

Sections Onboarding Event

Section (Meta)daten,
Terminologien, Provenienz

Online, 10.12.2025

Who we are and how to contact us

The section addresses issues of (meta)data, terminologies, and provenance. Tasks of the section include organizational aspects (collaboration, knowledge transfer), content aspects (e.g., modeling/ontologies), and infrastructural perspectives (development of standards/core services).

Working groups:

- Knowledge Graphs
- Ontology Mapping and Harmonisation
- Research Software Metadata
- Search and harvesting
- Terminology services
- Task Force Metadata

Mailing lists

office-section-metadata@lists.nfdi.de

section-metadata@lists.nfdi.de

Rocket Channel [#section-metadata-terminologies-provenance](#)

Next Section Meeting 22. Jan 26, 4 pm, online

Spokepersons: Oliver Koepler
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Jael Castro ljgarcia@zbmed.de

Base liaison officers: Sandra
Zaenkert zaenkert@zbmed.de and
Eva-Lotte Rother

Section
„Meta(data),
Terminologies,
Provenance“

What: Facilitate the exchange of knowledge among developers/users of knowledge graphs.

Why: Ensure that domains share a common understanding of concepts and relations, and we can exchange best practices.

How: Create an overview of existing KGs that are developed and/or used by NFDI communities; Provide feedback and use cases for the basic service KGI4NFDI.

When: Monthly meeting, every 3rd Wednesday of the month 2 pm CET/CEST

Contact: section-metadata-wg-kg@lists.nfdi.de

Existing outcomes:

- Shigapov, R., Schubotz, M., Fliegl, H., Norouzi, E., Fortmann-Grote, C., Becker, M., Rossenova, L., Tietz, T., Posthumus, E., Zapilko, B., Dietze, S., Gesese, G.-A., Degbelo, A., Grieb, J., Rebecca Ondraszek, S., Voss, J., Thiery, F., W. Mees, A., Goedicke, M., ... Limani, F. (2025). Knowledge Graph Functions in NFDI (1.1) [Data set]. Zenodo. <https://doi.org/10.5281/zenodo.15224731>
- Rossenova, L., Schubotz, M., & Shigapov, R. (2023, September 14). The case for a common, reusable Knowledge Graph Infrastructure for NFDI. Conference on Research Data Infrastructure (CoRDI 2023), Karlsruhe, Germany. Zenodo. <https://doi.org/10.5281/zenodo.8342570>
- Limani, F., Shigapov, R., Degbelo, A., Schimmler, S., Zapilko, B., Rossenova, L., Dietze, S., Förstner, K. U., Karmakar, S., & Czerniak, A. (2023). Who is using Knowledge Graphs in NFDI? An overview by the Working Group "Knowledge Graphs". Zenodo. <https://doi.org/10.5281/zenodo.8332776>
- Shigapov, R., Limani, F., Degbelo, A., Schimmler, S., Zapilko, B., Rossenova, L., Dietze, S., Förstner, K. U., Karmakar, S., & Czerniak, A. (2023). Dataset: an overview of knowledge graphs in NFDI (1.0) [Data set]. Zenodo. <https://doi.org/10.5281/zenodo.8124286>
- Stocker, M., Rossenova, L., Shigapov, R., Betancort, N., Dietze, S., Murphy, B., Bölling, C., Schubotz, M., & Koepler, O. (2023). Knowledge Graphs – Working Group Charter (NFDI section-metadata) (1.2). Zenodo. <https://doi.org/10.5281/zenodo.7802304>
- Limani, F., Rossenova, L., Fortmann-Grote, C., Zapilko, B., Latif, A., Gerber, A., Fliegl, H. Knowledge Graphs for Research Data Management: Use Cases in Germany's National Research Data Infrastructure. 19th International Conference on Metadata and Semantics Research. 2025 (Accepted for publication)

WG Ontology Harmonization & Mapping

What: Assess and evaluate existing standards and tools for creating, validating/benchmarking, documenting and publishing terminology mappings and alignments

Why: Facilitate semantic interoperability and implementation of the FAIR principles.

How:

- 1) Aligning to and collaborating with international efforts, e.g., [RDA FAIR Mappings WG](#)
- 2) [GitHub repository issues](#) to define, develop and discuss tasks and activities

When: Two monthly meetings, every second Wednesday at 11:00 and every fourth Tuesday at 11:00

Contact: section-metadata-wg-onto@lists.nfdi.de

What: Finding out a core NFDI layer for research software metadata

DOI [10.5281/zenodo.10036382](https://doi.org/10.5281/zenodo.10036382)

Why: Software is core to research. Metadata is core to FAIR. Existing efforts need to be evaluated against and aligned to NFDI

How: Analysis of NFDI needs on the topic, alignment of existing approaches, proposal of usage guides tailored to NFDI. Work during monthly meetings and offline between meetings

When: Monthly meeting 2nd Tuesday of the month 11:00 CET/CEST

Contact: section-metadata-wg-rsmeta@lists.nfdi.de

Current outcomes:

- [Results on a Survey on Research Software Metadata in the NFDI Consortia](#)

What: The group focuses on improving metadata use for research data discovery and harvesting by humans and machines.

Why: Efficient search and harvesting need FAIR metadata that balances flexibility with completeness and interoperability.

How: By gathering requirements, best practices, and data sources, the group creates recommendations and fosters collaboration.

When: Monthly meeting last Tuesday of the month 12:00 CET/CEST

Contact: section-metadata-wg-search@lists.nfdi.de

Existing outcomes:

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- Brigitte Mathiak, Heinrich Widmann, Luca Ghiringhelli, Holger Israel, Fidan Limani, Christin Henzen, & Gerhard Heyer. (2022). **Working Group Charter** - Search and Harvesting. Zenodo. <https://doi.org/10.5281/zenodo.6770763>
- Mathiak, B., Widmann, H., Heyer, G., Henzen, C., & Czerniak, A. (2023). **Search and Harvesting across NFDI Consortia - Gaps and Challenges**. Zenodo. <https://doi.org/10.5281/zenodo.8426850>
- Mathiak, B., Heyer, G., Widmann, H. et al. **Search and Harvesting across NFDI Consortia – Gaps and Challenges**. *Datenbank Spektrum* 24, 77–84 (2024). <https://doi.org/10.1007/s13222-024-00480-7>

What: Facilitate the exchange of knowledge among developers/users of terminology services.

Why: Ensure that domains share a common understanding of concepts and relations, we need terminologies as a formal representation of domain knowledge.

How: Analysis of terminology service landscape in NFDI consortia; identify and discuss methods for integrating terminology services.

When: Monthly meeting last Thursday of the month 2 pm CET/CEST

Contact: section-metadata-wg-ts@lists.nfdi.de **Mailing list**

Existing outcomes:

- Baum, R., & Koepler, O. (2023). Leveraging Terminology Services for FAIR Semantic Data Integration Across NFDI Domains: How to Integrate Terminology Services Into Other Service Applications. *Proceedings of the Conference on Research Data Infrastructure*, 1. <https://doi.org/10.52825/cordi.v1i.356>
- Anders, I., Bailly, K., Baum, R., Engel, F., Ernst, F., Ghiringhelli, L. M., Kailus, A., Karam, N., Kett, J., Kraus, F., Löbe, M., Moeller, K., Patil, A., Rossenova, L., Voß, J., Weiland, C., & Özaslan, M. (2022). Terminology Services - Working Group Charter (NFDI section-metadata) (1.0). Zenodo. <https://doi.org/10.5281/zenodo.6759325>
- Koepler, O., Sasse, J., Karam, N., & Baum, R. (2024). Terminology Services 4 NFDI (TS4NFDI) - Initialisation Phase Proposal. Zenodo. <https://doi.org/10.5281/zenodo.12188787>
- Baum, R., Bailly, K., Bouazzouni, S., Fillies, J., Karam, N., Mühlhaus, T., Posthumus, E., Oladazimi, P., Sasse, J., Voß, J., & Koepler, O. (2024). Terminology Services 4 NFDI (TS4NFDI) - Integration Phase Proposal. Zenodo. <https://doi.org/10.5281/zenodo.13921325>

Task Force Metadata

What: Encourage the use and adoption of the already used (cross-discipline) metadata schemas to increase interoperability between the consortia

Why: Meet the requirements stated in the BLV goal, taking into account the formal obligation of the NFDI association charter concerning standard developments.

How: Identify and evaluate existing and applied (generic) metadata schemas, Develop a guideline for the consortia on how to map their metadata to a common ground like Dublin Core (DC) or DataCite or DCAT, Develop a guideline for modular metadata schema.

Workshop series on NFDI metadata recommendations

When: Monthly meeting 3rd Thursday of the month 14:00 CET/CEST

Contact: section-metadata-tf-meta@lists.nfdi.de

Existing outcomes: Report of the 1st NFDI Metadata Workshop

<https://zenodo.org/records/15227236>

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