

Letter of Intent for a cross cutting initiative on Education and Training:

## Competencies for NFDI (CompeNDI)

### 1 Binding letter of intent as advance notification or non-binding letter of intent

This letter is a non-binding letter of intent for an anticipated submission in 2020 or later.

### 2 Formal details

- Planned name of the consortium

Competencies for NFDI –

A NFDI Service for Education and Training in Data and Digital Literacy

- Acronym of the planned consortium

CompeNDI

- Applicant institution (Contact)

Tentative Contact: Christian-Albrechts-Universität zu Kiel

- Contact Persons

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### 3 Objectives, work programme and research environment

- *Research area of the proposed consortium (according to the DFG classification system)*

[www.dfg.de/download/pdf/dfg\\_im\\_profil/gremien/fachkollegien/amtsperiode\\_2016\\_2019/fachsystematik\\_2016-2019\\_en\\_grafik.pdf](http://www.dfg.de/download/pdf/dfg_im_profil/gremien/fachkollegien/amtsperiode_2016_2019/fachsystematik_2016-2019_en_grafik.pdf)

This is a cross cutting NFDI Service for education and training in Data and Digital Literacy. CompeNDI will offer tested and established services from basic education to advanced curricular elements for further developing the specific needs of NFDI initiatives, academic education and staff training. The Initiative will concentrate on a community building process by initiating and furthering stakeholder groups in FDM teaching and training and cooperate with existing NFDI consortia. Participants will make results and training infrastructures available to all disciplinary NFDI consortia, building on existing competencies and teaching expertise.

- *Concise summary of the planned consortium's main objectives and task areas*

In general, technical innovations often precede acceptance of related needs for education and staff training. However, acceptance is necessary to ensure that positive effects of technological advance become common practice and exert their full potential in science. In order to overcome potential resistance, to build "social consent" to a digital data culture, and to consolidate sustainable research data management following the FAIR – principles, it is essential to establish schemes for data literacy training for students and early career scientists. Science education in this field is crucial for the long-term success of the NFDI. As a cross-cutting topic for future NFDI initiatives, academic education and staff training in data science has two main goals:

1. support basic education that is independent of specific disciplinary needs and provides a basic understanding and topical training, and
2. develop advanced curricula elements to further data literacy and research data management, recognizing the specific needs of each research field, from e.g. social sciences to climate change.

Consequently, each disciplinary consortium will benefit from synergies created by a cross-cutting training infrastructure as is proposed here. Our consortium "Competencies for NFDI" (CompeNDI) establishes these synergies by combining already existing RDM competence and teaching expertise. CompeNDI will build upon this expertise, will offer tested and established services and make results openly available to all disciplinary NFDI consortia to form a base for further developing disciplinary skills and applications.

- *Brief description of the proposed use of existing infrastructures, tools and services that are essential in order to fulfil the planned consortium's objectives*

Does not apply.

- *Interfaces to other proposed NFDI consortia: brief description of existing agreements for collaboration and/or plans for future collaboration*

As cross-cutting consortia cannot submit proposals in the first application round, we will concentrate our efforts on 1) a community building process within the science community as a whole, by initiating a multi-stakeholder dialogue, in RDM teaching and training. We will 2) cooperate with existing NFDI consortia in this area. We strive to support the NFDI and offer help, access to the infrastructures we develop and experience, we've gained through various projects and activities. Several of members of CompeNDI are active in disciplinary consortia within the NFDI. We are therefore networking with these consortia to establish outreach among these initiatives.

WE INVITE interested consortia to contact us at [info@compendi.org](mailto:info@compendi.org) to work on data literacy and training concepts for the future!

For more information see our extended abstract

[http://www.compendi.org/files/compendi\\_abstract-nfdi-workshop-2019.pdf](http://www.compendi.org/files/compendi_abstract-nfdi-workshop-2019.pdf)

to the NFDI conference in Bonn, on May 13/14 2019 or visit our website at

<http://www.compendi.org>.

#### **4 Cross-cutting topics**

- *Please identify cross-cutting topics that are relevant for your consortium and that need to be designed and developed by several or all NFDI consortia.*

Data Literacy and Training.

- *Please indicate which of these cross-cutting topics your consortium could contribute to and how.*

The cross cutting topic addressed by the CompeNDI consortium is Data Literacy and Training in the broader sense. While disciplinary consortia are well suited to establish discipline-specific courses and training on particular infrastructures, the broad community of students and early career scientists often need a much lower level, basic training in FDM practices, tools and workflows. CompeNDI strives to address EVERY student to provide such basic level of Data Literacy education. CompeNDI also strives to develop novel methods of teaching by implementing new concepts and additional training material, to address researchers, which are not yet data aware within their disciplines. In addition CompeNDI aims to develop further training for established professionals,

researchers, technical staff and others within and beyond the German educational system.

We feel, that basic data literacy education is a fundamental prerequisite for the success of the NFDI. Data awareness will not JUST HAPPEN. It has to be coordinated within the science community at very early career stages. CompeNDI is getting ready to implement and support this task within the NFDI.