



# Section Meta(data), Terminologies, Provenance

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# Participants





## Your interests



(Meta-)Daten: Metadatschemata, Schnittstellen, Harvesting, föderierte Suche über Metadaten; "Terminologien": Verknüpfung zu Normdaten, lexikalischen Ressourcen wie Ontologien, Terminologien, Wortnetzten; Provenienz: nachhaltige Dokumentationsverfahren für Verarbeitungsketten für Forschungsdaten und der daran beteiligten Personen und Prozesse

NFDI-Kernmetadatenformat, Ontologien

Normdaten; Wiki Data; Philosophie/Geschichte der KI (Wissensdomäne)

Terminology Services, Cross-Domain Mappings, FAIR Digital Objects

Provenance/Research Process Tracking, Interoperability of Metadata Concepts and Schemes between Consortia

Metadaten

Metadata schemas, DOI, FAIR assessment, etc

All three areas, Metadata and Research data, Terminologies, and Provenance are of my interest.

Terminologie; Darstellung numerischer Werte; Metadatengeneratoren und -übersetzer

standardisierte Metadaten, Ontologien, Wissensgraphen, FAIR Prinzipien

Auffindbarkeit

Terminologien für Earth System Research



## Scope of the section

<https://zenodo.org/record/5619089#YaTff1WZO38>



### Metadata & Data

- (Meta)data harmonization, discoverability of data, general data and metadata standards with regard to a prospective NFDI core metadata format as well as format conversions and persistent identifier systems.

### Terminologies

- Cross-community and cross-disciplinary definitions of top-level ontologies and mappings of ontologies
- Best practices for modeling terminologies, vocabularies, and ontologies
- Development of services e.g., Terminology Service, Knowledge Graphs, etc.

### Provenance

- Legal, technical, and cultural aspects of the context in which (meta)data are created (e.g., in the context of experiments, lab books, digitization processes, etc.)
- Development of recommendations for common and comprehensible documentation procedures to answer the questions of what, where, when, who, how, and why of data generation and data processing
- Development of recommendations for representing provenance in a possible NFDI core metadata format.



## Goals of the section

### Structural goals

- Continuous **integration** of all consortia and communities and their needs. The section is able to speak consensually on the topics of metadata, terminologies and provenance
- Linking and **harmonizing** developments of the consortia working with similar data, tools and standards
- Creation of **working groups** to address specific, well-defined tasks in the scope of (meta)data, terminologies, provenance

→ **Openness**



## Goals of the section



### Subject-specific goals

- Collaborative definition of top-level **ontologies** / mapping of ontologies
- Concepts and recommendations for the **harmonization** of (meta)data and terminology **services** for the NFDI and beyond
- Definition of cross-disciplinary **minimum information** standards / metadata for the scientific disciplines represented by NFDI
- Linking criteria for the domain-specific integration and validation of basic services in the area of (meta)data, terminologies and provenance
- Exploitation of synergies in the development of domain-independent metadata standards and use of infrastructure
- **Overview and evaluation of existing approaches** and (emerging) best practices, harmonization of interfaces
- Development of concepts for the **annotation** of metadata elements with terms from terminologies



# Proposal for the Establishment of Working Groups

WGs are founded by the approval of the Section governance.

Section leadership conducts a formal **review** of the Charter with the following criteria to be met:

- Completeness of the Charter
- Motivation must derive from at least one of the Section's topic areas
- At least 6 participants from different institutions AND at least 6 different NFDI consortia
- Openness of the results

WGs are **open and transparent** to all NFDI members.

WGs report **progress** to the Section at least every 6 months.



## Charter:

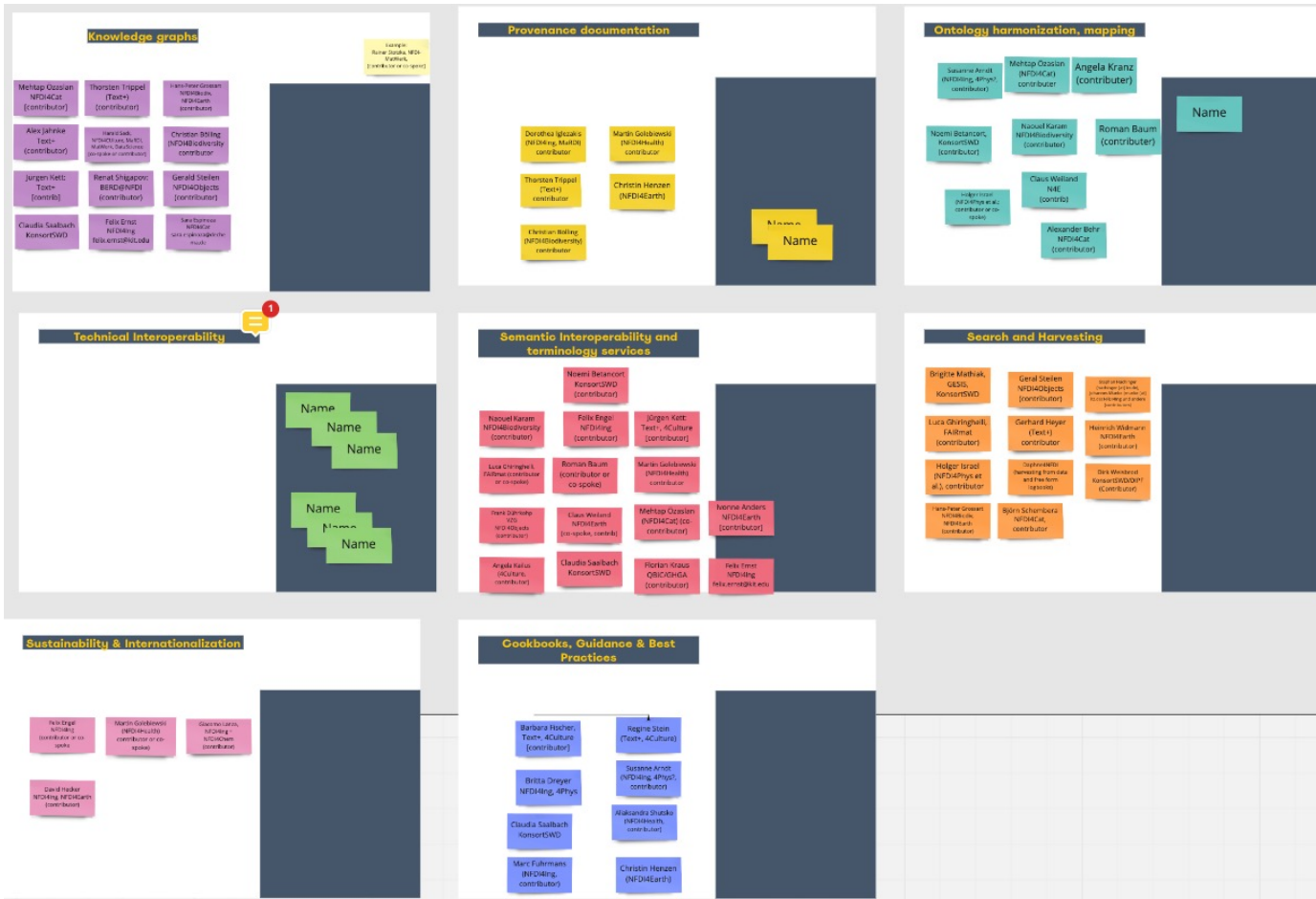
1. Motivation
2. Objectives with concrete description of expected results
3. Work plan with milestones (max. 24 months)
4. Initial membership list
  - At least 6 members from different institutions and at least 6 different NFDI consortia
  - Members commit to provide a certain number of person months
  - Members nominate at least 2 WG chairs (co-spokes)
5. Adoption plan with the description how the NFDI consortia want to use the expected results concretely.







# Working Groups



## WG Proposals:

- Knowledge graphs
- Provenance documentation
- Ontology harmonization, mapping
- Technical interoperability
- Semantic interoperability and terminology services
- Search and harvesting
- Sustainability and internationalization
- Cookbooks, guidance and best practices
- Open for more !



## Working Grpups

In the next step these preliminary groups need to collaborate and work on a case statement for their working group. Each working group should create a case statement in the [GDrive folder](#) using the [template provided](#). Check the [Proposal for the Establishment of Working Groups](#) slide.

GDrive Folder

<https://drive.google.com/drive/folders/1QfR5gYuPfiyGPqEYLiap21w9zAcQs3lW>

Template

<https://docs.google.com/document/d/1zhQLtNHSeWb1un4aS9jQQVDzHu-txOwv/edit>





## Communcation channels



### Mailing list

[section-metadata@lists.nfdi.de](mailto:section-metadata@lists.nfdi.de)

[office-section-metadata@lists.nfdi.de](mailto:office-section-metadata@lists.nfdi.de)

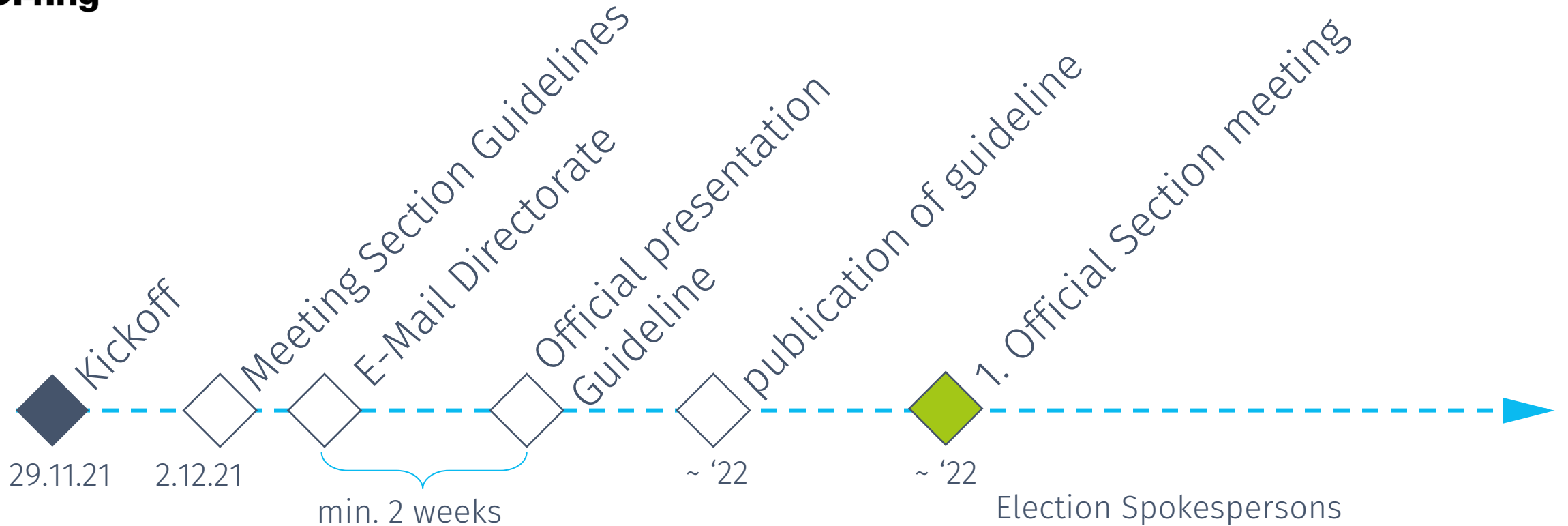
RocketChat <https://all-chat.nfdi.de/channel/section-metadata-terminologies-provenance>

#Section-Metadata

Request access to RocketChat

- Consortia: Managing office
- No consortia, but NFDI e.V. membership NFDI e.V. , NFDI-Directorate

## Next steps of NFDI e.V.





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infrastruktur (NFDI) e.V.**

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