Open Mind
Technology for society

Call for proposals

Applied and Engineering Sciences

2022-23
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Chapter 1: Introduction / Open Mind

1 Introduction

In this Call for proposals information is provided about the application procedure for the “Open Mind 2022-2023” funding round. This Call for proposals falls under the responsibility of the Dutch Research Council (NWO).

In this Call for proposals you will find information about the aim of this programme (Chapter 2), the conditions for the grant application (Chapter 3) and how your proposal will be assessed (Chapter 4). This is the information you need to submit a grant application. Chapter 5 states the obligations for grant recipients in the event you are awarded funding, Chapter 6 contains the contact details and Chapter 7 the annexes.

1.1 Background

NWO Domain Applied and Engineering Sciences (NWO Domain AES; in Dutch Toegepaste en Technische Wetenschappen TTW) invites scientists to submit out-of-the-box research ideas that contribute to sustainable solutions for global societal challenges (along the line with people, planet, profit).

Imagine competing to solve some of the world’s most daunting problems. Imagine using technology to combat disease, improve education, create disaster communication systems, empower people with disabilities, or promote environmental sustainability. Open your mind and submit your research idea to NWO Domain AES. Ideas will be pitched at the annual NWO innovation festival TEKNOWLOGY, competing for one of the Open Mind grants. A short description of the Open Mind ideas that received funding in previous years can be found on the NWO website: https://www.nwo.nl/openmind.

At the NWO innovation festival TEKNOWLOGY that will be held on June 27th 2023, NWO Domain AES provides a platform to scientists to discuss global challenges through creativity, passion, and their knowledge of technology. To support scientists to realise their ambition in solving and/or contributing to these global challenges, NWO Domain AES has a total budget of 350,000 euro available. In principle seven Open Mind grants, with a maximum of 50,000 euro (inclusive of Dutch VAT) each and for a duration of one year, will be awarded at the NWO innovation festival TEKNOWLOGY 2023 to the best ideas with significant societal impact.

In this way Open Mind contributes to the mission of the NWO Domain AES: to promote engineering research with application and impact for people and society. To shape this mission, AES will focus on the following three objectives:

- strengthening the engineering basis;
- efficient innovation chains;
- visible societal impact.

For more information, see: www.nwo.nl/aes-strategy.

1.2 Available budget

The available budget for this Call for proposals is €350,000 (inclusive of Dutch VAT). Seven applications of 50,000 euro can be granted.

1.3 Submission deadline(s)

The deadline for submitting full proposals is March 14, 2023, at 14:00:00 hours CET.
2 Aim
This chapter describes the aim of the programme and the societal impact.

2.1 Aim of the programme
Researchers are often societally involved and full of ideas for improving the world by using technology. NWO Domain Applied and Engineering Sciences wants to support these researchers with the Open Mind call and invites researchers to submit out-of-the-box research ideas that contribute to sustainable solutions (by using or developing technology) for global societal challenges (along the line with people, planet, profit).

Applications should be characterized by original and unconventional research approaches or methods as well as their high-risk profile. We want to be impressed by your scientific challenge, unconventional research methods and expected societal impact. Make clear to us why the problem that you address is important for society and why it should be tackled right now and why the results of your project are essential and to what changes your project may lead.

To support researchers to realize their ambition in solving and/or contributing to these global challenges, they can use the Open Mind grant to work on their idea during a 1-year project to find out whether or not their idea can have a significant impact on society. The emphasis of this grant is on new ideas that have not been investigated yet by the researchers themselves or in the broader research community.

2.2 Societal impact
New knowledge and insights from scientific research can make an important contribution to solutions for current and future societal issues. Examples are the energy transition, health and care, or climate change. Knowledge utilisation increases the chances of research having a societal impact and is therefore an important aspect of the NWO strategy for 2019-2022.

2.2.1 Knowledge utilisation
NWO defines knowledge utilisation as an iterative process aimed at achieving societal impact. Through interaction and alignment between researchers and possible users of knowledge, the chances of knowledge utilisation and, accordingly, societal impact increase. Via its knowledge utilisation policy, NWO facilitates the possible contribution of research to societal issues by encouraging productive interactions with societal stakeholders during the development and realisation of the research. NWO does this in a manner appropriate to the aim of the funding instrument.

2.2.2 Customisation in approach knowledge utilisation
Depending on the aim of the funding instrument, NWO will select the approach that has the greatest chance of achieving societal impact. The primary aim of the funding instrument determines the method NWO deploys to facilitate knowledge utilisation in various phases of the project (proposal, realisation, project completion) and the effort required from the applicant(s) and partner(s).

Given the fact that Open Mind aims to support out-of-the-box research ideas that contribute to sustainable solutions for global societal challenges, the Impact Plan approach fits best with the Open Mind programme. With this approach, NWO facilitates the development of an integrated strategy by researchers and partners with the target of increasing the chances of the desired societal impact. NWO offers an e-learning module to help those interested on their way using the Impact Plan approach. Please visit the NWO website impact.nwo.nl/en for more information.

However, given the nature of the Open Mind programme (small grants, short project durations, focus on creative out of the box ideas and assessing the feasibility thereof, no consortia), only certain elements of the Impact Plan approach are asked for in the Open Mind applications (see Application
form). When finishing their project, Open Mind grant recipients, will be asked to elaborate on the possible or foreseen trajectory towards impact in their end reports.

For more information about the NWO knowledge utilisation policy, see the website: www.nwo.nl/en/knowledge-utilisation.
3 Conditions for applicants

This chapter contains the conditions that are applicable to your grant application. Firstly it describes who can apply for funding (section 3.1) and what you can request funding for (section 3.2). Subsequently, you will find the conditions for preparing and submitting the application (sections 3.3 and 3.4) and the specific funding conditions (section 3.5).

3.1 Who can apply

Eligible for submitting a proposal are scientists (scientific personnel, PhD students, postdocs, assistant professors, associate professors and full professors) employed at:
- universities located in the Kingdom of the Netherlands;
- university medical centres;
- institutes affiliated to the Royal Netherlands Academy of Arts and Sciences (KNAW) or NWO;
- Netherlands Cancer Institute;
- the Max Planck Institute for Psycholinguistics in Nijmegen;
- Naturalis Biodiversity Center;
- Advanced Research Centre for NanoLithography (ARCNL);
- Princess Máxima Center.

Applicants need to have a (temporary) appointment at one of the organisations mentioned above at the moment of submission of their proposal.

Scientists with a temporary appointment should make sure that the host institution guarantees the employment for the duration of the Open Mind project (July/August 2023-July 2024). A written statement signed by the board of the institute should be received by NWO Domain AES no later than June 1st 2023.

Applicants with a part-time contract should guarantee adequate supervision of the project and all project members for whom funding is requested.

Extra conditions:
A maximum of 2 applicants can apply.

3.1.1 Main and co-applicants

The main applicant submits the proposal via the NWO web application ISAAC. During the assessment process, NWO will communicate with the main applicant. After a proposal has been awarded funding, the main applicant will become the project leader and point of contact for NWO. The (knowledge) institution of the main applicant is the main beneficiary and will become the official secretary.

Co-applicants have an active role in realising the project. The (sub)project leaders and beneficiary/beneficiaries are jointly responsible for realising the entire project.

3.2 What can be applied for

For an application in this Call for proposals, a maximum of €50,000 can be applied for. The maximum duration of the proposed project is 1 year. For an Open Mind grant the following budget modules are available:

1. Personnel
   a. Personnel temporarily appointed to the project at the research institute
   b. Research leave for applicants
2. Materials
   a. Citizen Science
3. Foreign travel
Apply only for funding that is vital to realise the project. A more detailed explanation of the budget modules that can be applied for can be found in the annexes to this Call for proposals (7.1).

### 3.3 Preparing an application

The steps involved in writing your application are:
- download the application form from the NWO web application ISAAC or from the NWO web page (on the grant page of the funding instrument concerned);
- complete the application form (maximum of 2 A4 pages) and make sure to have included a downloadable link to the video or animation (see below) and to have ticked the statement box at the end of the application form;
- save the application form in ISAAC as a PDF file and upload it with any compulsory annexes;
- fill in the requested information online in ISAAC.

**Compulsory annexes: financial planning**

In case NWO has made a template available, the annexe should be drawn up according to the NWO template. Annexes must be uploaded in ISAAC separately from the application. All of the annexes, except for the budget, must be submitted as PDF files (without encryption). The budget must be submitted in ISAAC as an Excel file. Any annexes other than those above-mentioned are not permitted.

Please note that in the application form a link to a downloadable short movie or animation (maximum of 2 minutes) must be included. In this movie or animation, the problem and proposed solution need to be pitched in an inspiring way. Show us what it is about your research that excites you. We want to be impressed by your scientific challenge, unconventional research methods and expected societal impact. We encourage you to consider creative and original ways to present your ideas. Make sure that the link works, can be used until 27 June 2023 (the date of TEKNOWLOGY) and that the movie can be viewed without installing additional software (other than standard media players).

**Keep in mind a broad audience:** your well-educated neighbour should be able to understand your story. If you make use of audio and/or visuals make sure they are royalty free. Please keep in mind that your video could be used as source material for promotional purposes prior to and/or during NWO Innovation Festival TEKNOWLOGY. In such a case NWO will ask explicit permission beforehand.

You must write your application in English. The language spoken and/or written in the short movie should also be English.

An application can only be submitted via the web application ISAAC. Applications that are not submitted via ISAAC will not be taken into consideration.

As the main applicant, you are required to submit the application via your own personal ISAAC account.

It is important to start with your application in ISAAC on time:
- if you do not yet have an ISAAC account, then you should create this on time to prevent any possible registration problems;
- any new organisations must also be added to ISAAC by NWO;
- you also need to submit other details online.

Applications submitted after the deadline will not be taken into consideration by NWO.

For technical questions, please contact the ISAAC helpdesk, see contact (Chapter 6).

Does a main and/or co-applicant work at an organisation that is not included in the ISAAC database? You can report this via relatiebeheer@nwo.nl so that the organisation can be added. This will take several days. It is therefore important that you report this at least one week before the deadline.
Chapter 3: Conditions for applicants / Open Mind

The applicant must inform the organisation where she/he works about the submission of the application, and the organisation must accept the granting conditions of this Call for proposals.

### 3.4 Conditions for submission

#### 3.4.1 Formal conditions for submission

NWO will assess your application against the conditions listed below. Your application will only be admitted to the assessment procedure if it meets these conditions. After submitting your application, NWO requests you to be available to implement any possible administrative corrections so that you can (still) meet the conditions for submission.

These conditions are:
- the main applicant and co-applicant(s) meet the conditions stated in Section 3.1;
- there is a maximum of 2 applicants;
- the application form is, after a possible request to make additions or changes, complete and filled out according to the instructions;
- the application is submitted via the main applicant’s ISAAC account;
- the application is received at or before the deadline set;
- the application is written in English;
- the application budget is drawn up in accordance with the conditions for this Call for proposals;
- the proposed project has a duration of at most 1 year;
- All of the required annexes are, after a possible request to make additions or changes, complete and filled out according to the instructions;
- The required video pitch is in English and is maximum 2 minutes long;
- The required video pitch contains audio and/or visuals that are royalty free.

### 3.5 Conditions on granting

The NWO Grant Rules 2017 and the Agreement on the Payment of Costs for Scientific Research are applicable to all applications, except as otherwise provided hereafter.

#### 3.5.1 Data management

The results of scientific research must be replicable, verifiable and falsifiable. In the digital age, this means that, in addition to publications, research data must also be publicly accessible insofar as this is possible. NWO expects that research data resulting from NWO-funded projects will be made publicly available, as much as possible, for reuse by other researchers. “As open as possible, as closed as necessary” is the applicable principle in this respect. Researchers are at least expected to make the data and/or non-numerical results that underlie the conclusions of work published within the project publicly available at the same time as the work’s publication. Any costs incurred for this can be included in the project budget. Researchers should explain how data emerging from the project will be dealt with based on the data management section in the proposal and the data management plan that is drawn up after funding is awarded.

**Data management section**

The data management section is part of the proposal. Researchers are asked before the start of the research to consider how the data collected will be ordered and categorised so that this can be made publicly available. Measures will often already need to be taken, during the creation of data and analysis of the data, to make its later storage and dissemination possible. If it is not possible to make all data from the project publicly available, for example due to reasons of privacy, ethics or valorisation, then the applicant is obliged to list the reasons for this in the data management section.

The data management section in the proposal is not evaluated and will therefore not be weighed in the decision whether to award funding. However, both the referees and the committee can issue advice with respect to the data management section.
3.5.2 Scientific integrity
In accordance with the NWO Grant Rules 2017, the project that NWO funds must be carried out in accordance with the nationally and internationally accepted standards for scientific conduct as stated in the Netherlands Code of Conduct for Research Integrity (2018). By submitting the proposal, the applicant commits to this code. In the case of a (possible) violation of these standards during a project funded by NWO, the applicant should immediately inform NWO of this and should submit all relevant documents to NWO. More information about the code of conduct and the policy regarding research integrity can be found on the website: www.nwo.nl/en/scientific-integrity. https://www.nwo.nl/integriteit

3.5.3 Ethical statement or licence
The applicant is responsible for determining whether an ethical statement or licence is needed for the realisation of the proposed project. The applicant should ensure that this is obtained from the relevant institution or ethics committee on time. If the project is awarded funding, then the grant is issued under the condition that the necessary ethical statement or licence is obtained before the latest start date for the project. The project cannot start until NWO has received a copy of the ethical statement or licence.

3.5.4 Nagoya Protocol
The Nagoya Protocol ensures an honest and reasonable distribution of benefits emerging from the use of genetic resources (Access and Benefit Sharing; ABS). Researchers who make use of genetic sources from the Netherlands or abroad for their research should familiarise themselves with the Nagoya Protocol (www.absfocalpoint.nl). NWO assumes that researchers will take all necessary actions with respect to the Nagoya Protocol. http://www.absfocalpoint.nl/

3.5.5 Extra conditions

IP during the assessment procedure
NWO invites the top 15 applicants to pitch their Open Mind idea for the Assessment committee at the annual NWO’s innovation festival TEKNOWLOGY. Furthermore, the awarded Open Mind applicants will present the results of their projects at TEKNOWLOGY 2024 to the public. In case applicants foresee IP-related issues preventing them from either pitching their idea or presenting their Open Mind project results, NWO expects that they will have taken care of any issues prior to the TEKNOWLOGY event in question. Applicants are encouraged to contact NWO when in doubt or in case of questions.
4 Assessment procedure

This chapter first of all describes the course of the assessment procedure (Section 4.2). It then states
the criteria that the assessment committee will use to assess your application (Section 4.3).

The NWO Code for Dealing with Personal Interests applies to all persons and NWO employees involved

NWO strives to achieve an inclusive culture in which there is no place for conscious or unconscious
barriers due to cultural, ethnic or religious background, gender, sexual orientation, health or age
(www.nwo.nl/en/diversity-and-inclusion). NWO encourages referees and members of an assessment
committee or jury to be actively aware of implicit associations and to try to minimise these. NWO will
provide them with information about concrete ways of improving the assessment of an application.
http://www.nwo.nl/diversiteit-en-inclusie

4.1 The San Francisco Declaration (DORA)

NWO is a signatory to the San Francisco Declaration on Research Assessment (DORA). DORA is a
worldwide initiative that aims to improve the way research and researchers are assessed. DORA
contains recommendations for research funders, research institutions, scientific journals and other
parties.

DORA aims to reduce the uncritical use of bibliometric indicators and obviate unconscious bias in the
assessment of research and researchers. DORA’s overarching philosophy is that research should be
evaluated on its own merits rather than on the basis of surrogate measures, such as the journal in
which the research is published.

When assessing the scientific track record of applicants, NWO makes use of a broad definition of
scientific output.

NWO requests committee members and referees not to rely on indicators such as the Journal Impact
Factor or the h-index when assessing applications. Applicants are not allowed to mention these in their
applications. You are, however, allowed to list other scientific products besides publications, such as
datasets, patents, software and code, et cetera.

For more information on how NWO is implementing the principles of DORA, see

4.2 Procedure

The application procedure consists of the following steps:
- Submission of the proposal
- Consideration of the proposal
- Pre-selection for pitches at Teknowlogy
- Pitches at Teknowlogy
- Assessment committee meeting
- Decision-making

Due to the expertise present in the assessment committee and the small size of the grant, NWO has
decided for the assessment of the applications to make use of the possibility given in Article 2.2.4,
paragraph 2, of the NWO Grant Rules 2017, to realise the assessment procedure without involving
referees.
4.2.1 Submission of a proposal

For the submission of the proposal, a standard form is available on the funding page of this Call for proposals on the NWO website. When you write your proposal, you must adhere to the questions stated on this form and the procedure given in the explanatory notes. You must also adhere to the conditions for the maximum number of words and pages. Your complete application form, including a link to your movie and the Financial planning Excel file, must have been received before the deadline via ISAAC (see paragraph 1.3). After this deadline, you can no longer submit a proposal. After submitting the proposal, the main applicant will receive a confirmation of receipt.

4.2.2 Consideration of the proposal

As soon as possible after you have submitted your proposal, you will hear from NWO whether or not your proposal will be taken into consideration. NWO will determine this based on several administrative-technical criteria (see the formal conditions for submission, Section 3.4). NWO can only take your proposal into consideration if it meets these conditions. Please bear in mind that within two weeks after the submission deadline, NWO may approach you with any possible administrative corrections that need to be made so that your proposal can (still) meet the conditions for submission. You will be given one opportunity to make the corrections, and you will be given five working days to do this.

4.2.3 Pre-selection for pitches at TEKNOWLOGY

If NWO receives so many proposals that the total amount of funding requested is four times or more the available budget for this Call for proposals (as stated in Section 1.2), then a pre-selection of the proposals will take place. In this case, the assessment committee will assess all proposals based on the assessment criteria (see Section 4.3.1) individually and meet to discuss their grades in order to establish a ranking. For this, the NWO score table will be used (on a scale of 1 to 9, where “1” is excellent and “9” unsatisfactory). A maximum of fifteen proposals will then be selected will then be selected to be further evaluated by the assessment committee at the pitch session during the NWO innovation festival TEKNOWLOGY. Taking this information into account, the assessment committee will advise NWO to reject the proposals that have not been selected and have the least chance of being awarded funding. For these proposals, the assessment committee will formulate a written motivation. The other proposals will be taken into the further procedure.

No preselection will take place in case the number of proposals does not exceed four times the number of proposals that can be funded. In that case all projects will be invited to the pitch session during the NWO innovation festival TEKNOWLOGY.

4.2.4 Pitches at TEKNOWLOGY

The applicants of the proposals that are invited will be provided a platform at the NWO innovation festival TEKNOWLOGY 2023 (scheduled 27 June 2023) in order to pitch their idea for the committee (and partially for the public) prior to the closed committee meeting. During the pitch, the assessment committee has the opportunity to pose questions and the applicant can respond to these questions in the discussion with the committee. In this manner, the principle of hearing and rebuttal is applied. The pitch and the discussion with the committee are important parts of the assessment and can lead to an adjustment of the assessment and the score of the proposal.

The applicants may also be invited by NWO Domain AES to assist in creating additional media (such as a professional short movie or posters) for public display at the annual conference.

In May 2023 candidates will be informed if they are selected to pitch at the TEKNOWLOGY conference.

4.2.5 Meeting of the assessment committee

After the pitch session, the assessment committee will meet to discuss the proposals of the applicants.
who pitched their proposals. The committee will make its own assessment based on the application, the movie and the pitch. The committee will consider whether the questions posed by the committee are properly addressed during the pitch.

Following the discussion, the committee will establish a final ranking, draw up a written recommendation addressed to the board of NWO Domain AES about the quality and ranking of the proposals and select the winners of the Open Mind grants. For all proposals, the assessment committee will formulate a written motivation, including the qualification.

Depending on evaluation of the proposals based on the four selection criteria, in principle a maximum of 7 proposals will be announced as winners of the Open Mind grants at the conference.

For more information about the qualifications, see [www.nwo.nl/en/apply-funding-how-does-it-work](https://www.nwo.nl/kwalificaties)

If, after the discussion of the proposals, it transpires that two or more of the proposals based on their weighted total score cannot be distinguished from each other, then there is an ex aequo situation (see the paragraph about ex aequo).

### 4.2.6 Ex aequo

NWO understands ex aequo to be a situation in which two or more proposals based on their weighted score cannot be distinguished from each other. An ex aequo situation is relevant with respect to the boundary of the available budget or the selection boundary. The existence of an ex aequo situation is determined as follows. The starting point is the ranking drawn up by the assessment committee, with the final scores rounded down to two decimal points. The reference score is the score of the lowest-ranked proposal within the boundary of the available budget or the selection boundary. All proposals with a score that is within 0.05 or less of the reference score will be considered. In this way, the proposals that are equal within a score of 0.1 will be selected. If an ex aequo situation occurs at the boundary of available budget or the selection boundary, then the proposal with a higher score pertaining to the criterion Originality will end as the highest. If the proposals subsequently in a tie, the assessment committee, with the help of an (anonymous) majority vote, will determine the ranking (in accordance with Article 2.2.7, third paragraph, sub a, part IV of the NWO Grant Rules 2017). If this vote provides no resolution either, or is not desirable to vote, the ex aequo situation will be send on to the decision-making body.

### 4.2.7 Decision-taking

Finally, board of NWO Domain AES will assess the procedure followed and the advice from the assessment committee. It will subsequently determine the final qualifications and take a decision about awarding or rejecting the proposals.

### 4.2.8 Timetable

Below, you will find the timetable for this Call for proposals. During the current procedure, NWO might find it necessary to make further changes to the timetable for this Call for proposals. You will, of course, be informed about this in time.

<table>
<thead>
<tr>
<th>Proposals</th>
<th></th>
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<tbody>
<tr>
<td>March 14, 2023 14:00:00 hours CET</td>
<td>Deadline proposals</td>
</tr>
<tr>
<td>May 2023</td>
<td>Outcome pre-selection</td>
</tr>
<tr>
<td>June 27, 2023</td>
<td>Pitches &amp; Assessment committee meeting (Teknowlogy 2023)</td>
</tr>
<tr>
<td>End of August 2023</td>
<td>Decision by the board</td>
</tr>
</tbody>
</table>
4.3 Criteria

4.3.1 Substantive assessment criteria

The applications submitted within this Call for proposals will be substantially assessed on the basis of the following criteria:

I. Originality (25%)
II. Quality project plan (25%)
III. Urgency (25%)
IV. Potential Impact (25%)

I. Originality (25%)
- If the subject is already being researched, are aspects present that make this proposal unique / that set this proposal apart?
- The proposal concerns (combinations of) technology with a current Technology Readiness Level (TRL) of maximally 5 (individual contributing technologies may be more mature, in multidisciplinary proposals it is the combination that counts. See Annex 1 for further information on TRL.
- The proposal clearly differs from being a logical continuation of previous or ongoing research funded earlier by STW, NWO Domain AES or NWO.
- The proposal clearly differs from being a logical continuation of previous or ongoing research of the applicants or of others involved.

II. Quality project plan (25%)
- The proposal can be reasonably finished within one year.
- The proposal can reasonably be executed within the 50,000 Euro budget.
- The subject addressed, the motivation and the solution are all clearly described.
- The written proposal and the video are complementary, but address the main idea of the proposal individually as well.

III. Urgency (25%)
- Would the consequences in one year be severe if this subject isn’t addressed immediately?
- The context makes this a good moment to address the subject.
- The societal relevance of the subject is known or recognized in (scientific) literature or policies of governments, non-governmental organisations or companies.
- No simple solution with existing means is yet available or currently known means have significant shortcomings.

IV. Potential impact (25%)
- Support for the importance of the subject is also present outside the scientific community. If not, the proposal addresses how it expects to generate this support (aspects such as use conditions, context, public acceptance or relevant legislation).
- The envisioned results of the proposal have the potential for a significant contribution to change.
- The results will contribute directly to either change, elimination of bottlenecks or facilitating follow-up (by evoking follow-up projects or involvement of others).
- The envisioned results provide a larger potential impact compared to equal investment in other existing means or solutions.
5 Obligations for grant recipients

This chapter details the various obligations that - in addition to the conditions stated in Section 3.5 - apply after funds have been awarded.

5.1.1 Data management

After a proposal has been awarded funding, the researcher should elaborate the data management section into a data management plan. For this, applicants can make use of the advice from the referees and committee. The applicant describes in the plan whether use will be made of existing data, whether new data will be collected or generated, and how the data will be made FAIR: Findable, Accessible, Interoperable, Reusable. Before submission, the data management plan should be checked by a data steward or similar officer of the organisation where the project will be realised. The plan should be submitted to NWO via ISAAC within 4 months after the proposal has been awarded funding. NWO will check the plan as quickly as possible. Approval of the data management plan by NWO is a condition for disbursement of the funding. The plan can be adjusted during the research.

More information about the data management protocol of NWO can be found at: www.nwo.nl/en/research-data-management.

5.1.2 Intellectual property

Applicants must carry out a project funded by NWO during the time that they work for the knowledge institution. If an applicant or a researcher funded by NWO is appointed by more than one employer, then the other employer should relinquish any possible IP rights that emerge from the project of the applicant.

5.1.3 Socially responsible licensing

The knowledge that emerges from the project could be suitable for use in society. When agreements about licensing and/or the transfer of research results developed under this Call for proposals are made, due consideration should be given to the ten principles for socially responsible licensing, as stated in the NFU factsheet “Socially Responsible Licensing Toolkit for knowledge institutions” (www.nfu.nl/sites/default/files/2020-09/200902-NFU%20Factsheet%20Toolkit%20SRL.pdf).

https://www.rijksoverheid.nl/documenten/rapporten/2019/05/29/tien-principes-voor-maatschappelijk-verantwoord-licentieren

5.1.4 Open Access

As a signatory to the Berlin Declaration (2003) and a member of cOAlition S (2018), NWO is committed to making the results of the research it funds openly accessible via the internet (Open Access). By doing this, NWO gives substance to the ambitions of the Dutch government to make all publicly funded research available in Open Access form. Scientific publications arising from projects awarded on the basis of this Call for proposals must therefore be made available in Open Access form in accordance with the Open Access Policy.

Scientific articles

Scientific articles must be made available in Open Access form immediately at the time of publication (without embargo) via one of the following routes:

- publication in a fully Open Access journal or platform registered in the DOAJ;
- publication in a subscription journal and the immediate deposition of at least the author accepted manuscript of the article in an Open Access repository registered in Open DOAR;
- publication in a journal for which a transformative Open Access agreement exists between UNL and a publisher. For further information, see www.openaccess.nl/en.http://www.openaccess.nl/
Chapter 5: Obligations for grant recipients / Open Mind

Books

CC BY licence
To ensure the widest possible dissemination of publications, at least a Creative Commons (CC BY) licence must be applied. Alternatively – in case of substantial interest – the author may request to publish under a CC BY-ND licence. For books, book chapters and collected volumes, all CC BY licence options are allowed.

Costs
Costs for publication in fully Open Access journals can be budgeted in the application using the budget module for “material costs”. Costs for publications in hybrid journals are not eligible for reimbursement by NWO. For Open Access books, a separate NWO Open Access Books Fund is available.

For more detailed information about NWO’s Open Access policy, see www.nwo.nl/en/open-science http://www.nwo.nl/openscience

5.1.5 Start and duration of project
The project may commence once NWO has received a copy of the award decision letter signed by the project leader, the data management plan and if applicable, a copy of any necessary ethics approval and/or WBO licence (see the subsection on the data management plan and on ethics later within this section 3.5). However, projects may not commence later than four months after the grant award decision (i.e. the date on the decision letter).

5.1.6 Reporting
Applicants who are awarded Open Mind funding will be invited by NWO to present the obtained results on the following annual conference in 2024. Furthermore, the applicant will be asked to submit a short final report after the project ends. For this purpose, NWO will send the beneficiary a form that must be filled out and signed by the beneficiary.

5.1.7 Referring to NWO grant
NWO would appreciate that the applicant, when publishing results will state that NWO has provided an Open Mind grant and that in case of a scientific publication the NWO project number will be mentioned. In addition, if applicable, NOW would appreciate that the NWO logo will be displayed and/or NWO’s formal appellation in the language concerned will be used.

5.1.8 Payment of the grant
For the payment of the Open Mind grant article 3.2.3 of the NWO Grant Rules 2017, version January 2019 is applicable. Payment of the grant takes place in the following manner:
- 80% of the grant will be made available after a positive decision of NWO Domain AES and upon fulfilment of all conditions;
- The remaining 20% of the grant will be paid after an NWO Domain AES has received and approved the final report as described in the Open Mind conditions, as set out in this call.
6 Contact and other information

6.1 Contact

6.1.1 Specific questions
For specific questions about this Call for proposals, please contact:
Dr. Rob Hermans
Tel: +31 30 6001 317
Email: openmind@nwo.nl

Anne van der Ham MSc
Tel: +31 30 6001 316
Email: openmind@nwo.nl

6.1.2 Technical questions about the web application ISAAC
For technical questions about the use of ISAAC, please contact the ISAAC helpdesk. Please read the manual first before consulting the helpdesk. The ISAAC helpdesk can be contacted from Monday to Friday between 10:00 and 17:00 hours on +31 70 34 40 600. However, you can also submit your question by email to isaac.helpdesk@nwo.nl. You will then receive an answer within two working days.

6.2 Other information

NWO processes data from applicants received in the context of this call in accordance with the NWO Privacy Statement, www.nwo.nl/en/privacyverklaring https://www.nwo.nl/privacyverklaring

NWO might approach applicants for an evaluation of the procedure and/or research programme.
7 Annexe(s):

7.1 Explanation of budget modules

Explanation of budget module Personnel
It is possible to apply for the funding of the salary costs of personnel who make a substantial contribution to the research. Funding of these salary costs depends on the type of appointment and the organisation where the personnel are/will be appointed.

- For university appointments, the salary costs are funded in accordance with the UNL salary tables applicable at the moment the grant is awarded (www.nwo.nl/en/salary-tables). http://www.nwo.nl/salaristabellen
- For university medical centres, the salary costs are funded in accordance with the NFU salary tables applicable at the moment the grant is awarded (www.nwo.nl/en/salary-tables). http://www.nwo.nl/salaristabellen
- For the Caribbean Netherlands, the Dutch government employs civil servants on Bonaire, Sint Eustatius and Saba under different conditions than in the European part of the Netherlands www.rijksdienstcn.com/werken-bij-rijksdienst-caribisch-nederland/arbeidsvoorwaarden.

NWO will apply a mandatory one-off indexing of the salary costs with respect to:

- UNL rates: for proposals submitted before 1 July and that are awarded funding after 1 July;
- NFU rates: for proposals submitted before 1 August that are awarded funding after 1 August;

The mandatory one-off indexing has no influence on the level of the grant ceiling or on the maximum amount of the grant awarded per proposal. The level of the grant ceiling and the maximum amount of the grant awarded will remain unchanged during the assessment procedure. The mandatory one-off indexing will be applied after the decision-taking about awarding or rejecting proposals has been completed.

The rates for all budget modules are incorporated in the budget template that accompanies the application form. Remunerations for PhD scholarship students ('bursalen') at a Dutch university are not eligible for funding from NWO.

The available budget modules are explained below.

Personnel temporarily appointed to the project
Temporary personnel positions for which the costs can be financed with the Open Mind grant, are: PhD, Professional Doctorate in engineering (PDEng), Postdoc and non-scientific personnel (like technicians).

Research leave for applicants
With this budget module, funding can be requested for the costs of the research leave of the main and/or co-applicant(s). The employer of the applicant(s) can use this to cover the costs of relinquishing him or her from educational, supervisory, administrative or management tasks (not research tasks). The time that is released through the research leave grant can only be used by the applicant(s) for activities in the context of the project. The proposal must describe which activities in the context of the project the applicant(s) will carry out in the time relinquished.

The maximum amount of research leave that can be applied for is the equivalent of 5 full-time months. NWO funds the research leave in accordance with the salary tables for a senior scientific employee or post-doc (scale 11) at the time the grant is awarded (www.nwo.nl/en/salary-tables). http://www.nwo.nl/salaristabellen

Explanation of budget module Material
The material budget that can be applied for is specified according to the three categories below:
Project-related goods/services
- consumables (e.g. glassware, chemicals, cryogenic fluids, etc.)
- measurement and calculation time (e.g. access to supercomputer, etc.)
- costs for acquiring or using data collections (e.g. from Statistics Netherlands [CBS]), for which the total amount may not be more than €25,000 per proposal
- access to large national and international facilities (e.g. cleanroom, synchrotron, etc.)
- work by third parties (e.g. laboratory analyses, data collection, citizen science, etc.)

Travel and accommodation costs for the personnel positions applied for
- domestic travel and accommodation costs in as far as essential for the project

Implementation costs
- national symposium/conference/workshop organised by the project researchers
- costs for Open Access publishing (solely in full gold Open Access journals, registered in the “Directory of Open Access Journals” https://doaj.org)
- costs data management
- costs involved in applying for licences (e.g. for animal experiments)
- audit costs (only for institutions that are not subject to the education accountants protocol of the Ministry of Education, Culture and Science), maximum €5,000 per proposal; for projects with a duration of three years or less, a maximum of €2,500 per proposal applies

Costs that cannot be applied for are:
- basic facilities within the institution (e.g. laptops, office furniture, etc.)
- maintenance and insurance costs

The research institute is responsible for the necessary infrastructure and the supervision of project workers. If an applicant/co-applicant cooperates with other institutes not eligible for NWO Domain AES funding, such as TNO or a foreign university, the non-eligible institutes are responsible for their own costs. Private co-funding is not applicable to Open Mind proposals.

Citizen science
Involving citizens (citizen science) can contribute to the quality of the research. With the help of citizens, data and insights can be acquired that would not otherwise be available for research. NWO also funds citizen science. Applicants can use the budget module “material, project-related goods/services, work by third parties” to request a remuneration for the involvement of citizens in projects. The budget module offers a possibility and is not a requirement. Applicants are free to decide whether it is worthwhile involving citizens in the project and what exactly they use this budget for (for example, reimbursement of expenses of citizens, skills training for citizens or technical devices for the participating citizen).

7.2 Additional annexes

7.2.1 Technology Readiness Level (TRL) scale

The TRL scale is a metric for describing the maturity of a technology. The acronym stands for Technology Readiness Level. The scale consists of 9 levels. Each level characterises the progress in the development of a technology, from the idea (level 1) to the full deployment of the product in the marketplace (level 9).

This scale was developed by NASA in the 70s to assess the maturity of a technology prior to integrating this technology into a system. It contained 7 levels at that time. Nowadays, 9 levels compose the scale. These levels are detailed below.
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Level 1 - Basic Research: basic principles are observed and reported
Lowest level of technology readiness. Scientific research begins to be translated into applied research and development. Examples might include fundamental investigations and paper studies.

Level 2 – Applied Research: technology concept and/or application formulated
Once basic principles are observed, practical applications can be formulated. Examples are limited to analytic studies and experimentation.

Level 3 – Critical function, proof of concept established
Active research and development is initiated. Laboratory studies aim to validate analytical predictions of separate components of the technology. Examples include components that are not yet integrated or representative.

Level 4 – Laboratory testing of prototype component or process
Design, development and lab testing of technological components are performed. Here, basic technological components are integrated to establish that they will work together. This is a relatively “low fidelity” prototype in comparison with the eventual system.

Level 5 – Laboratory testing of integrated system
The basic technological components are integrated together with realistic supporting elements to be tested in a simulated environment. This is a “high fidelity” prototype compared to the eventual system.

Level 6 – Prototype system verified
The prototype, which is well beyond that of level 5, is tested in a relevant environment. The system or process demonstration is carried out in an operational environment.

Level 7 – Integrated pilot system demonstrated
Prototype is near, or at, planned operational system level. The final design is virtually complete. The goal of this stage is to remove engineering and manufacturing risk.

Level 8 – System incorporated in commercial design
Technology has been proven to work in its final form under the expected conditions. In most of the cases, this level represents the end of true system development.

Level 9 – System ready for full scale deployment
Here, the technology in its final form is ready for commercial deployment.

Level beyond 9 - Market introduction
The product, process or service is launched commercially, marketed to and adopted by a group of customers (including public authorities).