

netherlands

eScience center

Project Full Proposal

Innovative
Technologies Call
2021



REGISTRATION FORM (BASIC DATA)

This document contains explanatory text in italics. Please remove this text before submission.

1a. Details of the applicant

Lead Applicant (LA)

Surname, first name, title(s)	
Date of PhD	
Position	
Institute	
Department	
Section	
Address	
Postcode	
City	
Tel	
E-mail	

1b. Submission for the technology area:

- FAIR-enabling technologies
- data-efficient AI

2a. Title of the project

A short and specific title for the proposed research.

2b. Summary for the eScience Center website (max 150 words)

Please provide a non-expert summary of the proposal for use on the eScience Center website and other media.

2c. Research abstract (max 250 words)

Please provide an expert research abstract of the proposal for the benefit of the reviewers.

2d. Keywords

(max. 6 keywords)

2e. Link with eScience Center expertise

Indicate the area of expertise the proposed work is expected to require.

- Software quality (*developing workflow technologies, improving software practices, advancing software sustainability*)
- AI (*machine learning, image processing*)
- Analytics (*big data analytics, text analysis, visualization*)
- Data processing (*databases, real-time data analysis, interoperability and linked data*)
- Computing (*exploitation of hardware accelerators, high performance computing, cloud computing, combining simulations*)

2f. Project duration

Project start date:

Project end date:

Requested PYR:

The project should start at the latest 6 months after granting (expected in December 2021). The project duration should be between 24 and 36 months.

A project may be requested for an in-kind budget of 3.0 PYR. This in-kind funding will be provided by one or more of our research software engineers, depending on the project requirements and eScience expertise.

2g. Research Team

Name	Affiliation	Position	Contribution (FTE)	Expertise and type of involvement
<i>Lead Applicant</i>			<i>at least 0.2 required</i>	
<i>Team member 1</i>			<i>No requirements</i>	
<i>Team member 2</i>			<i>No requirements</i>	
<i>Add as many rows as required</i>				

The LA should come from a technical discipline (computer science, data science, AI, etc.), or from a research discipline with a focus on technology development. The LA must be in possession of a PhD.

The LA should have demonstrable knowledge and experience in developing digital methodologies.

The research team including the LA should make clear its availability for a collaborative effort.

A research team consists of at least the LA, and can include more researchers from one or more institutes.

3. Project proposal

The text and illustrations should facilitate easy reading and should be self-contained. References are allowed and will not count towards the word limits. In case there is overlap with the software management plan refer to that plan for details.

3a. Academic quality and state-of-the-art (max 1000 words)

- The proposed work should aim to solve a specific, urgent challenge.
- The proposal must indicate the technological and/or methodological challenges that need to be overcome.
- The proposal should discuss relevant existing technologies and methodologies and indicate why these do not suffice.
- The proposal must indicate how the proposed research is connected with efforts within the broader research community to address the methodological issue at hand.
- The LA should have demonstrable knowledge and experience in developing digital methodologies (refer to the Section 2g if necessary)
- The research team including the LA should make clear its availability for, and track record concerning, a collaborative effort, and argue why this is sufficient on the basis of a realistic project plan (refer to the Section 2g and 4 if necessary).

3b. Impact (max 800 words)

- The proposal must indicate which outcomes the projected software solution(s) are expected to lead to.
- The proposed research should potentially change the modus operandi in research disciplines, in terms of broadness, scale, speed of result delivery, or otherwise.
- The proposal must indicate which efforts are made to promote the results of the project, in terms both of academic publication and of research community (demonstrations, training, etc).

3c. Sustainability (max 800 words)

- The proposal must indicate how the technology and software will find use beyond the proposed work itself, preferably across institutional, national or disciplinary borders, both during and after finalization of the project.
- The technological and software deliverables must be open source/open access and permit use and/or interpretation by other researchers.
- The proposal must indicate how the project will build further collaborations, in academic research, industry, or both.

Software accessibility and quality (Health Check)

The eScience Center expects a basic level of accessibility and quality for the software used in the projects it awards and collaborates in. Applicants must therefore provide convincing arguments that the software serving as starting points of the research is usable and does not require substantial cleaning or overhaul. For research software serving as a starting point for the proposal, include the following information:

- A location where the software can be accessed (preferably a URL to a version control system).
- The license under which the software is distributed (if any).
- A location where the documentation can be accessed (preferably a URL).

If the software is not available online as open source, details must be provided, such as clear metadata, so a health check can be performed. Please contact the eScience Center to discuss alternatives.

Your institute may employ data stewards who can advise on these topics. Additionally, information on software and data quality can be found at:

- <https://www.openaire.eu/how-to-openly-license-research-data>
- <https://www.openaire.eu/how-to-make-your-data-fair>
- <https://choosealicense.com/>
- <https://fair-software.nl>

3d. Key publications

Please list a number (max 3) of key publication by the lead applicant and/or members of the research team relevant to the proposal.

4. Work plan, deliverables and timetable (max 800 words)

Please provide a realistic project work plan, and argue why this is sufficient to reach the project outcomes. The activities of the lead applicant and the research team should be integral to the proposed work plan. Note that the work plan may need to be adjusted during the project; this will always happen in consultation between the applicant and the eScience Center.

Deliverables can include academic publications, demonstrations, posters, presentations, software, datasets, documentation, and tutorials.

5. Workshops

*The organisation of **two** substantial workshops is mandatory. The goal of these workshops can include technology development, as well as user community engagement. The workshop proposal is not part of the full proposal; the full workshop proposal should be written after the project is awarded but prior to the start of the project. The format and costs of the workshops should be negotiated with the eScience Center, which will cover all costs.*

Please describe the topics and the goal for the workshops.

5a. First workshop (max 150 words)

5b. Second workshop (max 150 words)

ADMINISTRATIVE DETAILS

6. Statements by the applicant

The eScience Center strictly applies the [General Data Protection Regulation \(GDPR\)](#), the EU regulation aimed at strengthening data protection for all individuals within the EU (see www.eugdpr.org). In the Netherlands the regulation is implemented as the 'Algemene Verordening Gegevensbescherming (AVG)'. Applicants must strictly apply these rules and regulations, as well as the principles, in as much as these are applicable to the proposed work.

The eScience Center endorses the [Code Openness Animal Experiments](#) and the [Biosecurity Code of Conduct](#) (available at www.knaw.nl). Applicants must check whether the codes have relevance to their application. If so, the eScience Center requires applicants to endorse the code(s) and act according to these. In case of the Biosecurity Code the applicant is convinced that the knowledge presented in the application cannot lead to dual use.

Applicants are asked to endorse and follow the [Netherlands eScience Center Rules towards Publishing, Licensing, and Intellectual Property](#) (available at www.esciencecenter.nl). For alternative IP agreements, contact the eScience Center before proposal submission.

- I endorse and follow the rules and regulations as laid out in the 'Algemene Verordening Gegevensbescherming (AVG), as well as the underlying principles (GDPR).
- I endorse and follow the Code Openness Animal Experiments (if applicable).
- I endorse and follow the eScience Center Rules towards Publishing, Licensing, and IP. **If 'NO', then please justify, and contact the eScience Center before submitting the proposal.**
- I have informed my employing institute of the submission of this proposal, by sending a copy of the application to the scientific director or dean of the institute or department.
- I have completed this form truthfully.

Name (Lead Applicant):

Place:

Date:

ATTACHED DOCUMENTS

This full proposal needs the following documents:

- A software management plan, signed on behalf of an institute or other formal entity (for details, see section 2.4 of the call for proposals).

Optional letters of support or intent can also be attached (see section 2.5 of the call for proposals).