Knowledge of FAIR principles, metadata and data formats.
- Ability to validate, transform and clean large datasets.
- Experience with versioning and process automation.
- Collaboration with researchers and support in solving technical challenges.

Tools

Python	OpenRefine	OSF
R	Power BI	LINDAT
GitHub	Zenodo	DSpace

Validation, Cleaning and Preparation of Research Data for Sharing and Reuse.

Scenario A research team is completing a project focused on sociodemographic and behavioural data. Their goal is to publish a dataset that meets FAIR principles, and fulfils the requirements of the funder. However, the data come from multiple sources, vary in format and contain incomplete metadata.

The team/project data steward helps the researchers resolve technical and organisational issues. Using Python and OpenRefine, they create scripts for data cleaning and validation. Together with the researchers, they set up a workflow in GitHub for sharing code and versioning files. The steward checks that the dataset descriptions meet funder requirements and that the dataset is stored correctly in the chosen repository.
As a result, the project outputs are clear, reusable and prepared for further research.

Benefits for the Institution

Improves the quality and transparency of data outputs.

Ensures that projects comply with FAIR principles and funder requirements.

Helps standardise data management practices across faculties and teams.

Benefits for Researchers

Simplifies data preparation and publication by reducing technical errors.

Saves time through automation and clear workflows.

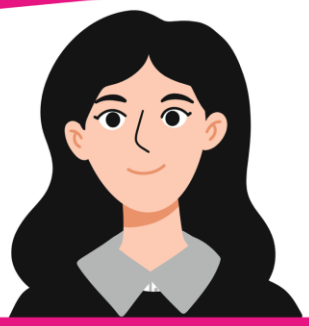
Ensures reliability, quality, and trustworthiness of datasets.

Provides direct technical and methodological support within research projects.

Research Data Specialist – technical and practical support for research teams (represents approx. 21% of data stewards in the Czech Republic).

Persona 3 Institutional Data Steward

Klára Benešová
Institutional Data Steward



"I don't want Open Science to stop at policies. It needs to work in practice — in tools, in data, and in people's minds."

Challenges: limited capacities and high workload, complex coordination across departments and faculties

My goal: connect institutional strategy with everyday research practice, strengthen the culture of data sharing and reuse, advance Open Science within the institution

What I need: access to up-to-date tools and training, institutional support, space for sharing good practice with colleagues

Job Description

I ensure that Open Science is not only written in policies but also implemented in daily practice.
I test and introduce new tools (DSW, repositories, GitHub), set up workflows, and coordinate collaboration between departments (research units – library – IT).
I represent the institution externally and help develop its internal data stewardship infrastructure and the competencies of other data stewards.

Example from practice

Setting Up a New Institutional Policy for Research Data Management
Together with IT and the library, I unified the institution's methodologies, updated DMP templates and created an overview of recommended repositories.
I also prepared a series of workshops enabling data stewards to test the tools we use (DSW, Zenodo, GitHub) and adapt them to the specific needs of different faculties.

MY PROFILE

PROXIMITY TO RESEARCH
Administration — **Research**

IT SKILLS
MS Office — **Programming**

SCOPE
Team — **Institution**

ROLE FOCUS
Working with data — **Training**

Main Tasks

- Coordination of data stewards and development of internal data management infrastructure
- Creation and updates of methodologies, policies, and data standards
- Consultation and training in FAIR and RDM
- Representing the institution in national and European initiatives

Tools and Competencies

Data Stewardship Wizard
DSpace
OpenAIRE
GitHub

- FAIR principles, data policies, and standards (OAI-PMH, Dublin Core)
- Project management, facilitation, and training
- Communication between research, IT, and administration

Impact / Contribution

For researchers:
Provides accessible training, methodologies, and practical guidance.

For Institution:
Strengthens DS competencies , develops infrastructure, and improves institutional readiness for national and European Open Science initiatives.

Coordinator of Open Science and RDM – strategic, methodological and technical coordination across the institution (represents approx. 36% of data stewards in the Czech Republic).

Use Case 3 Institutional Data Steward

Use Case 3
Institutional Data Steward

Role of the Data Steward

- **Combines** methodological, technical and coordination competencies.
- **Tests and introduces** new tools and processes in RDM and FAIR data.
- **Coordinates** the work of data stewards, trains colleagues and shares good practice across faculties.
- **Ensures** that methodological principles are applied consistently in everyday workflows.

Competencies

- Advanced knowledge of Open Science and FAIR principles.
- Understanding of repository systems and data infrastructures (DSpace, Zenodo, GitHub, OpenAIRE).
- Project management and coordination across teams (IT, library, research units).

Tools

Data Stewardship Wizard
DSpace
OpenAIRE
GitHub
Internal reporting and project systems

Connecting Strategic, Methodological and Technical Levels of Research Data Management.

Scenario The institution is establishing a new system for Open Science and research data management.
The institutional data steward stands between the strategic level of leadership and the everyday work of researchers.
She contribute to developing institutional methodologies and workflows and help translate FAIR principles and data policies into concrete steps and technical solutions.

In practice, this means coordinating the work of data stewards while also testing whether the tools and processes function as intended, for example, testing new repository platforms, mapping workflows and preparing model DMP templates.
The data steward communicates with university leadership, IT and researchers to align their needs when implementing new data services. They often represent the institution in national or European initiatives (EOSC CZ, OpenAIRE) and help develop the internal infrastructure for data sharing.

Benefits for the Institution

Connects strategic goals with real data management workflows.

Ensures that Open Science policies are supported by practical tools and procedures.

Develops data stewardship services and strengthens institutional RDM competencies.

Increases institutional visibility at the European level and supports system interoperability.

Benefits for Researchers

Helps introduce tools and practical workflows for data management.

Enables more efficient sharing and archiving of research data.

Ensures that training and methodological materials reflect real needs of research practice.

Coordinator of Open Science and RDM – strategic, methodological and technical coordination across the institution (represents approx. 36% of data stewards in the Czech Republic).

5 Conclusion

Personas and use cases provide a comprehensive overview of how data stewards support research, institutions, and Open Science. While personas describe professional profiles and typical areas of responsibility, use cases illustrate practical situations in which their work creates direct value. This document serves as a resource for institutions, researchers, and service developers who need to understand how data stewardship functions in practice, and why it represents an essential component of a modern research ecosystem.