

AZV AND
OPEN
SCIENCE

AMUN I

29.5.2023



EVROPSKÁ UNIE
Evropské strukturální a investiční fondy
Operační program Výzkum, vývoj a vzdělávání



MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY

PROJEKT: CZ.02.2.69/0.0/0.0/18_054/0014703

MUNI
ICS

AZV 2024 projects and Open Science/Data

Jiří Marek
ICS MUNI

29.5.2023

TENDER DOCUMENTATION FOR PUBLIC TENDER NO.1 IN RESEARCH, EXPERIMENTAL DEVELOPMENT AND INNOVATION

Attachment n. 1: XVII. Rights to the Results of the Project (p. 50/53)

(3) „The Beneficiary is obliged to ensure the management of research data collected or generated during the Project and to provide information on the availability and dissemination of research results and research data in accordance with the principle that research results and research data are not made public only in justified cases „

(3) “Příjemce je povinen zajistit správu výzkumných dat shromážděných či vytvořených v průběhu řešení projektu a poskytnout informace o dostupnosti a způsobu šíření výsledků výzkumu a výzkumných dat v souladu se zásadou, že výsledky výzkumu a výzkumná data nejsou zveřejňovány pouze v odůvodněných případech „

Section 5.7: Expected Results 5) (p. 34/36)

(5) “When publishing the Project results, it is recommended to carefully consider the choice of a peer-reviewed journal and not to publish in dubious journals that exhibit features of poor publishing practice, do not comply with publication standards and ethics (e.g. high number of self- citations, poor quality or fictitious peer-review procedures, fictitious names of editorial board members, fictitious quality indicators, etc.) (for more information, see for example <https://openscience.cuni.cz/OSCIEN-36.html>).”

(5) „Při publikování výsledků projektu se doporučuje pečlivě zvážit výběr odborného časopisu a nepublikovat v pochybných časopisech, které vykazují rysy špatné publikační praxe, nedodržíjí publikační standardy a etiku (např. vysoký počet autocitací, nekvalitní nebo fiktivní recenzní řízení, smyšlená jména členů redakční rady, smyšlené indikátory kvality apod.) (bližší informace například <https://openscience.cuni.cz/OSCI-37.html>).“

Attachment n. 4: Article 2.1 of the Framework, Section 2.1.1 Public financing of non-economic activities a) (p. 60/64)

(a) „public dissemination of research results on a non-exclusive and non-discriminatory basis, for example through teaching, open access databases, publicly available publications or open-source software;“

(a) “veřejné šíření výsledků výzkumu na nevýlučném a nediskriminačním základě, například prostřednictvím výuky, databází s otevřeným přístupem, veřejně přístupných publikací či otevřeného softwaru;“

Other issues

- **Section 5.7 Project proposal:** Deliverable can be also Open Source Software
- **Section 5.3 Project proposal:** Preliminary/pilot data – pilot data supporting the Project focus and hypothesis (d): + **ORCID ID**
- **Section 3.3 Project proposal:** (4) It is not possible to submit to the tender a Project proposal whose aim is to create a registry that corresponds in nature to the national health registry, the creation and administration of which is regulated by Act No 372/2011 Coll., on health services and conditions of their provision, as amended. Individual Projects may include the creation of a registry that is a database (collection of specific data that will be used to address the Project objectives), but the final goal of the Project is to achieve new knowledge.

Origins of this novelty

- Art. 10. 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
- Čl. 10. Směrnice Evropského parlamentu a Rady (EU) 2019/1024 ze dne 20. června 2019 o otevřených datech a opakovaném použití informací veřejného sektoru

Origins of this novelty 2

- „Member States shall support the availability of research data by *adopting national policies and relevant actions aiming at making publicly funded research data openly available ('open access policies')*, following the principle of 'open by default' and compatible with the FAIR principles. In that context, concerns relating to intellectual property rights, personal data protection and confidentiality, security and legitimate commercial interests, shall be taken into account in accordance with the principle of 'as open as possible, as closed as necessary'. *Those open access policies shall be addressed to research performing organisations and research funding organisations.*“
- „Členské státy podporují dostupnost údajů z výzkumu tím, že *přijmou vnitrostátní politiky a příslušná opatření s cílem otevřeně zpřístupnit všechny údaje z výzkumu financovaného z veřejných prostředků („politiky otevřeného přístupu“)* podle zásady „standardního zpřístupnění dokumentů ve formě otevřených dat“ a slučitelných se zásadami FAIR. V této souvislosti by měly být zohledněny obavy týkající se práv duševního vlastnictví, ochrany osobních údajů a důvěrnosti, bezpečnosti a oprávněných obchodních zájmů, v souladu se zásadou „co nejotevřenější, uzavřené podle potřeby“. *Tyto politiky otevřeného přístupu se zaměřují na organizace provádějící výzkum a organizace financující výzkum.*“

Open Science basics regarding data

Two types of data to share

1. Data supporting a journal article

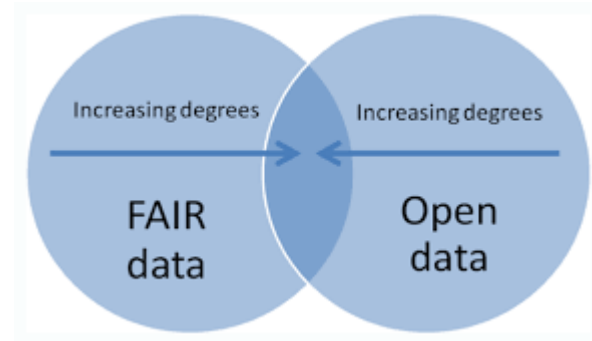
„Data, including associated metadata, needed to validate the results presented in scientific publications.“

2. Individual data sets

„Other data, including associated metadata connected to particular research project (as specified in the ‘data management plan‘)“

Source: H2020 Programme AGA – Annotated Model Grant Agreement Version 5.2 – 26.6.2019. [online] s. 248. Available at: http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf

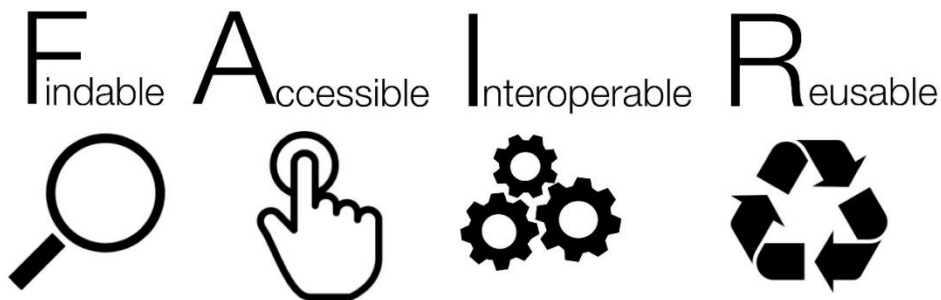
Open/FAIR data



Open Data ↔ FAIR Data

„As Open as Possible, as Closed as Necessary“

- **Findable** – metadata, registration, global persistent identifiers
- **Accessible** – standards for machine-readability, AAI
- **Interoperable** – semantic description of data and metadata, standards
- **Reusable** – clear licensing, data provenance (reproducibility)



<https://www.nature.com/articles/sdata201618>

What to do for AZV proposal?

What to do?

1. Principle as “*open as possible as closed as necessary*”
2. No DMP needed, but highly recommended to manage your reports -> we have a tool for it. [Data Stewardship Wizard](#)
3. Ideas about this agenda – not mandatory:
 - a. What kind of data will be generated?
 - b. What is the format of your data?
 - c. Where are you going to store your data?
 - d. How are you going to handle data?
4. No info about eligibility of APC or data management related costs, but it is eligible based on the general conditions
5. There is no defined methodology regarding this grant proposal condition in AZV grants, you can get inspired in [Horizon Europe \(HEU\) projects](#), [OP JAK – Špičkový výzkum](#), but the scope in AZV is much smaller.

M U N I
I C S

Inspiration from HEU projects

Inspiration from HEU:

1.2 Methodology - overall

- *„Open science practices: Describe how appropriate open science practices are implemented as an integral part of the proposed methodology. Show how the choice of practices and their implementation is adapted to the nature of your work in a way that will increase the chances of the project delivering on its objectives [e.g. up to 1/2 page, including research data management]. If you believe that none of these practices are appropriate for your project, please provide a justification here.“*

Inspiration from HEU:

1.2. Methodology - DMP

- „Writing a *DMP* is an activity directly linked to the methodology of the *research*, i.e. good data management will make the work more efficient/save time, contribute to safeguarding information and to increasing the impact and the value of the data among the beneficiaries and others, during and after the research.“

„AGMA Horizon Europe, p. 159“

Inspiration from HEU: Open Science practices

- Mandatory:
 - Open Access
 - Research Data Management
- Recommended:
 - open sharing of research (for example through [pre-registration](#), [registered reports](#), [pre-prints](#))
 - research output management (measures to ensure reproducibility of research outputs)
 - open access to software, models, algorithms, and workflows
 - participation in [open peer-review](#);
 - involving all relevant knowledge actors (e.g. [citizen science](#) or [crowd-sourcing](#), [co-creation](#), co-design, [co-assesment](#)).

M U N I
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MU support

Help for your proposal: Recommendations for the Usage of Storages

IT MUNI

Search ...



Čeština

I Need to ... IT Services IT News IT Centres

Recommendations for the Usage of Storages

A number of data storage solutions can be used at the university. Different repositories guarantee different levels of data security. Before you start storing data on a flash drive, mobile phone, network, or cloud, look at the recommendations for what storage is suitable for what types of data. If you are not sure where to store specific data, don't hesitate to contact us.

Consult Storage
Solutions

- [1. Data Categorization](#)
- [2. Storage Categorization](#)
- [3. Repositories Suitability for Different Types of Data](#)
- [4. Complete Documentation](#)

1. Data Categorization

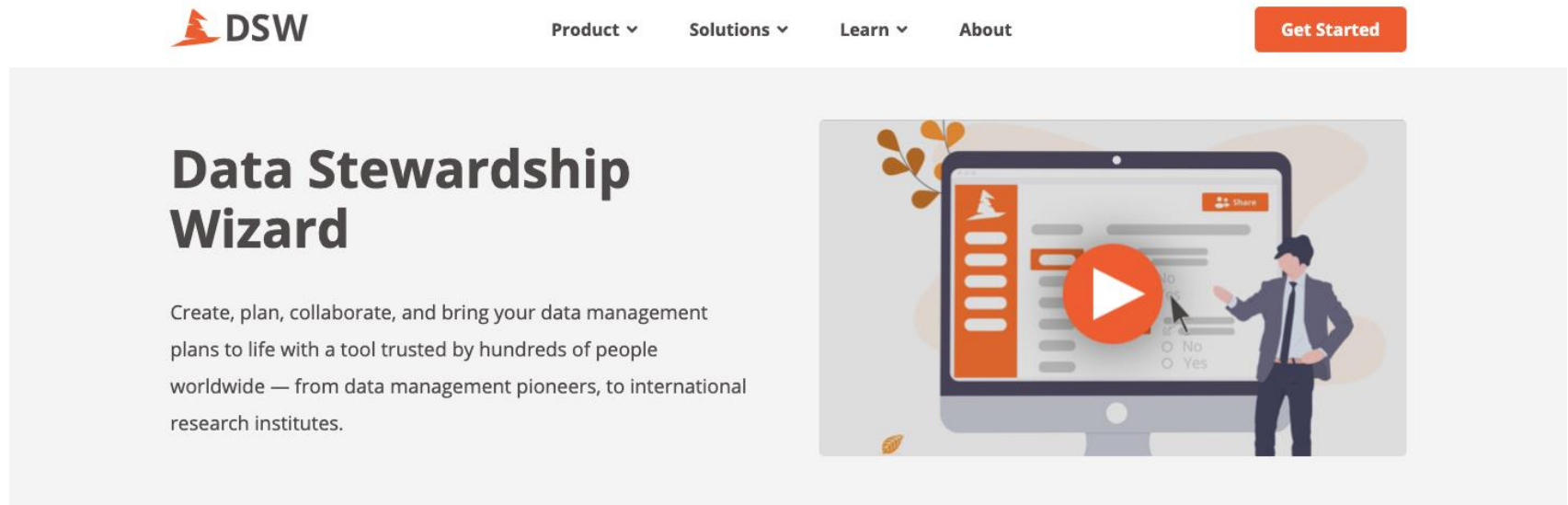
The table categorizes the types of data that MUNI students and employees may encounter. These are 4 categories of data sensitivity.

CATEGORIZATION	DESCRIPTION	EXAMPLES
Public Data	<ul style="list-style-type: none">Data is accessible to anyone without any restrictions, e.g., publicly displayed on the Internet.Their publication does not pose any threat to MUNI or other institutions/persons.	<ul style="list-style-type: none">presentations from public lectures;publicly available research reports;open-source software;public research data;promotion, public information about services.

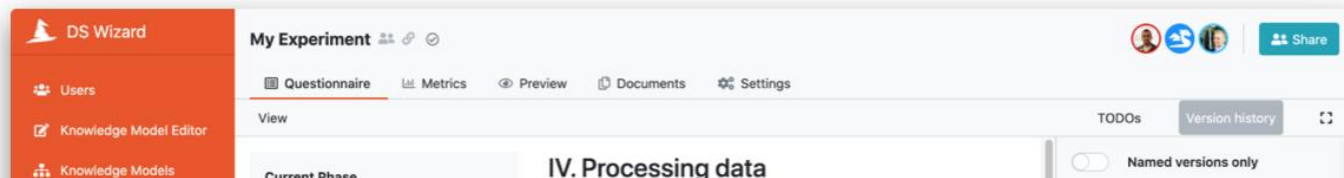
Help for your proposal: University directives

- MU Directive No. 1/2013 - Institutional repository
- MU Directive No. 6/2013 - Research data
- MU Directive No. 1/2018 - Personal Data Processing and Protection
- MU Directive No. 10/2013 - Intellectual property
- MU Directive No. 5/2015 - Research Ethics at MU

Help for your proposal/data management: MU DMP Tool: Data Stewardship Wizard



The image shows the top portion of the Data Stewardship Wizard (DSW) website. At the top left is the DSW logo, which consists of an orange stylized tree icon followed by the letters 'DSW'. To the right of the logo is a navigation menu with four items: 'Product', 'Solutions', 'Learn', and 'About', each with a small downward-pointing chevron. Further to the right is a prominent orange button with the text 'Get Started' in white. Below the navigation is a large hero section with a light gray background. On the left side of this section, the title 'Data Stewardship Wizard' is written in a large, bold, dark gray font. Underneath the title, there is a paragraph of text: 'Create, plan, collaborate, and bring your data management plans to life with a tool trusted by hundreds of people worldwide — from data management pioneers, to international research institutes.' To the right of the text is a large illustration of a man in a dark suit and white shirt standing next to a large computer monitor. The monitor displays a user interface with a sidebar on the left, a main content area with a large orange play button in the center, and a 'Share' button in the top right corner. The man is pointing towards the play button on the screen.



The image is a screenshot of the DSW application interface. On the left side, there is a vertical orange sidebar with the 'DS Wizard' logo at the top and three menu items: 'Users', 'Knowledge Model Editor', and 'Knowledge Models'. The main content area has a white background. At the top of this area, it says 'My Experiment' followed by icons for users, a share icon, and a refresh icon. Below this, there is a horizontal menu with 'Questionnaire', 'Metrics', 'Preview', 'Documents', and 'Settings'. Underneath the menu, the text 'View' is visible. The main content area displays 'Current Phase' as 'IV. Processing data'. On the right side of the interface, there are 'TODOs' and 'Version history' sections. A toggle switch is visible, currently turned off, with the label 'Named versions only' next to it.

EOSC-CZ Implementation

National Czech
Programme



Hledej ...



[O nás](#)

[Pracovní skupiny](#)

[Sekretariát EOSC-CZ](#)

[Školící centrum](#)

[Informace a události](#)

[Kontakt](#)

EOSC-CZ (beta)

European Open Science Cloud (EOSC) je evropská iniciativa zaměřená na rozvoj infrastruktury podporující postupy otevřené vědy v oblasti správy výzkumných dat. Nyní se začíná implementovat v ČR.



Antipredatory service

Compliance with the principles of transparency and best practice in scholarly journals

The aim of service

Provide serious candidates for publication in an Open Access journal with information on whether the title adheres principles of transparency and best practice in scholarly journals.

To whom the service is provided

The service is provided exclusively only to current PhD students and academic staff from Masaryk University. Request of other persons will not be processed.

Reminder: APC as eligible cost

1. APC for OA publications are eligible costs within the duration of the project

APC = Article Processing Charge (fee for OA publishing)

Open Science support can help you estimate the costs of APC, that should be written to you budget proposal.

Don't hesitate to ask: MU Open Science Support

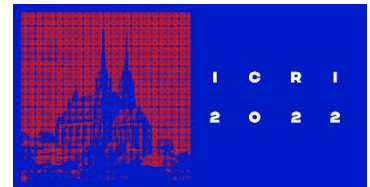
- **Open Science Methodologists** at your faculty/institute:
<https://openscience.muni.cz/en/contacts/open-science-methodologists>
- **Specialized Open Science support for projects:**
osprojekty@space.muni.cz
- **FAIR Data specialized support:** ruzicka@ics.muni.cz

Strategie Open Science MU 2022–2028

Approved 1. 11. 2022

„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.“

The [Strategy](#) is fully in line with [international trends](#), the outputs of the [ICRI 2022](#) conference and the newly presented [Brno Declaration on Fostering a Global Ecosystem of Research Infrastructures](#).



Open Access policy

- OA1:** Storage of MU scientific publications
- OA2:** Increasing the accessibility of MU scientific publications

Specialized support for Open Access development

- OA3:** MU Repository
- OA4:** Open publishing

Open Access funding

- OA5:** MU OA fund
- OA6:** EIR adaptation to a transformation model

FAIR Data policy

- FD1:** Strategy for MU research data management and access
- FD2:** Research data records

Specialized support for FAIR Data development

- FD3:** MU data repository
- FD4:** Support for research data management and access

FAIR Data infrastructure

- FD5:** Research data infrastructure

Support for scientists

- OS1:** DMP+
- OS2:** Human resources
- OS3:** Education and information
- OS4:** Open Science services

Internal processes

- OS5:** Policies at individual ECUs
- OS6:** Open Science in the science evaluation context
- OS7:** Open Science and MU grant schemes

Standards

- OS8:** DOI:
- OS9:** ORCID
- OS10:** OpenAIRE
- OS11:** AOAP, ACAN

Cooperation

- OS12:** National initiatives
- OS13:** International initiatives

Inspiration: Basic „Open Science policy text“ for your proposals, if needed

- *Masaryk University (MU), as the coordinator at the **XXX** project, proactively **supports** the implementation of **Open Access and FAIR Data practices** since 2020. A dedicated Open Science Methodologist at each faculty guides researchers and academics to effectively exploit opportunities to share data to benefit their research groups, community, and society. [MU recently adopted Open Science Strategy 2022–2028](#) goal is to bring Open Science practices as a standard for everyday use for MU researchers. The Strategy is fully in line with international best practice recommendations by EUA ([The EUA Open Science Agenda 2025](#)), UNESCO ([Checklist for universities on implementing the UNESCO recommendation on Open Science](#)), and Horizon Europe ([Horizon Europe Programme Guide](#)) recommendations. MU embodies research output management as part of intellectual property (IPR) management into Open Science considerations already in the planning stage of the projects, including budgeting-related costs. Implementation is driven by standard procedures centered around FAIR principles, the “as open as possible, as closed as necessary” principle, and proper Research Data Management (RDM) to enable maximum readiness of our researchers and the research infrastructure for open and effective dissemination of scientific results. The ultimate goal is to enhance knowledge transfer between academia and multiple stakeholders.*

Inspiration: Basic „Open Science policy text“ for your proposals, if needed

- *MU considers good Open Science practices as a building block for the future dissemination and exploitation of scientific results. This approach enables the university to foster activities regarding the reproducibility of research and to deliver better support to identified pathways of the impact of MU research. In this respect, the project **XXX** and the whole consortium will have all the support needed to enable Open Science practices and proper RDM Planning (e.g., support in dealing with publishers regarding the Open Access mandate) MU's goal within this consortium is also to help the other partners with the Open Science agenda to better transfer scientific knowledge nationally/cross-institutionally.*

Inspiration: Basic „data text“ for your proposals, if needed

- The project **XXX** will generate several data types. Thus, proper RDM planning, and a sustainable RDM plan design are critical. To create the DMP, the project has used and will further use the university-provided application [Data Stewardship Wizard](#), implemented and tested at MU, as a university tool to assess and manage data for research projects. One of the advantages of this application is its ability to calculate the level of FAIRness of the DMP. This function will enable us to continuously improve the work with produced data within the project lifetime, give guidance to other users after the project ends, and increase the possible future reproducibility of our research outputs. A proper RDM Plan will also enable the project team to share and comment on negative results produced during the project to foster sharing knowledge among colleagues from respective fields. Proper licensing and privacy data management is considered a standard. The necessary waivers of data regarding IPR or sui generis database rights, where applicable, will be managed via CC0 or CC-BY. The handling of personal data will be addressed following the instruction partners' directives on this topic (e.g., MU Directive 1/2018). The RDM Plan will be published together with all remaining data listed in the DMP Plan that haven't been published yet at the end of the project. Under the new MU Open Science Strategy 2022–2028 (goal OS1), the RDM practices are part of the so-called DMP+ (Data Management Plus) concept. This concept broadens good RDM planning practices to other research outputs (in the first phase to publications). By this approach, proper management of various research outputs and IPR management is secured to enable smooth and seamless cooperation, transparency, and clarity regarding results ownership within the project consortia and lower the barriers to further exploitations of produced outputs of **XXX** project. For details, refer to the Data Management Plan.

Inspiration: Basic „EOSC-CZ text“ for your proposals - ENG

- *"From 2024, there will be a gradual introduction of services and components of the so-called National Data Infrastructure (NDI), as envisaged by the [Architecture for the implementation of EOSC in the Czech Republic](#), to manage research data in the Czech Republic. In particular, the use of the so-called National Repository Platform (NRP) component is then discussed. Due to the fact that this infrastructure is just being created, it is currently not possible to provide more detailed information than what is provided at www.e-infra.cz/eosc. The [fill in] project consortium is aware of this initiative and will continuously monitor it in order to evaluate the possibility of using the upcoming services and storage capacities of the national solution."*
- **We recommend including this text to make it clear that your project is in line with other planned activities in the field of research data management in the Czech Republic.**
- EOSC = European Open Science Cloud

Inspiration: Basic „EOSC-CZ text“ for your proposals - CZ

- *„Od roku 2024 dojde k postupnému zavádění služeb a komponent tzv. Národní datové infrastruktury (NDI), jak je předpokládáno [Architekturou pro implementaci EOSC v ČR](#), pro účely správy výzkumných dat v ČR. Zejména se poté jedná o využití komponenty tzv. Národní repozitářové platformy (NRP). S ohledem na to, že nyní teprve vzniká tato infrastruktura, není možné aktuálně uvést bližší informace, než které jsou uvedeny na www.e-infra.cz/eosc. Konsorcium projektu **[doplnit]** si je vědomo této iniciativy a bude ji průběžně monitorovat, aby mohlo vyhodnotit možnost využití připravovaných služeb a úložných kapacit národního řešení.“*
- **Tento text doporučujeme uvést, aby bylo zřejmé, že Váš projekt je v souladu s dalšími plánovanými aktivitami na poli správy výzkumných dat v ČR.**
- EOSC = European Open Science Cloud

Discussion

AZV AND
OPEN
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THANK YOU
FOR YOUR
ATTENTION!

29.5.2023

AMUN I



EVROPSKÁ UNIE
Evropské strukturální a investiční fondy
Operační program Výzkum, vývoj a vzdělávání



MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY

PROJEKT: CZ.02.2.69/0.0/0.0/18_054/0014703