ACCESS-NRI Merit Allocation Guidelines

Last modified: 01 June 2023

1. Introduction

ACCESS-NRI currently receives resources for compute and storage directly from NCI, funded by the Australian Government's National Collaborative Research Infrastructure Strategy (NCRIS). ACCESS-NRI will use these resources to support model development and test runs for ACCESS-NRI staff, as well as to support community members to undertake scientific simulations using ACCESS models and share community reference datasets.

This document outlines the criteria for distributing compute and storage resources to the community Working Groups (WGs) to maximise the benefit and impact of the available resource.

2. Total Allocations

Total compute and storage resources available for FY 2022-2023. Please note that ACCESS-NRI is working on the assumption that similar resources will be available for FY 2023-24 but this is dependent on NCRIS funding (outcome pending).

	Total Compute (MSU)	Total Storage (PBs)
Community Working Groups (WGs)*	30	0.7
ACCESS-NRI Staff (development/testing)	20	0.3
Reference datasets	-	1.5

*Each of the 6 WGs will initially receive equal compute (5 MSU) and baseline storage (100 TB) allocations. On-going allocations will be adjusted according to the proposed plans put forward by each WG.

3. Allocation Process

3.1 Overview

The ACCESS-NRI merit allocation scheme for resources will operate as follows:

- Each community WG will be allocated a project code on NCI with compute and storage resources.
- WG Co-chairs along with the ACCESS-NRI Liaison will be designated as Lead CIs for this project code. For notification purposes within the MyNCI User Portal, the WG Co-chairs will be designated as Delegate Lead CIs.
- Membership requests will be reviewed by the WG Co-chairs.
  - Users requesting access project resources will be required to join the associated WG within the ACCESS-Hive Forum to be approved. Instructions on joining WGs can be found here.

- As part of the NCI Conditions of Use, all users must comply with the Defence Trade Controls Act. WG Co-chairs should consult with the ACCESS-NRI Liaison before approving any membership requests from overseas institutions.
- Every 6 months, WG Co-chairs will be asked to work with their community to specify a plan for simulations over the next two quarters, including a table showing estimated compute use and storage requirements. ACCESS-NRI will provide a template to assist with this planning.
  - Plans should also explicitly include requests for storage to cover reference datasets produced by these simulations. Further information on the process to request support for reference datasets can be found in the following section.
  - In addition to specific requests, WGs are expected to reserve at least 5% of their allocation each quarter that may be distributed for small needs (new users, testing, ECRs) at the discretion of the Co-chairs.
- These plans will be evaluated by the ACCESS-NRI Scientific Advisory Committee (SAC) according to the below assessment criteria (Section 4). The role of the SAC will also be to identify opportunities for WGs to coordinate around shared needs and/or to avoid possible duplication.
- At the end of each financial year the Working Group Co-Chairs and ACCESS-NRI Liaison will be required to report on the scientific impact and use of computational resources, as well as total usage by FOR code(s) and by organisation. ACCESS-NRI will provide a template to assist with reporting.

Please note:

- Allocations are not transferable to other NCI projects outside of the ACCESS-NRI scheme.
- Allocations should be used during the period of allocation and cannot be deferred to future allocation periods without approval from ACCESS-NRI and the Scientific Advisory Committee (SAC).
- Storage (/g/data) allocations are not intended for long-term storage (e.g., exceeding 4 quarters). Data intended for sharing and reuse will be supported by a separate dedicated storage allocation and managed as part of the NCI Data Collections.
- Above guidelines and resources may change subject to NCRIS funding agreements.

3.2 Reference Datasets

Requests to support reference datasets will operate as follows:

- As needed, WGs can request support for data intended for sharing and reuse among the community.
- Co-chairs along with the ACCESS-NRI Liaison will work with their community to supply a short summary of the dataset including but not limited to: (1) brief description, (2) storage requirements, (3) the responsible parties, and (4) licence under which the data will be shared. ACCESS-NRI will provide a template to assist with such requests.
- Proposed datasets will be assessed by the Science and Advisory Committee (SAC) according to the criteria outlined in Section 4. The role of the SAC will also be to identify opportunities for WGs to coordinate around shared needs and/or to avoid possible duplication.
- ACCESS-NRI Liaison will work with the ACCESS-NRI team and NCI data specialists to release reference datasets through the NCI Data Collections.

- At the end of each financial year, the SAC will use dataset usage information along with WG feedback to review ongoing suitability against the assessment criteria.

Please note:

- All reference datasets will require an active data management plan and where appropriate, are expected to adhere to the FAIR and CARE data principles.

4. Assessment Criteria

The criteria for prioritising ACCESS-NRI merit resources are to maximise:

Alignment with ACCESS development pathways OR software and tools (30%)

- Priority will be given to requests which contribute to the ongoing development of new ACCESS configurations, or to enhance existing configurations. _Reference datasets:_ Priority will be given to requests which contribute to the uptake or enhancement of supported ACCESS model configurations, model evaluation and data analysis tools.

Contribution to community (30%)

- Priority will be given to requests which will contribute to a broad user base, preferably from multiple organisations. This criterion will also take into account the value of distributing resource to new users, or early career researchers who are unable to support simulations from other means.

National benefit and impact (25%)

- Priority will be given to simulations that address science priorities that are aligned with national benefit and will maximise the impact of ACCESS development, software, data and tools.

Computational Feasibility (15%)

- The cost of compute and storage, value of the investment, the efficiency of the computations to be used and the feasibility of the plan to remove the data at the end of the project will be considered in distributing resources. _Reference datasets:_ The cost of storage and data management support, value of the investment, the compliance with relevant data standards, licensing, and the feasibility of the plan to transition or retire datasets at the end of the project will be considered in distributing resources.

5. Tools provided by ACCESS-NRI

To help the WG Co-chairs and ACCESS-NRI Liaison manage project resources, the ACCESS-NRI will provide:

- Request template to help plan compute and storage allocations
- Request template for reference datasets
- Monitoring tools for NCI resources

- Reporting template to help with the reporting requirements

Further information and links to the templates and tools will be added as they become available.

6. Conditions of Use

All WG Co-chairs and members of the WG granted resources should review and comply with NCI's terms and conditions of access: https://nci.org.au/users/nci-terms-and-conditions-access#Terms

7. Acknowledgement

ACCESS community members who make use of these resources are required to acknowledge ACCESS-NRI and NCI in their outputs. The following is an example acknowledgement template:

> *"This research was supported by the Australian Government's National Collaborative Research Infrastructure Strategy (NCRIS), with access to computational resources provided through the ACCESS-NRI Merit Allocation Scheme and the National Computational Infrastructure (NCI)."*

ACCESS-NRI also kindly asks that all outputs are reported through our reporting page <link to be added>.

Commented [KD38]: Followed suggested format from NCMAS guide.

Commented [KD39R38]: @Natalia Bateman - should we include a requirement to report/tell us as well?

Commented [KD40R38]: Actually, just looking at NCI conditions of use, we might need to have both facilities acknowledged or flag the NCI one as well.... thoughts?

Commented [KD41R38]: Okay have just added both NCRIS facilities into the one statement. Will add placeholder to add requirement to report their output to us as well (similar to how IMOS do this).

Commented [KD42]: Placeholder - we'll want to establish something, might just be simple survey tool initially and later directly connected into the reporting/monitoring tools through Aidan's team.