

## Letter of Intent – NFDI4Memory

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

<input checked="" type="checkbox"/>	Binding letter of intent (required as advance notification for proposals in 2021)
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### 2 Formal details

#### Planned name of the consortium

NFDI4Memory – The Consortium for the Historically Oriented Humanities

#### Acronym of the planned consortium

NFDI4Memory

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### 3 Objectives, work programme and research environment

#### Research area of the proposed consortium (according to the DFG classification system):

Review Board	Subject areas
101 Alte Kulturen	101-03 Alte Geschichte
102 Geschichtswissenschaft	102-01 Mittelalterliche Geschichte 102-02 Frühneuzeitliche Geschichte 102-03 Neuere und Neueste Geschichte 102-04 Wissenschaftsgeschichte
106 Sozial- und Kulturanthropologie, Außereuropäische Kulturen, Judaistik und Religionswissenschaft	106-02 Asienbezogene Wissenschaften 106-03 Afrika-, Amerika- und Ozeanienbezogene Wissenschaften 106-04 Islamwissenschaften, Arabistik, Semitistik 106-05 Religionswissenschaft und Judaistik
108 Philosophie	108-01 Geschichte der Philosophie
109 Erziehungswissenschaft und Bildungsforschung	109-01 Allgemeine und Historische Pädagogik
112 Wirtschaftswissenschaften	112-05 Wirtschafts- und Sozialgeschichte
Ausschuss für Wissenschaftliche Bibliotheken und Informationssysteme (AWBI)	Archivwissenschaft Bibliothekswissenschaft Museumswissenschaft

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

NFDI4Memory will set the pace for institutional, cultural and methodological innovation in historical research. With its unique expertise in digital historical source criticism and hermeneutics, it drives forward key elements of the future knowledge order for the NFDI as a whole. It will safeguard the critical functions and social relevance of the historical method to meet the challenges and opportunities of the digital future.

Its specific objectives can be summarised under the acronym “**LINKAGE**”, providing a community-specific agenda for meeting the NFDI's goals.

**1. Linking Research, Memory Institutions and Infrastructures:** 4Memory for the first time systematically integrates research, memory and information infrastructure institutions into a common digital research data infrastructure by establishing sustainable links between them.

**2. Integrating Historical Source Criticism into Data Services:** The conditions created by digitised and born-digital sources require that established traditions of source criticism be adapted to the new realities of research. This is a core aspect of historical research, and 4Memory will ensure that our community's expertise in hermeneutical approaches also contributes to other disciplines.

**3. Network of Historically Oriented Research Communities:** 4Memory serves the historically oriented humanities, above all the large community of historians and including many fields that work with historical data. We enable interdisciplinary exchanges with the social sciences and cultural studies and reflection about non-European data.

**4. Knowledge Order for the Digital Future of the Past:** Knowledge is produced, classified and disseminated within systems that create and connect institutional and disciplinary knowledge spaces. Transforming the existing knowledge order in the humanities from one largely based on printed material and traditional systems of archival and library classification to a digital one requires collaborative processes, new criteria for “verified” knowledge and innovative procedures for its evaluation and citation.

**5. Advancing the Analog / Digital Interface of Historical Source Material and Data:** 4Memory will encourage the development of advanced RDM strategies at the cutting edge of digital history. Since digital media coexist with analogue media and historians and archives will always also rely upon physical sources, we will also set up equally innovative procedures to bring digital and analogue methodologies together.

**6. Generating Standards for Historical Research Data and Sustainability:** Maintaining research-data quality requires discipline-specific, cross-disciplinary and international data-handling standards. These priorities must be fully integrated into the research process, requiring new research data management personnel as well as empowering historians themselves to ensure their data meets standards of quality, transparency and reusability.

**7. Education and Citizen Participation:** Improving data literacy is essential to the future data culture within our community and in society at large. In a time when research is faced with proliferating sources of information of vastly different, but not clearly distinguishable, levels of reliability, empowering the broader citizenry to use digital information thoughtfully is a must.

The **LINKAGE** objectives provide orientation for the specific measures and services adopted by the **task areas (TAs)** in the 4Memory consortium:

**TA1 – Data Quality:** TA1's aim is to create the basic conditions for data from the historically oriented humanities to be findable, accessible, interoperable and reusable (FAIR). We will assess and advance the definition, measurement and implementation of research data quality in the historically oriented humanities, accounting for the diversity of data types and formats, various

aspects of data quality, technical considerations, legal regulations and ethical principles, discipline-specific workflows and the methods of digital historical source criticism.

**TA2 – Data Connectivity:** A digital knowledge space requires contextualising digital objects to connect all relevant data – from analogue sources to digital presentation of results – and fostering transparency and traceability. Connectivity means making research data linkable and interoperable. First, subject-specific authority and metadata, taxonomies and controlled vocabularies will be used to connect research data with regard to its semantic content. Second, 4Memory’s data models will enable connectivity within the community, with other NFDI consortia and with national and international archival and museum directory services, library catalogues and (subject) bibliographies.

**TA3 – Data Services:** TA3 brings together key services and important data collections in a virtual 4Memory Data Space, enabling historians to work with data in both traditional and innovative ways, enriching them and making them available again to our community and beyond. TA3 operates a set of key services in a reliable, sustainable manner; makes existing repositories, DH tools and data offerings interoperable; provides services for reliable storage and long-term archiving of historical research data; offers a space for innovative experimentation; ensures the FAIRness of research data in 4Memory, and acknowledges the CARE principles for data governance.

**TA4 – Data Literacy:** TA4 aims to develop a DL competence profile for historically oriented researchers, a DL counselling network and a sustainable and certified DL training catalogue comprising training courses and materials geared towards specific target groups. Data Literacy has a distinctive meaning for historically oriented disciplines: sound historical scholarship depends on a rigorous, careful and cross-culturally aware application of the “critical historical method” as the basis for historical hermeneutics, historical knowledge production and the communication of knowledge about the past. Historians need to learn how to evaluate and to re-use historical research data produced with digital methodologies and based on digital source material.

**TA5 – Data Culture:** TA5 aims to promote the use and reuse of research data and the corresponding digital methods in our community and to encourage a distinct data culture in historically oriented disciplines. This requires developing a common discourse about the demands, pathways and consequences of digitalisation for our disciplines, incentivising the development of new competencies within them, as well as expanding our instruments of information, opinion-formation and communication, including new procedures for reviewing research data and data-driven research.

**TA6 – Participation and Steering:** TA6 enables 4Memory’s collaborative work – such as handling administration, building infrastructure and setting policies – and contributes to its content, acting as an overarching layer to foster synergies, facilitate knowledge exchange, encourage participatory decision-making, maintain relationships and manage engagement in the NFDI and our community. The concepts “Participation” and “Steering” shape the governance structure and guide community integration, defining leitmotifs for coordinating and collaborating internally within our consortium and community and externally within the NFDI, across society and internationally.

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

4Memory will establish systematic, sustainable links among research, memory institutions and information infrastructures. It combines the capabilities of the participating universities, research institutes, libraries, archives, museums and informational infrastructure institutions and will integrate them with further (and continuously emerging) services, tools and infrastructures both within and beyond our community, making a substantial contribution to research data management in the NFDI. The consortium benefits from and will contribute to existing international networks and contexts for the development of research services and tools. It will help build – and make available to our community – an improved data infrastructure for historical research. Specialised services are vital to our consortium, though not all can be listed due to lack of space; broadly oriented services essential to our objectives include:

### **Authority Data Services and Infrastructures:**

- Authority files for historical research (GND of the German National Library, Virtual International Authority File, Wikidata, etc.); integrating data from historical sources / collections
- Reference Bibliographies (Deutsche Historische Bibliografie, Gnomon Bibliographische Datenbank, Regionalbibliographien etc.)

### **Data Cataloguing and Aggregators:**

- Union catalogues (B3Kat, K10plus)
- Aggregators and portals (Archivportal-D, Handschriftenportal, DDB)
- Repositories and registries of digitised sources (ZVDD, VD 16/17/18, FIDs etc.)

### **Data Processing, Storage, Publishing and Archiving Infrastructure:**

- Collecting and processing infrastructures and environments (FuD Trier)
- Storage and computing infrastructures (Rechenzentrumsallianz Rheinland-Pfalz, DFN)
- Long-term storage and archiving (DIMAG, RADAR, ViDa, BSB)

### **Information Services, Communication Infrastructure and Community Networks**

- Information and digital services for historical research (H-Soz-Kult, CLIO ONLINE, Historicum.net and specialised information services)
- Research data management networks (nestor, RDA)

### **Consulting and Educational Services**

- Consulting services for research data management and training in methods of analysis (e.g. those at institutions in Trier, Darmstadt, Berlin, Mainz, etc.) will be developed into national services for the benefit of our community

4Memory also prioritises deepening and widening the reach of existing international networks by collaborating with international experts in digital humanities research and research data management. Among the relevant partners are German humanities institutions abroad, national research institutes in Europe and the rest of the world and EU-level cooperation projects and initiatives (e.g., DARIAH-EU, EHRI, LIBER, OPERAS, RDA, and SSHOC/EOSC).

Many further existing services are relevant to our community, but not all of them are currently usable by all of its members because they are too project-specific, not in regular operation or otherwise restricted. There are shortcomings regarding quality standards, interoperability, persistent identification and long-term archiving. Through the measures of its task areas, 4Memory will identify current problems and problems with existing services and resources; make existing repositories, DH tools and data offerings interoperable; and improve services for reliable storage and long-term archiving. Examples include establishing a working group of service providers to identify and enhance key services, setting up an expert group to implement a 4Memory knowledge graph, creating a shared 4Memory data space and a virtual indexing layer to ensure that this research data is cross-searchable. 4Memory will further develop existing elements of the community-specific data infrastructure and improve the integration of consulting and educational offerings in the area of research data management across the historically oriented humanities.

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

NFDI4Memory will establish a network of institutions and projects that work digitally with historical data, connecting its community in a subject-related and data-driven manner. 4Memory has a particularly strong connection with three other humanities consortia, each of which addresses a specific community: **NFDI4Culture**, **NFDI4Objects** and **Text+**. In 2019 we signed a joint [Memorandum of Understanding](#) (MoU) in which the four consortia pledged to collaborate on issues of common interest to the consortia and to the NFDI as a whole. In 2020 we signed a [revised version of the MoU](#) that deepened our plans for collaboration. The four consortia meet regularly to discuss ways of extending their cooperation on common issues. 4Memory has, furthermore, signed the "[Leipzig-Berlin-Erklärung](#)" on cross-cutting topics. A majority of 4Memory's co-applicants and a significant number of our participants have become institutional members of NFDI e.V., providing an additional avenue for the consortium to contribute to the aims of the NFDI as a whole.

As set out in the agreement, representatives of the consortia have met regularly and discussed how they will coordinate their activities in order to address cross-cutting topics collaboratively. The memorandum group participated in meetings between the consortia and representatives of professional associations in the context of the "Forum geisteswissenschaftliche NFDI" to discuss routines and procedures to integrate professional organisations in the NFDI process. The memorandum group will continue to exchange information on how services and tools relevant to the humanities as a whole can be jointly developed and operated, thereby deepening the degree of collaboration among the humanities consortia.

Beyond the named humanities consortia, 4Memory will cooperate with other consortia regarding knowledge exchange and cross-cutting topics. 4Memory will collaborate with **BERD@NFDI** on topics such as automated text, layout and structure recognition as well as in the harmonisation of terminologies and the mutual exchange of controlled vocabularies and ontologies. Historical data have many of the same issues as the qualitative and quantitative social science and economic data that are the focus of **KonsortSWD**. **MaRDI** supports the network analysis of historical data (such as correspondence or itineraries) and develops algorithms that take into account temporal issues and factual inaccuracies, capabilities that are of interest to 4Memory.

In addition, we see potential interfaces with basic services with regard to identity and access management and long-term archiving, metadata handling and workflow automation.

### **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.**

Beyond the issues related to the overall mission of the NFDI, such as data publication workflows and infrastructure, several topics are important with regard to a cooperative approach to the other (planned) humanities consortia (4Culture; 4Objects and Text+), with whom 4Memory has a [Memorandum of Understanding](#), which include domain-specific metadata interoperability, provenance, data literacy as well as rights and ethics.

The combination of distinct objectives and experience that the consortium brings together will enable 4Memory to make unique contributions to the following cross-cutting topics:

- Critiquing data / data criticism
- Provenance, terminologies and contextualisation of research data
- Data literacy and training concepts, materials, workflows
- Data ethics and legal aspects

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

### **Critiquing data / data criticism in multiple temporal and spatial contexts**

4Memory is the only planned consortium defined by its focus on the distinct challenges of historical research across a range of data types. Historically oriented research extends across epochs and cultural contexts, posing particular challenges to scholars in our community. As in other disciplines, data criticism means considering the integrity and authenticity of data, but historians go further, reflecting fundamentally upon the historicity of data, including technical changes in data storage and formats. Research data and the sources that form their basis are not only heterogeneous – from texts, statistics and images to audiovisual media and born-digital information in the context of contemporary history – but also fragile, incomplete and emerge in dynamic relations. We aim to bring our unique perspectives to bear on the methods used to understand and critique data into the NFDI across disciplines.

### **Provenance, terminologies and contextualisation of research data**

The scholarly value of data depends on understanding their origins in historical contexts: knowing where, how and in which (digital) format they were produced. The empirical foundations of historical knowledge – our sources – were created amid diverse social and cultural relationships, in which, for example, place names, and even the meanings of terms, categories and concepts were not only different but also historically changing. The provenance of sources or documents in digital form must, just like their analogue counterparts, be transparent and understandable. Such knowledge about data's historicity must not be lost through digital representation and must be made more accessible and even improved. We are well placed to reflect upon the history of knowledge structures and, therefore, to place digitalisation in a critical, long-term perspective.

### **Data literacy concepts, materials, workflows**

4Memory will pursue specialised methodological innovation and activities to enhance data literacy (DL) in historically oriented research and teaching by bringing together university departments, professional associations for historical didactics, archives and archival training colleges. They will develop a DL competence profile for historically oriented researchers and a sustainable, certified DL training catalogue that not only comprises specific training courses and training material geared towards specific target groups but also enables a cross-disciplinary and cross-data approach. Across Germany's diverse and federalised education system, this will enable a cross-disciplinary and cross-data approach and, at the same time, enable the possibility of identifying generic elements of data literacy in order to jointly develop methodological competence profiles.

### **Data ethics and legal aspects**

Historical RDM raises many ethical and legal issues: To whom do digital historical data belong? What does ease of cross-cultural data *access* mean for cross-cultural data *responsibility*? What consequences do machine learning / artificial intelligence methods in data analysis have? How can we balance the "right to be remembered" with the need to maintain privacy in contemporary historical sources? Ethical questions about "open access" are inseparable from the legal frameworks within which data and research results are made available. While for many historians, the problem of sources and data being in copyright is not a serious issue (because they address periods in the distant past), those dealing with 20th and 21st century topics often face serious limitations in using – or even referencing – recent materials. By bringing together researchers with public and state archivists and their specialised expertise in handling legal issues of data preservation, 4Memory will contribute to the development of such topics in the NFDI, such as via the cross-cutting section "Ethical & Legal Aspects".