

Process for national call for e-resources

5. January 2023

DeiC

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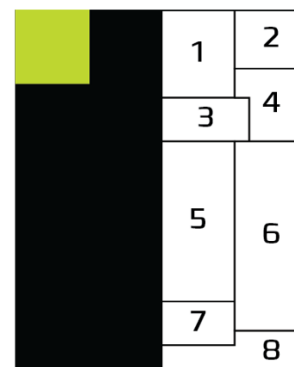
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2 Application for National E-resources

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 be in charge of 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 <https://www.deic.dk/>

The overall legal responsible unit for the application process is the Ministry of Higher Education and Science¹. 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 <https://ufm.dk/>

3 Overview of the Application Process

Allocation of the resources on the common national part of the e-infrastructure are granted two times a year. The process will be coordinated with the local and international (EuroHPC regular access calls) resource allocation. As a starting point the deadlines below will be used:

Proces	Ansvar	Første uddeling	Anden uddeling
Invitation for applications is published	DeiC organization	1 st of January	1 st of July
Deadline for applications	Applicants	1 st of March	1 st of September
Assessment of compliance with formal requirements available	DeiC organization	15th of March	15th of September
Technical and research assessment available	DeiC e-resource committee	1 st of May	1 st of November
DeiC Board approval of grant recommendation	DeiC Board	Medio May	Medio November
Letters of grants or rejections are sent to the applicants. Letters of grants includes conditions for the national resources University front office are informed HPC Centers are informed	DeiC organization	15 th of June	15 th of December
Allocated resources available	Applicants	Medio July	Medio January

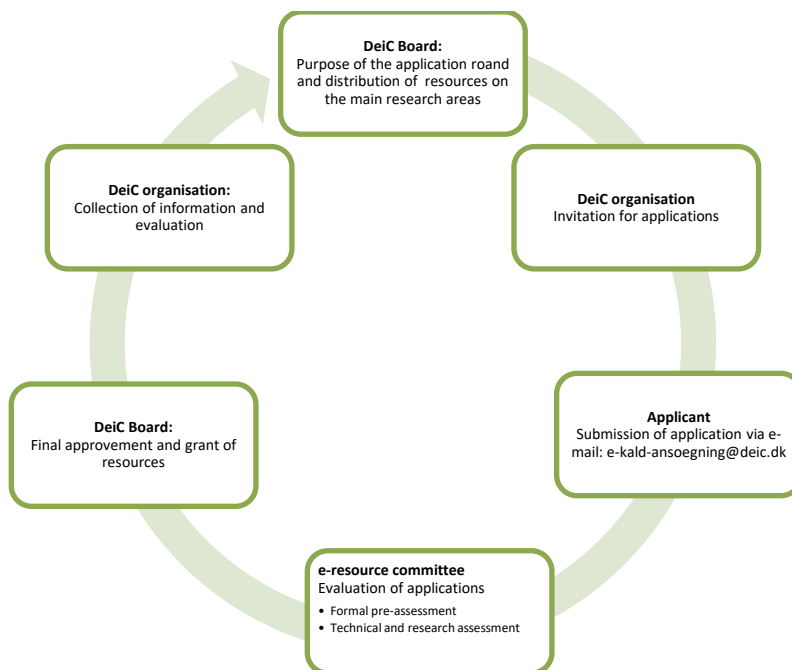
Note: Dates are adjusted according to Sundays and public holidays in connection with each call.

3.1 Application proces

- Determination of purpose with the application round and allocation of resources on the main research areas (DeiC Board)
- Call for applications (DeiC)
- Submission of applications via mail: e-kald-ansoegning@deic.dk
- Assessment of applications
- Formal pre-assessment and evaluation (DeiC organization)
- Technical and research assessment of applications (e-resource committee)
- Final approval and grant of resources (DeiC Board)
- Collection of information and evaluation of the process (DeiC organization)

Figure 1 shows the main steps and responsible in the process. Each step is further described below.

DeiC CEO is the main responsible for the implementation of the process, supported by the appointed e-resource committee.



3.2 Purpose of the application round and distribution of resources on research areas

Before an application round **the DeiC Board** determines the distribution of resources on the two main categories of research; 1. Natural Science, Technology and Health Science and 2. Humanities, Theology, Social Sciences and Legal Science. In addition, a share is reserved to be distributed in connection with the final assessment round. This share is as starting point 20% of the available resources. The purpose of the reserved share is to be able to adjust for projects exceeding the share awarded a main research area. The Board determines the distribution after an assessment of reported needs, previous applications, and any defined areas of focus.

DeiC Board can in after consultation with the Ministry for Higher Education and Science define a specific purpose for a call, where applications in the area will be prioritized (e.g., "The green agenda or virus research" Covid-19").

Similarly, parts of the resources can be reserved for projects, with a grant from NUFU or on the national research roadmap.

Grant period

The resources will generally be available over a two-year period, during which the applicant must explain, when the resources will be used. This principle can be deviated from by uncertainty about the availability of resources during the period.

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.

3.3 Call for Applications

The DeiC organization is responsible for the preparation of a call for applications. The chair of the e-resource committee is consulted in the process. The invitation must be approved by the Chair of the DeiC board before publication.

The call will be published on the DeiC website and are at the same time mailed to the **universities Front Office**, who are responsible for the distribution at their own university.

The call must contain:

- The framework for DeiCs allocation of compute resources
- Deadline for the application
- Expected date of award
- Description of any specific purpose and prioritization of applications for this
- Available resources on the different HPC systems
- Available resources distribution on the main research areas
- Conditions for the use of the resources (e.g., Time of use)
- Formal criteria for the application
- Assessment and grant criteria (technical feasibility and research impact)
- Assessment and grant process and deadlines for the specific call
- Responsibilities in connection with the application process
- Possibility of support for the application process

Application must be submitted via mail: e-kald-ansoegning@deic.dk

University local **Front Office** are responsible for supporting the applications and part of the technical support. **Front Office** can deliver a technical assessment together with the applications, but this is not a requirement.

If the application does not contain a technical assessment, it will be provided by DeiCs **Back Office** in connection with the assessment, so that it is available for the committee.

In addition, DeiC can be contacted for support at the email address: e-kald-support@listserv.deic.dk

3.4 Evaluation of the applications

Formal pre-assessment

DeiC CEO is responsible for the establishment of a system and a process, making it possible to receive and treat the applications, communicate with the applicants and for carrying out the formal pre-assessment.

The total list of the received applications are sent to the **chair of the e-resource committee** for comments before the pre-assessment.

The following criteria are used in the formal pre-assessment:

Application that do not meet the formal criteria will not be processed. The applicants will receive an administrative rejection.

Application and submission

- The application must be submitted via mail: e-kald-ansoegning@deic.dk
- The application must contain information as described in the application form, cf. appendix with review of the fields in the application form.
- 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)

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.

Language

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

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.

Applications for e-resources (HPC or data storage)

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.

Applicant 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. 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.)

3.5 Technical and Research Assessment of the Applications

If the application fulfills the formal criteria mentioned above, the application will be processed by the e-resource committee on the available basis.

The final reasoned list of applications rejected for formal reasons is approved by the **Chair of the DeiC Board** before the further processing of the applications.

DeiC divides the applications according to the main scientific field. In case of doubt, the **chair of the e-Resources Committee** is consulted.

Technical Assessment by DeiC back office

DeiCs Head of HPC sends the applications to assessment in **DeiC Back Office**, commenting on the technical feasibility of the project; are the resources applied for available, does the project technically match the resources applied for, has the applicant and possibly the co-applicants hold the necessary knowledge to be able to utilize the resources applied for.

5% of the national compute resources are reserved to test of computer programs, student projects, preparation of applications for compute resources on Danish or international HPC centers. If an application is rejected due to technical or competency reasons, the applicant is referred to apply to use these resources, in order to obtain sufficient competencies to submit a renewed application at a later application round.

The list of applications that are rejected for technical reasons is submitted to the chair of the e-Resources Committee for comment. The final list of rejected applications is approved by the Chair of the DeiC Board.

Assessment by the E-resource Committee

The DeiC board has appointed an e-resource committee responsible for the research assessment of the applications. The members are composed on the basis of a distribution between the main research areas.

The criteria for the composition of the members is available from the DeiC website:

(<https://www.deic.dk/en/supercomputing/Apply-for-HPC-resources/E-resource-committee>).

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.

Final Resources Distribution by the E-resource Committee

All the applications are finally 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.

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

3.6 Assessment criteria

The research assessment will be based on the criteria below

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.

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 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?

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?

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, considers 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?

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 service.

Publication and Dissemination of the Results

- 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?

3.7 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.

The grant letter will contain information about access and support for the use of the resources.

The letter will also inform the applicant on the 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.

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).

Cf. Notice on compute resources on the national e-resources (bekendtgørelse om regnetid på nationale e-ressourcer) no. 215 from 04/02/2022 decisions on the allocations cannot be appealed to another administrative authority.

DeiC sends a list of the successful application to the relevant university front office and publish the collected list on the DeiC website.

The list is also sent to the relevant **Back Office/HPC Centers**, who are responsible for ensuring, that the granted projects have access to the systems and receives adequate support.

3.8 Collection of information and evaluation of the process

Among other activities **DeiC** aims to ensure increased dissemination and use of the digital research infrastructure.

DeiC collects anonymized information and prepares analyzes and statistical studies that over time will show how different parameters develop. These can be used to later adjust the size of the HPC centers, the extent of storage capacity, and how to communicate to different user groups. The latter in the case of a visible under-representation of areas or user types.

4 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>)

4.1 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.

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

4.2 Publication of Granted Projects

If your 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/supercomputing/kald/kald-H2-2023> (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.

4.3 Publication of Granted Projects

When an application is granted, DeiC will publish information about the applicant, co-applicants, institutional affiliation, as well as the project title and duration at www.deic.dk/supercomputing/kald/kald-H2-2022

Therefore the applicant should be careful not to use confidential information in the title of the project.

5 Responsibilities in the Application Process

5.1 Responsibility of the Applicant

It is the responsibility of the **Applicant** to complete the application form correctly and ensure that the information is correct. It is also the responsibility of the **Applicant** that the content of the required appendices is correct, and that the appendices are attached to the application. It is the responsibility of the **Applicant**, that the application is submitted before the deadline specified in the call.

It is the responsibility of the Applicant to meet to meet the formal requirements in the call, in order for your application to be considered by the e-resource committee.

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

The Applicant is obliged 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 The Ministry of Higher Education and Research, 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 Roles in the Allocation of National e-resources

All actors when allocating the national e-resources are subject to a duty of confidentiality, cf. section 27 of the Public Administration Act., (Forvaltningslovens § 27).

6.1 Ministry of Higher Education and Research/Agency for Higher Education and Research

DeiC is a legal entity under the Ministry of Higher Education and Research/The Agency for Higher Education and Research.

6.2 DeiC Board

The DeiC board consists of members at management level from the eight Danish universities. The Board is responsible for the development and use of the national e-infrastructure.

6.3 DeiC organization

The DeiC organization handles the practical handling and administration of the resource allocation.

DeiC CEO is responsible for handling and process.

DeiC Head of HPC is responsible for handling the technical assessment of the applications.

6.4 e-resource committee

The DeiC board has appointed a e-resources committee to be responsible for the research assessment of the application and the final prioritizing of the applications.

The members are composed on the basis of a distribution in the main scientific areas. Criteria for the composition and committee members can be found on DeiC's website (<https://www.deic.dk/en/supercomputing/Apply-for-HPC-resources/E-resource-committee>).

Rules of procedure have been drawn up for the members of the e-Resources Committee, which, among other things, describe matters concerning the duty of confidentiality and incapacity.

6.5 Front Office

The universities are responsible for establishing a local Front Office. Front Office takes care of user support related to the digital infrastructure, including support for the application process and collaboration with the local e-resource committee.

6.6 Back Office

The Back Office is a function of the DeiC organization, which in collaboration with the corresponding functions of the national HPC Centers is responsible for support directly related to the use of the infrastructure. The Back Office function in DeiC handles the technical evaluation of the applications received.

6.7 Applicants

Applicants are researchers or research projects from the Danish universities.

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.