

**Call for Projects Information and Instructions – 4th Call for Projects
V2.0 (6 Nov 2024)**

1. Overview

The National Supercomputing Centre (NSCC) Singapore has revised its Strategic Resource Allocation policy to align with its role as a National Research Infrastructure (NRI). We will support key National R&D programmes and research projects in achieving significant economic outcomes and scientific imperatives for Singapore.

Prioritisation and allocation of resources will fall under the purview of the Strategic Resource Allocation Committee.

For more information on Strategic Resource Allocation Policy and FAQs, please refer to <https://www.nscg.sg/srapolicy/>

Refer to Table 1 for the project categories that will be supported by NSCC Singapore. All applications for Call for Projects are evaluated under the **‘RIE-funded Projects’** category.

S/N	Categories	Recommended Resource Allocation (of NSCC’s total resources)
1	RIE-funded Projects	60%
2	Young Investigator Seed Project	7.5%
3	HPC Research	7.5%
4	Training and Promotion	5%
5	SME/Startups	5%
6	Non-RIE Funded Projects	15%

Table 1: Strategic Resource Allocation Categories. *Note: The percentage allocated may be reviewed and revised in the future by the SRAC to ensure alignment with the rapidly evolving landscape of HPC technology and evolving research needs.*

2. Evaluation Criteria

2.1 Projects with approved RIE funding and a sufficient HPC Compute Budget are eligible for consideration.

2.2 Projects will be prioritised according to these key criteria:

a) National priorities: NRF and SRAC will advise NSCC Singapore regarding projects of national priority.

b) Complexity: The complexity of a project refers to its ability to use significant HPC compute resources to accelerate research innovation. For this call, we expect the jobs to routinely and efficiently utilise a minimum of 4 GPU cards or 256 CPU cores.

c) Track Records: PIs' track records in utilising their resources based on their projected resource demand will also be considered.

2.3 All HPC Resources allocated are subjected to charges in order to encourage responsible usage of national resources. The charges will be based on NSCC Singapore's RIE-funded projects rate (Refer to Table 2 below).

2.4 For details on the new Strategic Allocation policy, you may visit www.nscg.sg/srapolicy.

3. Charges for allocated HPC resources

3.1 As an NRI, NSCC Singapore is mandated to impose charges for the allocated compute resources for cost recovery purposes and encourage responsible usage of national resources. Hence, applicants are strongly recommended to include a HPC Compute Budget for the compute resources as part of their overall project budget.

4. Key Points for Researchers

4.1 HPC Compute Budget

4.1.1 All approved RIE-funded projects must have a HPC Compute Budget.

4.1.2 HPC Compute Budget must be sufficient for the amount of compute resources needed for the entire project duration.

4.2 Estimating the HPC Compute Budget

4.2.1 Budgeting should be based on commercial Cloud Service Provider (CSP) rates of the respective institutions/organisations' existing contracts.

4.2.2 This ensures that Principal Investigators (PIs) have sufficient HPC Compute Budget for the CSPs, should their Call for Projects application be unsuccessful.

4.3 All HPC resources allocated are subjected to charges

4.3.1 This to encourage prudent and efficient usage of national resources.

4.3.2 The charges will be based on NSCC Singapore’s RIE-funded projects rate.

4.4 During Call for Projects application

4.4.1 PIs are to submit projected resource demands on a quarterly basis.

4.5 Realistic projection of resource demand

4.5.1 Plan realistically for the amount of HPC resources requested in the Call for Projects application.

4.6 Support for resource estimation

4.6.1 NSCC Singapore will provide support to assist PIs in resource estimation, through training, and in-house experts who can provide advice.

4.7 Accountability and PI track record

4.7.1 PIs are expected to utilise their resources based on their projected resource demand.

4.7.2 PIs are required to submit their projected quarterly resource demand for their entire project cycle.

4.7.3 Deviation from the projected resource demand will affect the PI’s applications in future Calls for Projects. Refer to Point 6.1 on Quarterly Resource Demand Projection.

5. Role of the Research Office

5.1 Point of contact

NSCC Singapore will liaise with the Research Office of each institution for the receipt and verification of the applications to the Call for Projects. The Research Office will also be responsible for the pre-and post-award management of compute resources allocated.

5.2 Letter of Award

5.2.1 NSCC Singapore will consolidate the approved Call for Projects applications and prepare a Letter of Award to the Research Office.

5.2.2 Approved projects receive 100% of their requested HPC resources for their projects’ duration.

5.2.3 Acceptance/Rejection

Upon receiving the Letter of Award, the Research Offices will respond to NSCC Singapore if they accept or reject the award, and subsequently communicate this to their respective PIs.

5.3 Invoicing via Research Offices

- 5.3.1 Projects successfully approved to use NSCC Singapore's HPC resources will be invoiced via the host institution's research office/project grant management offices, for each project cycle.
- 5.3.2 PIs with approved projects need to ensure that their **HPC Compute Budget** is sufficient for the requested HPC resources.
- 5.3.3 If the HPC Compute Budget for the project is **insufficient**, PIs can utilise the (insufficient) HPC Compute Budget to commence their research. However, PIs should approach the funding agency to secure additional HPC Compute Budget for the required resources.
- 5.3.4 If there is **no HPC Compute Budget**, PIs should approach the funding agency to secure a HPC Compute Budget.

6. Allocation and Billing Process

6.1 Quarterly resource demand projection

- 6.1.1 PIs are required to submit their projected quarterly resource demand for their entire project cycle.
- 6.1.2 The first two quarters are deemed as the adjustment period
 - a) NSCC will not penalise or invoice PIs for unconsumed HPC resources based on their projections.
- 6.1.3 During the adjustment period of each call:
 - a) PIs are allowed to roll over unused allocated resources to the next quarter but not beyond the 3rd quarter.
 - b) PIs are only charged according to their usage, not allocation.
- 6.1.4 After the adjustment period:
 - a) PIs are required to submit an updated projected quarterly resource demand for their entire project cycle, which may be multi-year (3 or 5 years), through

their respective Research Offices.

- 6.1.5 PIs are allowed to revise and submit their projected quarterly resource demand (1 quarter in advance) to encourage responsible and prudent usage of scarce HPC resources.
- 6.1.6 PIs will be charged according to their revised HPC allocation from the 3rd quarter onwards, based on their updated projected quarterly resource demand and not based on consumption. Any unused HPC resources will be invoiced.
- 6.1.7 Additional resource requests are subject to resource availability and SRAC approval.
- 6.1.8 Invoices will be sent via the Research Office at the end of every two quarters.
- 6.1.9 Refer to Table 2 for RIE-funded rates (approved as at 21 August 2024)
 - a) Rates apply to the projects awarded under the 4th Call for Projects.
 - b) Rates may be subjected to revision for future Calls for Projects.

	Rates for RIE-Funded Projects (before GST)
	(S\$)
CPU Core hrs	0.006
GPU Card hrs - A100 (40GB)	0.79
GPU Card hrs - H100 <i>(Only applicable for projects allocated to ASPIRE 2A+ system)</i>	1.26
HDD Storage GB-mth	0.021

Table 2: RIE-funded rates

7. HPC Compute Resources

7.1 Please refer to our website for more information:

- About ASPIRE 2A¹
- About ASPIRE 2A+²

8. Eligibility

The eligibility of the applicants for this call is as follows:

8.1 The applicant of the project (hereafter, “Project Applicant”)

¹ <https://help.nsc.sg/aspire2a/about/>

² <https://help.nsc.sg/aspire2aplus/about/>

- a) The Project Applicant should be the PI or the supervisor of the project. If required, the PI may authorise a team member to apply on their behalf.
- b) The Project Applicant must have a valid NSCC account.
- c) The Project Applicant will be responsible for all correspondence of the project, including but not limited to the receiving of notifications from NSCC, managing of project membership and requests for changes in resources.

8.2 Members of the Project

- a) Users can be added to the project as members with the approval of the Project Applicant or PI.
- b) The users must have an existing NSCC user ID.

8.3 Project

- a) The project must be approved by the organisation (acknowledged by the supervisor or manager) of the Project Applicant.
- b) Verification and approval will be done via the Project Applicant's research offices.

9. Procedures for Application

9.1 The application must be submitted by the Project Applicant:

- 1) Login to the Projects Portal³.
 - (a) For new projects:
 - (b) Click on "Create Project to create a new application.

For existing projects:

 - (c) Click on "Renew" beside the project that you would like to Renew. Your project will be changed to the *Draft* status.
 - (d) Click "Edit" to modify your application.
- 2) Fill in all the required details. You may refer to the Guideline for Application Form⁴.
- 3) Submit the completed application form. Your submission should be changed to the *Submitted* status.

**Important note: An incomplete form or one that has not been completed correctly can result in a failed application or can have your application denied.*
- 4) After the closing of the application period, the form will be verified by the host institutions' respective research offices followed by prioritisation and approval by SRAC.

³ <https://projects.nscg.sg/>

⁴ <https://help.nscg.sg/wp-content/uploads/Guideline-for-Application-Form.pdf>

10. Approval of Projects

10.1 Review Process

Verified applications will be reviewed and prioritised by the Strategic Resource Allocation Committee (SRAC).

10.2 Notification of Results

The results of the application will be communicated to the Project Applicant via the Research Offices. Note that NSCC will not be communicating the results to the project applicant directly. The project will begin on the start date of the project cycle, as indicated in the Letter of Award.

10.3 Handling of Personal Information

All personal information such as name, email address, and contact number that are submitted will be used by NSCC to facilitate the processing of the application and the subsequent use of the system.

10.4 Disclosure of Application Form

By applying to this call, users agree to the disclosure of the information provided in the application forms and all the project details to NSCC.

11. Report of Deliverables

11.1 Deliverable reports must be submitted to NSCC at the end of the project cycle.

11.2 Deliverables Report

The deliverables must be updated via the Projects Portal within 60 days from the end of the project cycle.

11.3 Acknowledgement and Citation

All academic journal or conference papers or reports that have leveraged NSCC's resources shall acknowledge and cite NSCC with the following:

“The computational work for this article was (fully/partially) performed on resources of the National Supercomputing Centre (NSCC), Singapore (<https://www.nscg.sg>).”

11.4 Presentation

Selected users may also be required to partner with NSCC to present a talk, article, paper or poster at NSCC-organised events (e.g., SupercomputingAsia conference, use case studies or other occasions where NSCC has a presence).

11.5 Disclosure of Information

The following information may be publicly disclosed as required by NSCC for the

promotion of HPC in Singapore.

Project ID, project name, Project Applicant's name, organisation, and awarded resources.

12. Acceptable Use Policy (AUP)⁵

12.1 All users of NSCC's resources must agree to the terms as stated in the AUP. If there is a breach of the AUP, NSCC reserves the right to revoke the user account and/or the awarded resources.

13. Others

13.1 Withdrawal of Project

- a) The Project Applicant may inform projects-admin@nsc.sg if they wish to withdraw the project within 10 days after the start of the project cycle.

13.2 Modifications to Members of the Project

- a) To request changes to the membership of an approved and active project. Please complete Part I of the form and send the request to projects-admin@nsc.sg.
- b) Note that requests for membership changes can only be made by the Project Applicant or Principal Investigator of the project.
- c) Complete "**NSCC Request Form_Change of Membership_Template**" which can be downloaded from NSCC Request Forms – Changes for Active Projects – Aspire2a⁶ and send the request to projects-admin@nsc.sg.

13.3 Ownership Change for Project Directories

- a) To request changes to the file ownership of a project if the owner no longer has access to the file, for reasons including but not limited to, if the owner has left the organisation.
- b) For sharing of project directories for active users, please refer to FAQ Item 10.2 for instructions to edit the Access Control List (ACL).
- c) Please complete [Part I and Part II](#) of the form and send the request to projects-admin@nsc.sg.
- d) Note that requests for ownership changes can only be made by the Project Applicant or Principal Investigator of the project.
- e) Complete "**NSCC Request Form_Change Directory Ownership_Template**" which can be downloaded from NSCC Request Forms – Changes for Active Projects – Aspire2a⁶ and send the request to projects-admin@nsc.sg.

⁵ <https://help.nsc.sg/aup/>

⁶ <https://help.nsc.sg/aspire2a/nsc-request-forms/>

13.4 Change of Project Applicant

- a) To request changes to the Project Applicant of an approved and active project. An official email is mandatory. Please complete Part I and Part II of the form and send the request to projects-admin@nsc.sg.
- b) Note: Requests for this change can only be made by the Project Applicant or Project Investigator of the project.
- c) Complete “**NSCC Request Form_Change of Project Applicant_Template**” which can be downloaded from NSCC Request Forms – Changes for Active Projects – Aspire2a⁷ and send the request to projects-admin@nsc.sg.

13.5 Requests for Additional Resources

- a) The Project Applicant can submit a request to projects-admin@nsc.sg for requests of additional resources. This will be subject to the availability of the resources and approval by the SRAC.

13.6 Adjustment of Resources

- a) The Project Applicant can submit a request to projects-admin@nsc.sg to request for an adjustment of resources for the project at least 1 quarter in advance by revising their quarterly resource projection.

14. Contact Information

For more information on Call for Project Application, pls email: projects-admin@nsc.sg

⁷ <https://help.nsc.sg/aspire2a/nsc-request-forms/>