

The Czech Core Metadata Model for Research Data

CCMM

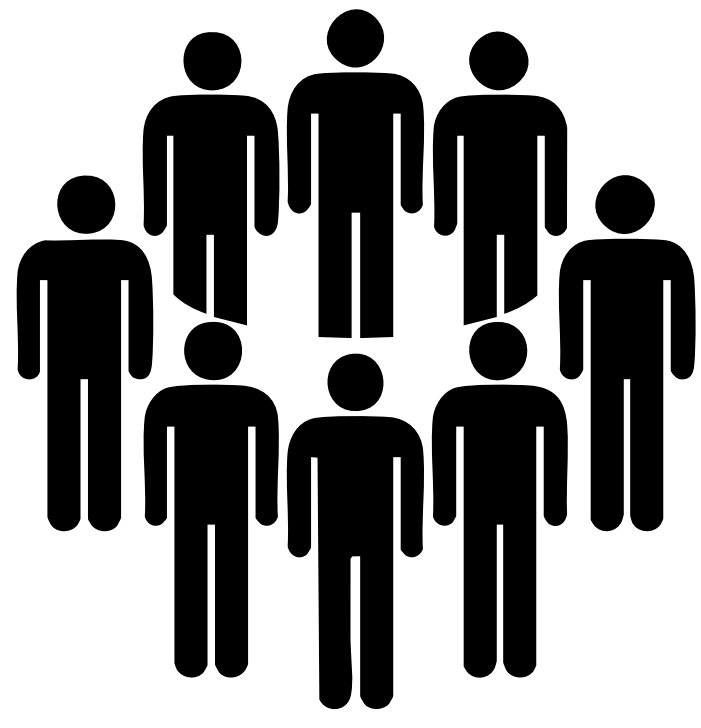
This poster presents the **Czech Core Metadata Model (CCMM)**, developed collaboratively by the **National Library of Technology (NTK)** and the **EOSC CZ Metadata Working Group**, with NTK leading the conceptual and technical design. CCMM provides a structured framework for describing research datasets, harmonizing metadata across repositories, ensuring interoperability, and offering a foundational structure for emerging domain-specific data repositories within the Czech Republic, while being aligned with European and global standards.

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Community

The need to harmonize metadata in the National Data Infrastructure led to the establishment of the **Metadata Working Group**, gathering all interested stakeholders to take part in the development and review process of the **Czech Core Metadata Model**.

 **422 unique members**
 **70 research institutions**



feedback
posting issues



The review process consists of creating, replenishing, and implementing issues and releases published on GitHub.



Version control uses M.m.P

Major for main version
Minor for structure changes and major conceptual changes
Patch for conceptual changes not affecting structure

Releases



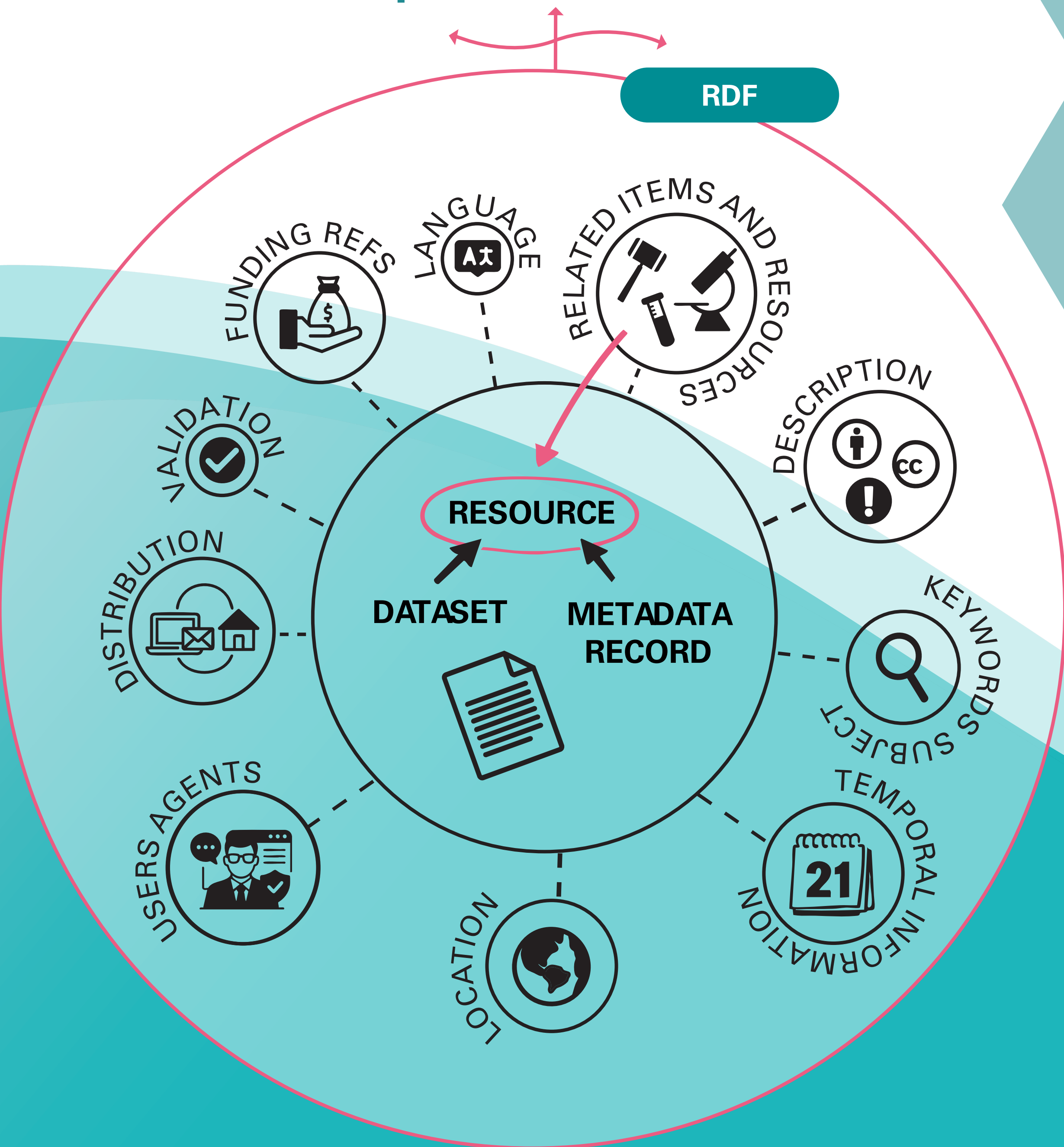
The purpose of CCMM is to describe datasets as scientific results and FAIR digital objects. The goal is to become a DCAT profile.

Why DCAT?

In order to preserve information meaning and narrow the frame of expected information, use existing schemas. Main reused ontology is DCAT, a vocabulary designed for catalogization of data. DCAT supports creation of domain specific profiles. CCMM has ambition to become one.

Why RDF?

Big issue in understanding metadata in large catalogues is understanding all information in the same context as it was mentioned by the author. This is achieved using ontologies, controlled vocabularies and linked data through Resource Description Framework (RDF)



3.1 Access rights
Profiled class IRIs: `dcterms:RightsStatement`
IRI: `https://model.ccmm.cz/research-data/AccessRights`
Label: Access rights
Definition: A statement about the access rights to the dataset.
Hierarchy: profiles class profile Rights Statement (dcap:RightsStatement) profiles class Rights Statement (dcap:RightsStatement) profiles class Rights Statement (dcap:RightsStatement)
Definition: A statement about the intellectual property rights (IPR) held in or over a resource, a legal document giving official permission to do something with a resource, or a statement about access rights.
Usage note: Use IRI identifier from the register `http://purl.org/coar/access_right/`.

CCMM consist of both conceptual (RDF) and structured (XSD) model.

```
<?xml version='1.0' encoding='UTF-8'>
<xsd:schemaLocation="https://schema.ccmm.cz/research-data/1.1 https://model.ccmm.cz/research-data/dataset/schema.xsd"
  xmlns="https://schema.ccmm.cz/research-data/1.1"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema-instance">
  <!-- IRI for Dataset should ideally be a DOI (if available) -->
  <iri>https://doi.org/10.48700/dataset.dmq82-ed856</iri>
  <metadata:identification>
    <iri>https://data.narodni-repozitar.cz/general/datasets/dmq82-ed856</iri>
    <!-- Language(s) of this metadata record -->
    <language>
      <iri>http://publications.europa.eu/resource/authority/language/ENG</iri>
      <label xml:lang="en">English</label>
    </language>
    <!-- Qualified relation -- Data Manager placeholder (source JSON lacks this info) -->
  </metadata:identification>
</xsd:schema>
```

Crosswalks and mappings

Will be provided in 2026 to support interoperability with other models, assing DOIs easily and exchange metadata in different systems.

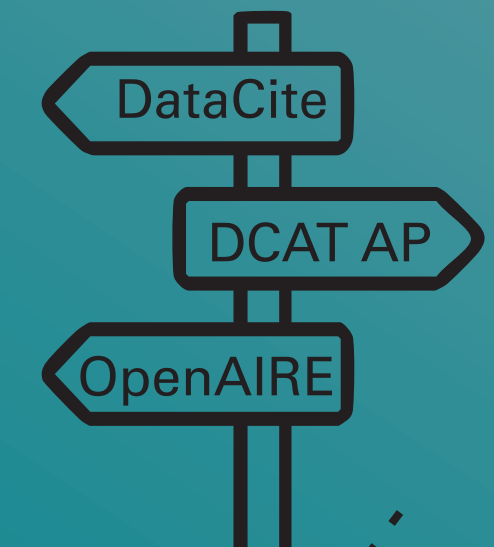
Extensions and domain specific models

1) extension of the original model, adding relations to the newly defined classes or assessing new attributes
2) restriction of existing elements, such as narrowing the list of acceptable values, setting up more strict cardinalities etc.



Domain specific data require domain specific metadata properties. CCMM is expected to be basis to those models. Extend it for domain specific attributes or specialize CCMM features to fit better on your domain.

register model



CCMM - V

