



Call for Proposals Green Cities, Nederlandse Organisatie voor Wetenschappelijk Onderzoek

Avenues for future academic research into social innovations

WOTRO Science for Global Development

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1 Introduction

1.1 Background

There is a long history of scientific collaboration between China and The Netherlands. The Dutch Research Council (NWO), through the Merian Fund¹, and the Chinese Academy of Sciences (CAS) aim to further stimulate long-term research collaboration between their two countries by funding joint research, to strengthen the international position and global impact of their research. Funding is provided for interdisciplinary and transdisciplinary consortia of Chinese and Dutch research groups and stakeholder partners, for high quality research that has the potential for high societal and scientific impact. The Cooperation China-The Netherlands (CAS) Programme is one of several instruments in the bilateral research cooperation between China and The Netherlands.

NWO and CAS have agreed on a strategic knowledge and innovation agenda. A call for proposals on a jointly agreed theme based on this agenda is published annually. Funded research should be in alignment with national research agendas, as well as international initiatives such as the UN Sustainable Development Goals, and build bridges between different actors in the knowledge chain, fundamental and applied research, and scientific disciplines. The theme for this year's call is 'Green cities'.

1.2 Available budget

The total budget for this call is M€ 1.4 on the Dutch side, and RMB 9 million on the Chinese side. With the available total budget, NWO and CAS aim to fund up to two projects with a duration of three (on the Chinese side) to four (on the Dutch side) years.

¹ The Merian Fund is part of NWO, and aims to stimulate long-term collaboration with important (emerging) science nations and increase the visibility and profile of Dutch science abroad. The Merian Fund focuses on broad scientific themes of societal importance that require a mission-oriented approach. Programmes in the Merian Fund are aligned with the National Research Agenda (NWA) of The Netherlands. For more information see: <https://www.nwo.nl/en/policies/international+collaboration/merian+fund>



Projects can apply for a maximum of € 700,000 at NWO, and for a maximum of RMB 4.5 million at CAS.

The NWO Grant Rules 2.017 are applicable to the part of the project's budget covered by the grant from NWO. The part of the budget covered by the grant from CAS must follow the CAS grant conditions. Please see section 3 for further details.

1.3 Validity of the call for proposals

This call for proposals is valid until the closing date 21 January 2020, 14:00 hours CET (for the submission of applications to NWO) / 21 January 2020, 16:00 CST (for the submission of applications to CAS).

PLEASE NOTE: Applications must be submitted to both NWO and CAS.

2 Aim

Many societal challenges are complex and interrelated. To address them requires sustainable collaboration, and flexibility and creativity to achieve sustainable results for effective and impactful solutions. The collaborative research financed by CAS and NWO in this call is intended to work towards scientific knowledge and sustainable, innovative solutions for high scientific and societal impact. At the same time, CAS and NWO aim to stimulate strong, sustainable research collaboration between their two countries. They do this by inviting consortia in which researchers from knowledge institutions from both countries will work with societal partners from public, semi-public and private organisations, in order to increase the societal relevance and impact of their research.

The current call focuses on research contributing to application-oriented solutions for increasing liveability of cities through urban green areas. This topic is of great interest and importance to both China and The Netherlands due to the increasingly urban nature of their populations.

2.1 Thematic focus

Currently, about half the global population lives in cities, a percentage that is expected to increase. The growth of cities in the 20th century has come with a separation of functions in the landscape. Within cities, activities such as living, working, education, sports, leisure, and shopping are spatially separated. Food production and access to larger green areas, for example, are mostly located outside of the cities.

All these separations reduce the overall vitality of the city, for instance by a lack of green areas in parts of the city or a lack of activity during part of the day, e.g., deserted office areas at night. In addition, a separation of functions greatly increases the demand for transport from one place to another, especially in larger cities, thereby contributing to higher greenhouse gas emissions.

In order to counter this, there is an increasing trend to design multi-functional spaces in urban areas. For this call, we ask how increasing multi-functional green spaces in the city can make a valuable contribution to making a city more liveable. The presence of green spaces in the city, on its own, has already been shown to have a positive effect on the well-being of the citizens living there, ranging from improvements in emotional wellbeing to clear physical health benefits. But urban green spaces can and should serve different functions at the same time, in order to optimally use the available room in the city.

Urban agriculture

Urban green spaces can be used for horticulture and agriculture and play an important role in enhancing urban food security and healthy nutrition. Local production decreases transport and distribution costs compared to rural production, while providing high quality fresh food that is safe, healthy and tasty. The short distances will compensate for a higher labour intensity and allow for a minimum of artificial crop protection measures and thus for sustainably produced food.

The importance of urban agriculture is increasingly being recognized by international organisations like UN-Habitat and the FAO. Food production within the city can contribute significantly to local economic development, poverty alleviation and social cohesion, and enhance inclusion of inhabitants otherwise excluded from the labour market. Residents can produce food together with their neighbours, strengthening social interactions. It can serve as a tool to teach children about healthy food and a healthy lifestyle.



Sustainability

Urban areas have several specific problems, such as the effect of heat islands, waste streams that require transport out of the city, and pollution of air, water and soil, sometimes at high levels. Natural, green solutions – often called nature based solutions (NBS) – can help alleviate those problems.

Rooftop farming or other forms of greening roofs can help insulate buildings and cut costs for heating or cooling and decrease GHG emissions. Green roofs have also been shown to combat the effects of urban heat islands, a problem that is set to grow as cities grow and the climate warms. Green areas can hold and filter rainwater, providing a buffer for water management within the city. These green areas can also absorb a wide range of pollutants, helping to clean both air and water.

Good designs for a greener city will also allow for closing cycles locally by reusing urban waste streams. Organic waste streams could be used to produce protein via animal farming (insects, chickens, pigs, fish, etc.) or composted for agricultural purposes. Waste water could, depending on the quality, be reused for the production of crops or used for ornamental plants and wetlands.

Biodiversity

The spread of cities has had a very strong effect on biodiversity in their region. Increasing the amount of green areas in the city will help to conserve or increase biodiversity. While conservation and restoration of biodiversity is a worthwhile aim on its own, there are additional benefits. More biodiverse systems are more resilient to change and are better able to provide the ecosystem services we need, like clean water and air and a healthy soil. Self-sustainable, long-term solutions that combine a range of (ecosystem) services should consider how to maximize biodiversity in their design.

In the coming decades, climate change is expected to exacerbate many of the problems already seen in cities today. The effects of heat islands, scarcity of access to clean water, (air)pollution or extreme weather are likely to pose significant challenges for cities around the world. Socio- economically vulnerable populations will be especially susceptible to these changes. Using natural solutions in the design of cities could help to mitigate these effects to a significant degree.

The above mentioned challenges of competing claims in urban planning require a sound integrated approach, overcoming the short-term sectoral interests of economic development, housing and infrastructure departments. Property rights – however they may be defined – play a paramount role here. There is a huge need for demonstration cases that can show that an integrated multi- functional approach can be successful not only in enhancing liveability of the city (including the associated rural hinterland) but also in improving socio-economic development.

This call focuses on research in order to develop application-oriented solutions to better integrate green areas in the city landscapes, to help develop practical innovations, and support decisions and policymakers towards sustainable planning and practices, strategies and policies. These application-oriented solutions are aimed at balancing trade-offs and amplifying synergies between economic development and social demands while simultaneously preserving the environment, for instance by introducing transfer of development rights (TDR).

Therefore, projects in the Green cities programme should:

- 1) Address challenges related to better integrating green areas into a city. The research proposal must specify why a specific city is chosen and what the relevant research questions are. The chosen city should ideally be suitable to work as a showcase and provide transferable knowledge to other settings. Seeing as cities can be very different with regards to culture, ethnic diversity and lifestyle within a country, let alone between countries, solutions for greening the city will often be tailored to a specific location. The applicants will be asked to clearly describe the factors that determine success or failure of the solutions proposed in order to identify positive contributors or pitfalls for application of the results to other locations.
- 2) Translate research to inform policies in developing options for integrating multi-functional green areas in a sustainable way. This will require sustainable resource management, long-term planning and governance. In this light, the research will have to take into account institutional arrangements, governance issues and legal aspects. The proposal should clearly describe relevant stakeholders and how they are involved. It should aim at collaboration with different governmental departments, specialists, land owners and policymakers, in order to allow for translation of the results of this research into practice. This Call emphasises the need to generate cases that demonstrate how greening cities could assist in achieving SDGs 2, 11 and 15.



2.2 Specific project requirements

2.2.1 Integrated research approach and co-creation

The challenges addressed in this call are interrelated and multi-scalar, and to reach impact require a holistic approach that spans the entire research and innovation chain. The consortia should crosscut scientific disciplinary boundaries (interdisciplinarity) and integrate scientific and practitioners' knowledge in joint research (transdisciplinarity). Research should focus on the entire knowledge chain, from fundamental to applied and practical research. The proposed research itself should be characterised by integrated perspectives. It should evolve in a process of co-creation with different partners: researchers from both countries and societal partners should be actively involved throughout the entire project, in (advising on) defining and conducting the research as well as in communicating the progress and results, in order to jointly produce a mutually valued outcome. Added value may be achieved by integrating and synthesising various sources of knowledge to create new knowledge and by creating sustainability through the development of long-term knowledge relations.

Applications should be based on a thorough review of existing knowledge and should preferably be complementary to existing research initiatives and reinforce these where possible. Project teams are encouraged to use a combination of quantitative and qualitative and quasi-experimental research methods, including operational research, and should include research-into-use approaches.

Projects are also expected to collaborate with the other project awarded in this call, so as to enhance the impact of the call as a whole. As a part of this, projects will be expected to attend joint kick-off and mid-term workshops, as well as a final conference. Projects should budget for this accordingly.

2.2.2 International collaboration

Applications should furthermore be characterised by equal partnership and sustainable collaboration between the Chinese and Dutch partners. This includes inter-institutional cooperation, a balanced contribution to the proposed research, and frequent exchange between the partners, including exchange visits by both senior and junior researchers. Projects must organise a maximum of four research visits (in total) of a minimum of three months each for PhD students and/or post docs, and of minimum three weeks each for senior researchers.

2.2.3 Knowledge Sharing and Impact Strategy

The research conducted in this call for proposals should have relevance and potential for impact beyond the academic world, such as in societal, technical, economical or cultural realms. This is why, in addition to having a societal or industry partner within the consortium, consortia should consider how relevant stakeholders can be involved in, or benefit from, the design and realisation of the proposed research project.

To further enhance the potential for impact of the proposed research, the application should state how approaches for achieving impact are integrated in the research design and conducted by the consortium in engagement with end users, such as practitioners, policymakers, and industry.

An integrated approach to impact

Developing a vision on desired change in collaboration between partners and stakeholders is pivotal for developing realistic and feasible strategies to enhance the potential for impact. To this end an integrated approach is required, which consists of the following elements:

- Co-creation
- Impact Strategy

Co-creation: A form of cooperation in research where different parties (researchers and stakeholders) in the knowledge process (demand and supply) interact and engage in joint learning to define problems, formulate possible solutions, design the research, conduct the research, assess the results and to translate these into new practices and products.

An **Impact Strategy** is the plan of the consortium that spells out how the activities contribute to outcomes. Outputs do not automatically lead to outcomes, thus strategies are needed of the research consortium to plan and monitor how their efforts will enhance the potential for outcomes. This strategy should spell out clearly:

- Stakeholder engagement: which are the relevant stakeholders to engage with, how is this engagement foreseen and whose responsibility is it;
- Communication: which is understood as an iterative process within the consortium and with



- stakeholders: which means of communication are foreseen from inception throughout and whose responsibility it is;
- Capacity development: which capacities, of partners and stakeholders, need strengthening in order to achieve the outcomes, how is this organised and whose responsibility it is;
 - Monitoring and evaluation: how is monitoring of activities foreseen, how do lessons feed back into the research design, and whose responsibility it is.

How to translate this approach in the proposal?

Co-creation: Specify how the different skills and expertise are complementary and how this is integrated in approaches. Co-creation within the consortium and with stakeholders is central to the development of the research proposal through to the execution of the research. Describe how co-creation within the consortium and with stakeholders is organised and monitored.

To further increase the potential for impact of the proposed research, the application should state how productive interactions around knowledge from the consortium to end users, such as government ministries, societal stakeholders and companies, will be facilitated. To this end, a clear impact strategy (including stakeholder engagement, capacity development, and communication, also with the aim to influence the enabling environment) needs to be provided. This impact strategy should contain descriptions of the actual knowledge transfer activities undertaken to encourage innovation and boost impact from inception through to the end stages of the proposed research.

Indicators, at output and outcome levels, facilitate monitoring progress and accordingly adjusting the research approach, where the assumptions proved insufficient or incorrect. Indicators should be formulated in SMART ways and be ambitious, yet realistic.

Box 1: Output, outcome and impact

Research outputs relate to the direct and immediate results obtained by a research project or programme.

Research outcomes relate to the changes in behaviour, relationships, actions, or activities of stakeholders as a result of sharing and uptake of research.

Research impact is defined as changes in economic, environmental and social conditions a project or programme is aiming at.

Change is a complex process that depends on a variety of actors and factors of which research is only one. Where research outputs fall under the direct sphere of control of a research project or programme, outcomes belong to their sphere of influence, and impact to their sphere of interest.

3 Guidelines for applicants

3.1 Who can apply

Eligible consortia are composed of researchers based in the Netherlands and in China, with active involvement in the project of a senior Principal Investigator (PI) on both the Dutch and the Chinese side, as well as a Dutch and a Chinese co-applicant. The consortium must also include a partner from a public, semi-public or private practitioner organisation (for-profit or not-for-profit).

Specifically, the Dutch and Chinese sides of the consortium must fulfil the following requirements:

Dutch side of the consortium:

- One Principal Investigator who fulfils the requirements of 3.1.1;
- At least one co-applicant who fulfils the requirements of 3.1.2;
- A partner from a public, semi-public or private practitioner organisation (for-profit or not-for-profit).

Chinese side of the consortium:

- One Principal Investigator who fulfils the requirements of 3.1.1;
- A co-applicant from a CAS institute or CAS university. If the co-applicant is from the same institute as the Principal Investigator, then he/she must be from a different department.

Together, the consortium members will 1) formulate relevant research questions and approaches; 2) formulate and submit the proposal through the Principal Investigators; 3) conduct the project activities; 4) coordinate knowledge sharing and support the application, dissemination and communication of the project results to a broader group of possible knowledge users that are not a member of the consortium; and 5) take responsibility for the adequate and timely reporting conditions.

Each Principal Investigator and consortium can only submit one proposal.



This call aims at knowledge chain-wide collaboration, to enhance demand articulation, ownership, and the effective uptake of results. For this reason, all consortium partners, as well as relevant stakeholders, are expected to be engaged in all phases of the project execution, from its inception to sharing the (emerging) results. Evidence of such active engagement will be an important element in the assessment of project proposals and may be demonstrated through references to involvement in project preparation, active involvement as a project partner and links between the proposed research project and ongoing projects of NGOs, private enterprises, and/or policy implementation.

A Consortium Agreement to regulate consortium governance, task division, resource management and ownership of results between the collaborating consortium organisations is obligatory (see section 3.5 for details).

3.1.1 Principal Investigators

A proposal should have two Principal Investigators: one based in The Netherlands or at a university established in the Kingdom of The Netherlands, and one based in China. The two Principal Investigators will serve as the recipients of the grants from their respective funding agencies, NWO and CAS. They will serve as the points of contact for their respective funding agencies and will submit the proposal to both organisations. The Principal Investigators' organisations will take responsibility for the project secretariat, the day-to-day management and all financial affairs of the research project, including the final financial accountability towards their respective funding agencies.

Dutch Principal Investigator

For scientists based in the Kingdom of The Netherlands, the NWO eligibility criteria apply. The Dutch Principal Investigator:

should be affiliated to one of the following institutions:

- Universities established in the Kingdom of The Netherlands;
- University Medical Centres;
- NWO and KNAW institutes;
- TO2 institutes;
- the Netherlands Cancer Institute;
- the Max Planck Institute for Psycholinguistics in Nijmegen;
- researchers from the DUBBLE Beamline at the ESRF in Grenoble;
- NCB Naturalis;
- Advanced Research Centre for NanoLithography (ARCNL);
- Prinses Máxima Center for Pediatric Oncology;

AND

have an employment contract for at least the duration of the application procedure and the duration of the research the grant is applied for;

AND

have at least a PhD or an equivalent qualification.

Researchers with a 0 hour contract at one of the institutions above cannot apply. An exemption can be made for Principal Investigators on a 'tenure track' contract at one of the institutions above.

Chinese Principal Investigator

For Chinese scientists, CAS requires the Principal Investigator to be affiliated to a CAS institute or CAS university;

AND

have an employment contract for at least the duration of the application procedure and the duration of the research the grant is applied for;

AND

have at least a PhD or an equivalent qualification;

AND



be associate professor or above title.

Please refer to the Chinese call for proposals on the CAS website for more information:
http://www.bic.cas.cn/tzgg/201911/t20191125_4725033.html

3.1.2 Co-applicants

A co-applicant is a participant in the consortium and receives funding through the Principal Investigator. The consortium should include co-applicants from at least one other Dutch and Chinese institution than the Principal Investigators.

Dutch co-applicants

NWO requires co-applicants to be:

- a researcher from one of the institutions listed in 3.1.1, who has an employment contract for at least the duration of the application procedure and the duration of the research the grant is applied for;
AND
has at least a PhD or an equivalent qualification.
Researchers with a 0 hour contract at one of the institutions above cannot be a co-applicant. An exemption can be made for researchers on a ‘tenure track’ contract at one of the institutions above.
- an experienced researcher (a professor, assistant professor, or a researcher with a similar appointment) with an appointment at a university of applied sciences funded by the Dutch Ministry of Education, Culture and Science for the duration of the application process and the project (funded in accordance with Article 1.8 of the law on higher education and scientific research).
- If the applicant is affiliated to an organisation not listed in paragraph 3.1.1 or a university of applied sciences as specified above, the organisation must meet the following cumulative criteria:
 - i. is based in The Netherlands;
 - ii. is a public institute and carries out its research independently;
 - iii. receives at least 50% public funding;
 - iv. is not-for-profit other than for the purpose of carrying out further research;
 - v. its researchers enjoy freedom of publication in international scientific journals.**Please note:** these conditions will be assessed by NWO **prior to** submission of the application. To this end, the co-applicant’s organisation must submit the following documents by email to cas-nwo@nwo.nl no later than **12 December 2019**:
 - a recent extract from the Chamber of Commerce register;
 - the deed of incorporation, articles of association or other formal document indicating the public task and the non-profit status;
 - the latest available annual accounts accompanied by an auditor’s statement.

Chinese co-applicants

CAS requires one co-applicant, who should be affiliated to a CAS institute or CAS university. If the co-applicant is from the same institute as the Principal Investigator, then he/she must be from a different department;

Furthermore, the Chinese co-applicant should:

have an employment contract for at least the duration of the application procedure and the duration of the research the grant is applied for;

AND

have at least a PhD or an equivalent qualification;

AND

be associate professor or above title.

Please refer to the Chinese call for proposals on the CAS website for more information:
http://www.bic.cas.cn/tzgg/201911/t20191125_4725033.html



3.1.3 Public and/or private collaboration partners

Consortia should contain a public and/or private practitioner collaboration partner. Public and/or private practitioner collaboration partners are partners from the public and/or semi-public sectors and/or industry. They are closely involved with the research and impact strategy. Please note that personnel of these organisations are excluded from payment of salaries and research costs from the NWO grant, unless they are hired through the NWO module 2 – work by third parties (see Annex 6.1). Costs for for-profit partners cannot be charged to the project budget. A public and/or private collaboration partner can receive funding from the CAS grant.

All organisations participating in a consortium must be registered as a legal persona.

3.2 What can be applied for

The Principal Investigators and consortia can apply for funds for a project with a maximum duration of three years (on the Chinese side) to four years (on the Dutch side).

This call invites full proposals to be submitted. All consortium members have to be involved in the formulation of the research questions, in the development of the proposal and in the execution of the research project. Each Principal Investigator and consortium can apply for one project only.

Reimbursable costs

Different costs can be reimbursed from the CAS and NWO grants. The application form allows you to specify which organisation you would like to cover a certain cost. You should complete two budgets, one specifying the costs to be covered by the NWO grant and one specifying the costs to be covered by the CAS grant.

Reimbursable costs NWO budget:

The budget is built up using the NWO-wide standardised building blocks, the so-called budget modules. These modules are described in Annex 6.1. In the proposal budget, applicants choose which combination of budget modules are needed to answer the research question and how often each budget module will be deployed. Each budget module can be applied multiple times. The following budget modules are available for an application within this round:

1. Personnel
Salary and/or research leave costs can be requested within the limits of the budget module specification in Annex 6.1. Please note that, should you wish to use this budget module to cover the salary, living costs, or research leave of someone appointed in China, local tariffs apply, and may not be more than the equivalent in the Dutch agreement "Funding for Scientific Research"². Costs of personnel from TO2 institutes or Public Knowledge Organisations (RKI's) may be requested, but this should be a cost-covering tariff conform the CAO and salary scale of the employee in question and may be no more than the maxima stated in the Handleiding Overheids-tarieven (HOT) 2017.
2. Material Credit
Only costs directly related to the project are eligible for reimbursement. These costs should be specified and substantiated in the proposal. Infrastructural expenses (housing, standard office computers), commuter traffic and other costs relating to overhead are not eligible for funding, nor are expenses covered by the bench fee. International travel related to international cooperation, or costs related to international workshops, may also be placed under module 5 (internationalisation). Please note that if the Principal Investigator on the Dutch side is not from a university or KNAW institute, the project will be required to submit an audit report at the end of its duration. If this is the case, please budget for this accordingly (€ 5,000).
4. Valorisation/Impact
Funding from this budget module can be requested for costs related to the proposal's impact strategy, such as workshops, policy briefs, and other activities to share the project's findings during and at the end of its duration. Please take into consideration the requirements regarding impact and an impact strategy as specified in section 2.2 of this call for proposals. Proposals should furthermore request funding for a kick-off, midterm and final workshop. In addition, proposals should request funding to attend the joint kick-off, midterm and final workshop with the other project funded in this call (€ 25,000).
5. Internationalisation
Funding in this budget module can be requested to further facilitate international exchange and

² <https://www.nwo.nl/en/funding/funding+process+explained/salary+tables>



travel. Please take into consideration requirements such as specified in section 2.3 of this call. This may be a maximum of 20% of the total requested budget from NWO.

NWO has provided an Excel budget format that should be uploaded with your application. While filling in the budget, you are expected to justify how the proposed cost will support the project. This justification may be no more than 1 A4 page, and should be included in section 4b of the application form.

A specification of the costs that are covered per module can be found in Annex 6.1. The above modules can be applied as many times as necessary, up to the maximum total budget on NWO side. All requested costs must conform the module specifications.

Reimbursable costs CAS budget:

The maximum duration on the Chinese side is three years. Projects can apply for a maximum of RMB 4.5 million at CAS – each year RMB 1.5 million.

The use and management of CAS project funds shall be carried out in strict accordance with the CAS Fund Management Provisions of all the Academy-level Research Projects. For more information, please see: http://www.bpf.cas.cn/gzzd/2/201801/t20180104_4628940.html

Please refer to the Chinese call for proposals on the CAS website for more information: http://www.bic.cas.cn/tzgg/201911/t20191125_4725033.html

3.3 When can applications be submitted

The deadline for the submission of proposals is:

- **21 January 2020, 14:00 hours CET (for submission of the application to NWO)**
- **21 January 2020, 16:00 CST (for submission of the application to CAS).**

Proposals must be submitted on time to both NWO (via ISAAC) and CAS (via ARP system).

When you submit your application to ISAAC you will also need to enter additional details online, such as the names and institutions or organisations of both Principal Investigators and of your co-applicants and collaboration partners. You should therefore start submitting your application at least five working days before the deadline of this call for proposals.

Applications submitted after the deadline to either NWO or CAS will not be taken into consideration.

3.4 Preparing an application

Proposal

Sino-Dutch research teams must prepare a joint research proposal, which will be submitted to NWO by the Dutch Principal Investigator and to CAS by the Chinese Principal Investigator. The Chinese Principal Investigator is also required to submit a Chinese application and a collaborative agreement. Please refer to the Chinese call for proposals on the CAS website for more information.

- Download the application form and Excel budget format from the electronic application system ISAAC or from NWO's website (on the grant page for this programme);
- Complete the application form and Excel budget format, using the guidelines in the application form;
- Save the application form as a pdf file and upload it in ISAAC and ARP system;
- Save the Excel budget format as Excel and upload it as separate document in ISAAC and ARP system.

Proposals should include:

- The application form for full applications;
- A completed budget, using the Excel budget format;
- A letter of commitment from the organisations of the Principal Investigators, co-applicants, and collaboration partner(s), in which the institution or organisation confirms that they agree to the conditions required for the execution of the project. The letter must be signed by the Dean of the faculty or director of the organisation and be printed on the letterhead of the institution or organisation. See the format in Annex 6.2;
- A draft consortium agreement;
- CVs of both Principal Investigators and all co-applicants and public or private collaboration partners (each max 1 A4 page);
- In case of co-financing: a letter of guarantee from the co-financing institution confirming the numeric amount that will be provided as co-financing. In case the institution of a consortium



member provides co-financing, this confirmation can be included in the letter of commitment. Letters of guarantee or commitment letters which include co-financing are unconditional and do not contain opt-out clauses.

It is not permitted to include other documents than those requested above. Applicants will be asked to remove any additional documents.

3.5 Conditions on granting

The NWO Grant Rules 2017 and the Agreement on the Payment of Costs for Scientific Research apply to all grants provided by NWO. The CAS grant conditions apply to all grants provided by CAS.

Conditions start and runtime of project

Start

The project should start by 1 October 2020. At least one researcher must be appointed to the project at the time of its start. If the project has not started by 1 October 2020, the NWO-WOTRO Steering Committee, on behalf of NWO, and the Board of CAS can decide to revoke the granting decision.

Start documents

The Dutch Principal Investigator and the Chinese Principal Investigator are responsible for ensuring the necessary documents for the start of the project are submitted to their respective funding agencies, so that the project in its entirety can start on time.

NWO

The project can start if the following documents have been approved by NWO:

- A project notification form with information of project staff;
- A data management plan;
- A consortium agreement, signed by all consortium organisations³;
- (If relevant) approval of relevant ethics committees;
- (If relevant) receipt by NWO of the first tranche of in-cash co-financing.

CAS

CAS will inform the Chinese Principal Investigator of the necessary steps. The Chinese Principal Investigator must submit all necessary documentation to CAS in time for the project to start by 1 October 2020.

Publications

When publishing the results of the subsidised research, the support by NWO and CAS should be mentioned.

Reporting to NWO and CAS

Annual and Mid-term report

Annually, the project must submit a report to inform NWO and CAS on the overall project progress, experiences and output. The Dutch Principal Investigator will receive instructions and a format for this report in advance.

The projects will also be evaluated at about the mid-term of the projects' running time by self-assessment. This includes a workshop of the project team organised by the consortium and a discussion of the results with stakeholders from outside the project team. Consortia should include this workshop in their budget. The mid-term report will be based on the conclusions of the workshop, including a reflection on and, if required, revision of the impact strategy, the underlying assumptions and the indicators. The International Advisory Committee (IAC, see 4.1) created by CAS and NWO will evaluate the progress of the projects based on mid-term reports submitted by the consortia. Interviews or field visits may be organised to evaluate the progress and impact of the projects. The IAC will give recommendations to the projects based on their evaluations.

³ A format can be found here: <https://www.nwo.nl/en/documents/wotro/wotro---format-consortium-agreement>



The mid-term report of all the projects of a call need to be submitted before the joint mid-term workshop and will be used as input for organising the mid-term workshop.

Final accountability to NWO

A substantive final report should be submitted within three months after the end of the project's runtime, detailing the research done and the achieved results, as well as a reflection on the project's impact strategy and its indicators. As part of this, projects will be asked to again complete a self-assessment, and hold a final workshop and a discussion with stakeholders from outside the project team. The final substantive report will again be evaluated by the International Advisory Committee, created by CAS and NWO. The final workshop should again be taken into account in the consortium's budget.

Simultaneously, the Dutch Principal Investigator and the controller/financial manager of the Principal Investigator's institution should submit a signed financial end report, organised according to the budget lines of the approved NWO budget. The report should detail, among others, the effective duration (period) and size (FTE) of the personnel appointed to the project using the module Personnel of the NWO grant, and, if applicable, how eventual replacements were arranged. The realised in-cash and in-kind co-financing should also be accounted for.

If the Dutch Principal Investigator is not based at a Dutch university, an external audit report must also be submitted. NWO reserves the right to conduct an external financial audit.

NWO reserves the right to externally evaluate projects financed under this call. The project ends with the issuing of the grant settlement decision. This decision is taken after approval of the final document(s) by NWO.

For financial accountability to CAS, see the Chinese version of the call for proposals: http://www.bic.cas.cn/tzgg/201911/t20191125_4725033.html

Programmatic coherence

The projects awarded under this call should contribute to liveable green cities. To this end, Principal Investigators, researchers and other consortium members are expected to contribute to knowledge exchange and knowledge utilisation at a programme level, and to participate in and contribute to the meetings organised for that purpose. This includes a joint kick-off and mid-term workshop with all projects of the call, as well as a final conference. This is in addition to the activities organised by the individual projects for this purpose. Consortia should budget for their participation in these meetings in their application (€ 25,000).

Co- financing

- Co-financing by private and/or public parties is not a requirement for this call, but if available, can take the form of in-kind or in-cash co-financing, with a maximum of 50% of the total project budget;
- It is possible for contributions to be partially in-kind and partially in-cash. The amounts of co-financing specified in the budget should correspond to the amount of co-financing specified in the letter of guarantee or, in case of co-financing by an organisation that is part of the consortium, in the letter of commitment. Letters of guarantee are unconditional and do not contain opt-out clauses;
- The private and/or public parties that are part of the consortium should be involved in the research for the duration of the project;
- Co-financing provided by a Chinese institution or organisation should preferably be included in the CAS budget, and should be accounted for to CAS. Co-financing provided by other institutions or organisations should preferably be included in the NWO budget, and accounted for to NWO;
- After a research proposal has been awarded funding, NWO will invoice the private or public party that has pledged an in-cash contribution if that in-cash contribution to the NWO budget is equal to or exceeds € 5,000. After the contribution has been received, the money will be awarded to the project. It is the responsibility of the Dutch Principal Investigator to invoice cash co-funding organisations who are contributing less than € 5,000.

Consortium agreement

For research partnerships to be effective, they have to be fair. A consortium agreement should be signed by all consortium partners prior to the start of the awarded project, detailing agreements regarding rights (such as copyright, publications, intellectual property, etc. of products or other developments in the project), knowledge utilisation, as well as affairs such as payments, progress and



final reports, and confidentiality. The agreement furthermore details agreements on governance of the consortium (to the extent that it gives sufficient guarantee for effective collaboration), finances, and if applicable, basic knowledge to be contributed, liability, disputes, and information sharing within the consortium. The agreement has to be drafted in a spirit of equity.

The initiative for the concluding of these agreements lies with the Principal Investigators. The agreement will be tested for consistency with the NWO Grant Rules 2017. For intellectual property (IP) rights, the provisions as specified in Chapter 4 of the NWO Grant Rules 2.017 are applicable, according to which the IP rights to the results belong to the research institution, whose employee generated the results in question (ownership follows inventorship). For the IP rights of the results of possible co-financing institutions, the percentages shown are applicable, unless an appropriate reflection justifies deviation from this.

Open Access

All scientific publications resulting from research that is funded by grants derived from this call for proposals are to be immediately (at the time of publication) freely accessible worldwide (Open Access). There are several ways for researchers to publish Open Access. A detailed explanation regarding Open Access can be found on www.nwo.nl/openscience-en.

Data management

Responsible data management is part of good research. NWO and CAS want research data that emerge from publicly funded research to become freely and sustainably available, as much as possible, for reuse by other researchers. Furthermore, NWO and CAS want to raise awareness among researchers about the importance of responsible data management. Proposals should therefore satisfy the data management protocol of NWO. This protocol consists of two steps:

1. Data management section

The data management section is part of the research proposal. Researchers should answer four questions about data management within their intended research project. Therefore before the research starts the researcher will be asked to think about how the data collected must be ordered and categorised so that it 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. Researchers can state which research data they consider to be relevant for storage and reuse.

2. Data management plan

After a proposal has been awarded funding the researcher should elaborate the data management section into a data management plan. The data management plan is a concrete elaboration of the data management section. In the plan the researcher describes whether use will be made of existing data or a new data collection and how the data collection will be made FAIR: Findable, Accessible, Interoperable, and Reusable. A data management plan must be submitted as part of the starting documents. Approval of the data management plan by NWO is a condition for disbursement of the funding. The plan can be adjusted during the research.

Further information about the data management protocol of NWO can be found at www.nwo.nl/datamanagement.

Nagoya Protocol

The Nagoya Protocol became effective on 12 October 2014 and ensures an honest and reasonable distribution of benefits emerging from the use of genetic resources (Access and Benefit Sharing; ABS). Researchers who make use of genetic sources from The Netherlands or abroad for their research should familiarise themselves with the Nagoya Protocol (www.absfocalpoint.nl). NWO assumes that researchers will take all necessary actions with respect to the Nagoya Protocol.

Ethical aspects

Any research proposal that raises ethical issues must be carefully considered in advance. The applicants need to assess what ethical challenges will be met in the proposed research, consider how these will be addressed, and how ethical clearance will be obtained. In The Netherlands, certain research projects require a statement of approval from a recognised (medical) ethics review committee or an animal experiments committee. In addition, some research proposals require a licence under the Population Screening Act (WBO). Similar laws and regulations in China must be adhered to if



required and applicable. Applicants must subscribe to and comply with the prevailing codes.

Applicants themselves are responsible for determining whether their research proposal raises possible ethical issues. If so, they are also responsible for obtaining any necessary statement of approval from the appropriate ethics review committees and/or license under the Population Screening Act or similar organisations. A research project can only start when NWO has received a copy of the necessary approving ethical statement and/or Population Screening Act license (if applicable). For complex questions related to ethical issues and in case applicants would question the need for ethical clearance, NWO and CAS reserve the right to consult an external adviser. If after consulting the applicant, NWO and CAS are of the opinion that an ethical assessment is needed for the application, then the applicant is obliged to take the necessary measures for such an assessment. If the applicant fails to obtain the necessary statement of approval from an ethics review committee then the grant shall be immediately withdrawn.

Once the project has started the research must be conducted in an ethically responsible way. The Global Code of Conduct for Research in Resource-Poor Settings can be complementary in this aspect to the Code of Conduct for Research Integrity. If the applicant fails to conduct the research in an ethically responsible way, NWO and CAS shall reserve the right to withdraw the grant immediately.

3.6 Submitting an application

Applications should be submitted to both NWO and CAS, by the Dutch and Chinese Principal Investigators respectively. Applications not submitted to both organisations will not be admitted to the assessment procedure.

Applications submitted after the deadline, or that have not been submitted to both application systems before the deadline, will not be included in the assessment procedure.

Submission to NWO:

The Principal Investigator based in The Netherlands or at a university established in the Kingdom of The Netherlands must submit his/her application via his/her own ISAAC account. Applications not submitted via ISAAC will not be admitted to the assessment procedure.

If the Principal Investigator does not have an ISAAC account yet, then this should be created at least five working days before the application is submitted to ensure that any registration problems can be resolved on time. If the Principal Investigator already has an ISAAC account, then he/she does not need to create a new account to submit an application.

Please note that you will be asked to submit additional information when submitting your application in ISAAC, such as the organisations of your consortium members. For this reason, we strongly advise that you start submitting your application at least five working days before the deadline. If the organisation of your co-applicant(s) or collaboration partners is not yet registered in ISAAC, you will need to contact the department 'Relatiebeheer' (relatiebeheer@nwo.nl) of NWO in order to add them.

For technical questions please contact the ISAAC helpdesk, see Section 5.1.2.

Submission to CAS:

The Chinese Principal Investigator should submit the application via ARP system. Please see the Chinese version of the Call for Proposals on the CAS website:
http://www.bic.cas.cn/tzgg/201911/t20191125_4725033.html

4 Assessment procedure

4.1 Procedure

Code for dealing with personal interests (Personal Interest Code)

The assessment and/or decision-taking process for this funding round will be carried out according to the Personal Interest Code. More information concerning the Personal Interest Code can be found on the NWO website. See: <https://www.nwo.nl/en/common/subsidies/funding-process-explained/code-for-dealing-with-personal-interests>.



Eligibility

After the deadline, the administrative eligibility of the applications is assessed by NWO and CAS, based on the eligibility criteria specified in paragraph 4.2.1. All applicants and their institutions must fulfil national eligibility rules for research proposals as set by the relevant organisation (see section 3.1, Who can apply).

If correction of the application submitted to NWO is possible and necessary, the Principal Investigator will be given the opportunity to adjust his or her application. If the application is not corrected within the given time frame, NWO and CAS will not include the application in the assessment process. Corrected applications will, after approval of eligibility by both NWO and CAS, be included in the assessment procedure.

Please note that applications submitted to CAS cannot be corrected, and if found not to comply with CAS's eligibility conditions will not be eligible.

The remainder of the assessment procedure will subsequently be conducted through the online system of NWO.

Substantive assessment

All eligible applications will be sent to independent, (inter)national reviewers, who will assess the application based on the criteria specified in 4.2.2. Each application will be assessed by a minimum of four reviewers. The reports by the external reviewers will be made available to the Dutch Principal Investigator via ISAAC, who should share them with the Chinese Principal Investigator.

The consortium will have five working days to write a response to the reviewers' reports. The response should be submitted by the Dutch Principal Investigator on behalf of the consortium, via his or her ISAAC account.

Assessment and grant advice

NWO and CAS will jointly compose an International Advisory Committee (IAC), with international experts. All applications are assessed in competition by the IAC, according to the criteria specified in paragraph 4.2.2. The IAC will make a final assessment of the application, based on the application, the reviewer reports, and the response, according to the criteria in section 4.2.2. The IAC will subsequently rank all applications. The IAC will subsequently present a substantiated advice to the NWO-WOTRO Steering Committee and the Board of CAS regarding which applications are to be awarded.

Decision

The NWO-WOTRO Steering Committee, on behalf of NWO, and the Board of CAS will check the assessment procedure has been carried out in accordance with the call for proposals, and will provisionally decide on the projects to be awarded, based on the advice of the IAC. The decision becomes definitive when the NWO-WOTRO Steering Committee and the Board of CAS have come to the same provisional decision.

Qualification

Based on the IAC's final score, NWO will award a qualification to all proposals, and will make this known to the Dutch Principal Investigator with the decision about whether or not the application has been awarded funding. CAS will communicate the decision to the Chinese Principal Investigator.

Only applications that receive the qualification "excellent" or "very good" will be eligible for funding. For more information about the qualifications please see: www.nwo.nl/en/funding/funding+process+explained/nwo+qualification+system.

Data management

The data management section in the application is not evaluated and therefore not included in the decision about whether to award funding. However, both the reviewers and the IAC can issue advice with respect to the data management section. After a proposal has been awarded funding, the researcher should elaborate the data management section into a data management plan. Applicants can use the advice from the reviewers and the IAC when writing the data management plan.

A project awarded funding can only start after NWO and CAS have approved all starting documents,



as stated in section 3.5. It is the responsibility of the Principal Investigators to ensure that these documents are submitted on time to the respective funding agencies so that the project can start within the allowed time frame.

Proposals

21 January 2020 16:00 CST	Submission deadline full proposals CAS
21 January 2020 14:00 CET	Submission deadline full proposals NWO
February-March 2020	Reviewers are consulted
Early April 2020	Consortia have five working days to submit a rebuttal, via the ISAAC account of the Dutch Principal Investigator
End of April 2020	IAC meeting
Beginning of May 2020	Decision NWO-WOTRO Steering Committee and Board of CAS
May 2020	NWO and CAS inform Principal Investigators about the decision
1 October 2020	Deadline start projects

While NWO and CAS strive to meet the above time frame, NWO and CAS reserve the right to deviate from the indicated dates.

4.2 Criteria

4.2.1 Eligibility criteria

The administrative eligibility will be checked at desk officer level by NWO and CAS. Applications that are not complete, have not been completed correctly, or have not been submitted on time to both organisations will not be admitted to the assessment procedure. This also applies if, after receiving the opportunity to correct the application submitted to NWO, the Dutch Principal Investigator does not resubmit the application within the given time frame. If correction of an application submitted to NWO, or the submission of necessary additional information, is possible, the Dutch Principal Investigator will be given the opportunity to correct their application and/or submit the necessary additional information within a given time frame. If the Principal Investigator is unable or unwilling to comply with this request, the application will not be admitted to the assessment procedure.

Please note that the application submitted to CAS cannot be corrected. Applications that do not meet the CAS eligibility criteria will be declared inadmissible and will not be included in the assessment procedure.

Eligibility concerns compliance with the conditions set in this call. Formal criteria include:

- Timely received application via NWO's electronic application system ISAAC and CAS's ARP system;
- Application has been submitted by the Dutch Principal Investigator and the Chinese Principal Investigator, who meet national eligibility criteria (section 3.1 of the Call for Proposals);
- Specific conditions (as outlined in Section 3 of the Call for Proposals, the annexes, and the notes in the application form) have been applied;
- Completed and signed application form, signed by both Principal Investigators and all co-applicants and collaboration partners;
- Composition of consortium complies with the requirements;
- Format, length of text, language is as required;
- Budget conditions are met;
- Completed annexes are added.

The following annexes should be added:

- CVs of the Principal Investigators, co-applicants, and collaboration partners mentioned in questions 1b and 1d of the application form (max. 1 A4 each);
- Letters of commitment of all consortium organisations, outlining the availability and commitment of consortium members, signed by the Dean of the faculty or director of the organisation and be printed on the letterhead of the institution or organisation;
- Draft Consortium Agreement;
- Letters of guarantee from parties providing co-financing (if applicable). Letters of guarantee are unconditional and do not contain opt-out clauses;
- Budget requested from NWO in Excel budget format (to be uploaded as a separate document).



No additional annexes are allowed. Please include the annexes in your application. Do not upload them as separate documents in ISAAC unless otherwise specified.

Please note that the Chinese Principal Investigator may need to submit additional documents to CAS in order to comply with national eligibility requirements. The Chinese Principal Investigator must also submit the application on time to CAS. If a proposal is declared inadmissible by CAS, it will also be declared inadmissible by NWO and will not be admitted to the assessment procedure. Please refer to the Chinese call for proposals on the CAS website for more information: http://www.bic.cas.cn/tzgg/201911/t20191125_4725033.html

Applicants will receive written confirmation of receipt within three weeks after the deadline of this Call, stating whether or not the application has been accepted into the assessment procedure. If an application is declared not eligible by either CAS or NWO, it will not be admitted to the assessment procedure.

4.2.2 Assessment criteria

Applications will be assessed according to the following criteria:

- I. Quality of the research proposal
- II. Quality of the consortium
- III. Potential scientific and/or societal breakthrough

The criteria carry equal weight and each count for one-third of the final assessment. The assessment criteria are further operationalised below:

- I. Quality of the research proposal
 - Scientific importance of the proposed research;
 - Complementarity to other research programmes or (inter)national research agendas;
 - Innovativeness of the research question and approach;
 - Interdisciplinarity and transdisciplinarity; the proposal incorporates the scientific disciplines necessary for addressing the problem, as well as knowledge from outside the scientific community;
 - Clarity of problem statement and rigour of research
 - Suitability and feasibility of the approach and methodology;
- II. Quality of the consortium
 - Quality of the involved research partners;
 - Quality of the Sino-Dutch collaboration, including equality in the partnership;
 - Potential for long-term knowledge relations;
 - Coherence and complementarity of the consortium, including organisation of the research;
 - Quality of knowledge co-creation, including attention to and involvement of the complete knowledge chain;
- III. Potential scientific and/or societal breakthroughs
 - Relevance for society, including the relevance of the proposed research for the focus of the call;
 - Degree to which the proposal aims for scientific and societal breakthroughs;
 - Quality of involvement of wider public/specific target groups;
 - Quality of impact strategy, including utilisation and valorisation;
 - Quality of communication plan for knowledge transfer, including outreach to industry, societal partners, and/or other stakeholders.

5 Contact details

5.1 Contact

5.1.1 Specific questions

For specific questions about Cooperation China-The Netherlands (CAS) and this call for proposals on 'Green Cities' please contact:

NWO:
Mr Berry Bonenkamp
+31 (0)70 349 44 16
CAS-nwo@nwo.nl

CAS:
Ms GONG Haihua
+86 (0)10 6859 7396
hhgong@cashq.ac.cn



5.1.2 Technical questions about the electronic application system ISAAC

For technical questions about the use of ISAAC please contact the ISAAC helpdesk. Please read the manual first before consulting the helpdesk. The ISAAC helpdesk can be contacted from Monday to Friday between 10:00 and 17:00 hours CET on +31 (0)20 346 71 79. However, you can also submit your question by e-mail to isaac.helpdesk@nwo.nl. You will then receive an answer within two working days.

6 Annexes

Annex 1: Overview NWO budget modules

Annex 2: Format Letter of Commitment

6.1 Budget Modules NWO grant

The following modules can be applied for from the NWO grant. Please use the Excel budget format while completing your budget. Any required justification should be included in section 4b. of your application form.

1. Module Personnel: a) PhD/PDEng/MD PhD; b) Postdoc; c) Non Scientific Personnel; d) Personnel at universities of applied sciences (HBO); e) Research leave; f) Other scientific personnel

NB: Remunerations for PhD scholarship students at a Dutch university are not eligible for funding from NWO.

- **Module 1a) PhD/PDEng/MD PhD**
The guideline is that 1 FTE PhD for 48 months or 0.8 FTE for 60 months can be applied for. If a different duration of appointment is desired for the realisation of the proposed research, then the guidelines may be deviated from as long as this is well justified (e.g., PDEng 2 years or MD PhD longer than 4 years).
The salary costs will be remunerated according to the agreements in the 'Agreement for Funding Scientific Research' made with the Association of Universities in The Netherlands and are based on the collective labour agreement of the Dutch universities (for researchers employed by University Medical Centres, the costs are based on the collective labour agreement of the Netherlands Federation of University Medical Centres).
In addition to salary costs, the project employee funded by NWO will receive a one-off individual bench fee (€ 5,000) to encourage his or her scientific career. The agreement and the maximum amounts for personnel costs can be found at <https://www.nwo.nl/en/documents/nwo/salary-tables/approval-of-funding-for-scientific-research-2008> and <https://www.nwo.nl/en/funding/funding+process+explained/salary+tables>
- **Module 1b) Postdoc**
The appointment of a postdoc must be at least 6 months at 1 FTE, and can be a maximum of 48 months at 1 FTE. The amount of months and FTE can be budgeted for as necessary, but must always be at least 0.5 FTE or for a duration of at least 12 months. The product of FTE x duration of the appointment must always be equal to at least six months at 1 FTE.
If the applicants wish to deploy expertise for a shorter period of time, then the material credit can be used for this.
The salary costs will be remunerated according to the 'Agreement for Funding Scientific Research' made with the Association of Universities in The Netherlands (for researchers employed by University Medical Centres, the costs are based on the collective labour agreement of the Netherlands Federation of University Medical Centres).
- **Module 1c) Non-scientific personnel**
For the appointment of non-scientific personnel, specifically needed for the research project which funding is applied for, a maximum of € 100,000 can be requested with this module. This can concern personnel such as student assistants, programmers, technical assistants, analysts, et cetera. This module can only be applied for in combination with modules 1a and/or 1b.
The amount of months and FTE can be budgeted for as necessary, but must always be at least 0.5 FTE or for a duration of at least 12 months. The product of FTE x duration of the appointment must always be equal to at least six months at 1 FTE. If the applicants wish to deploy expertise for a shorter period of time, then the material credit can be used for this.
Salary costs are dependent on the level and are remunerated in accordance with the agreements in the most recent 'Agreement for Funding Scientific Research' made with the Association of Universities in The Netherlands and are based on the collective labour agreement of the Dutch universities. The agreement and the maximum amounts for personnel costs can be found at <https://www.nwo.nl/en/documents/nwo/salary-tables/approval-of-funding-for-scientific-research->



2008 and <https://www.nwo.nl/en/funding/funding+process+explained/salary+tables>.

- Module 1d) Personnel at universities of applied sciences
For the appointment of personnel at universities of applied sciences the system of the Handleiding Overheidstarieven (HOT) has been applicable since 1 January 2017, in particular the column 'cost covering rates per hour' (table 2.2, Integrale loonkosten). This cost-covering rate per hour is based on the collective labour agreement for universities of applied sciences with respect to the salary scale of the employee concerned. The rates in the HOT are maximum values. For students, only the actual amounts paid to students can be entered as costs within the project. A maximum hourly rate of € 25.00 always applies to students.
- Module 1e) Research leave
In this module, the replacement costs for the main applicant and/or co-applicants can be applied for, so that they can be released from educational, administrative and management tasks. The research leave grant can only be used in combination with and for the purposes of the projects or programmes applied for. For the research leave grant, a maximum size of 5 months per project applies based on 1 FTE at the level of the postdoc employee as described in module 1b, with the hourly rates according to the agreement with the Association of Universities in the Netherlands. This budget is intended for the release of the applicants from educational and supervisory tasks so that they can work on the research for which funding has been requested. The employer can use the research leave grant to cover the costs of the replacement for the non-research tasks of the applicant(s) such as education, administrative and management tasks. These tasks must be specified in the proposal.
- Module 1f) Other scientific personnel
Budget for other scientific personnel such as university graduates, graduate physicians and graduate physicians training to be specialists that are needed for the research project that funding is requested for. This module can only be applied for in combination with module 1a and/or 1b. A maximum of € 100,000 can be requested for this. The size of the appointment must be a minimum of 6 months at 1 FTE and a maximum of 48 months at 1 FTE. The size of the appointment can be adjusted as necessary, but should always be at least 0.5 FTE or for a duration of at least 12 months. The product of FTE x duration of the appointment should always be equivalent to at least 6 months at 1 FTE.

2. Module Material credit

A maximum of € 15,000 per year per full-time scientific position (modules 1a, 1b and/or 1d) can be applied for, specified according to the three categories stated below:

Project-related goods/services

- consumables (glassware, chemicals, cryogenic fluids, etc.);
- equipment and/or software (e.g., lasers, specialist computers or computer programs, etc.);
- For these small items of equipment and/or software, the amount may not amount to more than € 160,000 per application;
- measurement and calculation time (e.g. supercomputer access);
- costs for acquiring or using data collections (e.g., from Statistics Netherlands);
- access to large national and international facilities (e.g., cleanrooms, synchrotrons, datasets, etc.);
- work by third parties (e.g., laboratory analyses, data collection, etc.);
- personnel costs smaller in size than those offered in module 1.

Travel and accommodation costs (for the employees for which a personnel grant was requested in modules 1a and 1b)

- travel and accommodation costs (national and international);
- congress visits (max. two per year);
- fieldwork;
- work visits.

Implementation costs

- national symposium/conference/workshop organised by the project;
- costs of open access publishing;
- data management costs;
- recruitment costs (incl. advertisement costs);
- costs involved in applying for licences (e.g., for animal experiments).
- Audit costs (only for institutes not subject to the Education Auditor's Protocol (*onderwijsaccountantsprotocol*) of the Ministry for Education, Culture and Science of the Netherlands, maximum € 5,000 per project; for projects with a duration of up to and including three years, maximum € 2,500.

Costs that cannot be applied for are:



- basic facilities within the institution (e.g., laptops, desks, etc.);
- maintenance and insurance costs.

If the maximum amount of € 15,000 per year per full-time scientific position is not sufficient for realising the research, then it may be deviated from if a clear justification is provided in the proposal. The only exception to this is the amount for small equipment (€ 160,000).

4. Module Impact: a) Knowledge Utilisation

Module 4a) The aim of this module is to facilitate the use of the knowledge⁴ that emerges from the research. The contribution requested may be no more than 20% of the total grant requested from NWO and must be specified.

As knowledge utilisation can assume very different forms in the various scientific disciplines, it is up to the applicant to specify which costs are needed, for example for producing an educational package or realising a feasibility study into application possibilities, or the costs of submitting a patent application.

For further information about knowledge utilisation, please <https://www.nwo.nl/en/common/about-nwo/organisation/nwo-divisions/wotro/the-impact-of-research>.

NB: please take into account the requirements stated elsewhere in the call for proposals, such as the attendance of the joint kick-off, midterm and final workshop, as well as organising a kick-off, midterm, and final workshop with your project.

5. Module Internationalisation: a) Internationalisation; b) Money follows Cooperation

• Module 5a) Internationalisation

The aim of this module is to encourage international collaboration. The contribution requested may be no more than 20% of the total requested budget from NWO. 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.

Funding can be requested for:

- travel and accommodation costs insofar as these are direct research costs that emerge from the international collaboration and for additional costs that are not covered in a different manner, for example from the bench fee. For an overview of the fixed maximum prices per country, see the listings of the Dutch government (<https://www.rijksoverheid.nl/documenten/besluiten/2018/09/26/tarifelijst-dienstreizen-buitenland-per-1-oktober-2018>);
- travel and accommodation costs for foreign guest researchers;
- costs for the organisation of international workshops/symposia/scientific meetings.

• Module 5b) Money follows Cooperation (MfC)

The module Money follows Cooperation offers the possibility to conduct part of the research project at a knowledge institute with a public task outside of The Netherlands.

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

This condition is not applicable if NWO has concluded a bilateral agreement regarding Money follows Cooperation with the national research funding agency of the country in which the foreign knowledge institute is located.

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

A researcher at a foreign knowledge institute must meet the requirements for co-applicants in paragraph 3.1, with the exception the requirement that he or she must be located within the Kingdom of The Netherlands.

The applicant receives the grant from NWO, and is responsible for transferring the MfC part of the grant to the foreign knowledge institute, as well as for accounting for this part of the grant towards

⁴ For the purposes of this module, the definition for “knowledge transfer” as set out in the Framework for State aid for research and development and innovation (OJ 2014, C 198) applies.



NWO. The risks associated with the exchange rate are the responsibility of the applicant. Therefore, costs and benefits that result from exchange rates cannot be subsidised. The applicant is responsible for:

- the financial accounting of all costs in both euros and the local currency, in which the utilised exchanged rate should be visible;
- a reasonable fixing of the exchange rate. The applicant must be able to give a description of this reasonable fixing at any time if so requested by NWO.

NWO does not award subsidy to co-applicants abroad who fall under (inter)national sanction laws. The EU Sanctions map (<https://www.sanctionsmap.eu>) serves as a guideline in this matter.

6.2 Format Letter of Commitment

[Template letter of commitment for consortium organisation]

[The letter should be printed on the stationery of the consortium organisation concerned]

[address main applicant]

Concerns: Letter of Commitment

[Location], [date]

Dear [name principal investigator],

Through this letter, I confirm that [proposed project, entitled '[name consortium organisation]' is available and committed to participate in the proposed project, entitled '[proposal title]', which was submitted to the '[Title of call]'.

[outline the availability and commitment of the consortium organisation, including the availability and commitment of the individual consortium members, and confirm that the PI and/or co-applicant(s) have a contract for the duration of the assessment process and the research]

[if applicable, indicate the consortium organisation's total contribution in cash, or quantify the in kind contribution. This amount should be the same as indicated in the application form.]

Yours sincerely,

[signed by the head of the organisation/department]

Location: [..]

Date: [..]

..... [signature]
[NAME + POSITION]