H2-2023 Call for applications for access to the e-resources

Call spring 2023 with access from 1st of July 2023

5. January 2023

[DeiC]

Content

1 Framework for Access Grants from DeiC

DeiC is the cooperation between the Ministry of Higher Education and Science and the eight Danish universities to ensure access to modern compute and storage systems.

The cooperation has entered into agreements with consortia of universities on the operation of national HPC facilities. The amount of compute resources on the facilities are distributed according to a key as illustrated in the figure.

The national resources through DeiC are allocated with 50% of the resources to the individual universities locally (the white part), while 45% of the resources (the black part) is allocated after announced calls for applications, as described in this document. The remaining 5% is so-called "free resources" (the green part) are used for test of calculation methods by both new and experienced users. The free resources are assigned by DeiC Head of HPC when sending a mail to eske.christiansen@deic.dk
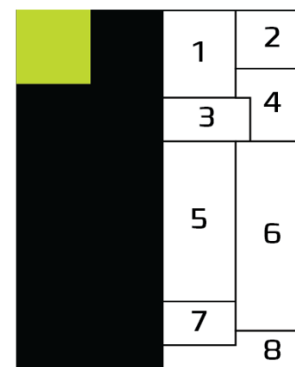
Read more about access to the free resources on https://www.deic.dk/en/Supercomputing/Instructions-and-Guides/Access-to-HPC-Sandbox

The DeiC Board has appointed an academic committee (e-resource committee), with members from all eight universities and from all scientific areas: Humanities (HUM), Social Science (SAMF), Technical Science (TECH), Health Science (SUND) and Natural Science (NAT) to oversee the assessment and grant of the resources.
The projects are granted resources after application and on basis of assessment of research quality and technical feasibility.

Read more about DeiC and the strategy behind the national cooperation at www.deic.dk.

The overall legal responsible unit for the application process is the Ministry of Higher Education and Science[1]. With text marking 215 on the National Finance Act paragraph 19.45.02.10 the Minister for Higher Education and Science is authorized to determine rules on the award of compute resources, including criteria for assessment and procedure by legal notice (BEK nr. 215 from 04/02/2022 https://www.retsinformation.dk/eli/lta/2022/215)

1.1 Reading guide

In this call you can read about the application options for you as an applicant, and which requirements you and the application will have to meet. You are encouraged to read the entire call.

1.2 About Call H2-2023

With this call DeiC invites applications from scientific staff and students at the eight Danish universities for allocation of compute resources on the national HPC facilities.

The call is open to all scientific areas.

The call is available in Danish and English. In case of discrepancies between the two versions, the Danish version is valid.

Reference is also made to the FAQ on DeiC's website: https://www.deic.dk/en/faq

1.2.1   Time Schedule for application and grant

H2-2023 is the second call for national compute resources. The time schedule is as follow:

Publication date	5th of January 2023
Deadline for applications	5th of March 2023
Assessment of compliance with formal requirements is carried out	17th of March 2023
Technical and scientific assessment from the e-resource committee is carried out	8th of May 2023
DeiC Board approves the grant recommendation from the e-resource committee	Ultimo May 2023
Applicants receives letter of grant or letter of rejection	15th of June 2023
Front office and HPC Centers are notified on the grant distribution	15th of June 2023
Allocated resources available from	1st of July 2023

1.2.2   Purpose of Call H2-2023

Call H2-2023 is the second call for application on compute resources on the national e-resources.
The second call is an open call with no specific purpose.

1.2.3   Duration of the Grant

For this call you can apply for resources for a period of either one or two years. That by either the period from the 1st of July 2023 to the 30th of June 2024, or the period from the 1st of July 2023 to the 30th of June 2025. The grant must be used evenly over the allocated period. Expected time(s) of use must be part of the application.

It is possible to apply for elongation of the period in the next call.

The resources must be used in the granted period. If the applicant does not have the opportunity to use the resources in the granted period, DeiC must be informed. If it is possible in the overall allocation of the national resources, the applicant can apply for a postponement of the use of the resources.

1.2.4 Available resources in the Call

Read more about the HPC systems properties and use at

https://www.deic.dk/en/supercomputing/national-hpc-facilities

and for EuroHPC LUMI at https://www.lumi-supercomputer.eu/lumi_supercomputer/

Center	Unit	Resources (2 year)	Resources (2 years)
DeiC Interactive HPC - CPU	CPU core/h	4.993.000	3.995.000
DeiC Interactive HPC – GPU	GPU core/h	239.300	191.000
DeiC Interactive HPC – Storage	TB	400	300
DeiC Throughput HPC	CPU core/h	21.523.000	17.219.000
DeiC Throughput HPC – storage	TB	1.300	1.000
DeiC Large Memory HPC	CPU core/h	216.000	173.000
DeiC Large Mem. HPC – Storage	TB	300	250
LUMI-C	CPU core/h	20.871.000	16.625.000
LUMI-G	GPU core/h	1.336.000	1.069.000
LUMI Storage	TB/H	9.011.000	7.209.000

1.2.5 Distribution pr. Scientific Area

The DeiC Board has distributed the resources in this call between the scientific areas:

- [NAT, TECH, SUND]: 50%
- [HUM, TEO, SAMF, JUR]: 30%
- Share reserved distribution across the scientific areas in connection with the final assessment: 20%

In the final distribution, the e-resource committee can allocate the resources from one scientific area to another, if not enough qualified applications have been received to use the resources for one of the areas.

2 Formal Criteria for the Application

The following criteria will be used in the formal pre-assessment of the application

2.1 Application and Receipt

- The application must be submitted through e-mail to: e-kald-ansoegning@deic.dk
- The application must be accompanied by a completed application form that can be found here: https://www.deic.dk/sites/default/files/documents/DOC/e-resourceapplication_05012023.dotx
  A guide with review of the fields in the application form can be found here: https://www.deic.dk/sites/default/files/documents/PDF/Application-guide.pdf.
- The application must be received before expiry of the application deadline
- The application must be accompanied by a CV from the applicant (max 2 pages)
- The application must be accompanied by a CV from Co-applicants (max 1 page)

- The application must be accompanied by a publication list from the applicant. (Max 10 most relevant publications)
- The application must, when the applicant is a student, be accompanied by a letter from the advisor of the student, that approve the students need for HPC resources.
- The applicant will receive a confirmation mail regarding the reception of his/her application within three days. In case this does not happen he/she should contact the DeiC support-mail (e-kald-support@listserv.deic.dk) as soon as possible. NB: Please provide contact information in your e-mail, as our mail-server will not automatically show your e-mail address.
- Applications that are granted resources will be published on the DeiC website. Applicants should be aware not to have confidential information in the project title (cf. section 6.2)
- The application will not be deleted, as the material must be handed over to the National Archives (Rigsarkivet)

The applicant is advised to inform the university local front office (https://www.deic.dk/en/Front-Office) about the application, so that the universities own resources might be reserved for the project, if national resources are not granted.

2.2   Language

Applications and appendices must be prepared in Danish or English. Applications in other languages are not processed.

2.3   Connection to a Danish University

When applying for compute resources, the applicant must

1. Be employed as scientific staff, (cf. legal notice no. 1443 from 11. December 2019 on job structure for scientific staff)
   or
2. Be enrolled as a student at a Danish university with an appointed supervisor, fulfilling the criteria in Section 1.

Companies can be co-applicants in connection with a research project in collaboration with a university and with a main applicant fulfilling the above-mentioned criteria.

2.4   Applicants Qualifications

Applicants, after Section 1. Above, must as a minimum have obtained a Ph.D. level or equivalent.

Master- and Ph.D. students can apply for resources with a supervisor as co-applicant. The supervisor must as a minimum fulfill the criteria in section 1 above.

2.5   Other Requirements to the Applicant

When applying the Applicant declares in good faith within the last two years from the time of application not to be known scientifically dishonest by the Board for Scientific Dishonesty (Nævnet for Videnskabelige Uredelighed) cf. Act nr. 383 of 26. April 2017 on Scientific dishonesty etc. (Lov nr. 383 af 26. april 2017 om videnskabelige uredelighed mv.)

2.6 Application for compute resources

The application must be for compute resources on the national HPC facilities under DeiC (including the Danish part of EuroHPC LUMI). The application cannot be for own purchase of the e-resources.

The total amount of compute resources applied for must be within the offered amount of the resources in the call.

3 Assessment Criteria

The research assessment will be based on the criteria below.

3.1 Connection to the Purpose of the Call

In cases where the DeiC board has defined a specific purpose for the call, applications within this area will be given priority.

Excess resources will be allocated after assessment of the other applications received.

3.2 Research quality

- Does the project description make it probable that the project contains a potential for scientific progress (theoretical, methodological, empirical)?
- Does the project description contain
  - a clear and delimited problem formulation and objective??
  - a description of state-of-the-art and/or scientific challenges within the project research area and the projects potential contributions to this? Consistent and appropriate hypotheses?

  - an account for the theoretical and/or methodological basis, including an argumentation for the proposed activities relevance in relation to this basis?

- If applicable for the project: Is there an argument for coherence between the project hypothesis, theory, and method?
- If applicable for the project: Is there a sufficient description of the project's empirical material or data basis, including any pilot projects and/or preliminary data?
- If applicable: Is there sufficient synergy between different parts of the project?
- Where applicable: Are any ethical aspects highlighted satisfactorily?

3.3 Qualification of the Applicant

- Has the applicant documented:
  - Scientific qualifications to an extent necessary for the implementation of the project?

  - A scientific production that document competencies for the implementation of the project?

- Have other key participants in the project documented scientific qualifications to an extent necessary for the implementation of the project?
- Is there a strategy for the organization and management of the project, including an account for the division of the tasks between the involved researchers and technically competent staff, as well as a probability that the applicant will be able to handle the applied project professionally and in terms of time, at the same time as the applicant's other research and management tasks?

3.4 Feasibility

- Are sufficient resources allocated to the project, including a professional framework, staff and access to the necessary facilities and equipment?
- Has a realistic plan for the work and timeframe been presented, which among other things, takes into account the recruitment of potential unnamed participants and the dissemination of the project results?
- Does the project description explain the milestones and success criteria of the project, and are these realistic?

3.4.1 Technical Feasibility

- Is there a proportionality between the compute resources applied for, and the expected scientific return?
- Is there a proportionality between the suggested activities and the compute resources applied for? There must be consistency between what is applied for and the scope of the project.
  Is there a good connection between the compute resources applied for, when they are to be used, and which tasks are to be solved (runs, resources, time)?
- Is it explained why resources are applied for at the specific HPC facility?
  Is the desired system suitable for the project based on hardware and system set-up?
- Can the desired software be implemented on the system within the project period?
- Is sufficient time allocated for test of the desired software so that it meets requirements to efficiency, scalability, reproducibility in a convincing way?
- Does the application contain considerations regarding workflow in relation to several different services?

3.5 Publication and Dissemination of the Result

- Are the overall considerations for open access publication, dissemination, patenting of the project result described satisfactorily??
- If applicable: Has the probability and plan of patents been described in the proposed project?
- Does the project data meet the criteria to be organized according to FAIR principles?
- If applicable: Is the data open as a starting point?

4 The Assessment Process

All applications that meet the formal requirements above (Section 2) will be processed on the basis of a technical and scientific assessment on the basis available.

DeiC e-resource committee is in collaboration with DeiC Back Office responsible for the technical and scientific assessment of the applications. The members are composed on a distribution on scientific areas, as well as technicians from DeiC Back Office team.

Criteria for the composition of the committee member can be found on DeiC's website: (https://www.deic.dk/en/supercomputing/Apply-for-HPC-resources/E-resource-committee).

- DeiC divides the applications according to main scientific areas. In case of doubt the chair of the e-resource committee is consulted.

The e-resource committee evaluates the applications in two subcommittees according to the main scientific areas.

1. Humanities, Theology, Social Sciences and Legal Science
2. Natural Science, Technology and Health Science

The first assessment in the two sub-committees results in a list consisting of three groups:

A: Application, which should have a grant

B: A priority list of applications to be allocated a grant, if there are resources to do so

C: Applications, that do not have the needed quality (technical or research-wise or in terms of implementation) to be able to obtain a grant.

The number of applications on the A-list should not exceed the resources available in relation to the distribution between the areas determined by the board.

The e-resource committee cannot cut in the amount of resources applied for during the assessment.

From the publication of a call until it is completed it is not possible to change the assessment criteria. The criteria can only be changed in connection with the next call.

4.1 Final Resources Distribution by the E-resource Committee

All the applications are evaluated in the joint e-resource committee.

Decisions for applications in group B can be postponed to a second assessment round, if there are resources left after the first round.

In the event of disagreement in the committee, this shall be decided by a simple majority of in the committee. In the event of a tie, the vote of the chair of the committee shall be decisive.

Excess earmarked resources can be transferred across the two main areas NAT / TECH / SUND and HUM / TEO / SAMF / JUR if necessary. However, this is first possible after all A and B applications within that main area have been awarded a grant.

A potential surplus of the national resources goes to the free resources if there is a residue after the assessment.

4.2 Approval in the DeiC Board

Based on the recommendations from the e-resource committee, DeiCs board makes the final approval of the projects to be granted resources.

When the board has approved the recommendation, DeiC prepares and sends letters of grant to the recipient of the national resources.

DeiC prepares and sends rejection letters to applications that has not been granted. The rejection letters will contain a short and comprehensive justification for the refusal, cf section 24 of the Public Administration Act (Forvaltningslovens § 24).

5 Responsibilities in Connection with the Application Process

5.1 Your Responsibility as an Applicant

When you apply for access to national e-resources via e-mail it is your responsibility to complete the application form correctly and ensure that the information is correct. It is also your responsibility that the content of the required appendices is correct, and that the appendices are attached to the application. Finally, it is your responsibility, that the application is submitted before the deadline specified in the call.

Section 2 of this call states which formal deficiencies in the application that may result in the application receiving an administrative rejection. It is your responsibility to meet the formal requirements of the notice, so that your application can be considered by the e-resource committee.

You are obliged to inform DeiC if the essential prerequisites for the implementation of the project are no longer met.

If your project is allocated compute time, you have a duty to follow the note requirement stated at https://www.deic.dk/en/Supercomputing/Instructions-and-Guides/Remember-to-acknowledge-the-use-of-national-hpc in relation to publications or other things that disseminates research results where publicly available national resources have been used.

5.2 Public Administration Act

The Public Administration Act (Lov om offentlighed i forvaltningen), Act no. 606 from 12. June 2013, entered into force on 1. January 2014) – gives you a number of rights as a citizen, just as it gives citizens a number of rights of access to public authorities case processing. The materiel you send to DeiC, is thus in its entirety covered by the provisions of the Public Access to Information Act in relation to e.g., access to documents. Reference is also made to the Public Administration Act (Forvaltningsloven; LBK 433 from 22. April 2014).

6 Processing of Data

The information you provide when applying is subsequently registered on a safe data storage at DTU. Upon request, you have the right to insight into and rectification of the data that we register and store about you, cf. the Data Protection Act (Act no. 502 of 23/05/2018) and the Data Protection Ordinance. The information that you provide is transferred on an ongoing basis to the National Archives in accordance with the rules of the Archives Act and the relevant provisions of the State Archives.

You can read more about the overall processing of personal data on DTU's website. (https://www.dtu.dk/english/about/strategy-policy/policies/privacy-policy)

6.1 Contact information to Data Protection Officer

DTU is data controller for the processing of the personal data carried out by DeiC. If you have any questions about the processing of the data, you can contact the personal data administrator:

Eske Christiansen (eske.christiansen@deic.dk)

The DPO of the Technical University of Denmark can be contacted in the following ways:
Mail: dpo@dtu.dk
Telephone: +45 25 25 25 25

Letter: Technical University of Denmark, Anker Engelunds Vej 1, Building 101A, 2800 Kongens Lyngby, Attn. DPO.

6.1.1 Appeals authority

If you wish to complain about the processing of your personal data, you can contact the Data Protection Authority (Datatilsynet):

dt@datatilsynet.dk

or

Datatilsynet
Carl Jacobsens Vej 35
2500 Valby

6.2 Publication of Granted Projects

If you application is granted, DeiC will publish information about your and any other project participants, institutional affiliation, as well as the project title and duration at:
https://www.deic.dk/en/supercomputing/Apply-for-HPC-resources (page will be established when the grants are published). Therefore, you should be careful not to use confidential information in the title of your project.

7 Get Help with your Application

7.1 Questions to the application procedure

Your local front office (https://www.deic.dk/en/Front-Office) can provide guidance in connection with the call and application procedure. You are also welcomed to contact DeiC at e-kald-support@listserv.deic.dk Please provide contact information in your e-mail, as our mail-server will not automatically show your e-mail address.

In addition, you can find answers to several of the most frequent asked questions at:
https://www.deic.dk/en/faq .

7.2 Questions to Ongoing Projects

If you have questions to a previously granted project, you can as well contact DeiC by email: e-kald-support@listserv.deic.dk. Please provide contact information in your e-mail, as our mail-server will not automatically show your e-mail address.