



# Call for proposals

## Perspectief

Enabling new technology in the Top Sectors  
Call for public-private research programmes

2020/2021

Utrecht, 12-08-2020, version 1  
Dutch Research Council  
Domain Applied and Engineering Sciences



Ministerie van Economische Zaken  
en Klimaat



# Contents

1	Introduction.....	1
1.1	Public-private research programmes of NWO Domain AES.....	1
1.2	Mission-driven innovation.....	1
1.3	Mission of NWO Domain AES.....	2
1.4	Available budget.....	3
1.5	Validity of the call for proposals.....	3
2	Aim.....	4
2.1	Increasing impact.....	4
3	Guidelines for applicants.....	6
3.1	Introduction.....	6
3.2	Specific provisions.....	7
3.3	Who can apply.....	15
3.4	Resubmission and submission elsewhere.....	18
3.5	What can be applied for.....	18
3.6	When can applications be submitted.....	25
3.7	Drawing up an application.....	25
3.8	Registering and submitting an application.....	27
4	Procedure and assessment.....	28
4.1	Procedure.....	28
4.2	Criteria.....	33
4.3	After awarding.....	35
4.4	Other conditions.....	36
5	Definitions.....	39
6	Contact.....	40
7	Perspectief schedule.....	41
8	Annexes and relevant references.....	42

**Note: In case of divergence between the language versions, the Dutch version shall prevail.**

## Deadlines for 2020/2021 Perspectief round

**Phase 1:** Programme initiative: register on website: Thursday 22 October 2020, 14:00:00 CEST

**Phase 2:** Programme design: submit design: Tuesday 15 December 2020, 14:00:00 CET

**Phase 3:** Programme proposal: submit detailed proposal: Tuesday 15 June 2021, 14:00:00 CEST

# 1 Introduction

## 1.1 Public-private research programmes of NWO Domain AES

The NWO Domain for the Applied and Engineering Sciences (NWO Domain AES) is looking for new research programmes in the context of Perspectief for the Top Sectors.

Perspectief was designed as an instrument for the innovation policy of the Dutch Ministry of Economic Affairs and Climate Policy. NWO Domain AES provides an annual research budget which is used to develop and fund challenging new research programmes in the applied and engineering sciences.

NWO Domain AES invites researchers and users to jointly submit new programmes within the framework of Perspectief. This call for proposals contains guidelines for drawing up your programme initiative (Phase 1), programme design (Phase 2) and programme proposal (Phase 3).

NWO Domain AES is part of the Dutch Research Council (NWO; see also [www.nwo.nl/en](http://www.nwo.nl/en)). As such, NWO Domain AES provides indirect government funding.

## 1.2 Mission-driven innovation

In the Letters to Parliament dated 13 July 2018<sup>1</sup> and 26 April 2019<sup>2</sup>, the Minister of Economic Affairs and Climate Policy informed the House about the new approach to the Top Sector policy. The economic opportunities presented by societal challenges and the ambition to play a lead role in a number of key enabling technologies (KETs) are therefore central in this approach.

The letters mention four societal challenges where efforts in the area of science, applied research and innovation are indispensable:

- i. Energy transition and sustainability (Ministry of Economic Affairs and Climate Policy, Ministry of Infrastructure and Water Management)
- ii. Agriculture, water, and food (Ministry of Agriculture, Nature and Food Quality, Ministry of Infrastructure and Water Management, Ministry of Health, Welfare and Sport)
- iii. Health and care (Ministry of Health, Welfare and Sport, Ministry of Social Affairs and Employment)
- iv. Security (Ministry of Justice and Security, Ministry of Defence)

The ministries involved in these four societal challenges have drawn up missions that were defined by the Cabinet.

KETs are characterised by a wide scope or reach in terms of innovations and/or sectors. KETs are essential in solving societal challenges and/or make a major potential contribution to the economy, by creating new industrial activity and new markets, enhancing competitiveness and supporting job creation. They enable groundbreaking innovations in processes, products and/or services and are relevant to science, society and the market.

---

<sup>1</sup> <https://www.rijksoverheid.nl/documenten/kamerstukken/2018/07/13/kamerbrief-naar-missiegedreven-innovatiebeleid-met-impact>

<sup>2</sup> <https://www.rijksoverheid.nl/documenten/kamerstukken/2019/04/26/kamerbrief-over-missiegedreven-topsectoren-en-innovatiebeleid>

From the perspective of technology's potential contribution to societal challenges in the Netherlands, the Ministry of Economic Affairs and Climate Policy has identified the following clusters of key technologies<sup>3</sup>:

- Chemical Technologies
- Digital Technologies
- Engineering and Fabrication Technologies
- Photonics and Light Technologies
- Advanced Materials
- Quantum Technologies
- Life science technologies
- Nanotechnologies

A Knowledge and Innovation Agenda (KIA)<sup>4, 5</sup> has been drawn up for each of the four societal challenges and for the KETs. These five KIAs serve as the starting point for the assessment of a research programme's suitability within Perspectief. For the Knowledge and Innovation Agendas, please see the Perspectief website (<https://www.nwo.nl/en/research-and-results/programmes/perspectief>).

For the purposes of this Call, the “key enabling technologies” are the same as the KIA KETs and include both the Key Enabling Technologies (KETs) mentioned in the Elsevier study<sup>6</sup> and the Future and Emerging Technologies (FETs) from the European programme Horizon 2020 and its successor Horizon Europe.

*Applications in the 2020/2021 Perspectief round should fit within one or more of the five knowledge and innovation agendas. In addition, one or more KETs from the eight categories should play a role in each application.*

## 1.3 Mission of NWO Domain AES

The mission of NWO Domain Applied and Engineering Sciences (AES) is to promote engineering research with application and impact for people and society. To shape this mission, AES will focus on the following three objectives for the period 2019–2022:

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

The working method used by NWO Domain AES involves bringing technical scientists and users together around excellent engineering research. For each funded project, a user committee is set up from the outset and meets regularly to discuss opportunities for application and the progress of the research.

NWO also gives companies and other organisations the opportunity to invest in research that meets their own research requirements. By participating in application-oriented projects via NWO Domain AES, investors can play a key role in the development of valuable technical innovations.

<sup>3</sup> <https://www.government.nl/documents/reports/2018/06/01/quantitative-analysis-of-dutch-research-and-innovation-in-key-technologies>

<sup>4</sup> A separate KIA has also been drawn up, focusing on earning capacity. This KIA is intended for topics that are of great importance to the top sectors and/or strengthen the Netherlands' earning capacity but are not included in one of the other KIAs. It is not part of the framework for this Perspectief round.

<sup>5</sup> <https://www.topsectoren.nl/innovatie>

<sup>6</sup> <https://www.government.nl/documents/reports/2018/06/01/quantitative-analysis-of-dutch-research-and-innovation-in-key-technologies>

For the specific provisions for user committees, the co-funding requirement and letters of support, see later in this call, the annexes “Perspectief 2020/2021” and the [“Brochure Guidelines Users’ Committee NWO Domain AES 2017”](https://www.nwo.nl/aesapplicant) (<https://www.nwo.nl/aesapplicant>).

## 1.4 Available budget

The NWO funding budget available for this programme is M€ 22.

## 1.5 Validity of the call for proposals

This call for proposals for the 2020/2021 Perspectief round is valid from 20 July 2020.

## 2 Aim

The objective of Perspectief is to contribute to the creation of economic opportunities for the Netherlands presented by the four societal themes and the KETs in the mission-driven innovation policy of the Ministry of Economic Affairs and Climate Policy, by:

1. Developing **scientifically excellent knowledge** leading to **new technology** relevant to industry and society through a multidisciplinary approach;
2. Building close and lasting **alliances** within consortia comprised of multiple knowledge institutions, companies and social organisations;
3. Creating more **focus and mass** (coherence) in research on thematic areas and KETs relevant to the Netherlands in order to create strong, internationally distinctive positions in Dutch industry and the knowledge infrastructure; and
4. Promoting **valorisation** of the resulting knowledge by users and end users.

Ideally, the entire user chain should be involved, enabling the consortium to achieve societal and economic impact. Such cooperation could be between academic institutions and companies (including SMEs, start-ups and scale-ups), TO2 institutes, university medical centres, civil society organisations (e.g. NGOs, charities), relevant ministries, national and regional government, universities of applied sciences and other bodies.

With the aims outlined above, Perspectief makes a major contribution to the objectives of AES: strengthening the foundation of the applied engineering sciences, increasing the efficiency of innovation chains and making a visible societal impact.

### 2.1 Increasing impact

NWO focuses on specific policy to encourage the transfer of knowledge generated with the aid of NWO funding. Such transfer can take place both to other scientific disciplines and to users outside of science (industry/society). **Knowledge utilisation** is seen as an iterative process towards societal impact. Coordination between researchers and potential knowledge users increases the chances of knowledge utilisation, and with it, the chances of societal impact. By **societal impact**, NWO means cultural, economic, industrial, ecological or social changes resulting wholly or partly from knowledge and skills generated by research. These changes usually occur after the research has been conducted.

Working with researchers and other stakeholders, NWO aims to contribute to societal impact via knowledge utilisation (by putting it on the agenda, inspiring and facilitating) in ways that suit all types of research. NWO defines knowledge utilisation as the application of knowledge through **productive interactions** with targeted stakeholders to create societal – including economic – value.

Not every funding instrument focuses to the same extent on increasing the chances of societal impact. To meet the various expectations in terms of societal impact, NWO applies **three approaches**. These focus in varying and proportional ways on encouraging knowledge utilisation. The three impact approaches are the Impact Outlook, Impact Plan and Impact Focus approach.

#### Impact Plan

The Impact Plan applies to the Perspectief programmes that focus on societal impact. Societal impact has many aspects. For example, scientific quality is a precondition for societal impact and societal impact is never solely the result of knowledge and insights gained from research. Moreover, societal impact is often not achieved until many years after a research project has been completed.



Researchers draw up an Impact Plan together with users and other stakeholders. An Impact Plan is a tool the consortium can use to achieve productive interaction and to describe the route to achieve societal impact. An Impact Plan includes an [approach](#) to knowledge exploitation that is [integrated](#) into the research design and increases the impact potential of the proposed research. The full proposal describes how the approach for achieving impact is integrated into the research design and how it will be carried out by the consortium partners together with stakeholders from fields such as policy, practice and industry.

More information on the Impact Plan approach is described in Chapter 1 of the document “Annexes Perspectief 2020/2021”.

## 3 Guidelines for applicants

### 3.1 Introduction

There are three phases involved in submitting a Perspectief application.

A Perspectief initiative (Phase 1) should be registered on the NWO website. The initiative phase aims to encourage consortium forming and to allow parties to explore the possibility of joining an initiative. The programme design (Phase 2) is drawn up by the consortium. If successful in the first assessment round, the consortium is then invited to prepare and submit a detailed Perspectief proposal (Phase 3) for the second assessment round.

The NWO Grant Rules 2017 (version dated February 2019) and the *Approval of funding for scientific research 2008* are applicable.

#### Significant changes from previous Perspectief round:

- Given the financial position of many companies/organisations due to COVID-19, no cash co-funding is required for the 2020/2021 round. However, the total compulsory co-funding remains 30%. Co-funding by companies and other users remains important within Perspectief programmes.
- The co-funding rate for TO2 institutes has been lowered from 50% to 30%.
- As a result of the NWO-wide harmonisation of budget modules since the 2019/2020 Perspectief round, there are various changes to the budget modules. For university institutions and university medical centres, salary costs are funded in accordance with the VSNU salary tables applicable at the time the call text is published (<https://www.nwo.nl/salary-tables>). These are the rates as at 1 July 2020.
- In any Perspectief round, a researcher may submit only one programme design or programme proposal as official representative, and be involved in a maximum of two applications or proposals. In previous rounds, a researcher could be involved in only one application as an official representative, as a co-applicant and/or in another capacity.
- The period for delivering an Option 2 IP agreement has been extended from three to six months.



## 3.2 Specific provisions

### 3.2.1 Mission-driven innovation policy with impact

Perspectief is funded by the Ministry of Economic Affairs and Climate Policy and is part of the Top Sector policy. NWO Domain AES is opening the 2020/2021 Perspectief round only to topics that fit into one of the five innovation agendas the Top Sectors (KIAs, four for societal themes and one for KETs). Knowledge and Innovation Agendas (KIAs) of the Top Sectors. In addition, one or more KET(s)<sup>7</sup> from the eight categories<sup>8</sup> should play a role in each application. See Section 1.2.

### 3.2.2 Type of research

Activities to be carried out must fall under the definitions of fundamental research and industrial research as included in the NWO Grant Rules 2017 or related activities (such as programme/project management and knowledge utilisation). In the programme proposal or budget form, or in the determination, applicants may be asked to clarify which activities consist of fundamental research, industrial research or other activities.

### 3.2.3 Structure of programme

A Perspectief programme consists of a coherent set of individual parts (projects or work packages), all contributing to the achievement of the programme objective(s). The programme proposal should demonstrate the substantial added value of the programme and be clearly distinctive compared with other initiatives and/or networks.

In the 2020/2021 Perspectief round, applicants can choose one of two options:

- **Option 1:** after the award of funding, a programme is treated as a single large project (with work packages rather than coherent projects). After funding has been awarded, the programme leader of the programme becomes the official representative of the project. If funding is awarded, the official representative receives the funding from NWO for the single large project. In this case, the word “programme” in this Call should be read as “project”. The official representative is responsible for the proper conducting of the project (submitted proposal), including compliance with funding conditions, passing on contributions to co-applicants and financial accountability. In this case, the co-funding and IP agreements are always made at the overall level of the large project. Because there is no co-funding requirement for the Governance project (see Section 3.2.9), funding for this project will be awarded separately.

<sup>7</sup> KETs include both the Key Enabling Technologies (KETs) mentioned in the Elsevier study (49 technologies) and the Future and Emerging Technologies (FETs) from the European programme Horizon 2020 and its successor Horizon Europe.

<sup>8</sup> From: *Quantitative Analysis of Dutch Research and Innovation in Key Technologies*, Elsevier Research Intelligence on behalf of the Ministry of Economic Affairs and Climate, <https://www.government.nl/documents/reports/2018/06/01/quantitative-analysis-of-dutch-research-and-innovation-in-key-technologies>

- **Option 2:** The programme is regarded as a set of separate but coherent projects. The project leaders of the individual projects are the official representatives for the projects and – if funding is awarded – receive a grant for their project. They are responsible for its proper conducting, including compliance with funding conditions, passing on contributions to co-applicants and financial accountability. In addition, every project leader sits on the user committee of the Governance project (this committee can be regarded as a programme committee, see Section 3.2.9). The programme leader of the programme (who is also the official representative and project leader of the Governance project) is notified of the funding of the programme and the disbursement of the grant for the Governance project. In this case, the co-funding and IP agreements are made at project level as standard (if Option 2 is chosen) IP agreements can also be made at programme level. Option 2 was the standard approach up to and including the Perspectief round 2018/2019.

### 3.2.4 New technology presenting economic opportunities

The programme proposal should focus on **developing new technology** that contributes to creating economic opportunities presented by societal challenges and key enabling technologies. The activities need not be limited to technology development: coherent social, ethical and/or cultural aspects, for example, can also be included in the proposal. Key enabling methodologies<sup>9</sup> can play an important role (see KIA Key Enabling Technologies). Besides having a national economic impact, the Perspectief programme should ideally create industrial activity in the Netherlands.

### 3.2.5 Consortium composition

Forming a strong consortium is important for a Perspectief programme. Besides knowledge institutions, the consortium should also include representatives from the entire valorisation and innovation chain: i.e. the **users** (see Section 3.2.6).

Activities (and funding requested) within the programme should be **distributed evenly** between the participating knowledge institutions. The programme should not be conducted mainly at a single knowledge institution. A consortium should include **at least three knowledge institutions** as applicants or co-applicants, including at least two universities. Knowledge institutions may not be counted twice within these conditions. An institution (e.g. a university medical centre) is either a submitting public knowledge institution or a (potential) user. Different faculties of the same university are not regarded as different knowledge institutions.

There should be one or two representatives from the users (who is/are not (a) co-applicant(s)) who act(s) as the programme co-lead(s) alongside the main applicant. These representative(s) should, in principle, be present at the interview and sit on the user committee of the Governance project to represent the users.

### 3.2.6 Users and user committee

Users of research are defined as natural or legal persons (at national or international level) who are able to apply the results of the research. A distinction is sometimes drawn between direct users of the knowledge generated, usually companies, and end users, who buy the products from those companies. Both have their own role to play in the innovation chain and must be named in the programme proposal.

It is the explicit intention that potential technology users and end users outside the immediate circle and outside the research field of the researchers submitting the application should be involved in the programme/project. Users should be able to apply the knowledge generated by the research. The programme proposal should describe the role and importance of the (potential) users.

---

<sup>9</sup><https://www.clicknl.nl/news/lancering-onderzoeksagenda-sleutelmethodologieen-kems/>

After the programme proposal has been awarded funding, a user committee is set up.

If you opt for the funding of a single large project (Option 1 in Section 3.2.3), a single user committee will be set up for the entire project. A minimum of four users should sit on the user committee. At least 50% of the committee members should be from industry, unless you give a reasoned explanation for the different composition of the user committee and provided this is necessary in order to optimise utilisation of the research results within a project. Your application should explain how the users will be effectively involved (for example, by setting up user committees at work package level in addition to the user committees at project level).

If you opt for a formal division of the programme into projects (Option 2 in Section 3.2.3), then a user committee will be set up for each project. At least four users should sit on each user committee. At least 50% of the committee members should be from industry, unless you give a reasoned explanation for the different composition of the user committee and provided this is necessary in order to optimise utilisation of the research results within a project. You may choose to combine user committees or even to set up a single large user committee. You should take this into account when concluding the IP agreements, because these are generally concluded at project level.

If a project leader or co-leader also has a full-time or part-time position with a user, another representative should sit on the user committee on that user's behalf.

### 3.2.7 Foreign parties

If strong players in a particular area are based outside the Netherlands, these foreign parties can be involved in the consortium. Foreign parties are subject to the same conditions as Dutch parties, including the requirement to sit on the user committee which meets at least once a year (travel and accommodation costs are at the company's expense and cannot be claimed). Foreign parties can provide co-funding under the same conditions as Dutch companies. Foreign parties that are subject to certain national and international sanctions laws and regulations cannot provide co-funding. The EU Sanctions Map (<https://www.sanctionsmap.eu>) offers a guideline in this respect.

### 3.2.8 TO2 institutes and universities of applied sciences

TO2 institutes and universities of applied sciences can also form part of the consortium and are key partners in the innovation chains leading to application. In the 2020/2021 round, there are additional opportunities for these parties to play an appropriate role in creating an efficient innovation chain for the programme in question.

Within the Perspectief round, a **TO2 institute** (legal entity) can choose a role as either a co-applicant (this is a new opportunity) or a user/co-funder for each programme. The activities carried out by TO2 institutes as co-applicants under the Perspectief proposal may consist only of **industrial research**.

Universities of applied sciences also have the opportunity of being co-applicants, enabling them to take on an additional, visible role within the consortium compared to universities and TO2 institutes. They can also be part of the consortium as users. However, universities of applied sciences cannot be co-funders.

The total funding requested for TO2 institutes and universities of applied sciences that are co-applicants must not exceed 20% of the financial resources required for the research. For Perspectief, this 20% can be calculated not only by individual project but also over the total programme costs. However, a condition for this is that the amount to be entered per project for universities of applied sciences or TO2 institutes must not exceed 50% of the financial resources required for the project concerned.

### 3.2.9 Governance project

To promote the added value of the programme and the achievement of its objectives in the area of utilisation, a separate Governance project should be defined in addition to the content project(s). (This also applies if you opt for the funding of a single large project (Option 1 in Section 3.2.3).) This project includes aspects of your programme that transcend individual projects and the management of your programme.

The programme leader is the project leader for this project. The programme leader and the project leaders of the research projects, a user delegation and the NWO programme officer constitute the user committee of the Governance project (this committee acts as the [programme committee](#)). This committee meets at least twice a year.

Because programmes in different scientific fields take many different forms and may differ in structure, it is up to the applicant to specify the costs required.

The NWO budget for the Governance project is [limited to 5%](#) of the funding requested from NWO for the entire programme, to be requested by the official representative of the consortium. Under the Impact Plan approach, consortia are expected to at least estimate the costs for the Governance project (budget module Knowledge Utilisation) for the following activities:

- Specific [activities to promote knowledge utilisation](#) in relation to parties other than those (intermediary) parties funded in the projects, such as knowledge platforms. These activities include joint learning, training and communication activities.
- [Stakeholder engagement](#): activities organised by the consortium aimed at involving stakeholders, such as consultation workshops, expert meetings, round table meetings, etc.
- [Communication](#): activities organised by the consortium such as learning events, development of videos, blogs, newsletters and other media communications. This may include the hiring in of communication expertise.
- [Monitoring and evaluation](#) in which knowledge utilisation is discussed, such as the interim evaluations and the meetings of the User Committee (see also Section 3.2.6).

Examples of other activities that can be funded within this project from the budget modules available (see Section 3.5) for project budget are:

- [Appointing a programme manager](#): Programme management includes the following: optimising the organisational structure of the consortium, supporting the consortium and the project leader of the Governance project (programme leader), monitoring the coherence, progress and unity of the programme, coordinating between the sub-projects within the programme and organising programme activities. There are two options:
  - A person is employed/engaged permanently or temporarily by a knowledge institution. This could be, for example, one of the applicants or co-applicants involved (budget module Personnel, under Research leave, Non-scientific personnel or Personnel of universities of applied sciences and other institutions), or a temporary staff member (other parts of the budget module Personnel).
  - A person from outside the knowledge institution, for example from one of the users, a consultancy firm or other organisation (if hiring outside staff, see budget module Material).  
The hourly rate must be based on the cost-covering rate, including applicable increments from the overall salary costs table in the “Research Tariffs Manual (HOT) 2017”, table 2.2 HOT 2017 up to scale 16. The maximum rate for this Perspectief round is € 119 per hour. The part of (commercial) hourly rates that exceeds the above tariffs is not eligible for funding and therefore cannot be included in the budget.
- [Programme activities](#): examples include programme days, an annual symposium, workshops and/or a summer school for the appointed researchers, site visits, etc. (budget module Material).

- Further **development** (during the programme) **of the utilisation plan** in order to achieve the programme objectives in the field of utilisation. Part of this might be a feasibility study into potential applications (Budget Module Knowledge Utilisation).

### 3.2.10 Co-funding requirement

Co-funding can consist of financial (cash) and/or in-kind contributions. For each programme, at least **30% of the total programme costs** (required financial resources plus in-kind contributions) should consist of *co-funding* by users (cash and/or in-kind contributions). No co-funding is required for the separate Governance project and the latter is not included in the calculation for the minimum mandatory co-funding. See the example calculations in the document “Annexes Perspectief 2020/2021” which is available on the Perspectief funding page (<https://www.nwo.nl/en/research-and-results/programmes/perspectief>).

If you opt for funding of the programme as a single large project (Option 1 in Section 3.2.3), then co-funding is pledged and provided for the large project, and the co-funding requirement applies to the whole large project, with the exception of the Governance project. NWO Domain AES should always be the main funder. The total NWO contribution for a programme is at least 50% of the total programme costs.

If you opt for a formal division of the programme into projects (Option 2 in Section 3.2.3), then co-funding will be pledged and provided for each project. The co-funding requirement applies to the *whole programme*, with the exception of the Governance project; it does not apply at project level. This ensures that scientifically merited project initiatives that do not meet the co-funding requirement can be compensated for by other projects in the same programme with a high user contribution. However, NWO Domain AES should be the main funder for each individual project and at least two-thirds (rounded upwards) of the projects (excluding the Governance project) individually should meet the co-funding requirement. The total NWO contribution for a project is at least 50% of the total programme costs.

**Financial contributions** are used to cover part of the project costs. Cash co-funding is collected (in one to four periods) by NWO Domain AES and the contributions are provided to the research group together with the AES contribution. Together, the AES contribution and the financial contributions from users constitute the financial resources required in order to carry out the large project (Option 1 in Section 3.2.3) or projects (Option 2 in Section 3.2.3). **Cash co-funding is exclusive of any VAT.**

The cash contribution from a company must not be linked to the provision of services, equipment or investment. An exception is the appointment of a PhD student in the context of Industrial and/or Societal doctorates.

Although in this Perspectief round 2020/2021 there is no requirement for cash co-funding, co-funding by companies and other users is definitely important within Perspectief programmes. This concerns the right balance as formulated in the criteria: Is there sufficient convincing support, both in kind and in cash, pledged by the user group and is this appropriate within the interests and capacity of the users and for the type of programme?

**In-kind contributions** refer to capitalised personnel and/or material contributions (as permitted in budget modules **Personnel** and **Material**) from users who are an integral part of the project. Now Domain Applied and Engineering Sciences (NWO Domain AES) uses fixed integral hourly rates for capitalising man hours that are provided in kind as co-funding by third parties in other words “users” for all new proposals for AES funds. NWO Domain AES accepts two integral hourly rates for a maximum of 1410 hours per year. For the Perspectief round 2020/2021 the Tariffs 2020 apply:

Senior researcher; hourly rate of € 115.73 is applicable for all employees with a university education

Junior researcher; hourly rate of € 66.89 applicable for all employees with a university of applied sciences education.

An exception to this is if a PhD student is (partly) contributed in kind and then the conditions from Section 3.2.11 Industrial and Societal Doctorates (ID/SD) apply.

In-kind contributions are accepted only on the condition that the share contributed by the user is an integral part of the work plan and can be monitored as an identifiable effort. Supervision (or workstations for e.g. a PhD student), consultancy and/or participation in the user committee and/or programme days (hours, travel expenses) are expressly excluded. Costs that are not eligible for funding according to this Call (such as overheads) are also excluded from in-kind co-funding. For pledges of material resources, charge the cost price. Commercial rates are not accepted. For pledges of equipment, take previous depreciation and intensity of use into account. It could be the case that a party wants to enter services already supplied (for example, a database, software or plant lines) as in-kind co-funding. This will not automatically be accepted as co-funding. In such cases you should contact NWO Domain AES.

Capitalised in-kind contributions entered in the budget must agree with a letter of support confirming the pledge of co-funding and the amount of the user's contribution. NWO Domain AES will determine whether the size of the amount stated is acceptable.

**The following are not allowable as co-funding (either in cash or in kind):**

- NWO Domain AES guards against improper mixing of cash flows: co-funding can never come from direct or indirect government funding (NWO<sup>10</sup>, KNAW). As a result, co-funding can never come from the knowledge institution of the (co-)applicant(s) or from institutions that can apply to NWO Domain AES themselves, with the exception of co-funding by a TO2 institute, in which case co-funding is allowable only if that institute is not a co-applicant;
- PPP allowance;
- Discounts on commercial or other rates, including on materials, equipment and/or services;
- Costs related to overheads, supervision, consultancy and/or participation in the user committee (including travel expenses) and programme days;
- Costs of services that are conditional. No conditions may be imposed on the provision of co-funding. Nor may the provision of co-funding be contingent upon reaching a certain stage in the research plan (e.g. go/no-go moment);
- Costs that are not paid by NWO Domain AES (e.g. clinical trials, costs relating to the exploitation of the research results, equipment service charges);
- Costs of equipment if one of the objectives of the research application is to improve or add value to this equipment;
- Grants, e.g. from the EU;
- Other forms of co-funding excluded on the basis of applicable laws and regulations.

### 3.2.11 Industrial and Societal doctorates

Industrial and Societal doctorates (ID/SD) refers to PhD students (see Section 3.5.1) who will carry out their research at both a knowledge institution and an organisation that is not an applicant or co-applicant. If an organisation and a knowledge institution work closely together, this increases the likelihood that the resulting knowledge will actually be applied in practice. The research should be an integral part of the programme. In the case of an ID/SD, the private or public organisation involved in the doctorate should bear at least 25% of the salary costs. This contribution may be part of the minimum co-funding requirement and in that case should always be in cash.

The proposed PhD candidate may be employed by either the knowledge institution or the organisation. The activities carried out by the doctoral researcher must come under fundamental or industrial research<sup>11</sup>. NWO funds the salary costs (of the applicant or co-applicant) in accordance with the applicable VSNU rate. Any surplus salary costs should be covered by the public/private employer

<sup>10</sup> Funding awarded by NWO is understood to mean funding obtained following approval of an application to NWO. It does not matter in which programme this funding was obtained, or who the recipient of the grant is.

<sup>11</sup> The research carried out is independent research as referred to in point 2.1.1 of the R&D&I framework.

and may be contributed to the project as in-kind co-funding. To calculate a surplus – due to an actual salary above the VSNU rate – NWO uses employer's contributions minus VSNU rates for the same size of appointment.

The distribution of salary costs between the organisation and the NWO contribution is subject to the provisions of Section 3.2.10, "Co-funding requirement". Within the co-funding framework, the exact distribution of salary costs for an ID/SD between company and NWO can be determined by the consortium. NWO transfers the funding to the official representative. No support/funding may be passed on to the organisation.

In order to count as a cash contribution, the organisation must transfer it to NWO, after which NWO transfers it to the official representative. This contribution must be confirmed by a letter (sent by NWO) after funding has been awarded. If a user contributes a PhD student as an in-kind contribution, then this always falls under ID/SD.

If an ID/SD is contributed to the project as in-kind co-funding, then the parties should make agreements concerning any IP rights generated by the ID/SD. These agreements should take account of possible access to the research results by other project participants, whether or not under FRAND (fair, reasonable and non-discriminatory) conditions.

The NWO grant is awarded solely to the knowledge institution for the purposes of the PhD research project. Please note in this context that, in accordance with the applicable NWO Grant Rules 2017, all research results must be published in Open Access form as soon as possible and thus serve the public interest. The other provisions of the call also apply, such as those on Intellectual Property & Publications.

### 3.2.12 Letters of support

NWO Domain AES asks that any form of support, especially co-funding, is confirmed by means of a letter of support when the full proposal is submitted (Phase 3). If co-funding is provided by users, a letter of support is compulsory in Phase 3. These letters are part of the application and are submitted for assessment to committee members (Phases 2 and 3) and international referees (Phase 3).

NWO Domain AES advises applicants and co-applicants to ensure that users especially endorse the importance of the utilisation plan to their operations. The letter of support should meet the following requirements. See also the "Annexes Perspectief 2020/2021" section on "Letters of support" (via <https://www.nwo.nl/en/research-and-results/programmes/perspectief>).

A Perspectief programme is subject to strict co-funding requirements and criteria included under the specific provisions, Section 3.2.10 "Co-funding requirements" and in the document "Annexes Perspectief 2020/2021" available via <https://www.nwo.nl/en/research-and-results/programmes/perspectief>.

#### Letters of support, Phase 2

To enable the assessment committee to reach a considered opinion on the programme design in Phase 2 concerning commitment to and support for the project or programme, **a minimum of four letters of support from users/stakeholders** should be submitted in Phase 2. The letter of support may include descriptions of the following:

- the interest of the public/private partner in the theme, programme or project described;
- the role of this public/private partner in the project or programme;
- how the user/stakeholder is involved in formulating the problem statement, the vision of success and other parts of the programme design;
- what their contribution to the described theme consists of or *might* consist of (cash and/or in-kind).



Uncertainty about users' actual or potential contributions and/or about the ability to meet the co-funding requirement in further development **is taken into account** in the assessment in Phase 2 (selection of programme designs for further development). Therefore, in Phase 2, the co-funding does not have to be in place yet.

### Letters of support, Phase 3

In a Perspectief proposal (Phase 3), all users pledging co-funding should clearly indicate the following via letters of support:

- Why the research theme and utilisation objectives are important to their company or organisation.
- What their contribution to the described theme consists of (cash and/or in-kind); in this phase, it should be an unconditional commitment. If you opt for a formal division of the programme into projects (Option 2 in Section 3.2.3), you should specify to which project(s) (which part of) the contribution is to be pledged.
- That the user accepts the conditions governing participation in AES projects (see "[Brochure Guidelines Users' Committee NWO Domain AES- 2017](#)" available from <https://www.nwo.nl/aesapplicant>).

Non-binding letters of support and letters of support containing resolute conditions will not be accepted in Phase 3. Specific requirements relating to letters of support can be found in the document "Annexes Perspectief 2020/2021" (via <https://www.nwo.nl/en/research-and-results/programmes/perspectief>).

### 3.2.13 Intellectual Property & publication agreements

In knowledge transfer between research and users within NWO programmes and projects, it is important that research results are handled responsibly with a view to contributing to science and the application of knowledge. NWO aims to exploit and publish research results as widely as possible and aims to encourage cooperation between researchers and various organisations.

The rules on this are laid down in the applicable NWO Grant Rules 2017 Article 4.2.4. IP rights on results, "Intellectual Property (IP) Policy" in the document "Annexes Perspectief 2020/2021" available on the Perspectief funding page (via <https://www.nwo.nl/en/research-and-results/programmes/perspectief>) and the publication arrangements of NWO Domain AES (part of the "[Brochure Guidelines Users' Committee NWO Domain AES- 2017](#)").

You have two options:

1. Responsibility for making Intellectual Property & Publication agreements lies with NWO Domain AES ("AES IP&P agreements", Option 1);
2. Responsibility for making Intellectual Property & Publication agreements lies with the main applicant/project leader ("Own IP&P agreements", Option 2).

If "Own IP&P agreements" is chosen, the responsibility lies with the main applicant/project leader. In addition, within **six months after the award**, NWO Domain AES will receive the following documents from the project leader:

- The signed contract in which IP&P agreements that have been made with the user(s) are listed. This contract should comply with the NWO Grant Rules 2017 and the requirements set out in the IP Policy.
- A signed IP&P statement by which the beneficiary/beneficiaries declare(s) that the contract containing IP&P agreements with the user(s) meets the four criteria set by NWO in the IP Policy. The project leader should refer to the relevant clauses of the contract.

If you opt for the programme to be funded as a single large project (Option 1 in Section 3.2.3), then a single contract will be concluded.

If you opt for a formal division of the programme into projects (Option 2 in Section 3.2.3), then you may conclude a contract at programme level or for each project. For each project, you can choose between “AES IP&P agreements” or “Own IP&P agreements”.

The Programme proposal (Phase 3) should outline which IP agreements will be made with the partners.

### 3.2.14 Start, duration, end date and final statement

Contrary to the NWO Grant Rules 2017, the programme should start within 12 months of the award date. The maximum duration of a programme is six years (from the starting date).

If you opt for a formal division of the programme into projects (Option 2 in Section 3.2.3), a Perspectief project may, contrary to the NWO Grant Rules 2017 and only if it is necessary and does not impede the implementation of the programme, start later than one year after the award date. The total duration of all projects under the programme is a maximum of six years. The latest possible end date for a programme is 31 December 2028. This is also the final date on which the final statement must be submitted to NWO.

### 3.2.15 Required funding and implementation readiness

The proposal will be rejected if it is likely that the research programme (and/or project) could be carried out without significant delay even without a contribution from NWO.

The proposal will be rejected if the programme (or necessary facilities) is not implementation-ready, or if it is insufficiently substantiated that it can start within one year of the award date and the activities can be carried out according to schedule.

## 3.3 Who can apply

### 3.3.1 Phase 1: Who can register a Perspectief initiative on the NWO website?

Anyone can register a Perspectief initiative on the NWO website. The steps to be taken are described in Section 4.1.

### 3.3.2 Phases 2 and 3: Who can act as official representative and co-applicants?

Applications may be submitted by a consortium representing the valorisation and innovation chain, as defined in Section 3.2. There are four categories of participant within a consortium:

1. Official representative<sup>12</sup>
2. Co-applicant(s)
3. Co-funder(s)
4. Users other than co-funders.

---

<sup>12</sup>See Sections 1.1 and 1.2 of the NWO Grant Rules 2017. Official representatives are referred to in the grant rules as main applicants.

The application should describe the following for each participant:

- the participant's role in the consortium
- the participant's contribution to the proposed programme/project

### Official representative

The programme leader submits the application on behalf of the consortium and is the official representative. The official representative is the point of contact for NWO during processing of the application (both Phase 2 and Phase 3).

If you opt for the funding of a single large project (Option 1 in Section 3.2.3), the programme leader will become the official representative after the award.

If you opt for a formal division of the programme into projects (Option 2 in Section 3.2.3), the project leader of each project will become the official representative for that project after the award. Therefore in this case, there will be more than one official representative in the programme. The programme leader will become the official representative of the Governance project.

The official representative receives the funding and is responsible, on behalf of the consortium, for scientific coherence, results and financial accountability. Researchers from the following knowledge institutions may act as official representatives:

- Universities established in the Kingdom of the Netherlands
- University medical centres
- KNAW and NWO institutes
- Princess Máxima Center
- the Netherlands Cancer Institute (NKI)
- the Max Planck Institute for Psycholinguistics in Nijmegen
- the DUBBLE Beamline at the ESRF in Grenoble
- Naturalis Biodiversity Center
- Advanced Research Center for Nanolithography (ARCNL)

The official representative should be:

- a postdoctoral researcher or lector/senior researcher, and
- appointed for at least the duration of the application procedure and the proposed project
- and have a contract of employment (duration of appointment) for at least the duration of the research for which funding is requested. Researchers with a zero-hours appointment are excluded from applying, as are researchers with a temporary (postdoc) appointment.

An exception to the required duration of appointment can be made for:

- Applicants with a tenure track appointment at one of the above knowledge institutions which does not cover the entire duration of the project. NWO defines a tenure track appointment as an appointment for experienced scientific researchers with prospects of permanent employment and a professorship in due course. The tenure track appointment must be confirmed in writing and funded from structural resources of the knowledge institution, as evidenced by a written statement from the institution, guaranteeing the duration of the research. NWO Domain AES will verify whether the appointment meets these conditions.

### Co-applicant(s)

A co-applicant is a participant in the consortium and receives funding via the official representative. A consortium may have several co-applicants as participants. A co-applicant must be affiliated to an organisation as listed under "official representative", or be employed by one of the following organisations:

- TO2 institutes<sup>13</sup>
- Universities of applied sciences (as referred to in Article 1.8 of the Higher Education and Scientific Research Act (WHW)).

#### Official representatives and co-applicants with a part-time appointment

- Official representatives and co-applicants employed on a part-time basis should in any case have access to sufficient university facilities and budget to carry out the project properly.
- Official representatives and co-applicants should carry out AES research while they are working for the knowledge institution. If this is not the case, the other employer should sign a waiver so as to guarantee knowledge ownership by NWO Domain AES and the research institution(s).

In any Perspectief round, a researcher may submit only **one programme design or programme proposal as official representative, and in total be involved in a maximum of two applications or proposals.**

### 3.3.3 Tasks of official representative and co-applicants

#### Application phase

The main applicant of the programme (programme leader) is regarded by the NWO Domain AES office as the official representative of the initiative, and as the contact person during the assessment and selection procedure. The official representative is responsible for forwarding information received from NWO, including referees' reports for rebuttal, to the relevant co-applicants in good time.

#### After award

The **programme leader** is responsible for monitoring the coherence of the programme and for achieving its objectives as described in the programme proposal.

If you opt for the funding of a programme as a large project (Option 1 in Section 3.2.3), then the main applicant will become the official representative after the award. The official representative is responsible for compliance with funding conditions, including conducting the project in accordance with the proposal and financial accountability submitted. The official representative is responsible for communicating the NWO conditions (e.g. the award letter) and for passing contributions on to co-applicants. **Co-applicants** must play an active role in conducting the project (i.e. as (co-)supervisor and/or in day-to-day supervision of researchers appointed to the project) and **are responsible for compliance with the applicable conditions of the funding decision insofar as these relate to their activities within the project.**

If you opt for a formal division of the programme into projects (Option 2 in Section 3.2.3), then the main applicant of each project within a programme will become the official representative for that project after the award. The official representatives are responsible for compliance with funding conditions, including conducting the project in accordance with the project plan and approved financial accountability. The official representative is responsible for communicating the NWO conditions (e.g. the award letter) and for passing contributions on to co-applicants. The official representatives sit on the user committee of the Governance project (which acts as the programme committee). **Co-applicants** must play an active role in conducting the project (i.e. as (co-)supervisor and/or in day-to-day supervision of researchers appointed to the project) and **are responsible for compliance with the applicable conditions of the grant decision insofar as they relate to their activities within the project.**

<sup>13</sup> The members of the TO2 federation are Deltares, Marin, NLR, TNO (including ECN) and WUR/DLO. See also <http://www.to2-federatie.nl> (in Dutch)).

The responsibility of the official representative(s) does not release co-applicants from their duty to conduct the projects approved within the programme in accordance with the approved project plan (see [NWO Grant Rules 2017](#) and “[User committee guidelines NWO Domain AES - 2017](#)”, available from <https://www.nwo.nl/aesapplicant>).

### 3.3.4 Stakeholders, users and co-funders

#### Co-funders

Co-funders are organisations that participate in the consortium and contribute to the project in cash and/or in kind. A co-funder must always be a user (see Section 3.2.6). Co-funders never receive funding from NWO. Knowledge institutions permitted to participate in applications in accordance with the description in Section 3.3.2 may not participate as co-funders in the 2020/2021 Perspectief round. An [exception](#) is made for [TO2 institutes](#). They may participate in a consortium as co-funders provided they do not also participate in the same consortium as co-applicants.

Parties who are not able to capitalise their contribution in advance are not included as co-funders (but may be users).

#### Users

A user is a party that is closely involved in conducting the research and/or in knowledge utilisation. Users never receive funding from NWO. A user can be a co-funder, but this is not necessary. See also Section 3.2.6.

#### Stakeholders

Stakeholders are players in the broader system of which the programme is part and who have a (positive or negative) interest in your acquired insights and the impact to which you wish to contribute. Key stakeholders are essential to your potential to achieve this contribution and involving them as early as possible (e.g. as users and/or co-funders) increases your chances of success.

## 3.4 Resubmission and submission elsewhere

A programme proposal with a similar research question and/or (wholly or partly overlapping) research programme and consortium may only be submitted if it has been considered in Phase 3 (programme proposal) no more than once in previous Perspectief rounds. A proposal can therefore be considered a maximum of two times in NWO Perspectief Phase 3.

If you have submitted a wholly or partly overlapping research programme in a different NWO funding instrument, you should state this in the declaration by the project's main and co-applicants (annexed to your application). It is not permitted to receive funding for the same research or activities under more than one NWO instrument.

## 3.5 What can be applied for

A minimum of [M€ 1.5](#) and a maximum of [M€ 4](#) can be requested for a programme proposal in this round. This includes the budget for the Governance project. The budget modules (including the maximum amounts) available within this call for proposals are listed in the table below. Please request only the amount that is essential to carry out the research.

If you opt for a single project in the event of an award (Option 1 in Section 3.2.3), the budget form should include a budget *for the total research project (excluding the Governance project)* and a budget for the Governance project. If you opt to divide the programme into sub-projects in the event of an award (Option 2 in Section 3.2.3), the budget form should include a budget *for each project*.

The following budget modules are available at project level for an application within this round:

	Budget module	Maximum amount
3.5.1	PhD student	no limit on number of positions, according to VSNU rates or NFU rates <sup>14</sup>
	Professional Doctorate in Engineering (PDEng)	no limit on number of positions, in combination with PhD students and/or postdoc(s), according to VSNU rates or NFU rates <sup>14</sup>
	Postdoc	no limit on number of positions, according to VSNU rates or NFU rates <sup>14</sup>
	Non-scientific personnel (NSP) at universities	€ 100,000, according to VSNU rates or NFU rates <sup>14</sup> , in combination with PhD students and/or postdoc(s)
	Other scientific personnel (OSP) at universities	€ 100,000, in combination with PhD student and/or postdoc
	Research leave	5 months, 1 FTE, according to VSNU rates or NFU rates <sup>14</sup>
	Personnel of universities of applied sciences and other institutions (such as TO2 institutes and SMEs)	no limit on number of positions, rates based on the "Research Tariffs Manual (HOT) 2017"
3.5.2	Material costs	€ 15,000 per year per full-time scientific position
3.5.3	Investments	No maximum
3.5.4	Knowledge utilisation	€ 25,000. This module can be used several times in each project
3.5.5	Internationalisation	€ 25,000. This module can be used once in each project
3.5.6	Money follows Cooperation	less than 50% of the total requested budget

VAT paid on purchases such as goods, services and investments will be reimbursed only if these purchases are part of the applicant's costs.

Funding should comply or be compatible with European legislation on state aid and procurement<sup>15</sup>.

An explanation of the available budget modules is given below.

### 3.5.1 Personnel

Funding for salary costs can be requested for personnel who make a substantial contribution to the research. Funding for these salary costs depends on the type of appointment and the organisation to which the personnel are/will be appointed.

Budget can be requested for the appointment of personnel:

- PhD/MD PhD
- PDEng
- Postdoc
- Non-scientific personnel (NSP)
- Research leave

<sup>14</sup> For personnel outside the Netherlands, local rates are funded up to the VSNU rates.

<sup>15</sup> See Regulation EU 1407/2013 of 18/12/2013, Regulation EU 651/2014 of 17/06/2014 and European Commission Communication 2014/C 198/01 to check compatibility with state aid rules. For Dutch public procurement rules, please see: <http://wetten.overheid.nl/BWBR0032203/2016-07-01>

- Other scientific personnel
- Personnel of universities of applied sciences and TO2 institutes

In principle, budget can only be requested for temporary personnel. For “Research leave”, “Non-scientific personnel” and “Personnel of universities of applied sciences and TO2 institutes”, budget may also be requested for personnel with a permanent appointment.

- For university institutions, salary costs are funded in accordance with the VSNU salary tables applicable at the time the call text is published (<https://www.nwo.nl/salary-tables>). These are the rates as at 1 July 2020.
- For university medical centres, salary costs are funded in accordance with the NFU salary tables applicable at the time the call text is published (<https://www.nwo.nl/salary-tables>). These are the rates as at 1 July 2020.
- For personnel of universities of applied sciences and other institutions, salary costs are funded according to the collective labour agreement (CAO) grade of the employee concerned, based on the “Research Tariffs Manual (HOT) 2017”.
- For the Caribbean Netherlands, the National Office for the Caribbean Netherlands employs civil servants on the BES islands under different conditions than in the European Netherlands. <https://www.rijksdienstcn.com/werken-bij-rijksdienst-caribisch-nederland/arbeidsvoorwaarden>.
- For personnel outside the Netherlands, local rates are funded up to the VSNU rates.

The rates for all budget modules are included in the budget form accompanying the application form. For the budget modules “PhD”, “PDEng” and “Postdoc”, in addition to salary costs, the project employee funded by NWO will receive a one-off individual bench fee of € 5,000 to encourage his or her scientific career. Remunerations for PhD students/PhD scholarship students at a Dutch university are not eligible for funding from NWO.

There is no limit to the number of times that personnel budget modules can be used under this Perspectief call. For non-scientific personnel and scientific personnel, this budget module can be used multiple times only if properly substantiated, and the module cannot be used more often than the number of PhD students or postdocs appointed (i.e. the budget module for non-scientific personnel can be used only once per PhD student/postdoc).

## PhD/MD PhD

A PhD student is appointed for 1.0 FTE for a duration of 48 months. The equivalent of 48 full-time months is also possible, e.g. an appointment of 0.8 FTE for 60 months. If a different duration of appointment is deemed necessary in order to conduct the proposed research, this rule may be deviated from as long as proper justification is given. However, the duration of appointment must always be at least 48 months.

## Professional Doctorate in Engineering (PDEng)

Funding for the appointment of a PDEng can only be requested if funding for a PhD student or postdoc is also requested.

The appointment for a PDEng position is a maximum of 1.0 FTE for 24 months. The PDEng trainee is employed by the applicant institution and is permitted to carry out research activities at an industrial partner for a limited period of time. If the programme proposal is accepted, an agreement must be concluded with the industrial partner(s) concerned. The funding application should describe the underlying Technological Designer Programme.



## Postdoc

The minimum size of the appointment for a postdoc is 6 full-time months and the maximum size is 48 full-time months. The appointment can be structured as desired, but it is always for at least 0.5 FTE *or* for at least 12 months. The product of FTE x duration should always be at least 6 full-time months. The material budget is available for more limited use of a postdoc.

## Non-scientific personnel (NSP) at universities

Funding for the appointment of non-scientific personnel required to conduct the research project can only be requested if funding for a PhD student or postdoc is also requested. A maximum of € 100,000 can be requested for non-scientific personnel. This can concern personnel such as student assistants, programmers, technical assistants and analysts. Depending on the job grade, you can choose from salary tables for non-scientific personnel with vocational (MBO), higher education (HBO) or university (Academisch) qualifications.

The minimum size of the appointment is 6 full-time months and the maximum size is 48 full-time months. The appointment can be structured as desired, but it is always for at least 0.5 FTE *or* for at least 12 months. The product of FTE x duration should always be at least 6 full-time months.

The material budget is available for more limited use of non-scientific personnel.

## Other scientific personnel (OSP) at universities

Funding for the appointment of other scientific personnel, such as AIOS (doctor training to be a specialist), ANIOS (doctor not training to be a specialist), or personnel with a university master's degree or a Dutch drs. or ir. title, can only be requested if funding for a PhD student or postdoc is also requested. A maximum of € 100,000 can be requested.

The minimum size of the appointment is 6 full-time months and the maximum size is 48 full-time months. The appointment can be structured as desired, but it is always for at least 0.5 FTE *or* for at least 12 months. The product of FTE x duration should always be at least 6 full-time months.

## Research leave for programme management

This budget module can only be requested within the separate Governance project and insofar as it concerns tasks related to programme management.

This budget module can be used to request funding for the costs of the main applicant(s) and/or co-applicant(s) to be replaced. The employer can use it to cover the costs of releasing the applicant from teaching, supervision, administrative or management tasks (not research tasks). The applicant(s) may only use the period of research leave for activities within the framework of the project. The application should describe the project-related activities which the applicant(s) will carry out during the research leave.

The maximum research leave that can be requested is the equivalent of 5 full-time months. NWO funds research leave on the basis of the salary tables (<https://www.nwo.nl/salary-tables>) for a senior scientific employee (scale 11.0) applicable at the time the grant is disbursed.

## Personnel of universities of applied sciences and TO2 institutes

The following maximum rates (per hour/day) are used for the funding of salary costs for personnel employed at a university of applied sciences or other institution (e.g. TO2 and SME), in accordance with the "Research Tariffs Manual (HOT) 2017". The HOT "cost-covering table" is used for the Taskforce for Applied Research SIA, and the HOT "costs plus table" for the Netherlands Initiative for Education Research (NRO) and other institutions.

Rates by post	Scale	Rate
Students	-	€ 25
Supporting NSP, vocational education	7	€ 59
Supporting NSP, higher education	10	€ 72
Junior researcher	10	€ 72
School teachers	10	€ 72
Supporting NSP, academic	11	€ 79
Intermediate-level researcher*	11	€ 79
Intermediate-level researcher*	12	€ 87
Doctor/researcher	12	€ 87
Lecturer/researcher	12	€ 87
Senior researcher	13	€ 95
Management/lector	16	€ 119

\* The first intermediate-level researcher scale 11 stands for AIO level and the second, scale 12, for postdoc level.

The above maximum rates are based on the cost-covering rate including the applicable increments. The hourly rate is calculated on the basis of the standard productive number of hours used by the organisation. The cost-covering rate must be substantiated and includes:

- (average) gross salary for the post of the employee who will contribute to the project
- holiday allowance and 13<sup>th</sup> month (if applicable in the relevant collective labour agreement) in proportion to the use in FTE
- social security contributions
- pension costs

### 3.5.2 Material

Per full-time scientific position requested (PhD, postdoc, PDEng), a maximum of € 15,000 in material budget can be requested per year of the appointment. Material budget for smaller appointments is requested on a *pro rata* basis and provided by NWO.

The distribution of the total amount of material budget between the personnel positions funded by NWO is a matter for the applicant. The material budget to be requested should be specified according to the following three items:

#### Project-related goods/services

- consumables (glassware, chemicals, cryogenic fluids, etc.);
- measurement and calculation time (e.g. supercomputer access, etc.);
- costs for acquiring or using data collections (e.g. from Statistics Netherlands), for which the total amount does not exceed € 25,000 per application;
- access to large national and international facilities (e.g. cleanrooms, synchrotrons, etc.);
- work by third parties (e.g. laboratory analyses, data collection, citizen science<sup>16</sup>, etc.);
- personnel costs for the appointment of a postdoc and/or non-scientific personnel of a smaller size than offered under these personnel budget modules.

#### Travel and accommodation costs for the requested personnel positions

- travel and accommodation costs;
- congress visits (max. 2 per year per requested scientific personnel position);

---

<sup>16</sup> Public involvement, or “citizen science”, can contribute to the quality of science. With the public’s help, data and insights can be obtained that would otherwise not be available for research. NWO is keen to fund citizen science and from 2020 will allow researchers to request funding for public involvement in research projects via the budget module “Material, project-related goods/services – work by third parties”. The module is an opportunity for researchers, not an obligation. Researchers can decide for themselves whether it is appropriate to involve the public in their research and how exactly this budget should be spent (e.g. reimbursing expenses, skills training or technical aids for participating members of the public).

- fieldwork;
- work visits.

### Implementation costs

- national symposium/conference/workshop organised by the project
- costs of Open Access publishing (only in full gold Open Access journals, registered in the Directory of Open Access Journals, <https://doaj.org/>)
- data management costs
- costs of licence applications (e.g. for animal experiments)
- audit costs (only for institutions not subject to the educational audit protocol of the Ministry of Education, Culture and Science), up to € 5,000 per application; for projects with a duration of three years or less, up to € 2,500 per application

### Costs that cannot be applied for are:

- basic facilities within the institution (e.g. laptops, office furniture, etc.)
- maintenance and insurance costs
- clinical trials

If the maximum amount of € 15,000 per year per FTE per scientific post requested is not sufficient for realising the research, then it may be deviated from if a clear justification is provided in the proposal (annex Excel file budget form).

## 3.5.3 Investments

In this budget module, funding can be requested for project-related investments in scientifically innovative equipment and/or data collection of national or international importance. The costs of these project-related investments should be adequately specified and justified in the application.

### Funding can be requested for the following costs:

- costs of investment in scientific equipment and datasets
- personnel costs for the setting up of databases and the initial digitalisation of the bibliographical equipment, if these cannot be purchased
- personnel costs for staff with specific, essential technical expertise needed in order to build or develop an investment. When requesting funding for personnel costs, the applicant must justify why these personnel costs are necessary. If the applicant does not have this expertise at their disposal, they must state that these costs will need to be purchased

The applicant's internal purchasing and procurement procedures and/or guidelines are applicable.

### Funding cannot be requested for:

- costs of infrastructure facilities that can be regarded as part of the regular infrastructure
- data collections and any associated software and bibliographies that are already available through other means
- other personnel costs, including personnel costs required to operate and conduct research with the facility
- maintenance and use of the equipment. The costs of equipment use by the researchers that are requested on a project can be requested via the material budget

There is no maximum limit on investments in this Perspectief round. In principle, no contribution from the university or institution is required for investments in this Perspectief round. Ideally, investments will be made in the first year of implementation of the programme.

### 3.5.4 Knowledge utilisation

The aim of this budget module is to facilitate the use of the knowledge that emerges from the research<sup>17</sup>. The budget requested must not exceed € 25,000.

Because knowledge utilisation takes many different forms in different scientific fields, it is up to the applicant to specify the costs required, e.g. costs of producing a teaching package, conducting a feasibility study into potential applications, or filing a patent application and patent protection during the term of the project.

The budget requested should be adequately specified and justified in the application. This module can be requested several times in each project.

### 3.5.5 Internationalisation

The budget for internationalisation aims to encourage international collaboration. The budget requested must not exceed € 25,000. The amount requested must be specified. If the maximum amount is not sufficient for realising the research, then it may be deviated from if a clear justification is provided in the proposal.

The following can be funded:

- travel and accommodation costs, provided this concerns direct research costs resulting from international collaboration and additional costs for internationalisation that are not covered in any other way, e.g. by the bench fee
- travel and accommodation costs for foreign guest researchers
- costs of organising international workshops/symposia/scientific meetings

### 3.5.6 Money follows Cooperation

The Money follows Cooperation module offers the opportunity to carry out part of the project at a knowledge institute with a public task outside the Netherlands.

The applicant must convincingly substantiate how the researcher from the foreign knowledge institute contributes specific expertise to the research project that is not available in the Netherlands at the level required for the project.

This condition does not apply if NWO has concluded a bilateral agreement concerning Money follows Cooperation with the national research funder of the country in which the foreign research institute is located. This NWO webpage lists<sup>18</sup> the research funders with which NWO has concluded such an agreement.

The requested budget within this module must be less than 50% of the total requested budget.

The co-applicant from the participating foreign knowledge institute should meet the requirements for co-applicants set out in Section 3.1 of this call for proposals, except for the condition that the co-applicant must be established within the Kingdom of the Netherlands.

<sup>17</sup>This module adopts the definition of “knowledge transfer” used by the European Commission in the Framework for State aid for research and development and innovation (OJEU 2014, C 198).

<sup>18</sup><https://www.nwo.nl/en/policies/international+collaboration/money+follows+cooperation>

The rates for the personnel costs of researchers working at the foreign knowledge institute are calculated using the correction coefficients table of the Marie Skłodowska-Curie grants (EU, Horizon 2020), with the Dutch VSNU rates being the starting point. The table can be found on this [NWO webpage](#).

The main applicant receives the funding and is responsible for transferring it to the foreign knowledge institute and for accounting for the MfC part of the funding. The MfC part will be accounted for as part of the overall final financial report for the project.

The exchange rate risk is borne by the applicants. Exchange rate liabilities are therefore not eligible costs. The applicant is responsible for:

- the financial accountability for all costs in both euros and local currency, using a visible exchange rate
- a reasonable determination of the level of exchange rates. At the request of NWO, the applicant must be able to provide a description of this reasonable determination at all times

If more than € 125,000 is requested within this module, the final financial report must be accompanied by an audit statement.

NWO does not award funding to co-applicants from outside the Netherlands who are subject to national or international sanctions laws and regulations. The EU Sanctions Map (<https://www.sanctionsmap.eu>) offers a guideline in this respect.

## 3.6 When can applications be submitted

- Phase 1: Programme initiative: register on website: Thursday 22 October 2020, 14:00:00 CEST
- Request of a statement of suitability: Tuesday 17 November 2020 at 14:00 hours CET
- Phase 2: Programme design: submit design: Tuesday 15 December 2020, 14:00:00 CET
- Phase 3: Programme proposal: submit detailed proposal: Tuesday 15 June 2021, 14:00:00 CEST

Applications submitted after the deadline (i.e. 14:00:01 CE(S)T is too late) will not be considered.

## 3.7 Drawing up an application

### 3.7.1 Phase 1: Initiative

Your programme initiative contains the following sections:

- provisional title
- short description of the initiative
- contact person/leader of the theme
- names and institution/company of the other initiators
- the Knowledge and Innovation Agenda (KIA) within which the research fits
- category/categories of key technology/technologies
- optional: date, time and location of the public meeting

You can register your programme initiative (Phase 1) and complete the above sections on the website <https://www.nwo.nl/en/research-and-results/programmes/perspectief>.

### 3.7.2 Request statement of suitability

The fit of a proposal in one of the five innovation agendas and the role of key enabling technologies will be assessed by the Top Sectors. The suitability form intended for this "Assessment of suitability in

Top Sectors policy” can be downloaded from the website <https://www.nwo.nl/perspectief> and should be submitted to [tw-persepctief@nwo.nl](mailto:tw-persepctief@nwo.nl) (see Section 4.1.2). A separate form is available for each KIA. The form suitability in Top Sectors policy contains the following parts:

- Data from programme for assessment
- KIA(s) and Key enabling technologies
- Summary initiative
- Justification suitability in KIA by the main applicant
- Justification role Key enabling technology/technologies by the main applicant
- Signature of the main applicant
- (To be signed for approval by the Top Sector with: Approved by top sector)

### 3.7.3 Phase 2: Drawing up a programme design

Your programme design (in English) should contain an outline describing the research lines and the type and number of projects within them that would be required to achieve the programme objective(s). Your programme design should contain an estimate and justification of the financial resources required to achieve the proposed research objective (see Section 3.5 “What can be applied for”).

The mandatory template to be completed can be downloaded from the Perspectief funding page at <https://www.nwo.nl/en/research-and- results/programmes/perspectief>. The programme design (Sections 1 to 3) should consist of a **maximum of 7 pages** (completed form) and the mandatory 4 annexes: selection publications, abbreviations & acronyms, references and support letters. A minimum of four letters of support should be submitted in Phase 2. Furthermore, the statement of suitability registered by the NWO request desk and issued by the Top Sector should be sent too. Additional annexes are not permitted.

### 3.7.4 Phase 3: Drawing up a detailed programme proposal

NWO Domain AES uses a mandatory format for Perspectief programme proposals. Both the mandatory format and also the accompanying forms will be sent to the programme’s main applicant by **personal email**.

The programme proposal (in English) consists of 42 A4 pages (excluding letters of support). Your programme proposal should be accompanied by the following forms, which must be completed in full. You may not add any additional annexes.

The detailed application includes an **Impact Plan**, which contains an approach to knowledge exploitation that is **integrated** into the research design and increases the impact potential of the proposed research. The Impact Plan consists of the following *elements* that are explained in the annex booklet:

1. Theory of Change
2. Impact Pathway
3. Strategic Activities Planning
4. Risk assessment

Programme forms if opting for the funding of a **single large project** (Option 1 in Section 3.2.3):

- Budget form (Excel file)
- A “Statement main applicant and co-applicant project” with a public summary of the project, and a completed “Data management” form
- Form for responding to committee concerns
- A list of (up to three) non-referees

Programme forms if opting for a formal [division of the programme into projects](#) (Option 2 in Section 3.2.3):

- Budget form (Excel file)
- For each project (the programme consists of multiple projects) a “Statement main applicant and co-Applicant project” with a public summary of the project and a “Data management” form
- Form for responding to committee concerns
- A list with (at most three) non-referees

## 3.8 Registering and submitting an application

A programme initiative can be registered (Phase 1) via a web form that you can find here: <https://www.nwo.nl/en/research-and-results/programmes/perspectief>.

The submission of applications in both Phase 2 and Phase 3 must be done by sending an email with annexes to [ttw-perspectief@nwo.nl](mailto:ttw-perspectief@nwo.nl).



## 4 Procedure and assessment

### 4.1 Procedure

#### 4.1.1 Procedure, Phase 1: Programme initiative

**Publication of the initiative** on the NWO website is a **mandatory condition** for submitting a programme design to NWO Domain AES but is *not* taken into account in the assessment by the referees or committee (Phases 2 and 3). If the initiative has not been registered, the programme design (Phase 2) will not be considered.

The Perspectief instrument is focused specifically on the development of new technologies and the potential for new forms of collaboration. NWO Domain AES is keen that research themes should be developed in openness and dialogue, preferably with the involvement of new partners. To be eligible to submit a programme design, you must therefore publish your programme initiative in advance on the AES website. By publishing Perspectief initiatives, NWO Domain AES aims to facilitate or increase the accessibility of Perspectief programmes for new research groups and to promote the pooling of resources, e.g. by combining initiatives.

A matchmaking meeting is optional, but it is recommended that such a meeting be organised in cooperation or coordination with the contact person of the KIA. Ideally, the limits of the theme and the possible content and architecture of the programme will be discussed during this meeting, and the relevant research community and other stakeholders will be invited to attend this meeting or will be identified during the meeting.

Register your programme initiative as soon as possible. Any matchmaking meetings or workshops can be announced at the same time. NWO Domain AES recommends that you organise this meeting as soon as possible, so that it can still generate input for the programme design to be submitted.

You should register your programme initiative before Thursday 22 October 2020, 14:00:00 CEST on the AES website by completing the form at <https://www.nwo.nl/en/research-and-results/programmes/perspectief>.

#### 4.1.2 Request statement of suitability

The fit of your proposal in one of the five innovation agendas and the role of key enabling technologies will be assessed via the Top Sectors by means of a statement of suitability. The main applicant submits the initial request for the assessment of suitability by the Top Sector to NWO. NWO will send the statement for assessment to the Top Sector. Any subsequent communication about the statement will take place directly between the main applicant and the Top Sector. If your proposal is suitable, then you will receive the signed suitability statement via NWO before the submission date for the programme design (Phase 2).

The form “Assessment of Suitability Top Sectors policy” can be downloaded from the website <https://www.nwo.nl/perspectief> (see Section 3.7.2).

We recommend that you carefully read the KIA (see Perspectief website) and that in the form you provide a tangible justification of the suitability. If you have doubts about the suitability, then please contact the Top Sector concerned. If your proposal fits more than one KIA, then you can state that one the form. For the assessment, the form will be submitted to the first KIA stated on the form.

Please note: the processing time at the Top Sectors can be several weeks. Therefore please send your form in good time and respond quickly to any requests for information from the Top Sector.

### Application suitability statement

The deadline for applications for a suitability statement is Tuesday 17 November 2020 at 14:00:00 CET. You should send the fully completed suitability form (Word version) via email to [ttw-perspectief@nwo.nl](mailto:ttw-perspectief@nwo.nl) stating "Perspectief round 2020/2021" and the number-specific code P20-XX, where XX is the number assigned to your programme initiative on the NWO Domain AES website after registration of your initiative. The programme design may be submitted by anyone, provided that the programme leader is copied in (cc'd) and the form has been signed with his/her initials.

## 4.1.3 Procedure Phase 2: Programme design

The mandatory format can be downloaded via <https://www.nwo.nl/en/research-and-results/programmes/perspectief>. The programme design (Sections 1 to 3) should consist of a **maximum of 7 pages** (completed form) and the mandatory annexes in Section 4. A minimum of four letters of support should be submitted in Phase 2. The form on suitability for Top Sector policy, completed in full and signed by one of the Top Sectors, should also be submitted. Additional annexes are not permitted.

### Submission of programme designs

The deadline for submitting programme designs is Tuesday 15 December 2020, at 14.00.00 CET. Entries must be sent by email to [ttw-perspectief@nwo.nl](mailto:ttw-perspectief@nwo.nl) stating "Perspectief round 2020/2021" and the number-specific code P20-XX, where XX is the number assigned to your programme initiative on the NWO Domain AES website after registration of your initiative. The programme design may be submitted by anyone, provided that the programme leader is copied in (cc'd).

*NB. Perspectief submissions CANNOT be made through ISAAC.*

### Not taken into consideration

Programme designs submitted after the deadline will not be considered. NWO assesses whether the application meets the submission criteria (i.e. whether it meets the requirements set out in Sections 3 and 4 of this Call for Proposals). Only programme designs that meet the conditions are eligible and will be taken into consideration by NWO Domain AES.

If a programme design needs to be corrected, the applicant will be given the opportunity to submit an amended programme design within **five working days**. If the amended programme design is not received within the set timeframe, NWO Domain AES will not consider the application. Amended programme designs that have been received on time will be accepted once they have been approved. If the required information is incomplete or is not provided by the deadline, the application will not be taken into consideration by NWO Domain AES.

### Assessment

Programme designs are assessed on the criteria described in Section 4.2.1 by a multidisciplinary assessment committee appointed by the AES Board.

### Announcement of selected programme designs

The main applicants for the programme designs will be informed in writing about the decision of the competent NWO board by early March 2021. Applicants who submitted a selected programme design will be given the opportunity to develop their programme design into a detailed programme proposal.

To encourage the forming of new networks, the selected programme designs will be announced on the AES website, stating the name and contact details of the main applicant. Interested parties may still be able to join.

## 4.1.4 Procedure Phase 3: Programme proposal

If your submitted programme design is selected, then you will have until Tuesday 15 June 2021, 14:00:00 CEST to define the programme proposal and provide a precise description of the projects defined within it, the financial resources required and the co-funding required from users.

There must be a **clear one-to-one relationship** between the selected programme design and the programme proposal, in terms of scope of the theme, applicants and co-applicants (original applicants + any additional groups), community and stakeholders, and the requested budget. If there are compelling reasons to deviate from this one-to-one relationship, written permission must be obtained from the AES office before 25 May 2021. NWO Domain AES will only grant this permission if, in its opinion, an important interest is at stake.

In the event of deviations from the requested NWO budget, permission need only be sought for deviations of more than € 400,000 (in either direction).

You should submit your programme proposal by Tuesday 15 June 2021, 14:00:00 CEST **by email** to [ttw-perspectief@nwo.nl](mailto:ttw-perspectief@nwo.nl). In all correspondence concerning your programme proposal, please use the **specific code P20-XX** that NWO Domain AES assigned to your programme design at an earlier stage.

### Submission of programme proposals and forms:

- The programme proposal with the accompanying letters of support is submitted as a single unsecured PDF file.
- The programme form “Response to committee concerns” is submitted as a separate PDF file.
- The programme form “Perspectief Indicators and Themes” is submitted as a separate PDF file.
- The programme form “Overview of non-referees” is supplied as a separate PDF file.
- The Excel file “Budget overview” has been attached.
- If you opt for a division into projects, the forms declaration and signature of the project’s main applicant and co-applicant and the “Data management” form are supplied in a separate PDF file for each project; if you opt to treat the programme as a single large project, they are supplied in a single separate PDF file.

### Not taken into consideration

Programme proposals submitted after the deadline will not be considered. NWO assesses whether the programme proposal is admissible (i.e. whether it meets the requirements set out in Sections 3 and 4 of this Call for Proposals). Only programme proposals that meet the conditions are eligible and will be taken into consideration by NWO Domain AES. If a programme proposal needs to be corrected, the applicant will be given the opportunity to submit a revised programme proposal within five working days. If the amended programme proposal is not received within the set timeframe, NWO Domain AES will not consider the programme proposal. Corrected programme proposals that have been received on time will be accepted once they have been approved. If the required information is incomplete or is not provided by the deadline, the application will not be taken into consideration by NWO Domain AES.

### Assessment by referees

Each programme proposal is submitted for peer review to four independent (preferably international) referees or expert reviewers. They base their assessment on the two criteria and sub-aspects stated in Section 4.2.2.

The referees' written assessments are anonymised and compiled into a "Referees' commentary". In the event of resubmission (see also Section 3.4), the application will be re-assessed, and different referees will be consulted.

### Applicants' rebuttal

The main applicant for the programme proposal is given the opportunity to submit a written rebuttal to the compiled referees' assessments. Your rebuttal must not exceed four pages of A4. The referees' assessments and the rebuttal are then compiled.

### Assessment committee and interviews

The programme proposals, referees' commentary, the rebuttal and form for the committee's concerns are submitted to the multidisciplinary assessment committee that has been set up by the AES Board. AES aims to ensure as far as possible that this is the same committee that assessed the programme designs at an earlier stage.

You will be given the opportunity to explain your programme proposal to the assessment committee orally by means of a presentation followed by a discussion. You will be informed of the interview date as soon as it is known.

You can be accompanied by your co-applicants and/or representatives/leads from the group of actual or potential users. If you are unable to present your programme proposal on the proposed date, then one of the co-applicants may take your place or you may opt to be assessed on the basis of the written information provided to the committee. You will receive detailed information about the time, location and organisation of this meeting, as well as about the composition of the assessment committee in due course.

### Quality requirement

To be eligible for funding, programme proposals must not score higher than 4.0 on the individual assessment criteria of Scientific Quality and Utilisation. In addition, the average of these two scores must not exceed 3.5.

The meaning of the scores on the assessment scale is as follows:

1. Excellent, 2. Excellent to very good, 3. Very good, 4. Very good to good, 5. Good, 6. Good to moderate, 7. Moderate, 8. Moderate to substandard, 9. Substandard.

The scores are rounded to the nearest whole number (e.g. 3.49999 is rounded down to 3 and 3.50 up to 4).

### Decision-making and informing of applicants

Based on the assessment committee's recommendations, the order of ranking indicated by the committee, any additional information requested from external parties, any additional strategic considerations and the available budget, the AES Board will make a policy choice and decide which programme proposals will be accepted and rejected. The AES Board determines the size of the programme budget and the resources to be allocated to the individual projects described in the programme proposal.

NWO assigns a qualification to all full proposals. The official representative is notified of this qualification when the decision on whether to grant funding is made.

## 4.1.5 Conflicts of interest and enforcement of deadlines

### Code for dealing with personal interests

The NWO Interests applies to all persons involved in the assessment and/or decision-making process.

### Enforcement of deadlines

The submission of a programme initiative on the NWO Domain AES website, the sending of the ex-ante assessment form by email (Phase 1) and the submission of a programme design (Phase 2) and programme proposal (Phase 3) are confirmed with a date and time stamp of registration and/or receipt.

Please note that submitted programme initiatives (Phase 1) and designs (Phase 2) with a date and time stamp of 14:00:01 CE(S)T on the deadline date or later are not eligible for submission of a programme design (Phase 2) and proposal (Phase 3) and will not be considered further in accordance with NWO guidelines.

## 4.2 Criteria

The Perspectief 2020/2021 call for proposals introduces differentiation in the aspects of the assessment criteria used for programme designs and full applications. The assessment committee assesses the programme designs (in Phase 2) and proposals (in Phase 3) against the two criteria of Scientific Quality and Utilisation, taking into account the questions below. These two assessment criteria have equal weighting.

### 4.2.1 Assessment criteria Phase 2: programme design

#### Scientific quality (50%)

1. Are the technical and scientific objectives of the programme clear and specific?
2. Are the technical and scientific challenges described innovative and relevant?
3. Will new technology be developed through a multidisciplinary approach?
4. Does the programme have clear added value compared to other existing research initiatives?
5. Does the programme create sufficient focus and mass (coherence) in order to create strong, internationally distinctive positions in Dutch industry and the knowledge infrastructure?
6. Is the scientific community of sufficient quality and are the knowledge institutions involved (including, where relevant, TO2 institutes and universities of applied sciences) suitable (complementary and multidisciplinary) to achieve the intended programme objectives?
7. To what extent do the projects/work packages form a single programme, is there good coherence between the projects/work packages and is the synergy clear? Do all of the different projects/work packages contribute to the programme objectives?
8. Does the budget suit the proposed activities?

#### Utilisation (50%)

1. Is the problem that the programme addresses and the vision of success (expected impact) clearly defined and socially relevant, and is it necessary to tackle the programme now?
2. Do the programme's approach and intended scientific insights fit in with this vision of success?
3. Were the problem statement, vision of success and the programme drawn up together with users and other stakeholders?
4. Does the programme contribute to the creation of economic opportunities for the Netherlands, and does it contribute to industrial activity in the Netherlands?
5. Is the role of these users and stakeholders clear in the research and the route towards impact?
6. Is the utilisation plan clear and will the direction and steps described in the utilisation plan lead to application by users?
7. Is there a coherent, complementary and multidisciplinary consortium? Is the entire innovation chain involved, including SMEs?
8. Does the user group show sufficient convincing interest and is the intended co-funding, both in kind and in cash, appropriate to the interests and capacity of the users and to the type of programme?

## 4.2.2 Assessment criteria Phase 3: programme proposal

### Scientific quality (50%)

1. Are the technical and scientific objectives of the programme clear and specific?
2. Is the proposed research technically and scientifically challenging? Are the technical and scientific challenges described innovative and relevant?
3. Will new technology be developed through a multidisciplinary approach?
4. Is the proposed approach/methodology appropriate to achieve the objectives?
5. Is the programme distinctive and does it have clear added value compared to other existing research initiatives?
6. Does the programme create sufficient focus and mass (coherence) in order to create strong, internationally distinctive positions in Dutch industry and the knowledge infrastructure?
7. Is the scientific community of sufficient quality and are the knowledge institutions involved (including, where relevant, TO2 institutes and universities of applied sciences) suitable (complementary and multidisciplinary) to achieve the intended programme objectives?
8. To what extent do the projects/work packages form a single programme, is there good coherence between the projects/work packages and is the synergy clear? Do all of the different projects/work packages contribute to the programme objectives?
9. Does the budget suit the proposed activities? Is there a clear and specific justification of costs?

### Utilisation (50%)

1. Is the problem that the programme addresses and the vision of success (expected impact) clearly defined and socially relevant, and is it necessary to tackle the programme now?
2. Do the programme's approach and intended scientific insights fit in with this vision of success?
3. Were the problem statement, vision of success and the programme drawn up together with users and other stakeholders?
4. Does the programme contribute to the creation of economic opportunities for the Netherlands, and does it contribute to industrial activity in the Netherlands?
5. Is the role of these users and stakeholders clear in the research and the route towards impact, and is there clear interaction and cooperation between researchers and private and public partners in the consortium, evidenced by the application and the letters of support?
6. Is the utilisation plan clear and complete, and will the steps taken in the utilisation plan actually lead to application by users?
7. Is there a coherent, complementary and multidisciplinary consortium? Is the entire innovation chain involved, including SMEs?
8. Have all facets of possible application of results been covered with relevant users?
9. Has the user group pledged sufficient convincing support, both in kind and in cash, and is that support appropriate to the interests and capacity of the users and to the type of programme?



## 4.3 After awarding

After approval from NWO and the Ministry of Economic Affairs and Climate Policy, the allocation decision taken by the AES Board leads to a conditional programme budget.

If a single large project is opted for (Option 1 in Section 3.2.3), it leads to a single conditionally funded project; if several projects are opted for (Option 2 in Section 3.2.3), it leads to individual conditionally funded projects.

Each official representative will receive an award letter with appendices which sets out the legal and financial conditions of funding and should be signed individually for approval by each official representative. The credits allocated do not become available until after the necessary documents have been signed and received by NWO Domain AES and if all relevant award conditions have been fulfilled.

After the programme proposal has been approved, NWO Domain AES will ask the co-funders for confirmation of the co-funding (“confirmation of commitment by third parties”). In relevant cases, further arrangements will be recorded in an agreement.

The AES office reserves the right to request additional information or a more detailed project description from the applicants before making the allocated credits available.

After an application has been approved, the official representative should elaborate the data management section into a data management plan. The official representative can use the advice of the referees and selection committee in this regard. The project can start as soon as the data management plan has been approved by NWO Domain AES.

### User Committee

To promote the effective transfer to users of knowledge generated by the research, NWO Domain AES sets up one or more user committees in consultation with the programme/project leaders (see Section 3.2.6).

### Initial discussion and kick-off meeting

Shortly after a programme has been approved, AES will hold an initial discussion with the programme leader, the programme manager and project leaders.

This is soon followed by a kick-off meeting with all official representatives, applicants, co-applicants, researchers and users. Budget should be reserved for this in the Governance project. The kick-off can also take place in phases:

- A first kick-off meeting with the partners or main partners, i.e. without the researchers.
- A large kick-off meeting once all or most of the researchers have been recruited.
- A separate introductory event for temporarily appointed researchers.

## 4.4 Other conditions

### Reporting requirement

In addition to the mandatory progress reports, NWO may ask you to submit an annual written report on the progress of the research programme. This report may consist of:

- a. An overview of the research activities carried out under the research programme;
- b. An overview with substantiation of the indicators achieved;
- c. A list of the participants in the research programme and the type of research activities that these participants carry out in the research programme;
- d. An overview of the participants' annual contributions to the research programme during the research programme in question, both in total and broken down by individual participant, as well as the proportion of the research activities under the research programme that are funded by other private cash contributions;
- e. An overview indicating which proportion of the amount of funding has been allocated to which type of research activities;
- f. A description of how the knowledge and results obtained through the research programme will be disseminated and transferred to others.

### Final report on the programme

A final report is submitted for each project in accordance with Article 3.5.2 of the NWO Grant Rules. If you opt for a formal division of the programme into projects (Option 2 in Section 3.2.3), NWO will request a final substantive report on the entire research programme, in addition to final reports at project level (both financial and substantive).

### Final statement

Funding recipients not covered by the educational audit protocol of the Ministry of Education, Culture and Science submit an audit statement at the end of the project. The associated costs may be entered under material costs.

The co-funders must be able to demonstrate that the pledged in-kind contribution has been made; a management statement may be requested. Together with the final settlement, the project leader will send NWO an overview of the in-kind contribution(s) made. NWO is entitled to conduct or commission a check of that overview.

In the event of failure to account for the pledged co-funding, or to deliver all or part of the pledged co-funding, NWO is entitled to withdraw all or part of the grant.

### Perspectief indicators

To understand the results of the Perspectief programmes, monitor progress and account to the party funding Perspectief (the Ministry of Economic Affairs and Climate Policy), several Perspectief key performance indicators (KPIs) will be formulated. These are expected to be:

- Number of identifiable knowledge transfer moments;
- Number of publications and co-publications with industry;
- Number and type of partners involved;
- Number of FTEs as in-kind co-funding made available by the partners;
- Co-funding;

- Expected increase in Technology Readiness Level (TRL) of the technology.

The final indicators will be included in the mandatory format for programme proposals (Phase 3). These aspects should be detailed in the progress reports and final report.

## Open Access

As a signatory to the [Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities \(2003\)](#), NWO is committed to making the results of scientific research funded by NWO freely accessible via the internet (Open Access). NWO is therefore implementing the Dutch government's policy to make all publicly funded research Open Access. All scientific publications resulting from research funded by awards under this call for proposals must therefore be made Open Access immediately (at the time of publication). NWO accepts different routes in this regard:

- publication in an Open Access journal,
- deposition of a version of the article in a repository, or
- publication in a hybrid journal in accordance with a deal between the VSNU and the publisher. See <https://www.openaccess.nl/en>.

Any costs of publishing in Open Access journals may be included in the project budget. NWO does not reimburse the costs of publishing in hybrid journals. These conditions apply to all forms of scientific publications resulting from this call for proposals, including scientific monographs, edited volumes, proceedings and chapters. For a more detailed explanation of NWO's Open Access policy, see: <https://www.nwo.nl/openscience-en>.

## Data management

It must be possible to replicate, verify and disprove the results of scientific research. In the digital era, this means that both publications and research data should be as freely accessible as possible.

NWO expects research data that emerge from projects funded by NWO to become freely available, as much as possible, for reuse by other researchers. In this regard NWO applies the principle: "as open as possible, protected if necessary". Researchers are expected to publish at least those data and/or non-numerical results that underpin the conclusions of works published within the project at the same time as the publication itself. Any associated costs may be included in the project budget. Researchers must state how data resulting from the project will be managed; this must be stated in the data management section of the research application and in the data management plan after funding has been awarded.

### **1. Data management section**

The data management section is part of the research application. Researchers are therefore asked to consider, even before the research starts, how the collected data will be organised and categorised so that they can be made freely available. Measures will often need to be taken during the production and analysis of the data to make their later storage and dissemination possible. If not all data resulting from the project can be made public, for reasons of privacy, ethics or valorisation for example, then the applicant must state this in the data management section.

### **2. Data management plan**

After an application has been approved, the applicant should elaborate the data management section into a data management plan. In the plan, the researcher describes whether existing data will be used or whether this is a new data collection. He or she will also describe how the data collection will then be made FAIR: Findable, Accessible, Interoperable and Reusable. Prior to submission, the data management plan should be agreed with a data steward or comparable officer of the knowledge institution where the research is to be conducted. This plan must be submitted to NWO via ISAAC within four months after the application has been awarded funding. NWO will approve the plan as

quickly as possible. Approval of the data management plan by NWO is a condition for disbursement of the grant. The plan can be adjusted during the research.

For more information on the NWO data management protocol, see:

<https://www.nwo.nl/datamanagement-en>.

## Nagoya Protocol

The Nagoya Protocol became effective on 12 October 2014 and aims to contribute to 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 resources from the Netherlands or abroad for their research should familiarise themselves with the Nagoya Protocol ([www.absfocalpoint.nl](http://www.absfocalpoint.nl)). NWO assumes that researchers will take all necessary actions with respect to the Nagoya Protocol.

## 5 Definitions

- SME: an enterprise which employs fewer than 250 persons and has an annual turnover not exceeding 50 million euros, and/or an annual balance sheet total not exceeding 43 million euros, as defined by the European Commission (2003/361/EC).
- Multidisciplinary approach/cooperation: an approach/cooperation in which knowledge from multiple disciplines is combined to complete the activity.
- Key enabling technology (KET): a technology in which the Netherlands excels scientifically and in which scientific and economic growth is expected in the coming years. A KET is a technology with a broad range of applications in various innovations and/or sectors. KETs are essential in solving societal challenges and/or in making a major contribution to the economy of new businesses and markets, enhancing competition and supporting the labour market. KETs enable groundbreaking innovations in processing, production and/or services. These technologies are relevant to science, society and the market as well.

In this round, similar to the KIA KETs, the definition includes technologies mentioned in the Elsevier Research Intelligence study *Quantitative Analysis of Dutch Research and Innovation in Key Technologies* and the Future and Emerging Technologies from the European programme Horizon 2020 and its successor Horizon Europe.

- Total programme costs: the sum of the total project costs of all projects.

## 6 Contact

For specific questions about Perspectief and this call for proposals, please contact the Perspectief coordinators via [ttw-perspectief@nwo.nl](mailto:ttw-perspectief@nwo.nl):



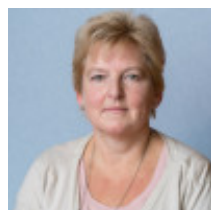
**Dr Anke Stekelenburg**  
NWO Domain AES  
Tel.: +31 30 600 1314



**Bastiaan de Jonge, MA**  
NWO Domain AES  
Tel.: +31 30 600 1273



**Secretarial Support**  
**Cora Heesakkers**  
NWO Domain AES  
Tel.: +31 30 600 1304



**Secretarial Support**  
**Yvonne van Scharenburg**  
NWO Domain AES  
Tel.: +31 30 600 1267

## 7 Perspectief schedule

### PHASE 1: Programme initiatives

Activity	Deadline
Registration programme initiatives on NWO Domain AES website	Thursday 22 October 2020, 14:00:00 CEST

### Submission suitability form

Activity	Deadline
Submission application suitability statement	Tuesday 17 November 2020 at 14:00:00 CET

### PHASE 2: Programme designs

Activity	Deadline/period
Submission programme design and signed suitability form	No later than Tuesday 15 December 2020, 14:00:00 CET
Applicants informed whether programme will be considered	Before Friday 18 December 2020
Assessment and ranking by committees	January – February 2021
Board decision on programme designs	Mid-March 2021
Applicants informed of decision	Within five working days after board decision

### PHASE 3: Programme proposals

Activity	Date/period
Programme designs developed into programme proposals	Mid-March – 15 June 2021, 14:00:00 CEST
Deadline for submitting programme proposals	Tuesday 15 June 2021, 14:00:00 CEST
Assessment by (international) referees	June– mid-September 2021
Main applicants' rebuttal	24 September – 8 October 2021, 12:00:00 CEST
Interview round with applicants / ranking by assessment committee	In week of 19 November 2021
Board decision on programme proposals 2020	December 2021
Main applicants informed of decision	Within five days after board decision

## 8 Annexes and relevant references

The following annexes apply in the case of Perspectief 2020/2021. These can be found in the PDF published with this call on the funding page for the Perspectief instrument (via <https://www.nwo.nl/en/research-and-results/programmes/perspectief>).

- Impact plan approach
- Intellectual Property (IP) Policy
- Co-funding example calculations
- Model letter and template for letters of support
- Technology Readiness Level and Societal Readiness Level
- Data management section
- Explanation of knowledge transfer moments.



## Links

- Applications for Perspectief programme (Phase 2 Perspectief\_format\_programmadesign\_2020-2021):  
<https://www.nwo.nl/en/research-and- results/programmes/perspectief>
- Overview of the Knowledge and Innovation Agendas  
<http://www.nwo.nl/perspectief>
- Overview of key enabling technologies  
<http://www.nwo.nl/perspectief>
- NWO Grant Rules 2017:  
<https://www.nwo.nl/en/documents/nwo/legal/nwo-grant-rules-1-may-2017>
- Brochure “User committee guidelines NWO Domain AES 2017”:  
<https://www.nwo.nl/en/about-nwo/organisation/nwo-domains/ttw>
- Code for dealing with personal interests  
<https://www.nwo.nl/en/common/subsidies/funding-process-explained/code-for-dealing-with-personal-interests>
- Nagoya Protocol:  
<https://www.cbd.int>
- Netherlands Organisation for Scientific Research (NWO):  
<https://www.nwo.nl/en>
- Open Access:  
[www.nwo.nl/en/policies/open+science](http://www.nwo.nl/en/policies/open+science)

**Published by**

Dutch Research  
Council (NWO)

**Visiting address:**

The Hague site  
Laan van Nieuw Oost-Indië 300  
2593 CE The Hague  
The Netherlands

Utrecht site  
Winthontlaan 2  
3526 KV Utrecht  
The Netherlands

August 2020

