# MU Open Science Strategy 2022–2028: Action Plan for years 2022–2024

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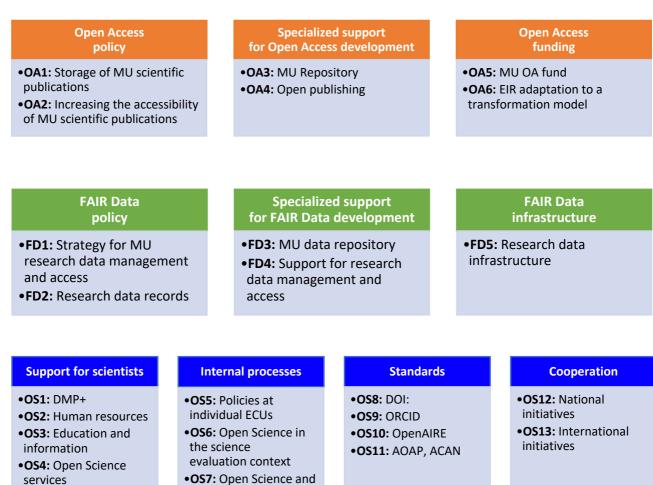
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### B. MU Open Science Strategy 2022–2028: Action Plan for years 2022– 2024

The Strategy comprises 24 objectives divided into 3 thematic blocks:

- 1. Open Access objectives
- 2. FAIR Data objectives
- 3. Open Science horizontal topics at MU

MU Open Science Strategy 2022–2028: Action Plan for years 2022–2024 (hereinafter referred to as the "Action Plan") is based on the Strategic Part and elaborates the measures to meet the strategic objectives in individual years. Each objective is guaranteed by a key MU unit whose involvement in the implementation of the submitted measures is necessary to achieve the planned objectives.



•US7: Open Science and MU grant schemes

### 2

### Target groups of Action Plan measures

### Impact of MU OS Strategy on scientists (S)

Measures marked with the letter S have a direct impact on scientists, who will benefit from them (will be direct beneficiaries of the measures).

### Impact of MU OS Strategy on the university (U)

Measures marked with the letter U have a direct impact on the university, which will benefit from them (will be a direct beneficiary of the measures).

### Enhancement of MU resources for Open Science (R)

Measures marked with the letter R have a direct impact on further enhancement of human, technological and infrastructure resources of MU.

### Enhancement of MU's position in Open Science (P)

Measures marked with the letter P have a direct impact on further enhancement of MU as an Open Science leader in the Czech Republic.

### 1. Open Access measures

Open Access policy	Specialized support for Open Access development	Open Access funding
<ul> <li>OA1: Storage of MU scientific publications</li> <li>OA2: Increasing the accessibility of MU scientific publications</li> </ul>	<ul> <li>OA3: MU Repository</li> <li>OA4: Open publishing</li> </ul>	<ul> <li>OA5: MU OA fund</li> <li>OA6: EIR adaptation to a transformation model</li> </ul>

### OA1: Storage of MU scientific publications

**Objective:** To ensure that all scientific publications of MU authors are stored in the MU Repository (its non-public part) or other mandatory repositories of MU.

Guarantor of the objective: Open Science Core Team + Open Science Implementation Group

### **Action Plan measures:**

<b>2022</b> OA1.1R	To analyse the necessary capacities for the long-term fulfilment of this indicator at each economic unit (ECU).
<b>2023</b> OA1.2R	To start preparation for the introduction of the obligation to store the MU researchers' publications in the MU Repository or other mandatory repositories of MU.
<b>2024</b> OA1.3U	To introduce an obligation to store the MU researchers' publications in the MU

## Clarifying note:

The support for the fulfilment of this objective, or obligation, is further addressed in OS4 as MU Open Science Service for scholarly environment. The communication and education regarding these changes are further addressed in OS3.

Repository or other mandatory repositories of MU.

### OA2: Increasing the accessibility of MU scientific publications

**Objective:** To increase the share of Open Access scientific publications in the MU Repository.

Guarantor of the objective: Open Science Core Team + Open Science Implementation Group

### **Action Plan measures:**

### 2022

OA1.1R	To analyse the need for internal capacities for the long-term fulfilment of this indicator at each ECU.
2023	
OA2.2U	To expand the DMP tool with Open Access, aiming at the design of a DMP+.
0A2.3U	To prepare an analysis of the university strategy for the retention of sufficient intellectual property rights of authors of its publications (Rights Retention Strategy).
2024	
OA2.4P	To make sure a discussion takes place on introducing an obligation of / retaining discretion in the publishing of outputs of a given ECU in the Open Access mode in connection with OS5.

### **Clarifying note:**

The support for the fulfilment of this objective, or obligation, is further addressed in OS4 as MU Open Science Service for scholarly environment. The communication and education regarding these changes are further addressed in OS3.

### OA3: MU Repository

**Objective:** To develop the MU Repository in accordance with the current requirements for international scholarly communication.

### Guarantor of the objective: IS MU team + Open Science Core Team

### **Action Plan measures:**

### 2022

OA3.1R	To analyse the possibilities of linking the institutional repository and field-specific repositories – Part 1.
OA3.2R	To analyse the possibilities of the MU Repository to store other than J and D type publications (according to the methodology of the Information Register of R&D results /RIV/).
OA3.3R	To ensure regular checks of compatibility of the MU Repository's functionalities with current requirements for scholarly communication and evaluation of the MU Repository's usage statistics.
2023	
OA3.4R	To provide the possibility of attaching underlying data to a publication in the MU Repository, to prepare the user manual.
OA3.5R	To analyse the possibilities of linking the institutional repository and field-specific repositories – Part 2.

- OA3.6R To link the institutional repository and field-specific repositories Part 1.
- OA3.7R To ensure regular checks of compatibility of the MU Repository's functionalities with current requirements for scholarly communication and evaluation of the MU Repository's usage statistics.

### 2024

- OA3.8R To link the institutional repository and field-specific repositories Part 2.
- OA3.9R To ensure regular checks of compatibility of the MU Repository's functionalities with current requirements for scholarly communication and evaluation of the MU Repository's usage statistics.

**Clarifying note:** Ongoing development of the institutional repository based on the performed analyses is expected. It is possible to store underlying data in the repository even now, but this marginal functionality must be further analysed and incorporated into the user manual.

### OA4: Open publishing

**Objective:** To develop systematic support for the publishing of open publications at MU, including the development of the "platinum/diamond Open Access route" at the university.

Guarantor of the objective: Munipress + economic units (publishers of platinum/diamond journals)

### **Action Plan measures:**

2022	
OA4.1R	To analyse tools for open publishing at MU and to create guidelines for further users – Part 1.
OA4.2R	To analyse the process of publishing proceedings from conferences organized by MU.
OA4.3R	To analyse the process of publishing platinum/diamond OA journals at MU.
OA4.4P	To join the international support network for platinum/diamond journals.
2023	
OA4.5R	To analyse tools for open publishing at MU and to create guidelines for further users – Part 2.
OA4.6R	To implement the recommendations resulting from the analysis in OA4.2R – Part 1.
OA4.7R	To implement the recommendations resulting from the analysis in OA4.4R – Part 1.
2024	
OA4.8R	To analyse the possibilities of open publishing consultation service provided by Munipress to other institutions in the Czech Republic.
OA4.9R	To analyse the support for outstanding platinum/diamond journals published outside MU for the use by MU authors.
OA4.10R	To implement a part of the recommendations resulting from the analysis in OA4.2R – Part 2.
OA4.11R	To implement the recommendations resulting from the analysis in OA4.4R – Part 2.

### Clarifying note:

This measure needs to be periodically updated in accordance with the development in this highly dynamic area. A CRAFT-OA Horizon Europe project was submitted in April 2022 for the promotion of

this form of academic result publication, which, if accepted, will significantly enhance MU's expertise in this area.

### OA5: MU Open Access Fund

**Objective:** To establish the central MU Open Access Fund as a funding mechanism for Open Access publishing of MU authors.

### Guarantor of the objective: Open Science Core Team

### **Action Plan measures:**

2022	
OA5.1U	To prepare conditions and rules of the administration and utilization of the MU Open Access Fund.
OA5.2S	To establish the MU Open Access Fund – Part 1 (getting the funding and pilot operation).
2023	
OA5.3S	To establish the MU Open Access Fund – Part 2 (stabilization of the funding mechanism and fund administration, operation for 2024).
OA5.4U	To ensure an analysis of the fund's use in 2023.
2024	
OA5.5S	To operate the MU Open Access Fund in 2024.
OA5.6U	To analyse the necessity of the MU Open Access Fund with regard to the adoption of transformation contracts for the purposes of the next Action Plan.

### **Clarifying note:**

The MU Open Access Fund will be administered by the Open Science Core Team. The operation of the fund will be the responsibility of the MU Open Science coordinator.

### OA6: EIR adaptation to a transformation model

**Objective:** To actively seek opportunities for the transformation of funding the MU EIR from the subscription model to the Open Access model.

Guarantor: Library Information Centre MU + Open Science Core Team

<b>2022</b> OA6.1U OA6.2U	To analyse the perspectives of EIR transformation for next years (a description of cash flow changes). To set the methodology of periodical monitoring of APC at MU.
2023	
OA6.3U	To analyse the current state of transformation contracts at the national and local levels – Part 1.
OA6.4U	To analyse publication activity in the fields where authors primarily publish nationally, to suggest action steps for a discussion with these publishers about adapting to Open Access publishing.

OA6.5U To analyse publication activity of MU authors in Open Research Europe and provide methodological guidelines for publishing on this platform to MU researchers.

### 2024

OA6.6U To analyse the current state of transformation contracts at the national and local levels – Part 2.

### 2. FAIR Data measures

FAIR Data policy	Specialized support for FAIR Data development	FAIR Data infrastructure
<ul> <li>FD1: Strategy for MU research data management and access</li> <li>FD2: Research data records</li> </ul>	<ul> <li>FD3: MU data repository</li> <li>FD4: Support for research data management and access</li> </ul>	• FD5: Research data infrastructure

### FD1: Strategy for MU research data management and access

**Objective:** To adopt and implement a long-term strategy for managing and accessing research data at MU in accordance with FAIR principles and the needs of the university research community.

Guarantor: Open Science Core Team

### **Action Plan measures:**

<b>2022</b> FD1.1U	To analyse the requirements of academic staff and the university for the
	development of management and accessibility of MU research data – Part 1.
2023	
FD1.2P	To prepare the position and strategy of MU regarding research data; discussing them throughout the university – Part 1 (preparation).
FD1.3U	To ensure the implementation of European Open Science Cloud (EOSC) into MU environment – Part 1.
2024	
FD1.4P	To ensure a clear position and strategy of MU regarding research data for the next period (a document/declaration) – Part 2 (implementation).
FD1.5U	To ensure the implementation of European Open Science Cloud (EOSC) into MU environment – Part 2.

### Clarifying note:

The above measures are primarily intended for analytical and managerial purposes to complement other measures of FAIR Data objectives, and to establish a position and clear strategy of MU in this area, which will be strongly influenced by the EOSC implementation into Czech environment.

### FD2: Research data records

**Objective:** To introduce an obligation to register the metadata of reported research data of MU researchers in the relevant register no later than within one year after the project ends.

Guarantor: Open Science Core Team + Centre for Scientometric Support of the RMU Research Office

### **Action Plan measures:**

# 2022 FD2.1R To analyse the metadata scheme of MU publications, taking into account the widespread need to record data resulting from research, with the aim of linking the records to the data repository – Part 1. 2023 FD2.2R To analyse the metadata scheme of MU publications, taking into account the widespread need to record data resulting from research, with the aim of linking the records to the data repository – Part 2. 2024 FD2.3U To introduce an obligation to register the metadata of reported research data of MU researchers in the relevant register.

### **Clarifying note:**

The support for the fulfilment of this objective, or of this obligation, is further addressed in OS4 as MU Open Science Service for scholarly environment. The communication and education regarding these changes are further addressed in OS3.

### FD3: Data repository

**Objective:** To design and implement a university solution for effective management, storage and publication of MU research data (including ensuring its development over the period of this Strategy).

Guarantor: Institute of Computer Science MU + e-INFRA CZ

2022	
FD3.1R	To analyse the possibilities of linking the data and the publication repositories at MU.
FD3.2R	To start preparation of the pilot data repository at MU – Part 1.
2023	
FD3.3R	To build the pilot data repository at MU as part of the EOSC implementation in the Czech Republic.
FD3.4S	To launch the pilot data repository at MU.
2024	
FD3.5U	To connect the pilot data repository at MU to other parts of the EOSC implementation in the Czech Republic.

### FD4: Support for research data management and access

**Objective:** To provide university-wide methodological and technological support for the management and access of research data including support for the compliance with the FAIR principles of data results of MU staff, aiming at the enhancement of visibility, impact and trustworthiness of research at MU.

### Guarantor: Open Science Core Team

### **Action Plan measures:**

2022	
FD4.1S	To implement the Data Stewardship Wizard as the main MU tool of DMP support.
FD4.2S	To prepare a methodological guide for the design of the Data Management Plan at MU.
FD4.3R	To analyse the field-specific repositories of research data that are most frequently used by MU academics.
2023	
FD4.4U	To implement the DMP+ as an extension of the Data Stewardship Wizard for the purpose of planning scientific results (publications and data) at MU (including interconnection with INET/ISEP).
2024	
FD4.5R	To develop support for the management and registration of cohort studies at MU.

### **Clarifying note:**

These measures are directed at the technological and managerial support for the management and access of research data at MU. The first-level support for researchers is addressed in OS4 as MU Open Science Service for scholarly environment.

### FD5: Research data infrastructure

**Objective:** To expand the university's existing e-infrastructure for the purposes of effective management, storage and access to research data.

**Guarantor:** Institute of Computer Science MU

<b>2022</b> FD5.1R	To prepare the linking of the MU pilot data repository to other national and international data services.
<b>2023</b> FD5.2R FD5.3R	To implement the linking of the MU pilot data repository to other national and international data services. To establish the SensitiveCloud service.

### 2024

FD5.3R To develop and further integrate the MU data repository in other national and international data services.

### Clarifying note:

The measures are designed to appropriately complement the existing measures in FD3 and national and international ambitions of MU in OS12 and OS13.

# 3. Measures for the development of Open Science horizontal topics at MU

Support for researchers	Internal processes	Standards and principles	Cooperation
<ul> <li>•OS1: DMP+</li> <li>•OS2: Human resources</li> <li>•OS3: Education and information</li> <li>•OS4: Open Science services</li> </ul>	<ul> <li>•OS5: Field-specific Open Science policies</li> <li>•OS6: Open Science and science evaluation</li> <li>•OS7: Open Science and MU grant schemes</li> </ul>	• <b>058</b> : DOI: • <b>059</b> : ORCID • <b>0510</b> : OpenAIRE • <b>0S11</b> : AOAP, ACAN	<ul> <li>•OS12: National initiatives</li> <li>•OS13: International initiatives</li> </ul>

### OS1: DMP+

**Objective:** To plan accessibility of results and management and sharing of research data in all research projects at MU.

Guarantor: Open Science Core Team + RMU Research Office

### **Action Plan measures:**

### 2022

OS1.1U To start preparatory work on the implementation of partial measures/obligations, including communication with the relevant constituent parts of MU, in the following years.

### 2023

OS1.2U To introduce an obligation to plan publication charges in project applications if necessary.<sup>1</sup>

### 2024

- OS1.3U To introduce an obligation to plan the funds for storage capacities and human resources for research data management in project applications in case such capacities and resources are necessary in view of the project nature.
- OS1.4U To introduce an obligation to have a DMP+ for each research project at each ECU. In case no publications (or data) are planned within a project, a statement that the project will not result in any publications may be issued instead of the DMP+. DMP+ records will be maintained through an INET/ISEP extension.

### Clarifying note:

The measures complement the measures in OA5, FD4 and OS2. The first-level support for researchers is addressed in OS4 as MU Open Science Service for scholarly environment. The communication and education regarding these changes are further addressed in OS3.

<sup>&</sup>lt;sup>1</sup> The funding body for example requires Open Access publications and the requirement cannot be met without publishing in a gold/hybrid Open Access journal.

### OS2: Human resources for OS support

**Objective:** To provide the necessary human resources for the systematic support for Open Science at MU.

### Guarantor: Open Science Core Team

Group).

### **Action Plan measures:**

<b>2022</b> OS2.1R OS2.3R OS2.3R	To ensure funding for the Open Science Core Team from 2023 onwards. To ensure continuation of the Open Science Advisory Board from 2023 onwards. To ensure the building of capacities for Open Science promotion at individual ECUs (e.g. in faculty libraries / R&D offices) – Part 1 (development of the Implementation Group).
<b>2023</b> OS2.4R	To ensure the building of capacities for Open Science promotion at individual ECUs (e.g. in faculty libraries / R&D offices) – Part 2 (development of the Implementation Group).
<b>2024</b> OS2.5R	To ensure the building of capacities for Open Science promotion at individual ECUs (e.g. in faculty libraries / R&D offices) – Part 3 (development of the Implementation

**Clarifying note:** The members of the implementation team must be qualified to manage the overall interoperability of scientific results (in terms of management, legal aspects and technology). The members of the Open Science Implementation Group are methodologists at each ECU that engages in research. Typically, they include library staff, project support staff, R&D and Ph.D. support, lawyers, data specialists, data curators, etc. The role of the Open Science Advisory Board in the implementation of Open Science Strategy for 2022–2028 will be to analyse and evaluate new trends and to gradually integrate them into the university's operations (Open Source, City/Citizen Science, Open Educational Resources etc.). An important task is to find a correct proportion between the university-wide data support on the one hand and specialized support and needs of the individual ECUs on the other.

### OS3: Education and information about OS

**Objective:** To raise awareness of MU staff and students about Open Science, university procedures and current trends in scholarly communication.

Guarantor: Open Science Implementation Group + Open Science Core Team + RMU Research Office

2022	
OS3.1S	To prepare a brief publication/monograph on Open Science promotion at MU.
OS3.2S	To provide a website with information about and a catalogue of MU Open Science Services.
OS3.3S	To include the theme of Open Science to the education of students and doctoral students.
OS3.4S	<ul><li>To introduce Open Science education with the following topics:</li><li>Open Access</li></ul>
	<ul> <li>Open Access as a strategy to increase the citation index (including the analysis of impacts on the evaluation of a given researcher)</li> <li>FAIR Data</li> </ul>
062 56	Data Management Plan / Data Management Planning
OS3.5S	<ul> <li>To launch communication campaigns concerning:</li> <li>the use of the OA Fund – Part 1 (perception of OA at MU + support for all OA routes)</li> </ul>
	<ul> <li>the use of vouchers and possibilities ensuing from the existing transformation contracts at the national and local levels – Part 1 (presentation of possibilities for MU researchers)</li> </ul>
	<ul> <li>the presentation of data services as part of the MU Open Science Service catalogue – Part 1</li> </ul>
	<ul> <li>the improvement of reported research data records – Part 1 (preparation)</li> <li>the preparation of the pilot Data Repository at MU – Part 1</li> </ul>
	<ul> <li>the topic and tools of Data Management Planning at MU – Part 1</li> <li>current e-infrastructure services for scientific purposes – Part 1</li> </ul>
	<ul> <li>current e-infrastructure services for scientific purposes – Part 1</li> <li>planning the accessibility of results and management and sharing of research data – Part 1 (obligation 1)</li> </ul>
2023	
OS3.6R	To launch a training course at MU, intended for data curators and specialists, including an analysis of solutions existing at MU and an attempt to, at least partially, integrate them.
OS3.7S	<ul> <li>To launch communication campaigns concerning:</li> <li>the use of the OA Fund – Part 2 (perception of OA at MU + support for all OA routes)</li> </ul>
	<ul> <li>the use of vouchers and possibilities ensuing from the existing transformation contracts at the national and local levels – Part 2 (presentation of possibilities for MU researchers)</li> </ul>
	<ul> <li>data services included in the MU Open Science Service catalogue – Part 2 (news)</li> <li>preparing for an obligation to register reported research data – Part 2 (pre- implementation)</li> </ul>
	<ul> <li>the launch of the pilot Data Repository at MU – Part 2</li> </ul>

- the topic and tools of Data Management Planning at MU Part 2
- current e-infrastructure services for scientific purposes Part 2
- planning the accessibility of results and management and sharing of research data Part 2 (obligation 2).

### 2024

- OS3.6R To continue in the training course organized at MU, intended for data curators and specialists, including an analysis of solutions existing at MU and an attempt to, at least partially, integrate them.
- OS3.5S To launch communication campaigns concerning:
  - the use of vouchers and possibilities ensuing from the existing transformation contracts at the national and local levels – Part 3 (presentation of possibilities for MU researchers)
  - data services included in the MU Open Science Service catalogue Part 3 (news)
  - the obligation to register reported research data Part 3 (implementation)
  - the news about the pilot Data Repository at MU Part 3
  - current e-infrastructure services for scientific purposes Part 3
  - planning the accessibility of results and management and sharing of research data Part 3 (standard information campaign).

### Clarifying note:

These measures should be understood as complementary to the remaining measures of the Action Plan. Education comprises a number of activities and topics. Positive and well as negative (e.g. predators, disinformation) impacts of Open Science must be discussed. Modern trends in online/offline education will be continuously monitored and support will be provided to ensure that course capacity matches demand.

### OS4: Open Science services

**Objective:** To develop the system of MU Open Science services in accordance with current requirements for (open) international scholarly communication and to secure its long-term operation and development.

Guarantor: Open Science Core Team + Open Science Implementation Group

### **Action Plan measures:**

<b>2022</b> OS4.1S	To launch the system of MU Open Science Services (a catalogue) and to start rendering the services by MU.
<b>2023</b> OS4.2S	To evaluate the effectiveness of the services provided; to adapt the services to current needs of Open Science at MU in 2023.
<b>2024</b> OS4.3S	To evaluate the effectiveness of the services provided; to adapt the services to current needs of Open Science at MU in 2024.
Clarifying note	·

### Clarifying note:

These measures should be understood as complementary to the remaining measures of the Action Plan.

### OS5: Field-specific Open Science policies

**Objective:** To ensure that individual Open Science policies are set at each ECU that engages in research<sup>2</sup> in accordance with field-specific standards and characteristics.

Guarantor: Open Science Core Team + Open Science Advisory Board

### **Action Plan measures:**

# 2022<br/>OS5.1UTo start adoption of the relevant policies, guidelines and process-defining documents<br/>as a legal basis for the implementation of the measures at MU – Part 1.2023<br/>OS5.2UTo continue in adoption of the relevant policies, guidelines and process-defining<br/>documents as a legal basis for the implementation of the measures at MU – Part 2.2024<br/>OS5.3UTo ensure adoption of the relevant policies, guidelines and process-defining<br/>documents as a legal basis for the implementation of the measures at MU – Part 2.2024<br/>OS5.3UTo ensure adoption of the relevant policies, guidelines and process-defining<br/>documents as a legal basis for the implementation of the measures at MU – Part 3.Clarifying note:

These measures aim at the gradual implementation of specific internal Open Science measures at the ECUs. Each ECU should have its internal instruction in place by 2024.

<sup>&</sup>lt;sup>2</sup> MU faculties and institutes.

### OS6: Open Science and science evaluation

**Objective:** To analyse and implement Open Science principles in the process of science evaluation.

Guarantor: Open Science Core Team + Open Science Advisory Board

### **Action Plan measures:**

<b>2022</b> OS6.1U	To analyse the possibilities to take account of Open Science principles in the process
050.10	of science evaluation – Part 1 (information gathering).
2023	
OS6.2U	To analyse the possibilities to take account of Open Science principles in the process of science evaluation – Part 2 (final version of the analysis).
2024	
OS6.3U	To start implementation of outputs from the analysis of the possibilities to take account of Open Science principles in the process of science evaluation in order to fully adopt them in 2025.

### OS7: Promotion of Open Science in MU grant schemes

**Objective:** Introduction of Open Science principles to MU grant schemes.

Guarantor: Open Science Core Team + RMU Research Office

2022	
OS7.1U	To analyse the possibilities to implement Open Science principles in MU grant schemes.
OS7.2U	To analyse the possibilities of designing new grant schemes that would promote Open Science principles at MU (e.g. Citizen Science) – Part 1 (information gathering).
2023	
OS7.3U	To implement Open Science principles to MU grant schemes – Part 1.
OS7.4U	To analyse the possibilities of designing new grant schemes that would promote Open Science principles at MU (e.g. Citizen Science) – Part 2 (draft of new schemes).
2024	
OS7.5U	To implement Open Science principles to MU grant schemes – Part 2.

### OS8: DOI and similar global identifiers of results

**Objective:** To secure a unique global identity of MU research outputs.

Guarantor: Open Science Core Team + Munipress

### **Action Plan measures:**

### 2022

OS8.1R	To ensure that a global identifier may be assigned to research data at MU (e.g. DataCite DOIs).
2023	
OS8.2R	To ensure the possibility of assigning a DOI or another suitable PID to any publication at MU in accordance with the requirements of MU authors.
OS8.3R	To ensure that MU Repository may assign a DOI or another suitable PID to a given publication.

### Clarifying note:

This measure is based on the existing practice of assigning DOIs to Munipress publications, and develops it further in the context of the EOSC implementation in the Czech Republic.

### OS9: ORCID and similar global identifiers of persons

**Objective:** To secure a unique global identity of all MU researchers.

Guarantor: Open Science Core Team + RMU Research Office

### **Action Plan measures:**

2022

OS9.1R To link the MU Repository to ORCID.

### 2023

OS9.2R	To link publishing at MU to ORCID.
OS9.1R	To link the MU Data Repository to ORCID.

### **Clarifying note:**

This measure is also based on the topic of the ORCID national consortium in objective OS12.

### OS10: OpenAIRE

**Objective:** To fully involve MU in OpenAIRE activities, including the systematic indexing of research outputs of MU researchers in European data aggregators.

Guarantor: Open Science Core Team

### **Action Plan measures:**

### 2022

OS10.1R To configure the MU Repository for harvesting in accordance with the latest OpenAIRE standard.

### 2023

OS10.2R To configure the MU Data Repository for harvesting in accordance with the OpenAIRE standard.

### **Clarifying note:**

This measure is also based on the topic of the enhancement of MU's position in OpenAIRE AMKE in objective OS13.

### OS11: As open as possible, as closed as necessary (AOAP, ACAN)

**Objective:** To analyse and ensure the use of synergies between Open Science and technology and knowledge transfer and commercialization of intellectual property at MU in order to maximise the efficiency of MU's intellectual property management.

Guarantor: Open Science Core Team + Technology Transfer Office (TTO) MU

<b>2022</b> OS11.1U	To prepare an analysis of needs and possibilities of synergies between Open Science and research commercialization – general analysis – Part 1.
OS11.2U	To prepare an analysis of impacts of opening up academic research and its results (especially data) on the commercialization of MU's research – Part 1.
2023	
OS11.3U	To prepare an analysis of needs and possibilities of synergies between Open Science and research commercialization – general analysis – Part 2.
OS11.4U	To prepare an analysis of impacts of opening up academic research and its results (especially data) on the commercialization of MU's research – Part 2.
OS11.5U	To implement measures to ensure the use of synergies between Open Science and technology transfer – Part 1.
2024	
OS11.6U	To implement measures to ensure the use of synergies between Open Science and technology transfer – Part 2.

### OS12: National initiatives

**Objective:** To secure an active role of MU in key national Open Science initiatives in order to be able to influence and transfer these activities to the MU environment.

Guarantor: Open Science Core Team

### **Action Plan measures:**

2022	
OS12.1P	To secure an active role of MU in the CzechElib consortium in the process of EIR funding transformation including follow-up activities in the project of the National Centre for Information Support for Research, Development and Innovation (NCIP VaVaI) (e.g. ORCID national consortium).
OS12.2P	To ensure a position of MU concerning Open Science within the framework of the e- INFRA CZ consortium (involvement in the EOSC implementation in the Czech Republic).
OS12.3P	To continue in the activities of the working group for the development of research data management in the Czech Republic (WG-RDM.cz).
OS12.4P	To support the position of MU concerning Open Science in the Association of Libraries of Czech Universities (AKVŠ) including the activities of the working group for OA managers, a part of AKVŠ.
2023	
OS12.5P	To provide active support for Open Science national initiatives including the leadership of some partial activities – Part 1.
2024	

## OS12.6P To provide active support for Open Science national initiatives including the leadership of some partial activities – Part 2.

### Clarifying note:

These measures will be updated on an ongoing basis. The above overview lists the most important milestones.

### OS13: International initiatives

**Objective:** To secure an active role of MU in selected international Open Science initiatives important for the university research.

Guarantor: Open Science Core Team

### **Action Plan measures:**

# 2022 OS13.1P OS13.1P To actively support the position of MU in the European implementation of EOSC. To actively support the position of MU in the non-profit organization OpenAIRE AMKE. 2023 OS13.3P To analyse interesting activities of the relevant DGs of the European Commission related to Open Science and to start the monitoring of selected activities.

- OS13.4P To analyse the possibilities of involvement and cooperation in field-specific repositories Part 1.
- OS13.5P To establish MU's position regarding initiatives promoting platinum/diamond Open Access routes (FJN and others).
- OS13.6P To analyse the possibilities of involvement and cooperation in selected international Open Science organizations and alliances Part 1.

### 2024

- OS13.7P To analyse the possibilities of involvement and cooperation in field-specific repositories Part 2.
- OS13.8P To analyse the possibilities of involvement and cooperation in selected international Open Science organizations and alliances Part 2.

### **Clarifying note:**

These measures will be updated on an ongoing basis. The above overview lists the most important milestones.

### Appendices

### Appendix No. 1:

List of MU Open Science Strategy Action Plan measures for 2022–2024

### 2022

2022	
OA1.1R	To analyse the necessary capacities for the long-term fulfilment of this indicator at each economic unit (ECU).
OA1.1R	To analyse the need for internal capacities for the long-term fulfilment of this indicator at each ECU.
OA3.1R	To analyse the possibilities of linking the institutional repository and field-specific repositories – Part 1.
OA3.2R	To analyse the possibilities of the MU Repository to store other than J and D type publications (according to the methodology of the Information Register of R&D results /RIV/).
OA3.3R	To ensure regular checks of compatibility of the MU Repository's functionalities with current requirements for scholarly communication and evaluation of the MU Repository's usage statistics.
OA4.1R	To analyse tools for open publishing at MU and to create guidelines for further users – Part 1.
OA4.2R	To analyse the process of publishing proceedings from conferences organized by MU.
OA4.3R	To analyse the process of publishing platinum/diamond OA journals at MU.
OA4.4P	To join the international support network for platinum/diamond journals.
OA5.1U	To prepare conditions and rules of the administration and utilization of the MU Open Access Fund.
OA5.2S	To establish the MU Open Access Fund – Part 1 (getting the funding and pilot operation).
OA6.1U	To analyse the perspectives of EIR transformation for next years (a description of cash flow changes).
OA6.2U	To set the methodology of periodical monitoring of APC at MU.
FD1.1U	To analyse the requirements of academic staff and the university for the
	development of management and accessibility of MU research data – Part 1.
FD2.1R	To analyse the metadata scheme of MU publications, taking into account the widespread need to record data resulting from research, with the aim of linking the records to the data repository – Part 1.
FD3.1R	To analyse the possibilities of linking the data and the publication repositories at MU.
FD3.2R	To start preparation of the pilot data repository at MU – Part 1.
FD4.1S	To implement the Data Stewardship Wizard as the main MU tool of DMP support.
FD4.2S	To prepare a methodological guide for the design of the Data Management Plan at MU.
FD4.3R	To analyse the field-specific repositories of research data that are most frequently used by MU academics.
FD5.1R	To prepare the linking of the MU pilot data repository to other national and international data services.
OS1.1U	To start preparatory work on the implementation of partial measures/obligations, including communication with the relevant constituent parts of MU, in the following years.
OS2.1R	To ensure funding for the Open Science Core Team from 2023 onwards.
OS2.3R	To ensure continuation of the Open Science Advisory Board from 2023 onwards.

OS2.3R	To ensure the building of capacities for Open Science promotion at individual ECUs (e.g. in faculty libraries / R&D offices) – Part 1 (development of the Implementation Group).
OS3.1S	To prepare a brief publication/monograph on Open Science promotion at MU.
S3.2S	To provide a website with information about Open Science Services at MU.
OS3.3S	To include the theme of Open Science to the education of students and doctoral
000.00	students
OS3.4S	To introduce Open Science education with the following topics:
000110	<ul> <li>Open Access</li> </ul>
	<ul> <li>Open Access as a strategy to increase the citation index (including the analysis of</li> </ul>
	impacts on the evaluation of a given researcher)
	<ul> <li>FAIR Data</li> </ul>
OS3.5S	<ul> <li>Data Management Plan / Data Management Planning</li> <li>To launch communication campaigns concerning:</li> </ul>
035.55	<ul> <li>the use of the OA Fund – Part 1 (perception of OA at MU + support for all OA</li> </ul>
	<ul> <li>the use of the OA Fund – Part 1 (perception of OA at MO + support for all OA routes)</li> </ul>
	• the use of vouchers and possibilities ensuing from the existing transformation
	contracts at the national and local levels – Part 1 (presentation of possibilities for
	MU researchers)
	<ul> <li>the presentation of data services as part of the MU Open Science Service catalogue – Part 1</li> </ul>
	<ul> <li>the improvement of reported research data records – Part 1 (preparation)</li> </ul>
	<ul> <li>the preparation of the pilot Data Repository at MU – Part 1</li> </ul>
	<ul> <li>the topic and tools of Data Management Planning at MU – Part 1</li> </ul>
	<ul> <li>current e-infrastructure services for scientific purposes – Part 1</li> </ul>
	<ul> <li>planning the accessibility of results and management and sharing of research</li> </ul>
	data – Part 1 (obligation 1)
OS4.1S	To launch the system of MU Open Science Services (a catalogue) and to start
	rendering the services by MU.
OS5.1U	To start adoption of the relevant policies, guidelines and process-defining documents
	as a legal basis for the implementation of the measures at MU – Part 1.
OS6.1U	To analyse the possibilities to take account of Open Science principles in the process
	of science evaluation – Part 1 (information gathering).
OS7.1U	To analyse the possibilities to implement Open Science principles in MU grant schemes.
OS7.2U	To analyse the possibilities of designing new grant schemes that would promote
037.20	Open Science principles at MU (e.g. Citizen Science) – Part 1 (information gathering).
OS8.1R	To ensure that a global identifier may be assigned to research data at MU (e.g. DataCite
036.1K	
OS8.1R	DOIs).
036.1K	To ensure that a global identifier may be assigned to research data at MU (e.g. DataCite DOIs).
0040.45	•
OS10.1R	To configure the MU Repository for harvesting in accordance with the latest
0044 411	OpenAIRE standard.
OS11.1U OS11.2U	To prepare an analysis of needs and possibilities of synergies between Open Science
	and research commercialization – general analysis – Part 1.
	To prepare an analysis of impacts of opening up academic research and its results
0010 10	(especially data) on the commercialization of MU's research – Part 1.
OS12.1P	To secure an active role of MU in the CzechElib consortium in the process of EIR funding transformation including follow-up activities in the project of the National
	Centre for Information Support for Research, Development and Innovation (NCIP
	VaVal) (e.g. ORCID national consortium).
	ימימון (כ.צ. טוכוש המנוטומו נטווטו נומווון.

OS12.2P	To ensure a position of MU concerning Open Science within the framework of the e-
	INFRA CZ consortium (involvement in the EOSC implementation in the Czech Republic).
OS12.3P	To continue in the activities of the working group for the development of research data
	management in the Czech Republic (WG-RDM.cz).
OS12.4P	To support the position of MU concerning Open Science in the Association of Libraries
	of Czech Universities (AKVŠ) including the activities of the working group for OA
	managers, a part of AKVŠ.
OS13.1P	To actively support the position of MU in the European implementation of EOSC.
OS13.2P	To actively support the position of MU in the non-profit organization OpenAIRE AMKE.

### 2023

2025	
OA1.2R	To start preparation for the introduction of the obligation to store the MU researchers' publications in the MU Repository or other mandatory repositories of MU.
OA2.2U	To expand the DMP tool with Open Access, aiming at the design of a DMP+.
OA2.3U	To prepare an analysis of the university strategy for the retention of sufficient intellectual property rights of authors of its publications (Rights Retention Strategy).
OA3.4R	To provide the possibility of attaching underlying data to a publication in the MU Repository, to prepare the user manual.
OA3.5R	To analyse the possibilities of linking the institutional repository and field-specific repositories – Part 2.
OA3.6R	To link the institutional repository and field-specific repositories – Part 1.
OA3.7R	To ensure regular checks of compatibility of the MU Repository's functionalities with current requirements for scholarly communication and evaluation of the MU Repository's usage statistics.
OA4.5R	To analyse tools for open publishing at MU and to create guidelines for further users – Part 2.
OA4.6R	To implement the recommendations resulting from the analysis in OA4.2R – Part 1.
OA4.7R	To implement the recommendations resulting from the analysis in OA4.4R – Part 1.
OA5.3S	To establish the MU Open Access Fund – Part 2 (stabilization of the funding mechanism and fund administration, operation for 2024).
OA5.4U	To ensure an analysis of the fund's use in 2023.
OA6.3U	To analyse the current state of transformation contracts at the national and local levels – Part 1.
OA6.4U	To analyse publication activity in the fields where authors primarily publish nationally, to suggest action steps for discussion with these publishers about adapting to Open Access publishing.
OA6.5U	To analyse publication activity of MU authors in Open Research Europe and provide methodological guidelines for publishing on this platform to MU researchers.
FD1.2P	To prepare the position and strategy of MU regarding research data; discussing them throughout the university – Part 1 (preparation).
FD1.3U	To ensure the implementation of European Open Science Cloud (EOSC) into MU environment – Part 1.
FD2.2R	To analyse the metadata scheme of MU publications, taking into account the widespread need to record data resulting from research, with the aim of linking the records to the data repository – Part 2.
FD3.3R	To build the pilot data repository at MU as part of the EOSC implementation in the Czech Republic.

FD3.4S	To launch the pilot data repository at MU.
FD4.4U	To implement the DMP+ as an extension of the Data Stewardship Wizard for the purpose of planning scientific results (publications and data) at MU (including interconnection with INET/ISEP).
FD5.2R	To implement the linking of the MU pilot data repository to other national and international data services.
FD5.3R	To establish the SensitiveCloud service.
OS1.2U	To introduce an obligation to plan publication charges in project applications if necessary.
OS2.4R	To ensure the building of capacities for Open Science promotion at individual ECUs (e.g. in faculty libraries / R&D offices) – Part 2 (development of the Implementation Group).
OS3.6R	To launch a training course at MU, intended for data curators and specialists, including an analysis of solutions existing at MU and an attempt to, at least partially, integrate them.
OS3.7S	To launch communication campaigns concerning:
	<ul> <li>the use of the OA Fund – Part 2 (perception of OA at MU + support for all OA routes)</li> </ul>
	<ul> <li>the use of vouchers and possibilities ensuing from the existing transformation contracts at the national and local levels – Part 2 (presentation of possibilities for MU researchers)</li> </ul>
	• data services included in the MU Open Science Service catalogue – Part 2 (news)
	<ul> <li>preparing for an obligation to register reported research data – Part 2 (pre- implementation)</li> </ul>
	<ul> <li>the launch of the pilot Data Repository at MU – Part 2</li> </ul>
	<ul> <li>the topic and tools of Data Management Planning at MU – Part 2</li> </ul>
	<ul> <li>current e-infrastructure services for scientific purposes – Part 2</li> </ul>
	<ul> <li>planning the accessibility of results and management and sharing of research data – Part 2 (obligation 2)</li> </ul>
OS4.2S	To evaluate the effectiveness of the services provided; to adapt the services to current needs of Open Science at MU in 2023.
OS5.2U	To continue in adoption of the relevant policies, guidelines and process-defining documents as a legal basis for the implementation of the measures at MU – Part 2.
OS6.2U	To analyse the possibilities to take account of Open Science principles in the process of science evaluation – Part 2 (final version of the analysis).
OS7.3U	To implement Open Science principles to MU grant schemes – Part 1.
OS7.4U	To analyse the possibilities of designing new grant schemes that would promote Open Science principles at MU (e.g. Citizen Science) – Part 2 (draft of new schemes).
OS8.2R	To ensure the possibility of assigning a DOI or another suitable PID to any publication at MU in accordance with the requirements of MU authors.
OS8.3R	To ensure that MU Repository may assign a DOI or another suitable PID to a given publication.
OS9.2R	To link publishing at MU to ORCID.
OS9.1R	To link the MU Data Repository to ORCID.
OS10.2R	To configure the MU Data Repository for harvesting in accordance with the OpenAIRE standard.
OS11.3U	To prepare an analysis of needs and possibilities of synergies between Open Science and research commercialization – general analysis – Part 2.
OS11.4U	To prepare an analysis of impacts of opening up academic research and its results (especially data) on the commercialization of MU's research – Part 2.

OS11.5U	To implement measures to ensure the use of synergies between Open Science and technology transfer – Part 1.
OS12.5P	To provide active support for Open Science national initiatives including the leadership of some partial activities – Part 1.
OS13.3P	To analyse interesting activities of the relevant DGs of the European Commission related to Open Science and to start the monitoring of selected activities.
OS13.4P	To analyse the possibilities of involvement and cooperation in field-specific repositories – Part 1.
OS13.5P	To establish MU's position regarding initiatives promoting platinum/diamond Open Access routes (FJN and others).
OS13.6P	To analyse the possibilities of involvement and cooperation in selected international Open Science organizations and alliances – Part 1.
2024	
OA1.3U	To introduce an obligation to store the MU researchers' publications in the MU Repository or other mandatory repositories of MU.
OA2.4P	To make sure a discussion takes place on introducing an obligation of / retaining discretion in the publishing of outputs of a given ECU in the Open Access mode in connection with OS5.
OA3.8R	To link the institutional repository and field-specific repositories – Part 2.
OA3.9R	To ensure regular checks of compatibility of the MU Repository's functionalities with current requirements for scholarly communication and evaluation of the MU Repository's usage statistics.
OA4.8R	To analyse the possibilities of open publishing consultation service provided by Munipress to other institutions in the Czech Republic.
OA4.9R	To analyse the support for outstanding platinum/diamond journals published outside MU for the use by MU authors.
OA4.10R	To implement a part of the recommendations resulting from the analysis in OA4.2R – Part 2.
OA4.11R	To implement the recommendations resulting from the analysis in OA4.4R – Part 2.
OA5.5S	To operate the MU Open Access Fund in 2024.
OA5.6U	To analyse the necessity of the MU Open Access Fund with regard to the adoption of transformation contracts for the purposes of the next Action Plan.
OA6.6U	To analyse the current state of transformation contracts at the national and local levels – Part 2.
FD1.4P	To ensure a clear position and strategy of MU regarding research data for the next period (a document/declaration) – Part 2 (implementation).
FD1.5U	To ensure the implementation of European Open Science Cloud (EOSC) into MU environment – Part 2.
FD2.3U	To introduce an obligation to register the metadata of reported research data of MU researchers in the relevant register.
FD3.5U	To connect the pilot data repository at MU to other parts of the EOSC implementation in the Czech Republic.
FD4.5R	To develop support for the management and registration of cohort studies at MU.
FD5.3R	To develop and further integrate the MU data repository in other national and international data services.
OS1.3U	To introduce an obligation to plan the funds for storage capacities and human resources for research data management in project applications in case such capacities and resources are necessary in view of the project nature.
OS1.4U	To introduce an obligation to have a DMP+ for each research project at each ECU. In case no publications (or data) are planned within a project, a statement that the

	project will not result in any publications may be issued instead of the DMP+. DMP+
	records will be maintained through an INET/ISEP extension.
OS2.5R	To ensure the building of capacities for Open Science promotion at individual ECUs
	(e.g. in faculty libraries / R&D offices) – Part 3 (development of the Implementation
	Group).
OS3.6R	To continue in the training course organized at MU, intended for data curators and
	specialists, including an analysis of solutions existing at MU and an attempt to, at
	least partially, integrate them.
OS3.5S	To launch communication campaigns concerning:
	• the use of vouchers and possibilities ensuing from the existing transformation
	contracts at the national and local levels – Part 3 (presentation of possibilities for
	MU researchers)
	• data services included in the MU Open Science Service catalogue – Part 3 (news)
	• the obligation to register reported research data – Part 3 (implementation)
	<ul> <li>on news about the pilot data repository at MU – Part 3</li> </ul>
	<ul> <li>current e-infrastructure services for scientific purposes – Part 3</li> </ul>
	<ul> <li>planning the accessibility of results and management and sharing of research</li> </ul>
	data – Part 3 (standard information campaign)
OS4.3S	To evaluate the effectiveness of the services provided; to adapt the services to
004.00	current needs of Open Science at MU in 2024.
OS5.3U	To ensure adoption of the relevant policies, guidelines and process-defining
033.30	documents as a legal basis for the implementation of the measures at MU – Part 3.
OS6.1U	To analyse the possibilities to take account of Open Science principles in the process
030.10	of science evaluation – Part 1 (information gathering).
OS7.5U	To implement Open Science principles to MU grant schemes – Part 2.
OS11.6U	To implement measures to ensure the use of synergies between Open Science and
0311.00	technology transfer – Part 2.
OS12.6P	
0312.0P	To provide active support for Open Science national initiatives including the
0642 70	leadership of some partial activities – Part 2.
OS13.7P	To analyse the possibilities of involvement and cooperation in field-specific
0642.00	repositories – Part 2.
OS13.8P	To analyse the possibilities of involvement and cooperation in selected international
	Open Science organizations and alliances – Part 2.

Appendix No. 2: Simplified Gantt chart of MU Open Science Strategy Action Plan measures for 2022–2024

See a separate chart: B. GANTT diagram