

Instructions and Template

For Base4NFDI Basic Service Proposals
Initialisation Phase

Version 3.3
2025-03-05

I General Instructions

The proposal template provides a mandatory structure and a number of tables to be completed. Apart from that, applicants are free to decide how to present the content. All sections of text in grey are intended to provide guidance for completing the proposal and should be deleted in your proposal submission.

Base4NFDI provides consultation and support during the initial application phase and throughout the three project phases. To make use of these options and consider them in your Service concept, contact us via base4nfdi-servicestewards@lists.nfdi.de.

Proposals for Base4NFDI Basic Services must be submitted via the spokesperson of the NFDI Section supporting the proposal to base4nfdi-office@lists.nfdi.de in PDF format. This implies that the proposal has been presented and discussed in a Section meeting and was met with approval.

Further information about the next submission deadline and the entire evaluation process can be found at the Base4NFDI website, which will be updated continuously^{1,2}. Proposals must be written in A4 format, 11 pt Arial font with line spacing of 1.5. The length of the proposal may vary depending on the complexity of the proposed service but may not exceed 15 pages (excluding cover page, financial tables of chapter 6 and appendix). A different font or line spacing may be used in tables, figures, footnotes and the list of references, provided the text is still easy to read. The proposal and appendices are to be written in English. Please use the proposal template contained in part B of this form.

The requested funding amounts should not include programme allowances (for indirect project costs). Budgeted allowances will come from Base4NFDI flex funds and vary by the phase (Initialisation, Integration, Ramp-Up for operation) for which funding is requested. Funding for the

¹ <https://base4nfdi.de/process/how-to-apply>

² <https://base4nfdi.de/process/decision-making>

Initialisation phase – with the exception of well-argued cases – will be limited to one year and a maximum of €226.500³.

For further information please refer to <https://base4nfdi.de> or contact Base4NFDI base4nfdi-office@lists.nfdi.de in the case that answers are not available online.

Changes to version 3.2 of this document (2024-11-19) are highlighted with **grey** background colour. Change notes can be found on www.base4nfdi.de. Please remove all remaining background highlighting for the final proposal.

II Proposal Template – Initialisation Phase

1 General Information

- Name of proposed Basic Service (in English)
- Acronym of the proposed Basic Service
- Service "subtitle" explaining key functionality
- Corresponding NFDI Section
- Lead institution

The lead institution is the coordinating institute for the Basic Service for the current stage of development.

Please enter the institute's name and address.

- Name of lead institution principal investigator

The primary contact and coordinator of the Basic Service.

Please enter the name and email address.

- Participating institutions

Table 1: List of participating institutions

Principal Investigator	Institution, location	Contact E-mail	Member in [consortium] ⁴	Funding requested [yes no]

³ An additional financial top-up to the stated amount - to compensate increased personnel costs based on updated DFG Personnel Rates - is fully subject to the decision of the NFDI Consortia Assembly. For further information please refer to <https://base4nfdi.de/process/how-to-apply>, section "How much is funded per phase each year?" or contact base4nfdi-office@lists.nfdi.de in the case that answers are not available online.

⁴ Name one DFG consortium the institution is or has a route to become a member of and through which funds should be appropriated if this proposal is approved.

List all participating institutions. If applicable, make clear if there are partner institutions without funding.

- **Planned duration of the project**

The Initialisation phase typically runs 1 year, under well-justified and well-explained circumstances up to 2 years. If the planned duration is longer than 1 year, please provide a justification here.

- **Significance**

Explain the intended added value of your service in max. 120 words. Try to use non-technical vocabulary and explain your proposal to an undergraduate-educate scientist / consortia member outside your field of specialty.

- **Summary of the proposal in English and German**

up to 1,500 characters each, including spaces

2 State-of-the-Art of Proposed Basic Service (max 3 pages)

II.2.1 Background and Motivation

Briefly explain the added value provided through an NFDI-wide Basic Service of the here proposed type. Briefly sketch how a Basic Service would look like and / or how its details would be shaped during the Initialisation phase. Please also briefly provide a rationale, why you think the proposed service can be defined as a Basic Service with regards to the Base4NFDI service definition⁵. If feasible and applicable, do also briefly add from your overall perspective: how will the proposed service possibly interact with other (basic) services, what does it need?

II.2.2 State-of-the-Art

Briefly outline the state-of-the-art of the current software, community and service landscape that already exists around your proposed basic service and that you are building on. Please specify to what extent the planned basic service overlaps with services provided by the EOSC EU Node, whether it would be complementary, competing, or an entirely new offering⁶.

II.2.3 Status of Work Results in Preparation for the Basic Service

(Keywords: Preliminary identified requirements and needs (on what basis evaluated?), functional/operational gaps - Robustness, security and scalability of intended technologies - Building on existing technologies/infrastructure - Open license technology - Coordination and integration of existing standards, conflicting standards/implementations - Necessity of further development or new development - Alternatives - Connection to existing consortia: Which consortia

⁵<https://base4nfdi.de/process/basic-services>

⁶<https://open-science-cloud.ec.europa.eu/services>

currently support the development of the service? Should also motivate the development phase overview in sections 4.2 - 4.4 ...)

II.2.4 Current Technical Readiness Level (TRL) of the proposed Basic Service (max 0.5 pages)

Briefly specify the current TRL for the proposed Basic Service (based on existing work).

The following definitions apply⁷:

- TRL 1 – basic principles observed
- TRL 2 – technology concept formulated
- TRL 3 – experimental proof of concept
- TRL 4 – technology validated in lab
- TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- TRL 7 – system prototype demonstration in operational environment
- TRL 8 – system complete and qualified
- TRL 9 – actual system proven in an operational environment (competitive manufacturing in the case of key enabling technologies; or in space).

For non-technical services, please provide analogous information.

3 SWOT Analysis (max 2 pages)

Please detail strengths, weaknesses, opportunities and threats for the proposed service in the table below and provide an explanation and transparent reflection on opportunities and risks, plans to overcome weaknesses and strengthen opportunities. Focus is on the one hand the intended service and its characteristics, on the other hand the analysis of the environment for the acceptance of the service in the NFDI and beyond. Please consider different perspectives, e.g., end users, consortia, international stakeholders.

Table 2: SWOT analysis

Internal	Strengths 1. 2. 3. ...	Weaknesses 1. 2. 3. ...
External	Opportunities 1.	Threats 1.

⁷https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf

2.	2.
3.	3.
...	...

4 Working Concept for the Development of the Basic Service (max 2.5 pages)

Describe the overall concept for the development of the Basic Service with regard to all stages (Initialisation, Integration, Ramp-Up for operation). As this proposal is for the Initialisation phase, describe it in more detail. Include in particular how requirements and use cases across all consortia are going to be captured.

II.4.1 Service Initialisation Concept

Describe how a prototype of the Basic Service is going to be introduced as a proof of concept into the evolving infrastructure, e.g., landscape reviews, identification of relevant stakeholders within consortia, requirements collection, consortium-specific as well as overarching analysis, gap analysis, exchange with sections, alignment of (user) personas, benefits (“what is in it for me”) and use cases. Initial definitions of training and outreach target groups, goals and rough content (“terminal learning objectives”). In particular, a working prototype and a proof of concept would mean that the service as a whole has reached TRL 5-6 which must be reflected by the respective project deliverables given below (section 5).

II.4.2 Development and Integration Outlook

Explain the development and integration work required to establish the Basic Service for different NFDI consortia, e.g., required work for interfaces with other existing IT solutions (see 4.1), adaptations to standards, creation & dissemination of training and further development to meet specific requirements.

II.4.3 Ramp-Up for Operation

Explain the requirements that have to be achieved to scale the service to a larger user group including hardware needs, operational overheads, estimates for compute power and continuous maintenance, roll-out of training to a wider audience, further measures for adoption and (user) support. The Basic Service may be accessible through a central site (central operations) or in a distributed way (e.g., operations through individual NFDI consortia). Make an effort to explain your own estimates.

II.4.4 Risks and Challenges

Give an overview on the risks and challenges that may occur through operations of the service on behalf of the Initialisation, Integration or Ramp-Up phase.

5 Work Programme (ca. 6 pages)

This section should describe the structure of your work programme for the Initialisation phase as it relates to the overall objectives of the proposed Basic Service.

II.5.1 Overview of Work Packages

The work programme for the Initialisation phase of a Basic Service is divided into different work packages, deliverables, and milestones. Please include all institutions working together on a work package (as a unified project group) and name the institution, who leads the work package.

An overview of what is expected from a basic service in each phase can also be found on our website⁸.

Be aware that there are **seven mandatory** deliverables from Task Area 1 (Base4NFDI). You are required to include them in your work programme, but should extend and specify their content towards your service, especially for the first three (D.TA1.1 – D.TA1.3, see below). More guidance on these deliverables can be found in reference⁹. The first three of them regard your documentation of the Initialisation phase:

1. Deliverable D.TA1.1: A report with a summary of your requirements analysis:

Report on your assessment of the needs of your community for your basic service. Especially considering the existing service landscape in the NFDI.

2. Deliverable D.TA1.2: A report providing an overview of your evaluation of existing tools and methods to provide your service, e.g. existing software.
3. Deliverable D.TA1.3: The documentation of your service design.

Based on the results of both analyses, describe how your service will be constructed.

These 3 reports are due approximately 3/6/6 months resp. after start but this can be adapted to your working plan. The following three mandatory deliverables are due until the end of the Initialisation phase:

4. Deliverable D.TA1.4: Development and provision of the Basic Service as a first prototype.
5. Deliverable D.TA1.5: Test of the Basic Service with selected users.
6. Deliverable D.TA1.6: Present the results of your service in your section and as a short summary (one page¹⁰).

Furthermore there is one deliverable to complete during the phase, depending on the timing of the corresponding events:

7. Deliverable D.TA1.7: Participate in Base4NFDI outreach events, that is the Base4NFDI user conference, services roadshow and give a NFDI talk.

For more detail see reference⁹ or contact the Base4NFDI team for consultation. Additionally, a matrix of contact persons or stakeholders across all consortia is considered a significant outcome

⁸<https://base4nfdi.de/process/what-is-expected-for-each-phase>

⁹Base4NFDI - Requirements for Completion of Initialisation Phase, <https://doi.org/10.5281/zenodo.11519610>

¹⁰Like described here <https://doi.org/10.5281/zenodo.14858394>

in preparation for the Integration phase. During this phase you should already be thinking about key performance indicators (KPIs) that can be applied in the Integration phase.

We further recommend a work package on community engagement and communication to allocate resources to, for example, the realisation but also participation in workshops. We recommend to allocate resources to

- Centrally coordinated activities and offers by Base4NFDI, like a kickoff event, a persona workshop, a monthly Jour Fixe with Base4NFDI and the other service teams, quarterly consulting regarding training with a focus on target group, learning goal definition and consultation regarding KPIs
- The organisation of two or more community workshops during the duration of the Initialisation phase
- Participation in consortia activities and conferences

Note that deliverables are tangible outcomes of the work (software, documents, plans, designs, training materials,...), while milestones are specific moments in time or in the course of the project. Here, the achievement of the goals (i.e. deliverables) of one of the development phases and the transition to the next phase is considered a milestone.

Please add the seven Base4NFDI deliverables to your work plan (with their original notation), preferably as a separate work package, with relations to your own related work packages. Alternatively to a separate work package you may include them into your own, but keeping their names and notations.

Table 3: Overall work programme with work packages, deliverables, milestones, and responsible partners.

Work package	Deliverables (D) and Milestones (M)	Responsible partner	Related work packages
1. content	D1.1 Title of deliverable D1.2 M1.1 ...	Institution	
2. other content	D2.1 D2.2 M2.1 ...	Some other institution	
...	
9. Base4NFDI mandatory items	D.TA1.1 Requirements analysis		
	D.TA1.2 Tools and software evaluation		
	D.TA1.3 Service design		
	D.TA1.4 Service prototype		
	D.TA1.5 Piloting and testing		

	D.TA1.6 Presentation of results		
	D.TA1.7 NFDI outreach activities		

II.5.2 Detailed Work Programme

Please provide a detailed description of the work packages, using one subsection per work package. Please include a Gantt chart summarising the duration, dependencies, deliverables and milestones of the WPs.

II.5.2.1 WP1

II.5.2.2 WP2

II.5.2.3 WP3

6 Funding Request

List the task area in the table heading and the individual work packages in the table. Add additional lines as necessary.

Table 4: Funding request by work package

	Year 1	Year 2 (if applicable)	Total (in €)
Work package 1			
Work package 2			
Work package 3			
...			
Total project funds			

List the name of each institution, adding additional lines if necessary.

Table 5: Funding request by institution

	Year 1	Year 2 (if applicable)	Total (in €)
Institution	Totals in €		
Lead institution			
Participating institution 1			
Participating institution 2			
Participating institution 3			
...			
Total project funds			

Please note the current staff funding rates of the DFG at the time of application, only on this basis funding is possible¹¹. In addition, please keep in mind the maximum budget that can be requested in the Initialisation phase (cf. Section I).

Any proposed instrumentation funding must be explained separately below the table.

Table 6: Funding request by funding category

	Year 1	Year 2 (if applicable)	Total (in €)
DFG funding category	Totals in €		
Staff			
Direct project costs			
Total project funds			

List the number of **person months** for which funding is requested under the given staff categories of the DFG Personnel Rates.

Table 7: Funding request by staff category

	Year 1	Year 2 (if applicable)
Staff category	Number of person months	Number of person months
Postdoctoral researchers and comparable		
Doctoral researchers and comparable		
...		

7 Required Support Actions from Base4NFDI, NFDI Sections and NFDI Consortia (max 1 page)

Please add additional support you explicitly need from the Sections, from Base4NFDI or from single consortia or any other support. An example is shown in the table.

Table 8: Support request

Support from	Work package	Contact person
Base4NFDI	Support in setting up questionnaire for requirements analysis	Lara Mustermann, Musterinstitut, lara.mustermann@musterinstitut.de

¹¹https://www.dfg.de/formulare/60_12/

Section Metadata		Max.mustermann@mustermail.de
...		

On the following page you will find a template to confirm the accuracy of the information provided in this application (Principal Investigator) as well as the commitment of all participating institutions (institute directors) listed in section "1 General information". You can reproduce the template accordingly. Please provide confirmation for the lead and every participating institution listed in Table 1.

[NAME OF INSTITUTION]

We herewith certify that we have submitted this proposal to Base4NFDI and that the information provided therein is accurate.

Head of the lead / participating institution

First name last name

City, date, signature

Principal Investigator

First name last name

City, date, signature

III Appendix

The appendix may only include the following information and documents:

a) Bibliography and List of References

Please list all sources and data repositories, information infrastructures and software that you have used to describe the status quo in your proposal. Indicate which sources were written or developed by members of the participating institutions (for example, by highlighting the source in bold).

b) Letters of Commitment (LoC) Supporting the Basic Service Development (cf. section 7 of this form)

It is standard for project partners to commit to the project activities. Partners are named in the paragraph "general information - participating institutions" of this template. Letters of commitment (LoC) are requested only in two cases: 1) from an NFDI consortium if it dedicates consortium funds for specific contributions to the service, 2) from other persons or institutions that may not actively participate but contribute to the service in any form.

LoCs can be submitted two weeks after the application deadline.

Please do not provide generic consortia support letters. General support including the approval of 25% of the NFDI consortia will be requested in a separate process by the Base4NFDI coordination team.

All signed documents must be sent by the corresponding section by email to the Base4NFDI Coordination (base4nfdi-office@lists.nfdi.de) in a PDF by the date of the decision round this proposal is seeking.