Case Study Template - RDA National PID Strategies Working Group

Title	Case Study: Czech Republic
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Features of National PID Approach and/or Strategy

Lead organisation(s)

List the lead organisation(s) and governance structure responsible for developing and/or maintaining the PID approach and/or strategy

The Czech National PID strategy is driven by the National Library of Technology in Prague (NTK). NTK is the largest and the oldest library of science and technology literature in the Czech Republic. Since 1991 has been operating under the Ministry of Education, Youth and Sports of the Czech Republic. According to its statute, NTK performs the function of a publicly accessible scientific and technical library, which is part of the Czech information infrastructure for R&D. It provides access to information and its reuse at the national level and in the public interest, especially through information services and the information infrastructure operated to support R&D&I, and education.

At the national level, NTK provides a supporting platform for research performing organisations and manages the National Licensing Centre for Electronic Information Resources (CzechELib), currently serving 125 members (Czech research institutions). Besize others, NTK also has been supporting the National Repository of Grey Literature, the Czech National ISSN Centre, which assigns ISSN numbers and registers serial publications in the Czech Republic and a workplace for The Digital Library for Grey Literature.

From this perspective, NTK can offer a coordinated national approach and central support for integration and adoption of ORCID and DataCide in the Czech Republic. First of all, in 2019, the Czech Government approved the <u>Action plan for National Strategy of Open Access to Scientific</u>

<u>Information for 2017-2020</u> (in Czech only). One of its measures was to introduce unique identifiers for authors (ORCID) as a mandatory part of the Czech National CRIS – <u>IS VaVal</u> 2.0). This national R&D&I Information System collects information on R&D&I supported from the public budget in the Czech Republic and is the only authorised, complete, and binding source of this information.

Later in 2020, the R&D&I Council, which administers and operates the National CRIS - IS VaVal, released a call for research organizations to introduce ORCID and request iDs to be connected to publications reported on the national CRIS in order to improve research evaluation and bibliometric analysis. Nevertheless, for unresolved concerns related to GDPR, ORCID has never been made mandatory in IS VaVal, only recommended.

In 2020, the Czech Government approved funding for NTK to lead a 7 years project "National Centre for Information Support of R&D&I" (2021-2027) to increase the quality and efficiency of the national R&D&I environment and to reduce administrative burden on the staff of RPOs. One of the activities was establishing and leading a national ORCID consortium to support implementation of European standards into the national landscape.

In 2021, NTK and ORCID took the steps toward the establishment of a formal community of practice by co-hosting a virtual workshop "ORCID in the Czech Republic: towards National Consortium."

Analysis of needs for persistent author identifiers (ORCID iD) among the research institutions in 2021/2022 https://doi.org/10.48813/6erb-z009 provided following recommendations:

- Seek a decision at government level on the mandatory use of ORCID iDs already in grant applications and especially in reporting research results to the National CRIS - IS VaVaI.
- Build up a centralised support for the ORCID and provide financial resources to institutions in the initial phase.
- Support integration of ORCID into the information/submission systems of funders in order to automatically assign successful projects into the ORCID profile.

Due to the lack of financial resources to support the research institutions to join the national consortium and integration of ORCID, this project activities was transferred to the following EU funded project CARDS.

In Dec 2021, thanks to the EU project DICE - Data Infrastructure Capacity for EOSC, NTK became part of the international DataCite Consortium EUDAT and since that could assign persistent DOIs free of charge until mid-2023. The assumption was that NTK will subsequently establish and lead the Czech consortium for DataCite.

In 2023, NTK has received EU funding¹ for 2023-2028 to establish a unified environment for sharing and effective management of information resources and to participate in the creation of a common framework for the implementation of data-oriented components of the Open Science in the Czech Republic, especially within the Open/FAIR Data and EOSC pillars. As part of this effort, NTK set up the National PID Centre – a specialized team supporting PIDs implementation on a national level. NTK will act as a leader of the national ORCID and DataCite consortia that will be operating under the PID Centre starting June 1st 2023.

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¹ Project CARDS (Czech Academic Research and Discovery Services), Registration Number CZ.02.01.01/00/22_004/0004342, more information available here and here and here

Currently, NTK is negotiating its role, as a coordinator of the Czech National Open Science Strategy, with the Czech Ministry of Education, Youth and Sports, R&D&I Council², to involve other major stakeholders within the Czech R&D environment – e.g. research funding and performing organisations (Czech Academy of Sciences, public universities etc.), EOSC.cz and other actors, Once this structure is set up and operating, the work on the national PID strategy should be embedded into its activities.

Scope

Define the scope of the the PID approach and/or strategy (i.e. who it applies to)

The PID strategy will primarily apply to:

TARGET INSTITUTIONS:

- Public research performing organisations (RPOs): Higher Education Institutions and Research organizations
- Research funding organizations (RFOs): Ministry of Education, Youth and Sports, Czech Science Foundation, Technology Agency of the Czech Republic etc.
- Policymakers: Ministry of Education, Youth and Sports; Research, Development and Innovation Council (R&D&I Council)
- Libraries: National library, National Library of Technology, academic libraries
- Publishers based in Czechia
- Service providers, research infrastructures

TARGET GROUPS:

- Researchers
- Librarians
- Open Science/Open Access managers/coordinators
- CRIS system managers
- Repository managers
- Other research support positions, e.g. data stewards, data curators

Drivers

Describe the drivers behind the PID approach and/or strategy development e.g. wanting to improve accuracy of research information, better track research impact, reduce administrative burden. etc.

The main driver is ensuring that the Czech R&D environment can benefit from effective implementation of PIDs on a large scale. This goal should be supported by the first phase of the planned cost-benefit analysis that should quantify the potential of financial savings due to the

² The Czech Research, Development and Innovation Council is an advisory body to the Czech government operated by the Office of the Government, more information available <u>here</u>

PIDs implementation. This potential is already being acknowledged and demanded by Czech researchers and the R&D community.

The national PID strategy is ultimately supposed to ensure a formal framework for management and access to PIDs and introduce them as a standard into the Czech R&D environment.

Strategy development

Describe the process and timeline through which the PID approach and/or strategy was developed e.g. Advisory Group was formed led by a government agency, there was a consultation period in which xx people and organisations were involved, the process by which agreement was achieved etc. Another e.g. ORCID OR DOI Consortium formed.

We are in very early stages of the development of the formal national PID strategy, however some concrete measures and decisions for adoption of PIDs have already been taken - NTK has been granted funding to create the National PID Centre as well as two national consortia (ORCID and DataCite) and cover all the related fees for its members between 2023 and 2028. The National PID Centre and its surrounding community made up mostly of ORCID and DataCite national consortia members and EOSC-CZ Metadata working group should be the key contributors to the creation of the Czech PID strategy.

We expect that building a solid national PID strategy will be a long-term process underpinned by experience with running the national consortia and the planned cost-benefit analysis. We would like to see some first concrete strategy draft in about 3 years from now. As mentioned above, we plan on formulating the strategy as part of the more holistic approach towards National Open Science strategy for the Czech Republic, which will be under development

Key features

Describe the key features of the PID approach and/or strategy

The features of the strategy will be guided by its ultimate goal which is to guarantee centralized support on the national level via continued funding of the National PID Centre and its services (including continued support and further development of national ORCID and DataCite consortia) that would enable further development of currently supported PIDs and support of new ones. From the perspective of the National PID Centre, we observe the need for a functional process for selecting new relevant PIDs and defining their priority that should be driven on the national level and the Czech research community's needs. Other features will be determined later.

Key infrastructure

List and describe the key infrastructure (platforms, systems, services) that will activate this national PID approach and/or strategy

Name of infrastructure	Key purpose	List of integrated PIDs
<u>e-infra</u>	This large infrastructure will build the National Repository Platform in the upcoming years. That should greatly facilitate adoption of PIDs.	TBD
National CRIS - <u>IS VaVal</u> (R&D Information System)	National research information system. We plan on working with Research, Development and Innovation Council (in charge of IS VaVaI) on integrating global PIDs into their submission processes as required. Nowadays it uses mostly local identifiers.	TBD
Institutional CRIS systems	Various institutional CRIS systems at Czech RPOs. OBD (Personal Bibliographic Database) application is an outstanding case of an institutional CRIS system in the Czech Republic developed locally by a Czech company DERS. An ORCID integration for OBD is currently in development.	TBD, OBD ORCID in process
Institutional or subject repositories	There are several repositories in the Czech republic collecting different objects, some are already using PIDs but there is still enough room to improve and really integrate those PIDs, not only allow their evidence.	Handle, DOI, maybe other
Major research funders	Grant application processes	TBD
Local publishers	Content submission processes	TBD

PIDs List which functions and PIDs are identified in the strategy e.g. identification of res

List which functions and PIDs are identified in the strategy e.g. identification of research grants is a function and the PID recommended in the PID approach and/or strategy is CrossRef DOI

Function	PID type	Recommended or required?
Identification of researchers	ORCID	Recommended
Identification of research outputs	DOI (DataCite, CrossRef)	Recommended
Identification of organizations	ROR	Recommended
Identification of books	ISBN	Recommended
Identification of serial publications	ISSN	Recommended

Identification of printed music ISMN Recommended
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We will likely look into support for additional PIDs such as IGSN (through DataCite), RaiD and others.

Impact and monitoring

Summarise any work to describe or track impact of the approach/strategy, including review and/or monitoring processes

NTK will deliver a cost-benefit analysis in two phases - in 2024 and 2028 (funded by project CARDS). The first phase will capture the current status of the selected PIDs usage within the Czech R&D environment and potential financial benefits of their effective implementation. The second phase will capture the progress in use of PIDs from 2024.

We will also set up regular monitoring of progress regarding adoption of ORCID, DOI (and other priority PIDs) with a set of identified key metrics as part of the National PID Centre impact assessment.

There is also a monitoring mechanism embedded in the CARDS project.

Links

Include any links to relevant documents

- National R&D&I Policy of the Czech Republic 2021+
- CARDS project
- General recommendations for metadata description of research outputs and research data - used at RFOs includes PIDs (in Czech only), https://doi.org/10.48813/yt6w-6h15
- Towards a national ORCID consortium in the Czech Republic, 2021, https://info.orcid.org/towards-a-national-orcid-consortium-in-the-czech-republic/
- Analysis of the effectiveness of and interest in centralised provision of the ORCID iD persistent identifier, 2022 (in Czech only) https://doi.org/10.48813/6erb-z009

Additional

Include any other relevant information

As the Czech national PID strategy is in very early stages of development, all that has been stated above is to a high degree preliminary and subject to change.