

Computing Time on National Computer Facilities

Call for proposals



Contents

| 1 | Introduction | | 2 |
|---|-------------------------------|---|----|
| | 1.1 | Background | 2 |
| | 1.2 | Available computing time and data storage | 3 |
| | 1.3 | Submission deadlines | 3 |
| 2 | Aim | | 4 |
| | 2.1 | Aim of the programme | 4 |
| | 2.2 | Societal impact | 4 |
| 3 | Conditions for applicants | | 5 |
| | 3.1 | Who can apply | 5 |
| | 3.2 | What can be applied for | 6 |
| | 3.3 | Preparing and submitting the application | 8 |
| | 3.4 | Conditions for submission | 9 |
| | 3.5 | Allocation conditions | 9 |
| 4 | Assessment procedure | | 13 |
| | 4.1 | The San Francisco Declaration (DORA) | 13 |
| | 4.2 | Procedure | 13 |
| | 4.3 | Criteria | 16 |
| 5 | Obligations | | 17 |
| 6 | Contact and other information | | 19 |
| | 6.1 | Contact | 19 |
| | 6.2 | Other information | 19 |



1 Introduction

This Call for proposals provides information about the application process for access to national computing facilities and expertise in the application round 'Computing Time on National Computer Facilities'. This Call for Proposals falls under the responsibility of the Dutch Research Council (NWO).

In this Call for proposals you will find information about the aim of this programme (Section 2), the conditions for the application for computing time (Section 3), and how your proposal will be assessed (Section 4). This information is what you need in order to submit an application for computing time. Section 5 outlines the obligations that apply in case of allocation. Section 6 contains the contact details.

1.1 Background

NWO Science (domain 'Exacte en Natuurwetenschappen') is responsible for providing access rights (computing time) to the National Computing Facilities, managed and performed by SURF. This call for proposals invites applications for access to national computing facilities and associated data services and expertise for the purpose of research computations for which the computer facilities and expertise of individual institutions are inadequate for which the computer facilities provided by the individual institutes themselves are inadequate. Through this call for proposals NWO Science domain provides access to the national computer systems: Supercomputer Snellius, Data Processing (Grid/Spider), Cloud Research Consultancy en HPC Cloud (via SURF Research Cloud). In addition, the Dutch allocation of the pre-exascale supercomputer LUMI is also part of this call¹. This brochure provides information on the process and options for requesting access to these national computing facilities.

This call applies to <u>applications for large amounts of computing time</u> on the National Computer Facilities. These include requests of more than 1,000,000 SBU (System Billing Units, section 3.2.1) on supercomputer Snellius, more than 1,000,000 CPU core hours or 10,000 GPU hours on Data Processing (Grid/Spider), more than 100,000 CPU core hours on Cloud Research Consultancy, and more than 50,000 CPU core hours or 5,000 GPU hours on HPC Cloud (via SURF Research Cloud).). This call is also intended for compute applications in which a large amount of TB storage is required. There are also limits for storage and support. More information can be found under section 3.2.1.

An allocation for access to the national computer systems for large applications runs for a maximum of two years per application.

For <u>small compute time requests</u> that are less than or equal to the above stated limits, you can request access directly **at SURF**, via: <u>surf.nl/en/services</u> (see Compute). For both small and large computing time requests, the conditions of this Call for proposals apply. There are also limits for storage and support. More information can be found under section 3.2.1.

An allocation for access to the national computing systems for small applications runs for a maximum of one year per application.

For large requests where, for example, the Snellius system is no longer sufficient, capacity can also be requested on the pre-exascale supercomputer LUMI in consultation with SURF. With an allocation for large applications, one gets access to the pre-exascale supercomputer LUMI for one year. Applicants for computing time on LUMI are requested to first build experience in working on LUMI and then have the project ready for a large application through NWO. This can be done through a pilot application via SURF or any of the EuroHPC JU calls. Pilot applications on LUMI are limited to 500,000 CPU core hours, 14,000 GPU hours and 100,000 TB-hours of storage². Pilot applications will also be granted one-year access per application to the pre-exascale supercomputer LUMI.

¹ The pre-exascale supercomputer LUMI is a European Tier-0 system and is owned by the European High Performance Computing Joint Undertaking (EuroHPC JU). The system is operated by CSC - IT Center for Science and the LUMI consortium and is located in Kajaani, Finland. The Netherlands has an allocation on the system, which is covered by this call. In addition to the Dutch allocation, access to the allocation of EuroHPC JU on the pre-exascale supercomputer LUMI can be requested through the Access Calls of EuroHPC JU.

² On the pre-exascale supercomputer LUMI, data storage is measured using TB-hours. Storing 1 TB of data for 1 hour uses 1 TB-hour. With 100,000 TB-hours, 11.4 TB of data can be stored for a year, but it is also possible to store more data for a shorter period. For more information, see the LUMI billing policy: https://docs.lumi-supercomputer.eu/runjobs/lumi_env/billing/

1.1.1 Changes compared to the previous Call for proposals

Compared to the previous Call for proposals for computing time, a number of changes have been made. The most important changes are listed below.

- In section 1.2 'Available computing time and data storage', the totals have been adjusted.
- In section 3.1 'Who can apply', the check for State Aid risk has been adjusted.
- In section 3.2 'What can be applied for' also includes information on small compute time applications.
- In section 3.3 'Preparing and submitting the application', a requirement has been added to first contact SURF about the technical aspects of the application.
- In section 3.5.6. 'Specific conditions' the correct reference of publications has been added.

1.2 Available computing time and data storage

The total available computing time and data storage for 2025 is (covering both large and small applications):

- Supercomputer Snellius: 1,902 million SBU (1,283 million SBU CPU thin nodes, 426 million SBU GPU nodes, 184 million SBU CPU fat nodes, 9 million SBU CPU high-memory nodes), with 9,896 TB of Snellius project space.
- Pre-exascale supercomputer LUMI: 21.32 million CPU core-hours, 0.96 million GPU hours, 10.1 million TBhours of storage.
- HPC Cloud (via SURF Research Cloud): 26.28 million CPU core-hours and 1.33 million GPU hours, with 846 TB of online storage.
- 15,000 TB Data Archive (offline tape storage).
- Data Processing (Grid and/or Spider): 150 million CPU core-hours and 0.3 million GPU hours, with 28,000
 TB of online storage and 14,000 TB of Grid storage tape (offline tape storage).
- Cloud Research Consultancy: 1.3 million CPU core-hours, with 265 TB online storage.
- 200 TB storage Research Drive.

1.3 Submission deadlines

The deadline for submitting proposals is 30 December 2025, before 14:00:00 hours CET. You can submit your proposal at any time. There are no intermediate deadlines.

2 Aim

This section describes the aim of the programme and the societal impact.

2.1 Aim of the programme

The aim of this programme is to make the national computer facilities accessible to researchers who want to carry out high-quality scientific research that would significantly benefit from using the advanced national computer systems and expertise for accomplishing their research objectives.

Researchers are invited to submit proposals for computing time using the national computer systems, including the dedicated data services and expertise.

NWO is explicitly seeking to stimulate a number of aspects:

- Efficient scientific use of the national computer facilities;
- Support for high-level scientific research using the national computer facilities;
- Optimal access to the national computer facilities for researchers.

2.2 Societal impact

New knowledge and insights from scientific research can make an important contribution to developing solutions for the various issues society faces, including, amongst other things, the energy transition, health and care, or climate change. By facilitating greater interaction and alignment between researchers and potential knowledge users, the chance of knowledge utilisation increases, as well as the likelihood of generating societal impact. Social impact here stands for changes that (partly) result from research-generated knowledge and skills. These changes contribute to the well-being of people, planet and society for this and future generations. Through its policy on impact, NWO promotes the potential contribution that research can make to societal issues by encouraging productive interactions with societal stakeholders, both during the development stage and the subsequent implementation of research. It does so in a manner that is in accordance with the aim of the particular funding instrument. NWO encourages researchers to take a broad view of the potential desired and undesired impact of their research.

2.2.1 Tailor-made impact

The primary aim of the funding instrument determines the method that NWO will deploy to facilitate knowledge utilisation in various phases of the project (proposal, realisation, project completion) as well as the effort required from applicants and partners.

In this programme, the Impact Outlook approach is applied. Here, researchers can choose which type of impact they want to specifically focus on, while proportional consideration is also given to what can be done for the remaining impact.

NWO offers an e-learning module that can help interested parties via <u>Online impact workshops | NWO</u>. For more information on our policy on impact, please visit the website: <u>Knowledge utilisation | NWO</u>.

3 Conditions for applicants

This section contains the conditions that are applicable to your computing time application. It first describes who can apply for computing time (section 3.1) and what you can request for computing time (section 3.2). Subsequently, you will find the conditions for preparing and submitting the application (sections 3.3 and 3.4) and specific allocation criteria (section 3.5).

3.1 Who can apply

Researchers may submit an application if they have a tenured position (and therefore a paid position for an indefinite period) or a tenure track agreement at one of the following research organisations. If the main applicant does not have a permanent employment contract, his/her appointment must be at least as long as the duration of the project for which an application is submitted:

- Universities and Universities of applied sciences, as referred to in section 1.8 of the Higher Education and Scientific Research Act (WHW) and the universities listed in the Policy Rule Universities located in the Kingdom of the Netherlands;
- University medical centres, by which is meant academic hospitals as referred to in section 1.13 paragraph
 1 of the Higher Education and Scientific Research Act (WHW);
- KNAW and NWO institutes;
- Netherlands Cancer Institute;
- the Max Planck Institute for Psycholinguistics in Nijmegen;
- NCB Naturalis;
- Advanced Research Centre for NanoLithography (ARCNL).
- Princess Máxima Center.
- National Institute for Public Health and the Environment (RIVM);
- Royal Netherlands Meteorological Institute (KNMI);
- Wageningen University (WUR)/Dienst Landbouwkundig Onderzoek (DLO);
- Netherlands Aerospace Centre (NLR);
- Deltares;
- Maritime Research Institute Netherlands (Marin);

Those with zero-hours contracts are excluded from submitting proposals.

It could be the case that the applicant's tenure track agreement ends before the intended completion date of the project for which funding is applied for, or that before that date, the applicant's tenured contract ends or ends due to the applicant reaching retirement age. In that case, the applicant needs to include a statement from their employer in which the research organisation concerned guarantees that the project and all project members for whom funding has been requested will receive adequate supervision for the full duration of the project.

Applicants with part-time employment contract must guarantee adequate supervision of the project and of all persons working on the project for whom computing time is requested.

The representation and advancement of women in science lags significantly behind that of men. Women are therefore explicitly invited to submit proposals.

Additional requirements:

Applicants may be affiliated to the research organisations listed in this section, and to other research organisations as referred to in Article 1.1(4) of the NWO Grant Rules and which meet the following cumulative conditions.

This includes for instance applicants from the following institutions:

- \circ ~ Netherlands Organisation for Applied Scientific Research (TNO).
- IHE Delft Institute for Water Education.
- Netherlands Forensic Institute (NFI).

- The following institutions participating in SURF cooperative: National Archives (NA), Royal Library 0 (KB), University for Humanistics (UvH), Police Academy and Integral Cancer Centre of the Netherlands (IKNL).
- Here, the organisation should be:
- based in the Netherlands;
- a foundation, association or public-law legal entity;
- principally engaged itself in conducting fundamental research, industrial research or experimental development in an independent manner;
- be able to declare that the organisation keeps separate accounting regarding economic/non-economic activities and that companies with decisive influence over the organisation are not given preferential access to the organisation's research results.

Please note: Prior to submitting an application, NWO checks on the basis of the above conditions whether an organisation complies with Article 1.1(4) of the NWO Grant Rules and may therefore participate as an applicant. NWO carries out this check partly to make sure that there is no question of granting prohibited State Aid. This check should also be carried out if an organisation already has been assessed within another NWO programme and was permitted as an applicant.

For the purpose of this check, the organisation of the intended applicant shall provide the following documents by email to rekentijd@nwo.nl (at least 10 working days prior to submission):

- a recent extract from the Chamber of Commerce;
- the deed of incorporation and/or current statutes;
- the latest available financial statement provided with an audit report³;
- the completed Declaration research organisation, available on the funding page of this Call for proposals.

It is allowed to add other relevant documentation. NWO may also request additional information if the above documents are not sufficiently conclusive to determine whether the organisation may act as an applicant.

If the organisation of the intended applicant does not provide the documents required for the eligibility check on the conditions on time, NWO may not accept that organisation as an applicant.

3.1.1 Main and co-applicants

The main applicant submits the proposal via the NWO web application ISAAC. During the assessment process, NWO will communicate with the main applicant.

After a proposal has been awarded funding, the main applicant will become the project leader and point of contact for NWO. The knowledge institution of the main applicant is the main beneficiary and will become the official secretary.

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

3.2 What can be applied for

For an application in this Call for proposals, computing time can be requested at NWO to the advanced national computing systems.

Within this call, these are applications for large amounts of computing time:

- More than 1,000,000 SBU on supercomputer Snellius (CPU and/or GPU) whether or not combined with terabytes of project space and/or Data Archive (offline tape storage).
- More than 500,000 CPU core hours and/or 14,000 GPU hours and/or 100,000 TB-hours of storage on the pre-exascale supercomputer LUMI, whether or not combined with terabytes of online storage and/or offline storage.

Organisations that are not legally obliged to have their financial statements audited do not have to provide such an audit report. However, they must be able to demonstrate that this legal obligation does not apply to the organisation in question.

- More than 1,000,000 CPU core hours or 10,000 GPU hours of Data Processing (Grid and/or Spider) and/or more than 200 TB of online data storage and/or more than 300 TB of Grid storage - tape (offline tape storage).
- More than 50,000 CPU core hours or 5,000 GPU hours on HPC Cloud (via SURF Research Cloud) whether or not combined with terabytes of online storage and/or Data Archive (offline tape storage).
- More than 100,000 CPU core hours on Cloud Research Consultancy whether or not combined with terabytes of online storage.

Small applications can be submitted directly to SURF via the portal <u>https://www.surf.nl/en/small-compute-applications-nwo</u>, these are applications:

- Up to and including 1,000,000 SBU on supercomputer Snellius (CPU and/or GPU) whether or not in combination with up to 10 TB of project space and/or up to 50 TB of Data Archive.
- Up to and including 500,000 CPU core hours and/or 14,000 GPU hours for <u>pilot applications</u> on the preexascale supercomputer LUMI, whether or not in combination with up to 100,000 TB hours of storage.
- Up to and including 1,000,000 CPU core hours or 10,000 GPU hours of Data Processing (Grid and/or Spider) whether or not in combination with up to 200 TB of online data storage and/or up to 300 TB of Grid storage tape (offline tape storage).
- Up to and including 50,000 CPU core hours or 5,000 GPU hours on HPC Cloud (via SURF Research Cloud) whether or not in combination with up to 2 TB online storage and/or up to 50 TB Data Archive (offline tape storage).
- Up to and including 100,000 CPU core hours on Cloud Research Consultancy whether or not in combination with up to 2 TB of online storage.

3.2.1 Accounting units

Supercomputer Snellius

Allocations on Snellius are based on CPU core hours and GPU hours for compute time. Terabytes are used for storage. The applications include a specification of the required resources by type, in particular the number of core hours or *System Billing Units (SBU)*. Using one core of a thin node for the duration of one hour costs 1 SBU.

(For more information see: https://servicedesk.surf.nl/wiki/display/WIKI/Snellius+partitions+and+accounting)

In the application form, various data storage services can be requested together with computing time. This concerns only those data services that are directly necessary for the computing work during the granting period of the project. The maximum amount of storage that can be granted takes place in consultation with SURF and depends on the capacity available at that time.

Pre-exascale supercomputer LUMI

Allocations done for LUMI are based on CPU core hours and GPU hours for compute time. TB-hours are used for storage.

(For more information see: https://docs.lumi-supercomputer.eu/runjobs/lumi_env/billing/)

Grid Data Processing

Allocations for CPU core hours and GPU hours on Grid will be converted into a priority configuration, using a fairshare mechanism. These priority configurations will ensure a continuously available amount of cores for a continuous supply of new computational tasks (for more information on the fairshare mechanism used, see: https://servicedesk.surf.nl/wiki/display/WIKI/Usage+and+Service+Model.

Because these cores are available to the project at all times, capacity will automatically be reached at the end of the allocated computation time period. The same applies to storage. During the project, if underutilised by other projects, a higher number of cores may be reached, but this will not affect the configured fairshare. To ensure continuity in case of repeated applications for Grid, the applicant should ensure that the start date of the new application matches the end date of the previous allocation.

Datafacilities

For storage, both the unit TiB/PiB and TB/PB are used in practice, depending on each system. 1 TiB (tebibyte) is 2⁴⁰ bytes, 1 TB (terabyte) is 10¹² bytes. 1 tebibyte is about 10% larger than 1 terabyte, this difference increases with larger units.

Expertise

In addition to computing and data facilities, additional hours of technical expertise may be required. In the application form the required amount of expertise hours can be indicated. The allocation of expertise hours takes place in consultation with SURF and depends on available capacity.

3.2.2 Types of applications

The Computing Time on National Computer Facilities programme distinguishes between the following types of application:

Individual applications

Individual applications are applications submitted for the use of one or more of these computer facilities for a single project.

Group applications

Group applications are applications for multiple projects bundled as a single application by a research group for the use of one or more of the computer facilities. The advantage of a group application is for applicants that it requires less effort than a number of separate applications. In addition, it provides better insight to the Scientific Use of Supercomputers (WGS) review committee about the relationship between the various projects carried out within one research group. Finally, it gives the research group the flexibility to shift computing time within the same computer system between subprojects during the project duration, should this prove necessary.

Follow-up applications

Follow-up applications are applications to continue an existing or previous project under the same name. These can be individual or group applications. Follow-up applications should always include a report from the previously allocated project. Reports of projects for which the computing time was allocated by NWO must be submitted to the relevant project in ISAAC within three months of the expiration date of the project. Reports of projects for which the computing time was not allocated by NWO, for example if access was obtained via SURF for a previous small project, must be included as an appendix when submitting a follow-up application. Reports of previous projects serve as extra information for the assessment committee for a better assessment of the follow-up application.

3.3 Preparing and submitting the application

To prepare your application, please go through the following steps:

- download the application form that can be obtained from the online application system ISAAC or from the NWO website (on the website for this programme); you are expressly requested to use the most recent 2025 application form; application forms from previous years are outdated and will not be considered. The application form for 2025 can be found on the funding page for this programme on the NWO website.
- first consult one of SURF's advisers on the technical aspects of the application at servicedesk@surf.nl.
- complete the application form.
- select and complete the corresponding technical annexes of the application form; remove all irrelevant technical annexes of computer facilities that will not be used.
- save the form as a pdf file and submit it with any required annexe(s) in ISAAC.
- complete the information requested online in ISAAC.

Mandatory attachment:

If the application is a follow-up application, also submit a report from the previous project. Reports from
previous projects are taken to the evaluation committee as additional information in the evaluation of

the follow-up application. The report form can be found on the funding page for this program on the NWO website.

The attachment should be prepared in accordance with the template provided by NWO. The attachment should be uploaded separately from the application in ISAAC. All attachments should be submitted as a pdf file (without security). Attachments other than those listed above are not permitted.

You must write your application in English.

Applications may only be submitted via the ISAAC web application. Applications that are not submitted via ISAAC will not be considered.

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

It is important to start your application in ISAAC on time:

- if you do not yet have an ISAAC account, then you should create one in good time to prevent any possible registration problems.
- any new research organisations must be added to ISAAC by NWO.
- you also need to submit other details online.

Applications submitted after the deadline will not be taken into consideration by NWO. For technical questions, please contact the ISAAC helpdesk, see contact Section 6).

Applicants are expected to have informed the research organisation where they work about submitting the application and that the research organisation accepts the grant conditions of this Call for proposals.

3.4 Conditions for submission

3.4.1 Formal conditions for submission

NWO will assess your application against the conditions, including the conditions listed below. Your application will only be admitted to the assessment procedure if it meets these conditions. After submitting your application, you are asked by NWO to be available to carry out any administrative corrections that may be needed to enable to meet the conditions for submission.

These conditions are:

- the main applicant and co-applicant(s) meet the conditions stated in Section 3.1;
- the application complies with the DORA guidelines as described in Section 4.1;
- the application form is, after a possible request to make additions or changes, complete and filled out according to the instructions;
- the application is submitted via the main applicant's ISAAC account;
- the application is received before the deadline;
- the application is written in English;
- the proposed project is for the duration of up to two years;
- the proposed project on the pre-exascale supercomputer LUMI is for the duration of up to one year;

All of the required annexes are, after a possible request to make additions or changes, complete and filled out according to the instructions.

3.5 Allocation conditions

The <u>NWO Grant Rules</u> and the Agreement on Funding Scientific Research apply to all applications, with the exception that under this Call for proposals no grants will be provided, rather scarce rights (computing time) will be distributed. This means that wherever the NWO Grant Rules state 'grant(s)', it should read as 'computing time' instead.

3.5.1 Compliance with the National Knowledge Security Guidelines

World-class science can benefit from international cooperation. The National Knowledge Security Guidelines (hereafter: the Guidelines) helps knowledge institutions to ensure that international cooperation can take place securely. Knowledge security concerns the undesirable transfer of sensitive knowledge and technology that compromises national security; the covert influence of state actors on education and research, which jeopardises academic freedom and social safety; and ethical issues that may arise in cooperation with countries that do not respect fundamental rights.

Applicants are responsible for ensuring that their project complies and will continue to comply with the Guidelines. By submitting an application, the applicant commits to the recommendations stipulated in these Guidelines. In the event of a suspected breach of the Guidelines in an application submitted to NWO for project funding, or in a project funded by NWO, NWO may ask the applicant to provide a risk assessment demonstrating that the recommendations in the Guidelines have been taken into consideration. If the applicant fails to comply with NWO's request, or if the risk assessment is in apparent breach of the Guidelines, this may affect NWO's grant award or determination. NWO may also include further conditions in the allocation letter if appropriate.

The National Knowledge Security Guidelines can be found on the central government website at: <u>Home |</u> <u>National Contact Point for Knowledge Security (loketkennisveiligheid.nl)</u>.

3.5.2 Data management

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

Data management Section

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

The data management section in the proposal is not evaluated and will therefore not be weighed in the decision whether to award funding. However, the committee can issue advice with respect to the data management section.

3.5.3 Scientific integrity

In accordance with the NWO Grant Rules, the project that NWO funds must be carried out in accordance with the nationally and internationally accepted standards for scientific conduct as stated in the Netherlands Code of Conduct for Research Integrity. By submitting the proposal, the applicant commits to this code. In the event any violation of these standards during a project allocated by NWO, the applicant should immediately inform NWO and should submit all relevant documents to NWO. More information about the code of conduct and the policy regarding research integrity can be found on the website: <u>Scientific integrity | NWO</u>.

3.5.4 Ethical statement or licence

The applicant is responsible for determining whether an ethical statement or licence is needed for the realisation of the proposed project. The applicant should ensure that this is obtained from the relevant institution or ethics committee on time. The absence or presence of an ethical statement or licence at the time of the application process has no effect on the assessment of the application. If the project is awarded funding, then the grant is issued under the condition that the necessary ethical statement or licence is obtained before the latest start date for the project. The project cannot start until NWO has received a copy of the ethical statement or licence.

3.5.5 Nagoya Protocol

The Nagoya Protocol ensures an honest and reasonable distribution of benefits emerging from the use of genetic resources (Access and Benefit Sharing; ABS). Researchers who make use of genetic sources from the Netherlands or abroad for their research should familiarise themselves with the Nagoya Protocol (<u>Home - ABS Focal Point</u>). NWO assumes that researchers will take all necessary actions with respect to the Nagoya Protocol.

3.5.6 Specific conditions

The specific conditions that apply to the allocation of access to the National Computer Facilities at SURF are the following:

Starting time and duration

If an application is approved, the research concerned must have begun within two months of this approval.

An allocation for access to the National Computer Facilities is for a maximum period of two years. An allocation for access to the pre-exascale supercomputer LUMI is for a maximum period of one year.

Definitions

The following definitions apply to any approval of an application:

By 'system' is meant the computer system to which access is provided, including any related front-end machines, peripheral equipment, data communication equipment and the related software, front-line support, etc.

By 'user' is meant the person to whom the computing time has been allocated, as well as those to whom this person allows access to the system under his or her own responsibility. For personnel contributing to the computating time project, affiliated to a research organisation mentioned in section 3.1, it is possible to use students/researchers (national/international) for this purpose.

The user must accept the terms of use applicable to the system used, which contain rules on the correct use of the system, by signing a user agreement with SURF. This user agreement includes, among other things:

- The user will not use the system for any purposes other than the project for which access has been given.
- The user will make no attempt to obtain access to, or make use of, programs or files owned by others or to which no access has been expressly given.
- The user will adhere to the requirements and procedures of the computer centre providing the system services.
- The user will immediately inform the computer centre involved of any faults detected in system software, compilers, data communications, etc., as well as any observed malfunctions.
- The user is responsible for any misuse of his or her username and account by third parties, and will therefore protect his or her passwords to the best of their ability against such misuse.
- The user is responsible for the consequences of any overrun in the allocated computing time.
- NWO Science and the involved computer centre can accept no liability for any loss or damages resulting from the use of the system or from any faults therein.

For the pre-exascale supercomputer LUMI, the applicant also needs to agree to the terms of use, see: <u>LUMI</u> <u>General Terms of Use</u>.

The user shall mention, in all publications and public deliveries, the fact that the research was supported by NWO for the allocation of computing time on the National Computer Facilities, hosted by SURF. The correct method of referral can be found on the NWO website: <u>Acknowledgement | NWO</u>.

'This publication is part of the project [name project] of the research programme [fill in programme name] that is (co-) funded by the Dutch Research Council (NWO). We acknowledge NWO for providing access to [name computer system], hosted by SURF through the Computing Time on National Computer Facilities call for proposals.'

For the pre-exascale supercomputer LUMI is the correct way of referral:

'We acknowledge the Dutch Research Council (NWO) in The Netherlands for awarding this project access to the LUMI supercomputer, owned by the EuroHPC Joint Undertaking, hosted by CSC (Finland) and the LUMI consortium through the Computing Time on National Computer Facilities call.' Based on ackowledgement LUMI.

Information

The information you provide with this application will be shared with SURF to ensure that SURF can provide the requested service in the best possible way.

4 Assessment procedure

This section first describes the assessment according to the DORA principles (Section 4.1) and the course of the assessment procedure (Section 4.2). Second, it states the criteria that the assessment committee will use to assess your application (Section 4.3).

The NWO Code for Dealing with Personal Interests applies to all persons and NWO employees involved in the assessment and/or decision-making process (Code for Dealing with Personal Interests | NWO).

NWO strives to achieve an inclusive culture where there is no place for conscious or unconscious barriers due to cultural, ethnic or religious background, gender, sexual orientation, health or age (<u>Diversity and inclusion</u> | <u>NWO</u>). NWO encourages referees and members of the assessment committee to be actively aware of implicit associations and to try to minimise these. NWO will provide them with information about concrete ways of improving the assessment of an application.

4.1 The San Francisco Declaration (DORA)

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

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

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

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

For more information on how NWO is implementing the principles of DORA, see <u>DORA | NWO</u>.

4.2 Procedure

The application procedure consists of the following steps:

- submission of the application;
- consideration of the application;
- provisional (partial) allocation by assessment committee WGS
- technical alignment with SURF advisor(s) on project set-up (mandatory);
- initial advice from the assessment committee WGS and SURF technical advisor(s);
- rebuttal;
- assessment committee meeting WGS;
- decision-making.

Applications submitted within the Call for proposals 'Computing Time on National Computer Facilities' are reviewed by the permanent assessment committee WGS. This committee consists of representatives from the scientific community with knowledge of the field, experienced users of national computing facilities and represents the main user groups of national computing facilities. The task of the assessment committee WGS is to assess the submitted applications and related documents in relation to each other and on their own merits, based on the assessment criteria given in this Call for proposals (see section 4.3.1).

The assessment committee WGS will first assess whether the computational work included in the application can be performed on locally available facilities. If in the opinion of the WGS this is the case, the WGS will advise the director of domain NWO Sciences (ENW) to reject the application. If, based on the advice of the WGS, the director of domain NWO Sciences decides to reject the application, the application will not be considered further in the assessment procedure.

Due to the expertise of large-scale computational work present in the WGS committee, NWO decided to use the option given in Article 2.2.4(2) of the NWO Grant Rules to conduct the assessment procedure without engaging referees, when evaluating applications.

The committee members are listed on the NWO website: <u>Computing Time on National Computer Facilities |</u> <u>NWO</u>

4.2.1 Submission of the application

A standard form for submitting proposals is available on the funding page of this Call for proposals on the NWO website. When writing your proposal, you must adhere to the questions stated on this form and the procedure given in the explanatory notes. You must also adhere to the guidelines for the maximum number of words and pages.

Your complete proposal form must have been uploaded in ISAAC before the deadline (see section 1.3). No proposals can be submitted after this time. After submitting the proposal, the main applicant will receive a confirmation of receipt.

4.2.2 Review of proposals

As soon as possible after you have submitted your proposal, you will hear from NWO whether or not your proposal is processed. NWO will determine this on the basis of a number of administrative and technical criteria (see the formal conditions for submission, section 3.4). NWO can only consider your proposal if it meets these conditions.

Please bear in mind that NWO may contact you up to two weeks after the submission deadline to ask you to make administrative corrections, if your submission does not yet meet all the relevant conditions for submission. You will be given one opportunity to make these corrections, and you will be given five working days to do this.

4.2.3 Provisional (partial) allocation by assessment committee WGS

The WGS committee will be requested to issue preliminary advice to the director of the NWO Science domain (ENW). For pending applications, the WGS Assessment Committee is asked to first conduct a quick review of the application based on the criteria listed in section 4.3 and aims to determine whether the application is eligible for provisional (partial) allocation. Provisional (partial) allocation refers to an allocation of 10% of the total requested computing capacity. For the Grid component of Data Processing, this is the entire requested computing capacity. Provisional (partial) allocation anticipates the decision to allocate or reject the full application. NWO aims to issue the partial allocation within one month after submission of the application if the WGS advises positively.

4.2.4 Initial advice from the assessment committee WGS and SURF technical advisor(s)

After the provisional (partial) allocation, the application for the remaining requested capacity is submitted for initial advice to one of the WGS members and a technical advisor from SURF. The WGS member assesses the application on the basis of the criteria listed in Section 4.3. The technical advisor only looks at criteria 1 and 3.

If there is any doubt where knowledge of a specific scientific field is insufficient, the WGS committee reserves the right to have the proposal reviewed by one or two independent referees. For particularly large proposals, i.e. exceeding 50 million SBUs, one or two independent referees will always be invited to review the proposal. If necessary, the WGS may formulate its own questions to the referee.

4.2.5 Rebuttal

The main applicant receives the initial advice with the WGS-member's report, the technical report, and any anonymised referee reports. You then have the opportunity to formulate a rebuttal. You will be given five working days to submit your rebuttal via ISAAC. If you decide to withdraw the proposal, then you should do this as quickly as possible by sending an email stating this to the office and withdrawing the proposal in ISAAC. If NWO receives your rebuttal after the deadline, then it will not be included in the rest of the procedure.

4.2.6 Meeting of the assessment committee

The WGS Assessment Committee will make its own consideration based on the available material at the next committee meeting. In this, the pre-advice and any additional referee reports provide important guidance for the final assessment, but are not necessarily adopted in full by the assessment committee. The committee will consider the arguments of the initial advice / referees, weigh them against one another and examine whether the written response contains a well-formulated rebuttal to the critical comments in the initial advice/referee reports.

Following their deliberations, the committee will prepare written recommendations for the director of the NWO Science domain (ENW). To be eligible for computing time, an application must meet all the criteria listed in section 4.3 and be positively assessed by both the technical advisor and the WGS assessment committee.

4.2.7 Decision-making

Finally, the Director of NWO Science domain (ENW) assesses the followed procedure and the advice from the assessment committee. Subsequently, the director decides on the approval and rejection of the applications.

4.2.8 Timeline

Below is the timeline for this Call for proposals. NWO may deem it necessary to make adjustments to the timeline of this Call for proposals during the current procedure. You will of course be informed in good time.

NWO strives to issue any provisional (partial) allocation within one month of the date of receipt of the proposal, and to complete the assessment procedure within four months of that date. Should the procedure encounter any delays, it is possible to apply for a second provisional (partial) allocation.

Proposals with completed files, including the technical advice from SURF, any referee reports and the written response, will be reviewed at the next upcoming WGS committee meeting. To be eligible for review at the upcoming meeting, however, the fully completed file for the proposal must have been received by NWO at least one week before the date of the meeting. Proposals with files that are only complete and ready for the WGS committee to review after this time will be submitted for review at the following committee meeting.

| mid February 2025 | 211 th WGS meeting |
|----------------------|-------------------------------|
| mid April 2025 | 212 th WGS meeting |
| mid June 2025 | 213 th WGS meeting |
| early September 2025 | 214 th WGS meeting |
| mid-October 2025 | 215 th WGS meeting |

| In 2025, the WGS will meet scheduled at the following times |
|---|
|---|

mid December 2025 216th WGS meeting

NWO strives to issue a final decision to applicants about whether a proposal has been accepted or rejected within two weeks of the WGS committee meeting at which the proposal is reviewed.

4.3 Criteria

4.3.1 Substantive assessment criteria

Proposals submitted within this Call for proposals will be substantively assessed according to the following criteria:

Project organisation

- The feasibility of the research, given the available human research capacity. (e.g. can the amount of processing, expected runs and/or analysis of results be done by the researchers involved?)
- The expertise of the research group in using computer facilities is in line with the scope of the proposal.

Scientific aspects of the project

- The scientific quality of the project, whether fundamental or applied, to which use of computer infrastructure can make a contribution.
- Assessment of the applicability of the numerical methods and implementation aspects in relation to the scientific objectives of the project.

Need to access computer facilities and technical expertise

- Given the objectives of the project, the request for computing time, data facilities and the accompanying services, such as storage and expertise, is justified.
- The amount of computing time, storage and expertise requested is proportional to the described volume of work within the project.
- Assessment whether the availability and execution of computing work can be done at local facilities.
- The realisation of the project.
- The expected use of (parallel) processing justifies access to national computing facilities.
- Optimising the use of computing power and other national computing services (such as increasing parallelisation in their codes, if applicable).

5 Obligations

This section details the various obligations which, in addition to the allocation conditions stated in section 3.5, apply to recipients after allocation.

5.1.1 Reporting

Allocation of computing time at a computer facility carries the condition that the applicant submits a report on the project to the NWO Science domain within three months of the end of the project. Reports must be submitted using the form 'Report Template for Granted Computing Time', which may be found on the funding page for this programme on the NWO website. This report and the publications resulting from the allocated research time can only be submitted for the project using the NWO electronic application system ISAAC.

5.1.2 Data management

After a proposal has been awarded funding, the researcher should elaborate the data management section into a data management plan. For this, applicants can make use of the advice from the committee. The applicant must describe in the plan whether existing data will be used, or whether new data will be collected or generated, and how this data will be made FAIR: Findable, Accessible, Interoperable, Reusable. Before submission, the data management plan should be checked by a data steward or similar officer of the research organisation where the project will be realised. NWO will check the plan as quickly as possible. Approval of the data management plan by NWO is a prerequisite for this. The plan can be adjusted during the research. More information about the data management protocol of NWO can be found at: <u>Research data management</u> <u>I NWO</u>.

5.1.3 Intellectual property

With respect to intellectual property (IP), the NWO IP policy applies. This can be found in Section 4 of the NWO Grant Rules.

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

5.1.4 Socially responsible licensing

The knowledge that emerges from the project could be suitable for use in society. When agreements about licensing and/or the transfer of research results developed under this Call for proposals are made, due consideration should be given to the ten principles for socially responsible licensing, as stated in the NFU factsheet '<u>Socially Responsible Licensing</u>'.

5.1.5 Open Access

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

Scientific articles

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

- publication in a fully Open Access journal or platform registered in the DOAJ;
- publication in a subscription journal and the immediate deposition of at least the author accepted manuscript of the article in an Open Access repository registered in Open DOAR;

 publication in a journal for which a transformative Open Access agreement exists between UNL and a publisher. For further information, see <u>Home | Open access</u>.

Books

Different requirements apply to scholarly books, book chapters, and edited collections. See the Open Access Policy Framework at <u>Open Science | NWO</u>.

CC BY licence

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

For more detailed information about NWO's Open Access policy, see Open Science | NWO.

6 Contact and other information

6.1 Contact

6.1.1 Specific questions

For specific questions about this Call for Proposals, please contact: Naomi Messing-Klopstra, tel. +31 (0)70 34 40 526 e-mail: <u>rekentijd@nwo.nl</u>

6.1.2 Technical questions about the web application ISAAC

For technical questions about the use of ISAAC, please contact the ISAAC helpdesk. Please read the manual first before consulting the helpdesk. The ISAAC helpdesk can be contacted from Monday to Friday between 10:00 and 17:00 hours on +31 (0)70 34 40 600. However, you can also submit your question by email to <u>isaac.helpdesk@nwo.nl</u>. You will then receive an answer within two working days.

6.2 Other information

NWO processes data from applicants received in the context of this Call in accordance with the NWO Privacy Statement, <u>Privacy Statement | NWO</u>. NWO might approach applicants for an evaluation of the procedure and/or research programme.

Links to partner websites Website SURF: https://surf.nl/

Small computing time requests can be made directly to SURF: <u>https://www.surf.nl/en/small-compute-applications-nwo</u>

Technische (gebruikers)informatie: <u>https://servicedesk.surf.nl/wiki/</u>

Informatie over Snellius: https://www.surf.nl/en/services/snellius-the-national-supercomputer

Informatie over LUMI: https://www.lumi-supercomputer.eu/

Informatie over Data Processing (Grid/Spider): https://www.surf.nl/en/services/high-performance-data-processing

Informatie over HPC Cloud (via SURF Research Cloud): <u>https://www.surf.nl/en/services/hpc-cloud</u>

Informatie over Cloud Research Consultancy: https://servicedesk.surf.nl/wiki/pages/viewpage.action?pageId=9797642

Informatie over EuroHPC: https://eurohpc-ju.europa.eu/index_en Publication: December 2024 Dutch Research Council

Visiting address: The Hague office Laan van Nieuw Oost-Indië 300 2593 CE The Hague The Netherlands

Utrecht office Winthontlaan 2 3526 KV Utrecht The Netherlands

Cover image: SURF

Homepage | NWO

