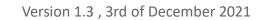


## Tutorial: How to make a EuroHPC application

#### **Regular Access**



| xtreme Scale                            | Regular  |   |   |   |   |
|---|--|---|---|---|---|
|   |  | Benchmark   | Development   | Fast Track  | Fast Track  |
| y renewable                             | 1y renewable   | 2 to 3 months   | 1y renewable  | < 6 months  | 1y renewable  |
| Continuous calls, bi-<br>early cut-offs | offs every four<br>months (3 cut-offs  | Continuous call,<br>monthly cut-offs  | Continuous call,  | ,   | Continuous call,<br>cut-offs ev. 2w/1m  |
| articipating systems                    | participating systems  | ~5%<br>All systems  | ~5%<br>All systems  | ~5%<br>All systems  | ~5%<br>All systems  |
|   |  | Limited   | Data processing<br>environment and<br>platform  |   |   |
| Vith specific                           |  | Yes – Open R&D  | Vec – Onen R&D  | No – use industry Fast<br>Track instead   | Exclusively<br>Open R&D   |
| 'es                                     | Yes  | No  | No  | No / Pre-identified   | No / Pre-identified   |
| 'es                                     | Yes  | Yes   | Yes   | Yes   | Yes   |
| 'es                                     | Yes  | No  | No  | Yes   | Yes   |
| ull application                         | Full application   | Technical application   | Technical application   | Light request + support<br>documents  | Full application  |
| enchmark I                              | Benchmark  | None  | None  |   | Previous allocation<br>Benchmark  |
| 2 months                                | > 2 months   | N/A   | N/A   | N/A   | N/A   |
| months                                  | 2 months   | ≥1 week <2 weeks  | ≥1 week <2 weeks  | ≥2 weeks <1 month   | ≥2 weeks <1 month   |
|   | ontinuous calls, bi-<br>early cut-offs<br>D - 90% of<br>articipating systems<br>lostly pre-exascale<br>lostly pre-exascale<br>for<br>ledium to long term<br>es – Open R&D<br>//ith specific<br>valuation criteria<br>es<br>es<br>es<br>es<br>es<br>ull application<br>enchmark<br>2 months | 2       Continuous call, cut-offs every four months (3 cut-offs per year).         0 - 90% of articipating systems       60 - 90% of participating systems         10 - 90% of articipating systems       60 - 90% of participating systems         10 - 90% of articipating systems       Mostly petascale         10 - 90% of articipating systems       Mostly petascale         10 - 90% of articipating systems       Mostly petascale         11 application criteria       Yes - Open R&D         12 - Open R&D       Yes - Open R&D         21 - 000 relevance       Yes         22 - 000 relevance       Yes         23 - 000 relevance       Yes         24 - 000 relevance       Yes         25 - 000 relevance       Yes         21 application       Full application         21 application       Senchmark         21 aponths       > 2 months | 2       Continuous call, cut-<br>offs every four<br>months (3 cut-offs<br>per year).       Continuous call,<br>monthly cut-offs         0 - 90% of<br>articipating systems       60 - 90% of<br>participating systems       ~5%         Nostly pre-exascale       Mostly petascale       All systems         verge storage for<br>ledium to long term       Limited       Limited         25 - Open R&D       Yes - Open R&D       Yes - Open R&D         vith specific<br>valuation criteria       Yes       No         25       Yes       Yes         26       Yes       Yes         27       Yes       No         28       Yes       No         29       Yes       No         29       Yes       No         20       Full application       Technical application         21       penchmark       Benchmark       None         21       nonths       > 2 months       N/A | And a base of the second of | And AdditionProductionProductionProductionProductionProductioncontinuous calls, bi-<br>offs every four<br>merty cut-offsContinuous call,<br>monthly cut-offsContinuous call,<br>monthly cut-offsContinuous call,<br>monthly cut-offsContinuous call,<br>cut-offs ev. 2w/1m0 - 90% of<br>per year).~5%~5%~5%0 - 90% of<br>participating systems<br>participating systems~5%~5%10 - 90% of<br>participating systems~5%~5%10 - 90% of<br>participating systems~5%~5%10 - 90% of<br>participating systems~5%All systems10 - 90% of<br>participating systemsParticipating systemsNo10 - 90% of<br>participating systemsParticipating systemsNo10 - 90% of<br>participating systemParticipating systemsNo10 - 90% of<br>participating systemParticipating systemsNo11 - 90<br>participationYes - Open R&D<br>With specific trackNoNo12 - 90 - 90% of<br>participationYesYesYes13 - 90<br>participat |

(From EuroHPC Access Policy, Version 1.1)



Tutorial: How to make a EuroHPC application

**Regular Access** 

| Version            | Comments, What has been added or adjusted   |
|--------------------|---|
| 1.2, Nov 17th 2021 | First version of screen-dump guide for how to make an application for EuroHPC Regular Access Calls  |
| 1.3, Dec 3rd 2021  | Slide 2: Table with version description included<br>Slide 8: Has highlighted where to find the "Project scope and plan" that needs to be attached in the online form for EuroHPC Regular Access Calls |
|                    |   |
|                    |   |
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|                    |   |
|                    |   |
|                    |   |





## Important information for EuroHPC applications

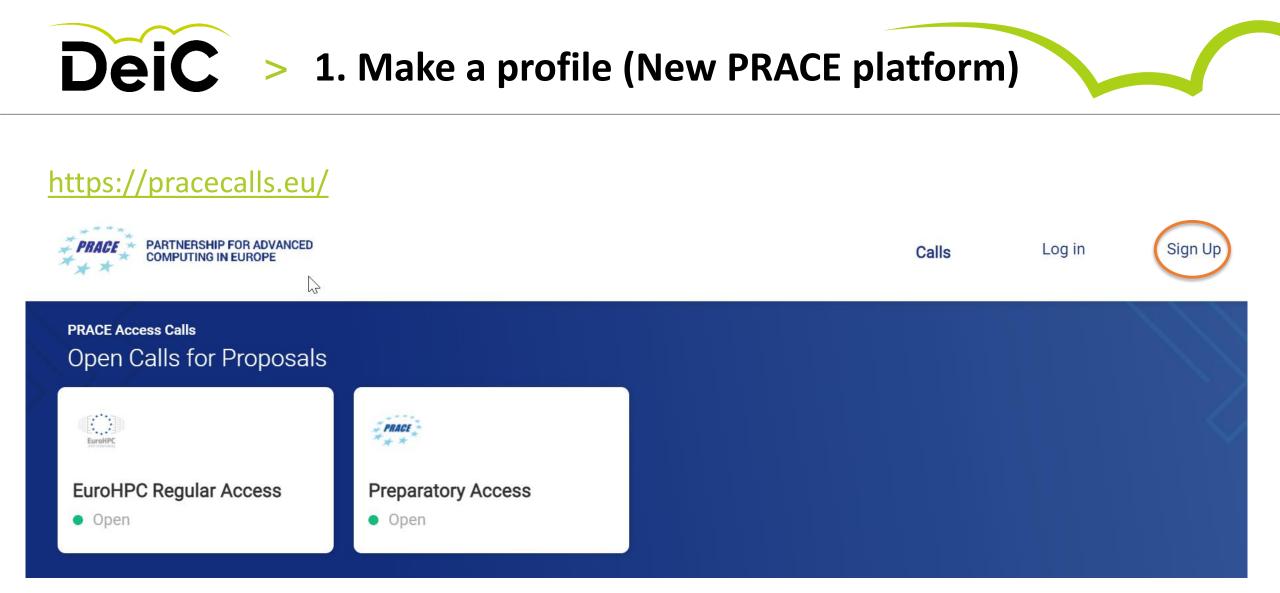


Who can apply ? Researchers from academia, research institutes, public authorities, and industry established or located in an EU Member State or in a country associated with Horizon 2020 can apply and access the EuroHPC pre-exascale and petascale supercomputers.

The submission of proposals is done via the **PRACE** *Peer-Review platform*. You will need to create an account first and once logging in you will be able to choose the **Regular Access** call in the **Calls** page. Once you start drafting your proposal, it will be available in your **Dashboard**. <u>https://pracecalls.eu/</u>

In order to apply to **Industry** or **Public Administration** tracks, the PI (Project Investigator) has to be affiliated with industry or public sector, respectively.

Please consult the **Terms of Reference** to check the eligibility and specific information about the open submission tracks (Scientific, Industry and Public Administration). <u>https://prace-ri.eu/wp-content/uploads/Terms\_of\_Reference\_Regular\_Call.pdf</u>





# **DeiC** > 2. Sign Up .... Register as new user

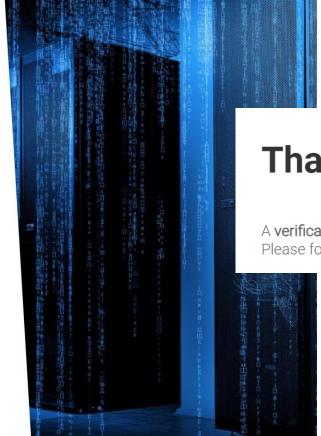




#### Welcome

Please, login or register for free

| Login            | Register |
|------------------|----------|
| First Name       |          |
| Last Name        |          |
| E-mail Address   |          |
| Password         | Ś        |
| Confirm Password | Ś        |
|                  | REGISTER |



#### Also entrance for



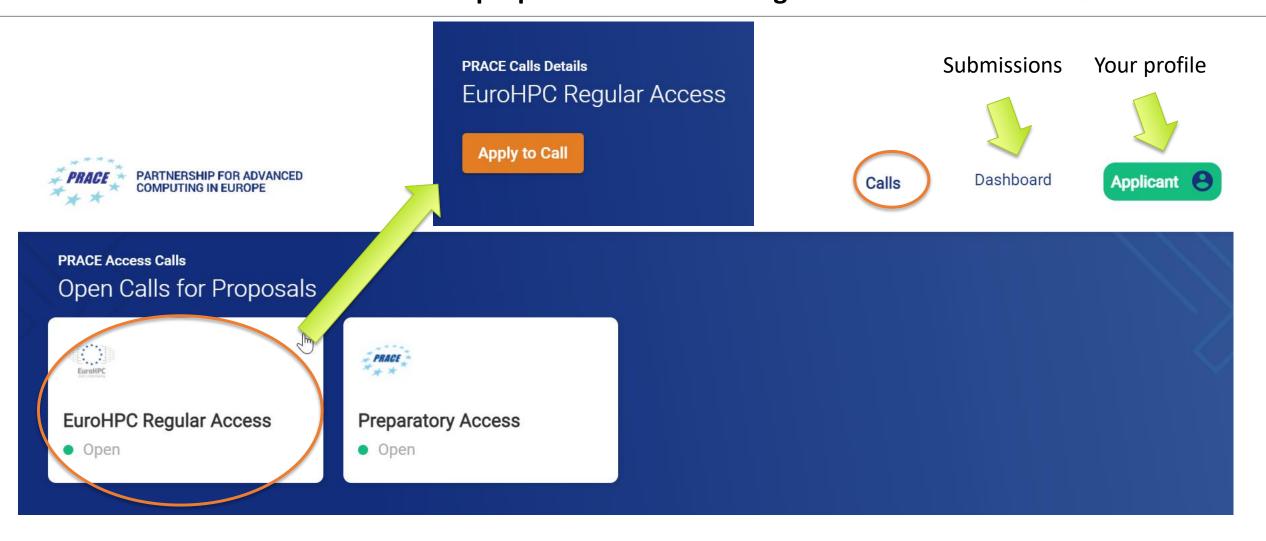
## Thanks for joining us!

A verification link has been sent to your e-mail address. Please follow the instructions to finish your registration!



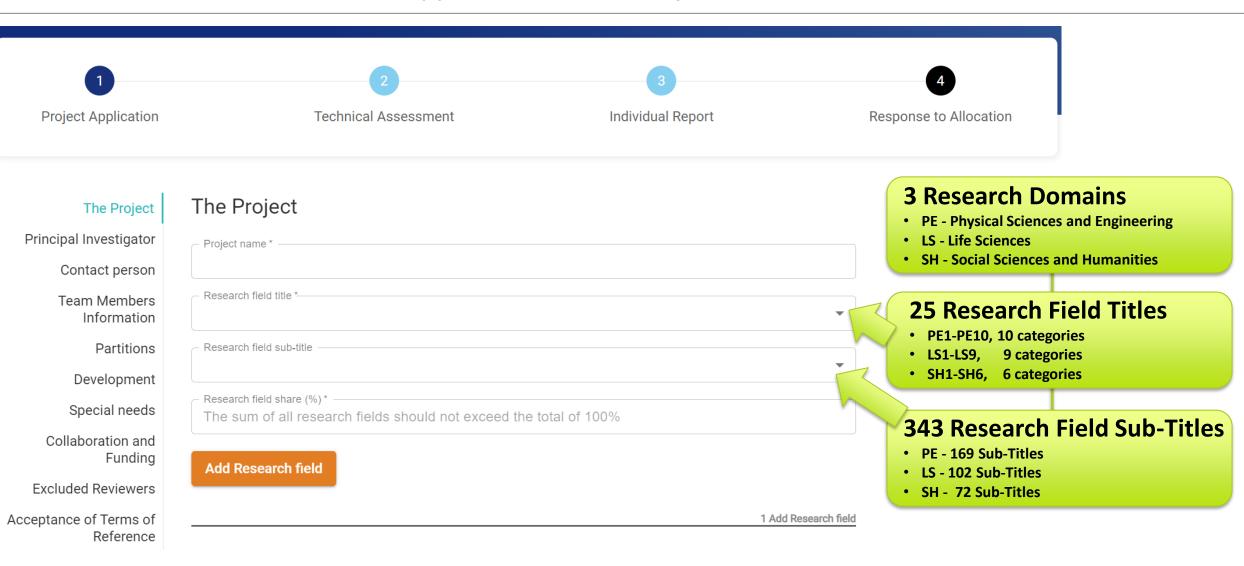


#### **2. Login - PRACE Peer Review Tool** ....and create a proposal for EuroHPC Regular Access





#### **3. EuroHPC Regular Access Call** Fill out the application form – Project details





### **4. Online Application Form** Project Details (Continued)



|                                     | Additional keywords   | https://prace-ri.eu/hpc-access/eurohpc-<br>access/eurohpc-ju-call-for-proposals-for-regular-   |
|-------------------------------------|---|--|
|                                     |   | access/euroripe-ju-can-ror-proposals-ror-regular-<br>access-mode/  |
| The Project                         |   | The following documents form the reference for this call:  |
| Principal Investigator              | //  | <ul> <li>The EuroHPC Access Policy can be found here</li> <li>The Terms of Reference can be found here</li> </ul>  |
| Contact person                      | Project summary (abstract)*   | <ul> <li>The Technical Information on the EuroHPC Supercomputers can be found here</li> <li>The template for the Project Scope and Plan can be found below:</li> </ul> |
| Team Members<br>Information         |   | <ul> <li>In Microsoft Word format</li> <li>In Latex format (and associated .cls file) – Coming Soon</li> </ul>   |
| Partitions                          | 0/2500 characters (max of approx. 500 words)  | Attach with information:   |
| Development                         | Project scope and plan document *<br>Click to choose a file Project scope and plan document (.pdf)  |  |
| Special needs                       | Only proposals with a civilian purpose will be eligible. Please confirm by ticking the box.   | Decises and plan. Regular Assess   |
| Collaboration and<br>Funding        | Proposal for civilian purposes *  | Project scope and plan – Regular Access  |
| Excluded Reviewers                  | Please tick the box in the case you are submitting the same project that has already been submitted to a previous cut-off but was not awarded. The proposal will be considered as a Resubmission.                                 |  |
| Acceptance of Terms of<br>Reference | Resubmission  | Public Administration Access Track   |
|                                     | Select the track that you wish to submit your proposal to. Please note that in order to apply for the Industry or Public Administration Access Tracks, the PI must be affiliated with Industry or the Public Sector respectively. | Industry Access Track  |
| EuroHPC                             | Track selection *   | Scientific Access Track  |
| Joint Undertaking                   | Next Save * mandatory field   |  |



## **DeiC** > 4. Online Application Form User information



| The Project                         | Principal Investigator | Employment contract valid for more than 3 months after end allocation * |
|-------------------------------------|------------------------|---|
| Principal Investigator              | ← Gender *             | ~ Website   |
|                                     | Title *                | Organisation name *   |
| Contact person                      | - First name *         | Organisation with Research Activity                                     |
| Team Members<br>Information         | C Last name *          | ○ Yes 	● No   |
| Partitions                          | _ Initials             | Organisation Head office in Europe                                      |
| Development                         | Date of birth *        | Percentage of R&D in Europe vs total R&D *                              |
| Special needs                       | E-mail address *       | Organisation Department *   |
| Collaboration and                   | Nationality *          | Organisation Group  |
| Funding                             | - Phone Nr             | Organisation Address *  |
| Excluded Reviewers                  | _ Job title *          | Organisation Postal code *  |
| Acceptance of Terms of<br>Reference |                        | Organisation City *   |
|                                     |                        | Organisation Country *  |
| EuroHPC                             |                        | Next Save * mandatory field   |



### **4. Online Application Form** User information (Continued)



| The Project<br>Principal Investigator<br>Contact person<br>Team Members | Contact person First name*                                  |  | EuroHPC                                 |
|---|---|--|---|
| Information<br>Partitions<br>Development<br>Special needs               | E-mail address *  |  | Phone Nr<br>+32123456789<br>Job title * |
| Collaboration and<br>Funding<br>Excluded Reviewers                      |   |  | Organisation name *                     |
| Acceptance of Terms of<br>Reference                                     | The Project<br>Principal Investigator                       | Team Members Information Please insert all the team members that will participate in this research Gender* | Organisation Department *               |
|   | Contact person<br>Team Members<br>Information<br>Partitions | Title *  | Organisation Address *                  |
|   | Development<br>Special needs<br>Collaboration and           | Last name *  | Organisation City *                     |
|   | Funding<br>Excluded Reviewers<br>Acceptance of Terms of     | Date of birth *  | Add Team Member                         |
|   | Reference   | Nationality *  | Next Save • mandatory field             |



#### > **4. Online Application Form** EuroHPC resources to choose from



| The Project            | Partitions  |                           | , five (5) EuroHPC machines |
|------------------------|---|---------------------------|-----------------------------|
| Principal Investigator | Partition name *  | are available fo          | r Regular Access calls      |
| Contact person         | Code used *   |                           |                             |
| Team Members           |   | Vega CPU Standard         | EEE****                     |
| Information            | Add Code  | Vega CPU Large Memory     | Joint Undertaking           |
| Partitions             | Add Code  | Vega GPU                  | * * *                       |
| Development            | 1 Add Code  | MeluXina CPU              |                             |
| -                      |   | MeluXina CPU Large memory |                             |
| Special needs          | Number of jobs simultaneously *1  | MeluXina GPU              |                             |
| Collaboration and      | ─ Wall clock time of a typical job execution (h) *  | MeluXina FPGA             |                             |
| Funding                | 1   | Karolina CPU              |                             |
| Excluded Reviewers     | Are you able to write checkpoint?   | Karolina GPU              |                             |
| Acceptance of Terms of | ○ Yes 	● No   | Discoverer CPU            |                             |
| Reference              | Maximum time between 2 checkpoints (h) *  | LUMI-C                    |                             |
|                        | Minimum # cores *      O     Minimum # cores *      O |                           |                             |
|                        | 1   |                           |                             |
|                        | Average # cores *   |                           |                             |
|                        |   |                           |                             |
|                        | Maximum # cores *   |                           |                             |
|                        | Minimum job memory (total usage over all cores GB) *  |                           |                             |
|                        |   |                           |                             |



### **4. Online Application Form** EuroHPC resources to choose from (Continued)

| The Project                         | Average job memory (total usage over all cores GB) *  | //O Strategy *                               |
|-------------------------------------|---|--|
| Principal Investigator              | Maximum job memory (total usage over all cores GB) *  |  |
| Contact person                      | Maximum amount of SCRATCH needed at a time (GB)*      | 1  |
| Team Members<br>Information         | Maximum amount of WORK needed at a time (GB) *        | 0/2500 characters (max of approx. 500 words) |
| Partitions                          | - Maximum amount of HOME needed at a time (GB) *      | I/O files generated per hour                 |
| Development                         | Maximum amount of ARCHIVE needed at a time (GB) *     | Add Partition                                |
| Special needs                       | Maximum # files to be stored on SCRATCH (thousands) * |  |
| Collaboration and<br>Funding        | Maximum # files to be stored on WORK (thousands)*     | 1 Add Partition                              |
| Excluded Reviewers                  | Maximum # files to be stored on HOME (thousands) *    | Next Save * mandatory field                  |
| Acceptance of Terms of<br>Reference | Maximum # files to be stored on ARCHIVE (thousands) * |  |
|                                     | Total amount of data to transfer to/from (GB) *       |  |
|                                     | - Justification of data transfer *                    |  |
| EuroHPC                             |   |  |
|                                     | 0/2500 characters (max of approx. 500 words)          |  |



#### **4. Online Application Form Description of main algorithms**



#### Development The Project

Principal Investigator

Contact person

Team Members Information

Partitions

Development

Special needs

Collaboration and Funding

**Excluded Reviewers** 

Acceptance of Terms of Reference

This should include the following: description of the main algorithms, how they have been implemented and parallelized, and their main performance bottlenecks and the solutions to the performance issues you have considered. For each code that needs to be optimized, please provide the details listed below.

- 1. Name and version.
- 2. Webpage and other references.

Save

3. Licensing model.

Next

4. Contact information of the code developers.

\* mandatory field

5. Your relationship to the code (developer, collaborator to main developers, end user, etc.).





#### **4. Online Application Form** Other areas to consider for success of project



#### Special needs

Principal Investigator

Contact person

Team Members Information

Partitions

Development

Special needs

Collaboration and Funding

**Excluded Reviewers** 

Acceptance of Terms of Reference Please specify the needs that are not listed above and are specific and necessary for the completion of the project (e.g. data transfer tools, workflow tools, other middleware requirements, dependence on a specific member of local/external staff, funding stream, 3rd party software, outcomes of other project, etc).





Principal Investigator

### **4. Online Application Form** Collaboration and funding



#### Collaboration and Funding

Please mention any additional funding or international collaborations that you are involved in. This will help strengthen your submission.

In addition, any information on international collaborations that you are involved in will help the PRACE Communications team in their dissemination activities to promote your work should you be awarded.

#### Is any part of the project covered by confidentiality?

Team Members Information

Contact person

The Project

Partitions

Development

Special needs

Collaboration and Funding

**Excluded Reviewers** 

Acceptance of Terms of Reference

| <ul> <li>Additional funding EC (ERC, Marie Curie, etc) *</li> </ul> |  |    |      |            |       |
|---|--|----|------|------------|-------|
|   |  |    |      |            |       |
|   |  |    |      |            |       |
|   |  |    |      |            |       |
|   |  | 11 |      |            |       |
|   |  |    |      |            |       |
| International collaboration *                                       |  |    |      |            |       |
|   |  |    |      |            |       |
|   |  |    |      |            |       |
|   |  |    |      |            |       |
|   |  | 11 |      |            |       |
| - National funding *  |  |    |      |            |       |
| Hatonal landing   |  |    |      |            |       |
|   |  |    |      |            |       |
|   |  |    |      |            |       |
|   |  |    |      |            |       |
|   |  | 11 |      |            |       |
| - Other funding *   |  |    |      |            |       |
|   |  |    |      |            |       |
|   |  |    |      |            |       |
|   |  |    |      |            |       |
|   |  |    | Next | Save * man | laton |





#### 4. Online Application Form Excluded Reviewers



| The Project                         | Excluded Reviewers   |
|-------------------------------------|----------------------|
| Principal Investigator              | Excluded Reviewer #1 |
| Contact person                      | Full Name            |
| Team Members<br>Information         | E-mail               |
| Partitions                          | Affiliation          |
| Development                         | Excluded Reviewer #2 |
| Special needs                       |                      |
| Collaboration and<br>Funding        | E-mail               |
| Excluded Reviewers                  | Affiliation —        |
| Acceptance of Terms of<br>Reference | Excluded Reviewer #3 |
| Reference                           |                      |
|                                     | E-mail               |
|                                     |                      |
|                                     | Affiliation —        |
|                                     |                      |

\* mandatory field

Next

Save





#### 4. Online Application Form Ready to submit the proposal



Acceptance of Terms of Reference The Project Please refer to PRACE website/EuroHPC/Regular Access call for more information: Principal Investigator https://prace-ri.eu/hpc-access/eurohpc-access/eurohpc-ju-call-for-proposals-for-regular-access-mode/ Contact person Team Members I accept the Terms of Reference \* Information Partitions Submit Save \* mandatory field Development Special needs Final submission Collaboration and Funding After submission you can't edit this step again. You can use the save button to keep progress before final submission. Excluded Reviewers Acceptance of Terms of CANCEL SUBMIT Reference

You have successfully submitted project EHPC-REG-2021R0026. Thank you for your submission.





## 5. Remember to Acknowledge the used HPC resources!



The usage of EuroHPC JU resources needs to be acknowledged for all data produced through EuroHPC JU allocations, **both in publications and when depositing the data to other infrastructures.** 

Users shall use the following wording in such acknowledgement in all such papers and other publications:

"We acknowledge EuroHPC JU for awarding this project access to [resource-name hosted by at site]"

See "Terms of Access" in: <u>https://prace-ri.eu/wp-content/uploads/Terms\_of\_Reference\_Regular\_Call.pdf</u>



National HPC in DK: (If used)

https://www.deic.dk/en/Su percomputing/Instructionsand-Guides/Remember-toacknowledge-the-use-ofnational-hpc