

**MU Open Science  
Strategy  
2022–2028**

**Open Science  
Core team**

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## Executive Summary

The aim and vision of MU Open Science Strategy 2022–2028 (hereinafter referred to as the “Strategy”) is to ensure that Open Science principles become an integral part of the research process and service infrastructure of Masaryk University at the level comparable with the world's leading research institutions. This process will help the university enhance the quality of research, develop an advanced form of research support services and promote the systemic change that is currently taking place throughout the science sector in the developed world.

The Strategy aims at launching and implementing the systemic change at Masaryk University, setting priorities, creating the necessary capacities and adapting the practical implementation of Open Science activities at MU in such a way that the academic community embraces these activities. Special attention during the preparation was and will be paid to the different field specifics and other features directly affecting the Open Science principles (such as transfer of knowledge and technology, and commercialization of intellectual property), which in the diverse environment of MU enrich the implementation of Open Science and at the same time pose a challenge.

This document has been prepared and submitted by the MU Open Science Core Team,<sup>1</sup> which was set up during the implementation of the HR4MU II project.<sup>2</sup> In its preparation, the team cooperated with the Open Science Advisory Board<sup>3</sup> and the Open Science Implementation Group.<sup>4</sup> The basic points of the Strategy were presented at the university-wide Open Science workshop on 9 June 2021 and at meetings with the academic community and heads of economic units (ECU) as part of the Open Science Roadshow in April to May 2021. The draft of the Strategy is a result of consultations led throughout the university for a year and a half. It comprises 24 objectives, which include the relevant indicators:

- 6 Open Access objectives (scientific publications),
- 5 FAIR Data objectives (research data),
- 13 horizontal topics’ objectives.

By 2028, MU will have as a result of the Strategy implementation:

1. Fully functional Open Access infrastructure including sufficient expertise for the assistance to MU academics with open forms of scientific publishing; the university will have gone through the transformation of electronic and information resources (EIR), which has been launched recently.
2. Fully functional FAIR Data infrastructure including methodological support and a system for storage and management of research data and their planning within research projects.
3. Localized Open Science support for the MU environment and connection to other important features of utilization of scientific results, such as commercialization of research outputs, Citizen Science etc.
4. Connection to outstanding national and international initiatives in this field; MU will be a leader in the field of Open Science in the Czech Republic.

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<sup>2</sup> Development of human resources and other strategic areas for the support of research at MU (CZ.02.2.69/0.0/0.0/18\_054/0014703, CEP code: EF18\_054/0014703)

<sup>3</sup> Members of the Advisory Board are MU research staff, senior employees and managers with international experience in science and scholarly communication.

<sup>4</sup> The Implementation Group comprises methodologists from all constituent parts of the university; in particular faculty library staff and/or employees of research departments.

The main aim of this strategic document is to provide a systematic support for Open Science at MU so as to use the Open Science potential to the maximum avail of the MU academic community.

In Brno, on 13 April 2022

**Jiří Marek** (MU Open Science Manager) and Open Science Core Team

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## Preamble

*“Open Science is a system change allowing for better science through open and collaborative ways of producing and sharing knowledge and data, as early as possible in the research process, and for communicating and sharing results.”* European Commission<sup>5</sup>

Following many years of searching and elaborating, Open Science has become a standard of scientific life.<sup>6</sup> Academics worldwide experience the effects of the opening of research and accessing its outcomes in their day-to-day work. The current issues include Open Access,<sup>7</sup> increased sharing of research data (FAIR Data)<sup>8</sup> and other components of the scientific process – from open methodologies, peer review, software and tools to new methods of research evaluation.<sup>9</sup> At the same time, the findings of publicly funded research are becoming interconnected with the society (Citizen Science). Open Science thus represents a new, modern way to implement research and open the access to scientific knowledge through digital technologies and tools enabling advanced cooperation.

Masaryk University aims to be “an internationally-recognized research university and an excellent Czech higher education institution, setting trends in fulfilling all the roles of a university.”<sup>10</sup> As such, it cannot stay aloof from the trends transforming global science; it must reflect them and actively engage with them. MU should follow in the hitherto action,<sup>11</sup> develop and promote it within the institution itself and on a national and European scale (see e.g. the prepared CR Open Science Strategy 2022+, European Open Science Cloud<sup>12</sup> and others).

It is no longer sufficient to see Open Science as an external development that the university merely monitors as a modern trend. Open Science is a reality and an advanced infrastructure for scientific services, a condition where a research institution behaves in accordance with the Open Science principles. Open Science is an advanced tool for the management and disclosure of the university’s findings, an instrument for scientific diplomacy and a synergistic complement to communication, popularization and transfer of knowledge and technologies. It is also an important agent for social acceptance and perception of science and research as an integral part of societal development.

Masaryk University, as a prestigious academic and research institution, has adopted the Open Science principles as a standard for its future operation. MU’s focus is science as such and its efficiency; Open Science is understood as an indispensable part of day-to-day support for its academic and scholarly environment. MU advocates the Open Science principles to be a standard at the university, in the Czech Republic and in the wider European and social context.

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<sup>5</sup> Open Science definition by the European Commission’s DG RTD:

[https://ec.europa.eu/info/sites/default/files/research\\_and\\_innovation/knowledge\\_publications\\_tools\\_and\\_data/documents/ec\\_rtd\\_factsheet-open-science\\_2019.pdf](https://ec.europa.eu/info/sites/default/files/research_and_innovation/knowledge_publications_tools_and_data/documents/ec_rtd_factsheet-open-science_2019.pdf)

<sup>6</sup> UNESCO adopted the first global Open Science recommendation in 2021: <https://council.science/current/news/unesco-science-commission-adopts-open-science-recommendation/>

<sup>7</sup> An open access to scientific publications in the electronic form without limitations on their use.

<sup>8</sup> FAIR = Findability, Accessibility, Interoperability, and Reuse. For more details see <https://www.go-fair.org/fair-principles/> or <https://www.nature.com/articles/sdata201618>.

<sup>9</sup> See e.g. Towards a reform of the research assessment system. Scoping report. European Commission, 2021-11-26.

<https://op.europa.eu/en/publication-detail/-/publication/36ebb96c-50c5-11ec-91ac-01aa75ed71a1/language-en>

<sup>10</sup> One of the visions in the Masaryk University Strategic Plan 2021–2028.

<sup>11</sup> In 2006 Masaryk University as the first Czech university opened its [Theses Archive](#); in 2010 as the first Czech higher education institution signed the [Berlin Declaration](#), supporting free access to scientific knowledge; in 2012 MU launched its [Institutional Repository](#) and operates the inter-university [Repository](#).

<sup>12</sup> [https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/our-digital-future/open-science/european-open-science-cloud-eosc\\_en](https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/our-digital-future/open-science/european-open-science-cloud-eosc_en)

## Significance of MU Open Science Strategy 2022–2028 for Masaryk University

MU Open Science Strategy 2022–2028 outlines the main directions for the development of the Open Science principles in the specific environment of Masaryk University and sets indicators for monitoring progress in each area. It gives clear guidelines to the academic community as to where focus their attention and resources in planning and implementing research activities and communicating their results.

Masaryk University embraces the significance of the Open Science principles and their envisaged positive effects. At the same time, it is aware of their limitations and potential problems. It fully accepts that the intended action may lead to negative consequences. Therefore, the university will try to promote a wider spectrum of approaches and activities in the long run as well as their ongoing evaluation and correction; it will strive to adopt a consistent systematic approach to the issues in question.

In the area of open publications, the Strategy aims for a “neutral approach” in the sense of treating all forms of Open Access (green, gold and platinum/diamond) as equivalent full-fledged forms of Open Access. At the same time, it tries to analyse the impacts of their implementation into the scientific life and research evaluation at the university and national levels and to search for the appropriate forms of motivation of academic staff regarding adopting and applying the principles of openness in science and research.

Although nowadays, Open Science comprises a wide range of items that have been “opened” (publications, data, software, methodology, peer review, teaching materials, etc.), the Strategy focuses in particular on two of them that are considered as key ones for a research university: scientific publications (Open Access) and research data (FAIR Data). The modular structure of the document enables to extend the activities to other areas as soon as the internal progress and external circumstances require so.

It is essential that the Strategy considers not only publications but also data that form the basis of further research outputs as the core of scholarly communication. The improvement of management, storage, visibility and availability of research data in accordance with the principle “as open as possible, as closed as necessary” will enhance the transparency of science and reproducibility of research results and will promote visibility and sharing of results among academics. Services related to these processes will create a new, advanced infrastructure of MU for the 21st century science.

The Strategy aspires to have an academic impact within Masaryk University as well as to affect the society and help Masaryk University become a leader in the wider Central European (CEE) region.

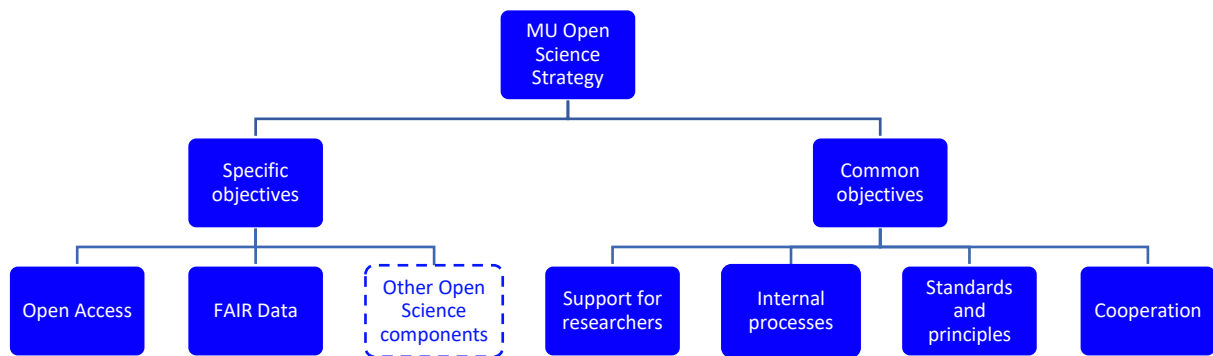
## Vision of MU Open Science Strategy 2022–2028

The principles of Open Science are an integral part of the research process and service infrastructure at Masaryk University at the level comparable to the world’s leading research organizations. This will help the university improve the quality of scientific research and promote the systemic change.

## Structure

The Strategy consists of three parts:

- A. Strategic part: vision, objectives, indicators and a mechanism for reviewing the strategy
- B. Action plan: implementation of the vision and strategic objectives
- C. Financial plan: assessment of financial demands of the planned steps and their impacts on the university’s budget.



The strategy is divided into the vertical “Specific objectives” and horizontal “Common objectives”. This structure enables to aptly modify the thematic vertical objectives (e.g. a possible extension to City/Citizen Science, Open Educational Resources, Open Source and others) and horizontal processes (new types of research infrastructure etc.).

Each objective has one or more indicators that are used for monitoring the fulfilment of the objective in question in the context of the implementation of the Strategy. The indicators are supplemented with the values “current status” and “future (target) status as per 2028”. The indicators have been designed so as their values may be monitored during the validity of MU Open Science Strategy 2022–2028 by means of Action Plans. The Strategy also comprises the “Statistical Data Monitored”, which will serve for a more detailed analytical evaluation of a particular objective. Certain indicator or statistical data values are attached the attribute “unknown”. This refers to indicators/statistical data where the current status has not been identified and the methodology for the collection of the indicators/data is to be finalized.

## Review mechanism

The Strategy focuses on the period from 2022 to 2028. It will be implemented in line with Action Plans prepared in two stages. The first one covers the period from 2022 to 2024; the other one applies to 2025–2028. The Action Plans must also respond to the envisaged dynamic developments in the area concerned. Therefore, it is advisable to make short-term working prospects and have a mechanism for reviewing the objectives based on an ongoing evaluation of the monitored indicators.

The aims of the review mechanism:

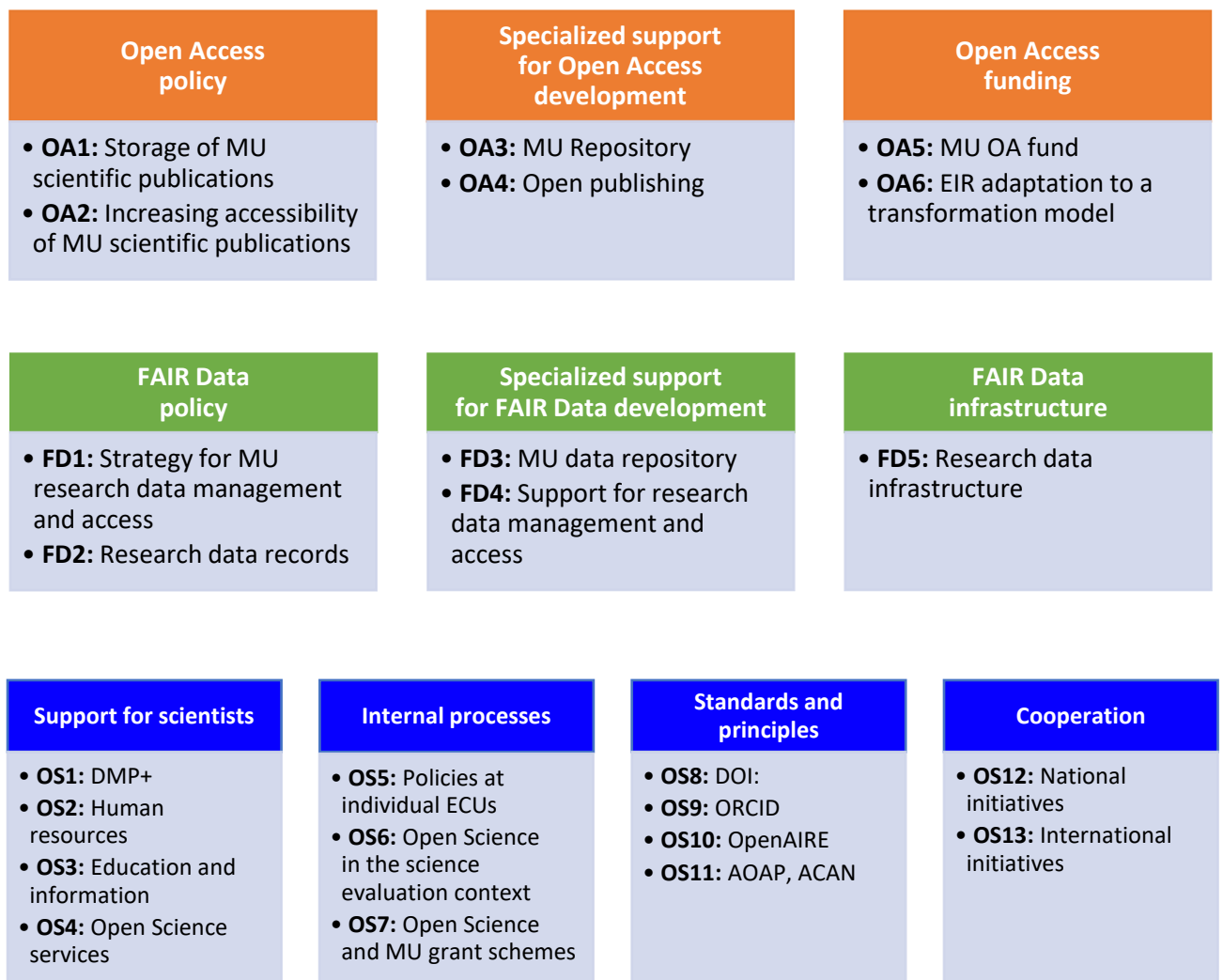
1. To facilitate an ongoing review of the Strategy based on the fulfilment of the objectives.
2. To enable an extension of the Strategy with further vertical and horizontal topics during the 2024 review, as appropriate.
3. In 2028 to finish the adoption of a follow-up strategy / follow-up steps until 2029.

## A. Strategic part of MU Open Science Strategy 2022–2028

The Strategy comprises 24 objectives divided into three thematic blocks:

1. Open Access objectives (6)
2. FAIR Data objectives (5)
3. Open Science horizontal topics at MU (13)

Each of the blocks is further divided into sections depicted in the chart below. Each objective contains its description, indicator, current status, future status as per 2028 and clarifying notes. The concrete steps leading to the fulfilment of the objective concerned are outlined in the Action Plans.





## 1. Open Access objectives

Open Access policy	Specialized support for Open Access development	Open Access funding
<ul style="list-style-type: none"> <li>• <b>OA1:</b> Storage of MU scientific publications</li> <li>• <b>OA2:</b> Increasing accessibility of MU scientific publications</li> </ul>	<ul style="list-style-type: none"> <li>• <b>OA3:</b> MU repository</li> <li>• <b>OA4:</b> Open publishing</li> </ul>	<ul style="list-style-type: none"> <li>• <b>OA5:</b> MU OA fund</li> <li>• <b>OA6:</b> EIR adaptation to a transformation model</li> </ul>

### OA1: Storage of MU scientific publications

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

Indicator	Unit	Current status	Future status	Year of fulfilment
Share of publications in the MU Repository against all publications listed in the Metadata Catalogue of Publication Records of MU	%	10	90	2027

**Clarifying notes:** The aim is that the full texts of any publication activities of MU authors are recorded and stored within MU (primarily in the MU Repository). The reasons are: better transparency and management of academic results, opportunity to improve anti-plagiarism tools, more efficient use of results including text/data mining. Publications originated before the effective date hereof will be dealt with on a voluntary basis. For the purposes of this objective, a publication means the publisher’s version or the most advanced version of the author’s manuscript that serves as the basis for the presentation of research results and is available to the researcher. The Metadata Catalogue of Publication Records of MU means the “Publications” module in is.muni. Publications stored at other MU mandatory places outside the Repository (digital libraries, MUNISpace etc.) are considered as stored within MU; the connection of such repositories to the MU Repository will be part of the Action Plan’s implementation. An important prerequisite for the fulfilment of this objective will also be an appropriate integration of the MU Repository into the most frequently used publication repositories such as arXiv.org etc.

## OA2: Increasing accessibility of MU scientific publications

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

Indicator	Unit	Current status	Future status	Year of fulfilment
Share of open publications of J and D type (according to the methodology of the Information Register of R&D results /RIV/) in the MU Repository	%	10	75	2027
Analysis of the university strategy for the retention of sufficient intellectual property rights of authors of its publications (Rights Retention Strategy) <sup>13</sup>	YES/NO	NO	YES	2023

Statistical data monitored	Unit	Current number
Share of MU open publications against all publications listed in the Metadata Catalogue of Publication Records of MU	%	10
Share of open degree theses originated at MU against all theses in the MU Theses Archive	%	unknown

**Clarifying notes:** The first indicator refers to field no. R94 RIV or a similar item in information systems for research, development and innovation (IS VaVal). It applies to results where the corresponding/first/principal author is from MU; such author makes the primary decision on the form of publishing the work concerned. This indicator is governed by the principle “as open as possible, as closed as necessary” and thus does not contradict the principles of commercialization of research outputs, personal data processing or other legitimate reasons for a limited access to scientific results (see objective OS11). It is desirable that other scientific results than J and D are made available through Open Access, too. Various Open Access routes (gold, green, platinum)<sup>14</sup> ensure the openness. Publications originated before the effective date hereof will be dealt with on a voluntary basis, unless another solution has been found. The Metadata Catalogue of Publication Records of MU means the “Publications” module in is.muni.

## OA3: MU Repository

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

Indicator	Unit	Current status	Future status	Year of fulfilment
Linking MU Repository to OpenAIRE (see OS10)	YES/NO	Partially	YES	2022
Possibility of attaching underlying data to a publication in the MU Repository	YES/NO	partially	YES	2023
Possibility of assigning a DOI or another suitable PID to publications that have not been assigned a PID by the publisher	YES/NO	NO	YES	2023

<sup>13</sup> More information about this measure to be found here: <https://www.coalition-s.org/rights-retention-strategy/>

<sup>14</sup> Gold, green, platinum (sometimes referred to as diamond) Open Access routes. The embargo period is not significant for the OA2 purposes; the general aim is to achieve increased accessibility as soon as possible.

Guarantee of long-term storage and accessibility of the uploaded publications	YES/NO	Partially	YES	2027
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Statistical data monitored	Unit	Current number
Number of field-specific repositories linked to the MU Repository	pc	0
Number of external downloads/displays of publications from the MU Repository	pc	unknown
Number of internal downloads/displays of publications from the MU Repository	pc	unknown

**Clarifying notes:** The aim is to ensure that systematic attention is paid to adapting the MU Repository to current trends and needs (university, national and international), including linking it to important international field-specific repositories. Linking to emerging data repositories may be considered in the future.

#### 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.

Indicator	Unit	Current status	Future status	Year of fulfilment
Share of Open Access proceedings from conferences organized by MU	%	unknown	80	2027

Statistical data monitored	Unit	Current number
Share of Open Access publications published at MU	%	unknown
Number of platinum/diamond journals published at MU	pc	53
Number of MU researchers in editorial boards of international Open Access journals	pc	unknown

**Clarifying notes:** Publications originated before the effective date hereof will be dealt with on a voluntary basis. For the purpose hereof, a publication means any type of publication (book, journal article etc.) published by Munipress or another (faculty) publisher at MU. The term “proceedings” means the official proceedings from a professional or scientific conference designated as such by the organizer. This objective will also focus on the promotion of the Open Access platinum/diamond route, which is seen as a prevailing form of publishing in the Open Access mode.<sup>15</sup>

#### 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.

Indicator	Unit	Current status	Future status	Year of fulfilment
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<sup>15</sup> For more details about the platinum/diamond route see <https://scienceeurope.org/our-resources/oa-diamond-journals-study/>.

Establishment of MU OA Fund	YES/NO	NO	YES	2022
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Statistical data monitored	Unit	Current number
Budget of OA Fund	CZK	0
Share of MU OA Fund payments against all APC payments of MU authors	%	0
Number of results of J, B and C types published with the support from MU OA Fund	pc	0
Number of results supported annually	pc	0
Share of applications against the results supported from MU OA Fund	%	0

**Clarifying notes:** The central MU Open Access Fund will function as a funding mechanism, not just a source of funding. The intention is to use the MU Open Access Fund as a support and motivational mechanism, not as the main source of funding for OA charges (APC). The central Open Access Fund may be supplemented with faculty Open Access funds. One of the secondary aims of the MU Open Access Fund is to contribute to the education of academic staff on the issue of predatory journals (connection to objective OS3).

#### 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.

Indicator	Unit	Current status	Future status	Year of fulfilment
To secure an active role of MU in the CzechElib consortium <sup>16</sup> in the process of EIR funding transformation	YES/NO	partially	YES	2022
To secure an active role of MU in the debate with national publishers (field-specific)	YES/NO	partially	YES	2024
To secure regular monitoring of APC at MU	YES/NO	partially	YES	2022

Statistical data monitored	Unit	Current number
Number of internally acquired EIR (except for CzechElib) with transformation-directed contracts	pc	0

**Clarifying notes:** The purpose of this objective is to support MU in the gradual transformation of scientific information funding from the subscription model to publishing charges, while retaining full access to the content (Read & Publish and others). Among other things, this will mean considering and introducing new funding flows at MU for funding scholarly communication and work and allocating the “tokens for publications by MU authors”. Activities related to this objective will also include monitoring the use of the Open Research Europe (ORE) platform by MU authors and monitoring/influencing the practices of national publishers in the area of Open Access (which are not considered in the CzechElib consortium’s negotiations and are often field specific and geographically differentiated, e.g. legal fields).

<sup>16</sup> And related projects such as NCIP VaVal.

## 2. FAIR Data objectives

FAIR Data policy	Specialized support for FAIR Data development	FAIR Data infrastructure
<ul style="list-style-type: none"> <li>• <b>FD1:</b> Strategy for MU research data management and access</li> <li>• <b>FD2:</b> Research data records</li> </ul>	<ul style="list-style-type: none"> <li>• <b>FD3:</b> MU data repository</li> <li>• <b>FD4:</b> Support for research data management and access</li> </ul>	<ul style="list-style-type: none"> <li>• <b>FD5:</b> Research data infrastructure</li> </ul>

### 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.

Indicator	Unit	Current status	Future status	Year of fulfilment
Strategy for research data management and access at MU	YES/NO	NO	YES	2024

**Clarifying notes:** The management and accessibility of research data is an area yet to be examined and developed at MU and therefore, the preparation of a unified university strategy of these issues needs more time. The MU FAIR Data Strategy will be drawn up as part of the first Action Plan for 2022–2024 and then integrated into MU Open Science Strategy 2022–2028. For the purposes of this objective, research data means data according to the definition in MU Directive No. 6/2013 (as amended).<sup>17</sup> For the purposes of reporting, research data are divided into “reported data” and “other data”, see Appendix No. 1 to the Strategy. Activities related to this objective will include involvement in the development of European Open Science Cloud (EOSC)<sup>18</sup> and its implementation to Czech environment.<sup>19</sup> The newly prepared strategy for managing and accessing data at MU will be governed by the principle “as open as possible, as closed as necessary”<sup>20</sup> and will not contradict the interests of MU, the interests of the data acquirers, the commercialization of research outputs, the processing of personal data or other legitimate reasons for restricted access to research data.

<sup>17</sup> “Research data” means data knowingly obtained or processed for research purposes in connection with a research task except for data concerning the research task organization.

“Research task” means research activities that include acquisition, storage and utilization of research data. A research task is an activity during which data is acquired, stored and utilised for research purposes, regardless of the manner of its designation or of the origin of money from which the research task is funded.

“Utilization of research data” means processing of research data for the purpose of interpretation, publication or archiving (i.e. management of data accessibility). Utilization of research data also means shredding, making copies and transferring the research data to third parties for processing.

<sup>18</sup> For more details about European Open Science Cloud at the European level see <https://eosc-portal.eu/>.

<sup>19</sup> For more information about the European Open Science Cloud implementation into Czech environment see <https://www.e-infra.cz/eosc>.

<sup>20</sup> See objective OS11.

## FD2: Research data records

**Objective:** To introduce a duty to register the metadata of reported research data<sup>21</sup> of MU researchers in the relevant register no later than within one year after the project ends.

Indicator	Unit	Current status	Future status	Year of fulfilment
Share of projects with registered metadata of reported research data	%	0	90	2027

**Clarifying notes:** This duty shall not involve the publication of data itself; it only concerns the obligation to provide information of the data existence through metadata. It means to strengthen the “F” (Findability) aspect of the FAIR principles, so that the existence of research data is detectable. The practical implementation of this duty will be specified in implementing regulations. The register (Metadata Catalogue of Reported Research Data) will form a part of the university and national solution of research data management. The university will provide adequate support before the introduction of the duty. The registration of reported research data originated before the effective date of this Strategy and the relevant implementing regulations will be dealt with on a voluntary basis. For the purposes of this objective, research data means data according to the definition in MU Directive No. 6/2013 (as amended) or data originated in the course of the research process used for the purpose of verifying the results of the research (process definition). The aim is to prepare the university for the reporting of information about research data in the Information Register of R&D results (RIV) (see the existing field R97 of IS VaVal).

## 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).

Indicator	Unit	Current status	Future status	Year of fulfilment
Pilot version of the university data repository	YES/NO	NO	YES	2023
Linking the repository to OpenAIRE (see OS10)	YES/NO	NO	YES	2023
Possibility of assigning a DOI or another suitable PID to uploaded datasets	YES/NO	NO	YES	2024
Possibility of working with “oversize” datasets	YES/NO	NO	YES	2025

Statistical data monitored	Unit	Current number
Number of field-specific repositories linked to the data repository	pc	0

**Clarifying notes:** The purpose is to provide a solution that will enable MU researchers to manage, securely store and make available research data according to the FAIR principles and that will appropriately complement existing (international) field-specific data repositories. Oversize datasets mean those that exceed the limits for inclusion in the data repository and will need to be stored in repositories outside the data repository. The data repository for MU will be provided within the implementation of European Open Science Cloud (EOSC) into Czech environment.

<sup>21</sup> For the definition of “reported research data” see a chart in Appendix No. 1.

## FD4: Support for 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.

Indicator	Unit	Current status	Future status	Year of fulfilment
Developing tools for the preparation of a DMP+ <sup>22</sup>	YES/NO	NO	YES	2023
Providing support for introduction of FAIR principles of data results	YES/NO	partially	YES	2023
Develop support for the management and registration of cohort studies at MU <sup>23</sup>	YES	partially	YES	2024

Statistical data monitored	Unit	Current number
Number of supported research projects in the area of data management at MU	pc	10
Share of MU research projects with FAIR Data management	%	5
Share of scientific publications by MU staff, where underlying data is accessible in the FAIR mode	%	unknown
Number of datasets published by MU staff in the FAIR mode	pc	unknown
Share of MU students' final theses with FAIR Data management	%	unknown

**Clarifying notes:** This objective concerns the introduction of specialized services and methodological and technological support for FAIR Data issues. One of DMP+ is an extended version of Data Stewardship Wizard<sup>24</sup> (DSW), which is being tested at MU and will be launched in 2022 as a recommended tool for preparation and management of DMP at MU. For more details on DMP see objective OS1.

<sup>22</sup> "DMP+", or Data Management Plan Plus is a plan of research data management for a particular project including information about scientific publications. There will be two levels: 1) pre-project level; 2) project level. The first level will be used for evaluation and early planning of treatment of scientific results within the planned project. The second level will represent the Data Management Plan proper, which will also contain information about scientific publications planned. The second level will only be completed in case the project concerned is transferred to the implementation stage (funding is obtained). In projects that do not generate data, a declaration of "not generating research data" and information about scientific publications planned will be sufficient. For more details see objective OS1. This approach is based on international practice in the work with research data, e.g. in line with Horizon Europe principles.

<sup>23</sup> A cohort means a "panel of individuals monitored on a long-term basis for the purpose of research".

<sup>24</sup> More about the tool at <https://ds-wizard.org/>.

## 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.

Indicator	Unit	Current status	Future status	Year of fulfilment
Share of researchers with available e-infrastructure for the storage of research data.	%	unknown	90	2025
Share of students with available e-infrastructure for the storage of research data.	%	unknown	90	2026
Introduction of SensitiveCloud	YES/NO	NO	YES	2023

Statistical data monitored	Unit	Current number
Share of fields of study with adopted support for comprehensive data management in line with the FAIR Data principles against all fields of study at MU	%	2

**Clarifying notes:** The Open Science Strategy is not primarily responsible for the building of the physical IT storage infrastructure, but aims to use and adapt the services of this e-infrastructure for the needs of Open Science at MU. An example of e-infrastructure is data storage infrastructure of the Institute of Computer Science (ICS) MU and CESNET; an example of a field-specific solution is LINDAT/CLARIAH-CZ. Availability means the possibility to use the e-infrastructure by an MU employee or student. SensitiveCloud is infrastructure prepared at the ICS MU for the purposes of storage and processing of sensitive data (e.g. in biomedical research etc.).



### 3. Open Science horizontal topics at MU

Support for researchers	Internal processes	Standards and principles	Cooperation
<ul style="list-style-type: none"> <li>•OS1: DMP+</li> <li>•OS2: Human resources</li> <li>•OS3: Education and information</li> <li>•OS4: Open Science services</li> </ul>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>•OS8: DOI:</li> <li>•OS9: ORCID</li> <li>•OS10: OpenAIRE</li> <li>•OS11: AOAP, ACAN</li> </ul>	<ul style="list-style-type: none"> <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.

Indicator	Unit	Current status	Future status	Year of fulfilment
Share of research projects with DMP+	%	5	90	2025

Statistical data monitored	Unit	Current number
Share of research projects with planned publishing in the Open Access gold route including planning of funds for APC	%	unknown
Share of research projects with planned publishing in the Open Access green route	%	unknown
Share of research projects with planned publishing in the Open Access platinum/diamond route	%	unknown
Share of research projects with planned funding of storage capacities and human resources for research data management	%	unknown

**Clarifying notes:** “DMP+”, or Data Management Plan Plus is a plan of research data management for a particular project including information about scientific publications. There will be two levels: 1) pre-project level; 2) project level. The first level will be used for evaluation and early planning of treatment of scientific results within the planned project. The second level will represent the Data Management Plan proper, which will also contain information about scientific publications planned. The second level will only be completed in case the project concerned is transferred to the implementation stage (funding is obtained). In projects that do not generate data, a declaration of “not generating research data” and information about scientific publications planned will be sufficient. This approach is based on international practice in the work with research data, in line with Horizon Europe principles.

## OS2: Human resources for Open Science support

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

Indicator	Unit	Current status	Future status	Year of fulfilment
Permanent position of Open Science Manager	YES/NO	partially	YES	2022
Stable Open Science support structure (Core Team, Implementation Group, Advisory Board)	YES/NO	partially	YES	2023
Specialized course for training data curators and data specialists at the individual ECUs (in line with field-specific standards)	YES/NO	NO	YES	2024

Statistical data monitored	Unit	Current number
Number of data curators (stewards) at MU	pc	1
Number of research groups with own support (a specialized data curator)	pc	4

**Clarifying notes:** The OS MU implementation team must have sufficient and qualified staff in order to provide systematic support for and development of Open Science at all levels (managerial, legal and technical). A central role is played by the university-wide *Open Science Core Team*, which is partially funded from the HR4MU II project until the end of 2022 (university-wide funding must be secured after 2022). The team's work is built upon by the *Open Science Implementation Group*, which provides direct support at the individual ECUs and comprises Open Science methodologists (typically library staff, project support staff, R&D and Ph.D. support, lawyers, data specialists, data curators, etc.). The aim of the Open Science Advisory Board, which comprises renowned scientists and science managers with international experience and interest in the development of Open Science, is to provide strategic input and feedback for the targeting and implementation of the university's Strategy. There is a new category of experts: data specialists or data curators who will help researchers with the management, storage and potential accessibility of research data in accordance with the needs and specifics of individual fields and areas. For a more detailed description of Open Science support groups at MU and their activities/focus see Appendix No. 4.

## OS3: Education and information about Open Science

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

Indicator	Unit	Current status	Future status	Year of fulfilment
Share of MU academic staff who participated in Open Science education (workshops, events, seminars, individual consultations)	%	30 %	85 %	2027
Share of MU doctoral students who participated in Open Science education (workshops, events, seminars, individual consultations)	%	15 %	85 %	2027

Statistical data monitored	Unit	Current number
Share of other students of MU who participated in Open Science education (workshops, events, seminars, individual consultations)	%	unknown

Number of educational activities organized	pc	25
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**Clarifying notes:** Education must be understood as a long-term series of activities and topics. It is necessary to explain the necessity and positive impacts of the modern form of scholarly communication and also its negative impacts (e.g. predators, disinformation etc.). Modern trends in online/offline education will be continuously monitored and support will be provided to ensure that course capacity matches demand. The promotion of information and education will include the development and continuous updating of the [openscience.muni.cz](https://openscience.muni.cz) website and the creation of methodological materials for researchers and project support staff, including cooperation on FRESHERS activities, etc.

#### OS4: Open Science services

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

Indicator	Unit	Current status	Future status	Year of fulfilment
Adopted system of MU Open Science services (and their Catalogue) for all areas set by MU Open Science Strategy 2022–2028	YES/NO	partially	YES	2022

Statistical data monitored	Unit	Current number
Number of Open Access services	pc	5
Number of FAIR Data services	pc	2
Number of other services	pc	1

**Clarifying notes:** The aim is to ensure that systematic and sufficient attention is paid to the development of MU Open Science services for the needs of the university's academic community. The services may include consultancy concerning open scientific publishing (selection of a journal including identification of potential predatory journals, finding out the OA requirement for the given journal, communication with the publisher etc.), consultancy regarding the preparation of a DMP, subsequent management and FAIRization of research data, and many others).

#### OS5: Field-specific Open Science policies

**Objective:** To ensure that individual Open Science policies are set at each ECU that engages in research<sup>25</sup> in accordance with field-specific standards and characteristics.

Indicator	Unit	Current status	Future status	Year of fulfilment
Numbers of ECUs engaged in research that have an internal Open Science regulation	pc	3	12	2024

**Clarifying notes:** Each ECU engaged in research (faculties and university institutes) will have adopted its own internal Open Science policy/guideline based on MU Open Science Strategy 2022–2028 and will adapt it to the specific needs of the fields of study and areas dealt with at the given ECU. The aim is not to create a strategy parallel to the university-wide Strategy, but to secure the Open Science support at a given ECU (this activity may include e.g. the definition of the position of the Open Science methodologist at a given ECU, the specification of Open Science duties for the given ECU, etc.).

<sup>25</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

Indicator	Unit	Current status	Future status	Year of fulfilment
Prepared analysis of needs and possibilities of science evaluation at MU that takes into account Open Science promotion	YES/NO	NO	YES	2023

Statistical data monitored	Unit	Current number
Number of measures implemented in MU's science evaluation that promote Open Science	pc	0

**Clarifying notes:** At the international level, there is a consensus on the need to promote Open Science through the evaluation of science at the national and international level,<sup>26</sup> although the right approaches are still a matter of debate and trial. Proven solutions will be adopted at the institutional level, but institutions may also develop their own mechanisms (these must be carefully analysed in advance to avoid potential negative impacts – for example, undue pressure to publish in the OA mode “at any cost” could lead to publishing in predatory journals or generate disproportionate financial costs). Positive forms of support may include an award for “the contribution to Open Science” and emphasize the social impact for MU.

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

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

Indicator	Unit	Current status	Future status	Year of fulfilment
Share of MU grant schemes with Open Science principles	%	0	100	2024
Analysis of new grant schemes for further development of Open Science at MU (e.g. Citizen Science grants etc.)	YES/NO	NO	YES	2024

**Clarifying notes:** The aim is to actively support the development of Open Science at the university level. All forms of Open Access (green, gold, platinum/diamond) are taken into account. The terms of grant schemes will be set in accordance with the relevant international standards (e.g. the European Commission's Horizon 2020, Horizon Europe or the legislative implications of Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information),<sup>27</sup> which is also in line with the newly prepared National Open Science Strategy 2022+.

<sup>26</sup> See for instance the European Commission's study “Towards a Reform of the Research assessment system. Scoping report” published in November 2021, <https://op.europa.eu/en/publication-detail/-/publication/36ebb96c-50c5-11ec-91ac-01aa75ed71a1/language-en>

<sup>27</sup> See Art. 10 of the cited directive: <https://eur-lex.europa.eu/legal-content/CS/TXT/HTML/?uri=CELEX:32019L1024&from=CS>

## OS8: DOI and similar global identifiers of results

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

Indicator	Unit	Current status	Future status	Year of fulfilment
Share of research outputs (articles, monographs, datasets or other artefacts) of MU staff, which have a DOI or a similar identifier assigned	%	55	80	2024

**Clarifying notes:** Various types of persistent global identifiers (PID) are suitable for various types of research outputs (publications vs data); the most frequently used identifier in the current world of science is DOI (Digital Object Identifier).

## OS9: ORCID and similar global identifiers of persons

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

Indicator	Unit	Current status	Future status	Year of fulfilment
Share of MU research/academic staff who have an ORCID assigned	%	60	100	2023

Statistical data monitored	Unit	Current number
Share of research outputs (articles, monographs, datasets or other artefacts) of MU staff, reported to RIV, which state an ORCID in the author's details	%	unknown

**Clarifying notes:** The aim is that all MU employees are assigned an ORCID and that it is actively used in scholarly communication (in publications, communication with publishers, grant agencies, in reporting results etc.). Both the ORCID and the PID should fulfil their potential in linking and automating scientific information in the digital environment and to facilitate new forms of MU's research performance analysis.

## OS10: OpenAIRE

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

Indicator	Unit	Current status	Future status	Year of fulfilment
Share of published research outputs (articles, monographs, datasets or other artefacts) of MU staff, which are indexed through OpenAIRE, against all research outputs reported at MU	%	unknown	95	2027

**Clarifying notes:** OpenAIRE is currently the key European metadata aggregator on open research outputs and a platform for defining and promoting standards for scholarly communication. In case this role is played by another system/infrastructure, this fact must be taken into account.

## 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.

Indicator	Unit	Current status	Future status	Year of fulfilment
Analysis of needs and possibilities of synergies between Open Science and research commercialization – general analysis	YES/NO	NO	YES	2023
	YES/NO	NO	YES	2023
Setting of systematic cooperation between Open Science and research commercialization at MU	YES/NO	NO	YES	2024

Statistical data monitored	Unit	Current number
Number of implemented measures at MU aiming at the increase in synergies between Open Science and research commercialization	pc	0

**Clarifying notes:** An internationally recognized principle/approach to Open Science expressed by the motto “*as open as possible, as closed as necessary*” enables to apply exceptions from the general OS aim, which is open sharing of publicly funded research results. This principle allows to reconcile and link often seemingly contradictory lines of work with research results in order to minimize the potential negative impacts of Open Science. As has been said in the preamble, MU strives to implement Open Science in such a way that negative impacts on the academic environment are prevented as much as possible. This principle e.g. allows not to publish selected scientific findings with the application and commercial potential directly within Open Science, but to provide them to human society indirectly through the transfer of technologies and knowledge and commercialization of the relevant scientific results. An indispensable part of this process is formal protection of such results (e.g. by a patent), where the law requires the element of novelty, and thus a closed system of work with the research results and their intentional non-disclosure. This non-disclosure approach, which only considers disclosing the research results in a particular case is fully legitimate and in line with the principles of Open Science, and MU’s internal processes must properly and effectively reflect it. Certain scientific results, especially data or specific technical solutions, will only be beneficial to society when they are translated from the theoretical level into a specific commercial product or service, thus linking the academic world with the application (commercial) sector. The aim of this measure is to ensure that this principle is utilized in the MU environment.

## 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.

Indicator	Unit	Current status	Future status	Year of fulfilment
Involvement in the National Centre for Information Support for Research, Development and Innovation (NCIP VaVal) and cooperation with the National Library of Technology (NTK)	YES/NO	partially	YES	2022
Cooperation with e-INFRA CZ	YES/NO	partially	YES	2022
Cooperation with the Association of Libraries of Czech Universities (AKVŠ)	YES/NO	partially	YES	2022
Implementation of EOSC in the CR	YES/NO	partially	YES	2022

**Clarifying notes:** This is in particular the cooperation within the “e-INFRA CZ” consortium and partners such as the National Library of Technology (NTK), Research, Development and Innovation Council (RVVI) and other university and research institutes and infrastructures “rich in data”.

## OS13: International initiatives

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

Indicator	Unit	Current status	Future status	Year of fulfilment
Involvement in the EOSC consortium	YES/NO	partially	YES	2022
OpenAIRE consortium	YES/NO	partially	YES	2022
Field-specific initiatives related to the research conducted at MU ELIXIR, BBMRI, LINDAT/CLARIAH and others)	YES/NO	partially	YES	2023
European Commission’s DG RTD in the area of Open Science	YES/NO	NO	YES	2023
Establish MU’s position regarding initiatives promoting platinum/diamond Open Access routes (FJN and others)	YES/NO	NO	YES	2023
Involvement and cooperation in selected international Open Science organizations and alliances	YES/NO	partially	YES	2023

**Clarifying note:** These are mainly selected initiatives where MU will participate separately or in cooperation with partners. This activity will be continuously evaluated and new initiatives will be added, as appropriate.

## Acronyms and definitions

Acronym	Description
DMP	Data Management Plan is a document that describes the planned process of handling research data in a particular project / research task. It may include information on data collection and generation, data processing, storage, protection, access, reuse, licensing, interoperability, size, and data formats, a financial processing model and long-term storage, etc.
DMP+	Data Management Plan Plus, an extended data management plan. It is a DMP supplemented with information on scientific publications to be produced as part of the project.
AOAP, ACAN	As open as possible, as closed as necessary. This collocation expresses a recognized principle of research data management / approach to Open Science, which allows to exclude publishing in the open mode e.g. under grant terms on the grounds of generally accepted objective reasons such as protection of personal data, commercialization of the research result etc.
FAIR	The acronym means Findability, Accessibility, Interoperability, Reusability. The FAIR principles express the required characteristics of research data that should facilitate easier findability of such data in both human- and machine-readable form. This data is furthermore provided with high-quality metadata and unique persistent identifiers, stored in standard formats, accessible through standard open protocols and with clear information on the terms and possibilities of use. The FAIR principles can now be considered one of the standards for working with research data in the international environment.
Green OA	An Open Access model based on making scientific texts accessible, especially preprints and postprints, by storing them in an open repository, on the author's website or at their workplace (autoarchiving). Open Access is provided by the author, who must act in such a way that the rights of any third parties (usually the publisher) to the work are not infringed. <sup>28</sup>
Gold OA	An Open Access model based on publishing peer-reviewed scientific articles in open journals. Open Access is provided by the publisher. <sup>29</sup> However, the author often pays a charge (APC) to the publisher for the Open Access.
APC	Article Processing Charge is a fee for processing an article for publication. The charge is paid by the author of the article or, as the case may be, the author's institution to

<sup>28</sup> Havlová, Jaroslava, Marek, Jiří. Zelená cesta otevřeného přístupu. In: KTD: Česká terminologická databáze knihovnictví a informační vědy (TDKIV) [online]. Praha: Národní knihovna ČR, 2003- [cit. 2022-04-14]. Available at: [https://aleph.nkp.cz/F/?func=direct&doc\\_number=000015851&local\\_base=KTD](https://aleph.nkp.cz/F/?func=direct&doc_number=000015851&local_base=KTD).

<sup>29</sup> Havlová, Jaroslava, Marek, Jiří. Zlatá cesta otevřeného přístupu. In: KTD: Česká terminologická databáze knihovnictví a informační vědy (TDKIV) [online]. Praha: Národní knihovna ČR, 2003- [cit. 2022-04-14]. Available at: [https://aleph.nkp.cz/F/?func=direct&doc\\_number=000015850&local\\_base=KTD](https://aleph.nkp.cz/F/?func=direct&doc_number=000015850&local_base=KTD).



	the publisher for publishing the article in the OA free-of-charge mode for the readers.
Platinum/Diamond OA	An open publishing model where the author does not pay any APC to the publisher for publishing an article in the OA mode. The publisher does not charge the readers for the access to the article, either. The publishing costs are settled by the state, trade unions or learned societies as a form of supporting the advancement of science. The platinum/diamond OA aptly complements the green and gold routes and is becoming an emerging trend in open publishing.
EIR	Electronic information resources
Research data reported	Research data stated in the DMP for a particular scientific task/project that is a reported output of a project.
Other research data	Research data that originated within a research task, but was not planned and is not intended to be reported as a project result.
Open Science	An initiative advocating an open access to scientific knowledge, i.e. an effort to make scientific knowledge and outputs of research projects generally available to the general (and professional) public free of charge and in as accessible a form as possible (see FAIR principles). It applies to scientific publications as well as to research data and other areas such as Citizen Science etc.
Open Access	A model of communication of scientific research results where scientific publications are made available to readers in an open mode and free of charge. Payments for publishing and peer-review costs are settled in various ways, see the Open Access green, gold and platinum/diamond routes.
PID	Persistent Identifier is a short character string that uniquely identifies a digital object, e.g. a scientific publication, dataset, etc. This identifier directly refers to the given object, but not to its physical location. By means of appropriate services, the user can use the persistent identifier to identify the current location of the object. The use of a PID therefore allows an object to be uniquely referenced and permanently accessed by users, while allowing for changes to the physical location of the object.
OS Core Team	The central team for Open Science support at MU
OS Implementation Group	An extended MU Open Science support team consisting of "Open Science methodologists" at MU economic units.
OS Advisory Board	An advisory group for implementation and support for Open Science at MU, consisting of senior researchers in different fields, representatives of the management of MU constituent parts and representatives of MU research infrastructures.

## Appendices

### Appendix No. 1: Chart of MU Open Science Strategy 2022–2028 definitions

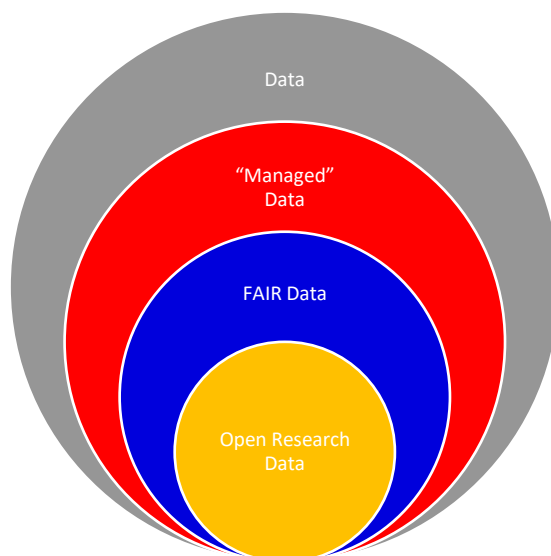


Figure 1: Levels of processed data<sup>30</sup> (in terms of a research task and the degree of data openness)

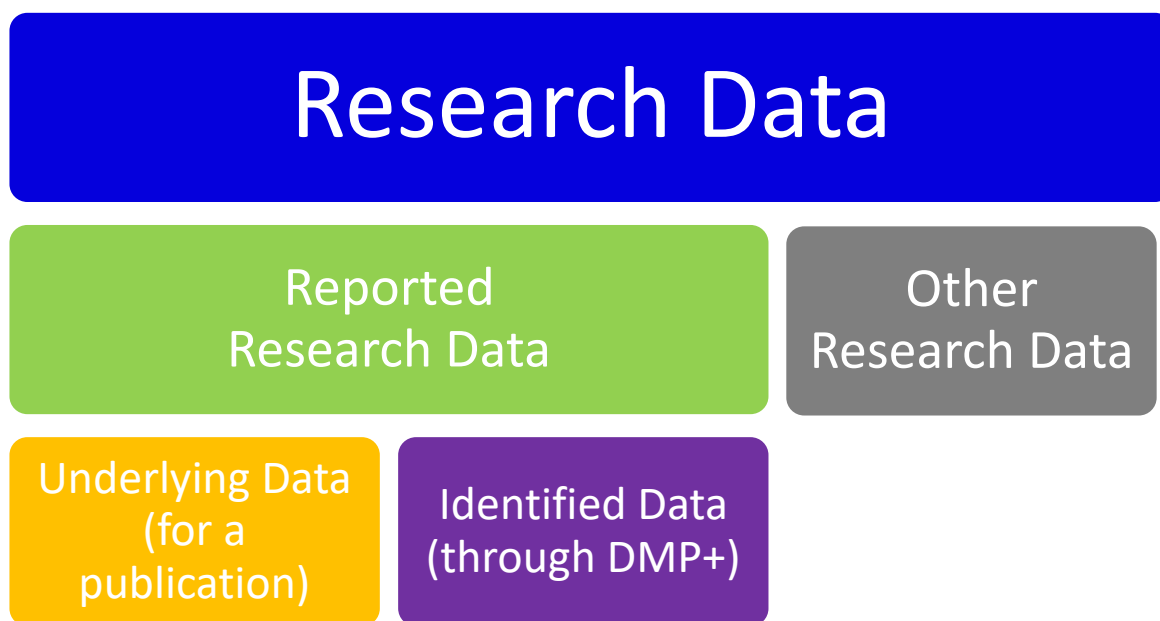


Figure 2: Definitions of data types managed within a research task (in terms of data registration)<sup>31</sup>

<sup>30</sup> The chart depicts different levels of the data processed.

“Data” – any data that can be used for research.

“Managed Data” – data managed for the purposes of a certain research task (Section 2(b) of MU Directive No. 6/2013 (as amended)).

“FAIR Data” – data that is worth and suitable for “FAIRization”.

“Open Research Data” – data that can be published in the Open Data / Open Access.

<sup>31</sup> Chart of managed research data (*Managed Data*) within a research task (Section 2(b) MU Directive No. 6/2013 (as amended) in terms of data registration. MU research data is divided into “*Reported Research Data*” (data stated in the DMP for a particular scientific task/project (intended to be reported as project results) and “*Other Research Data*” (data that originated within a research task, but was not planned and is not intended to be reported as project results).

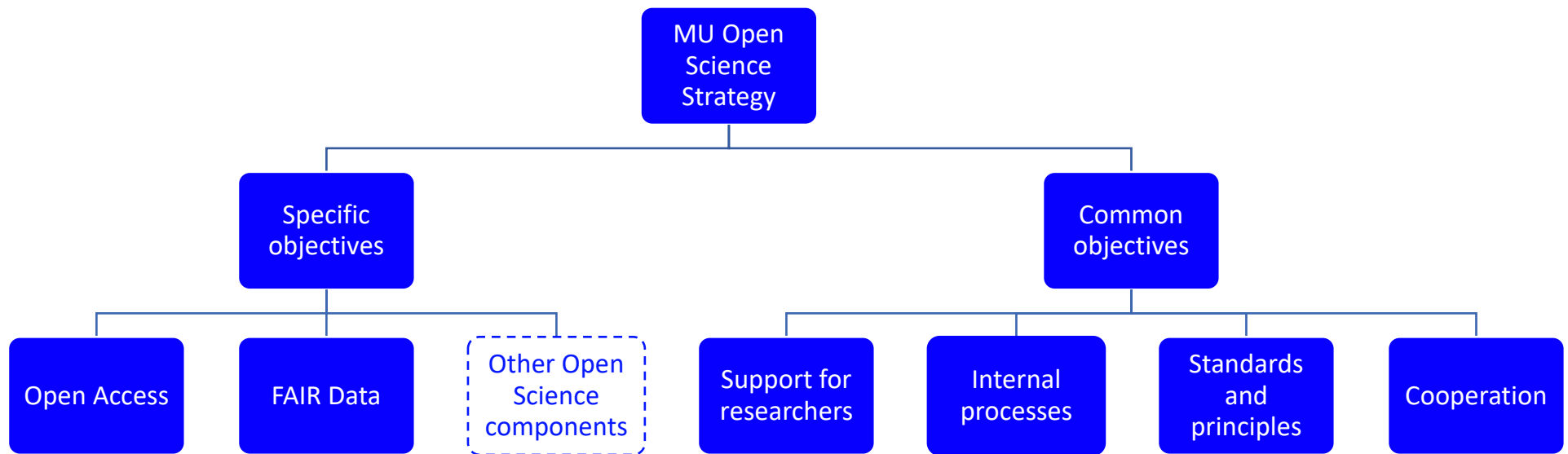
## Appendix No. 2: Overview of indicators of MU Open Science Strategy 2022–2028

Objective:	Indicator	Unit	Current status	Future status	Year of fulfilment
OA1	Share of publications in the MU Repository against all publications listed in the Metadata Catalogue of Publication Records of MU	%	10	90	2027
OA2	Share of open publications of J and D type (according to the methodology of the Information Register of R&D results /RIV/) in the MU Repository	%	10	75	2027
OA2	Analysis of the university strategy for the retention of sufficient intellectual property rights of authors of its publications (Rights Retention Strategy)	YES/NO	NO	YES	2023
OA3	Linking MU Repository to OpenAIRE (see OS10)	YES/NO	partially	YES	2022
OA3	Possibility of attaching underlying data to a publication in the MU Repository	YES/NO	partially	YES	2023
OA3	Possibility of assigning a DOI or another suitable PID to publications that have not been assigned a PID by the publisher	YES/NO	NO	YES	2023
OA3	Guarantee of long-term storage and accessibility of the uploaded publications	YES/NO	partially	YES	2027
OA4	Share of Open Access proceedings from conferences organized by MU	%	unknown	80	2027
OA5	Introduction of MU OA Fund	YES/NO	NO	YES	2022
OA6	To secure an active role of MU in the CzechElib consortium in the process of EIR funding transformation	YES/NO	partially	YES	2022
OA6	To secure an active role of MU in the debate with national publishers (field-specific)	YES/NO	partially	YES	2024
OA6	To secure a regular monitoring of APC at MU	YES/NO	partially	YES	2022
FD1	Strategy for research data management and access at MU	YES/NO	NO	YES	2024
FD2	Share of projects with registered metadata of reported research data	%	0	90	2027
FD3	Pilot version of the university data repository	YES/NO	NO	YES	2023
FD3	Linking the repository to OpenAIRE (see OS10)	YES/NO	NO	YES	2023
FD3	Possibility of assigning a DOI or another suitable PID to uploaded datasets	YES/NO	NO	YES	2024
FD3	Possibility of working with “oversize” datasets	YES/NO	NO	YES	2025
FD4	Developing tools for the preparation of a DMP+	YES/NO	NO	YES	2023
FD4	Providing support for introduction of FAIR principles of data results	YES/NO	partially	YES	2023
FD4	Develop support for the management and registration of cohort studies at MU	YES	partially	YES	2024
FD5	Share of researchers with available e-infrastructure for the storage of research data.	%	unknown	90	2025
FD5	Share of students with available e-infrastructure for the storage of research data.	%	unknown	90	2026
FD5	Introduction of SensitiveCloud	YES/NO	NO	YES	2023
OS1	Share of research projects with DMP+	%	5	90	2025

<b>OS2</b>	Permanent position of Open Science Manager	YES/NO	partially	YES	2022
<b>OS2</b>	Stable Open Science support structure (Core Team, Implementation Group, Advisory Board)	YES/NO	partially	YES	2023
<b>OS2</b>	Specialized course for training data curators and data specialists at the individual ECUs (in line with field-specific standards)	YES/NO	NO	YES	2024
<b>OS2</b>	Permanent position of Open Science Manager	YES/NO	partially	YES	2022
<b>OS3</b>	Share of MU academic staff who participated in Open Science education (workshops, events, seminars, individual consultations)	%	30%	85%	2027
<b>OS3</b>	Share of MU doctoral students who participated in Open Science education (workshops, events, seminars, individual consultations)	%	15 %	85 %	2027
<b>OS4</b>	Adopted system of MU Open Science services (and their Catalogue) for all areas set by MU Open Science Strategy 2022–2028	YES/NO	partially	YES	2022
<b>OS5</b>	Numbers of ECUs engaged in research that have an internal Open Science regulation	pc	3	12	2024
<b>OS6</b>	Prepared analysis of needs and possibilities of science evaluation at MU that takes into account Open Science promotion	YES/NO	NO	YES	2023
<b>OS7</b>	Share of MU grant schemes with Open Science principles	%	0	100	2024
<b>OS7</b>	Analysis of new grant schemes for further development of Open Science at MU (e.g. Citizen Science grants etc.)	YES/NO	NO	YES	2024
<b>OS8</b>	Share of research outputs (articles, monographs, datasets or other artefacts) of MU staff, which have a DOI or a similar identifier assigned	%	55	80	2024
<b>OS9</b>	Share of MU research/academic staff who have an ORCID assigned	%	60	100	2023
<b>OS10</b>	Share of published research outputs (articles, monographs, datasets or other artefacts) of MU staff, which are indexed through OpenAIRE, against all research outputs reported at MU	%	unknown	95	2027
<b>OS11</b>	Analysis of needs and possibilities of synergies between Open Science and research commercialization – general analysis	YES/NO	NO	YES	2023
<b>OS11</b>	Analysis of impacts of opening up academic research and its results (especially data) on the commercialization of MU's research	YES/NO	NO	YES	2023
<b>OS11</b>	Setting of systematic cooperation between Open Science and research commercialization at MU	YES/NO	NO	YES	2024
<b>OS12</b>	Involvement in the National Centre for Information Support for Research, Development and Innovation (NCIP VaVal) and cooperation with the National Library of Technology (NTK)	YES/NO	partially	YES	2022
<b>OS12</b>	Cooperation with e-INFRA CZ	YES/NO	partially	YES	2022
<b>OS12</b>	Cooperation with the Association of Libraries of Czech Universities (AKVŠ)	YES/NO	partially	YES	2022

<b>OS12</b>	Implementation of EOSC in the CR	YES/NO	partially	YES	2022
<b>OS13</b>	Involvement in the EOSC consortium	YES/NO	partially	YES	2022
<b>OS13</b>	OpenAIRE consortium	YES/NO	partially	YES	2022
<b>OS13</b>	Field-specific initiatives related to the research conducted at MU ELIXIR, BBMRI, LINDAT/CLARIAH and others)	YES/NO	partially	YES	2023
<b>OS13</b>	European Commission's DG RTD in the area of Open Science	YES/NO	NO	YES	2023
<b>OS13</b>	Establish MU's position regarding initiatives promoting platinum/diamond Open Access routes (FJN and others)	YES/NO	NO	YES	2023
<b>OS13</b>	Involvement and cooperation in selected international Open Science organizations and alliances	YES/NO	partially	YES	2023

Appendix No. 3: Chart of MU Open Science Strategy 2022–2028



## Appendix No. 4: Roles of MU Open Science support teams in the implementation of the Strategy

