

General Policy on Utilization of the ASEAN-Korea HPC Facility in Indonesia (AKF)

1 Purpose and Scope

This Policy establishes the general rules governing access to the ASEAN-Korea HPC Facility in Indonesia (AKF) by eligible users. It defines **eligibility, access modes, resource allocation, the proposal and review process, conditions of use, data and security obligations, and monitoring**. As the stable parent document for all AKF utilization, it governs every **Call for Proposals**, each of which inherits from it and specifies only call-specific parameters: **themes, deadlines, and per-call ceilings**.

AKF is established under the Korea-ASEAN Digital Innovation Flagship Project (KADIF), funded by the ASEAN-Korea Cooperation Fund (AKCF), and hosted by BRIN at the KST Soekarno in Cibinong, Indonesia. Its purpose is to build HPC capacity for data and AI utilization across ASEAN, foster regional digital sovereignty, and democratize access to advanced computing for all **ASEAN Member States (AMS)**.

2 Abbreviations

- **AKF:** the ASEAN-Korea HPC Facility in Indonesia, comprising the compute, storage, network, and software described in the AMS HPC System Configuration Policy.
- **AHSC/AHAC/AHLM:** the AKF Scientific Committee (scientific programs and allocation), Advisory Committee (oversight and guidelines), and Laboratory Management (day-to-day operations), as defined in the Terms of Reference (ToR) document.
- **PSC:** the AKF Project Steering Committee; provides strategic guidance in line with the approved project proposal to ensure that the project implementation is in line with the objectives, approach, and scope of the project.
- **PI:** Principal Investigator; the person accountable for a project, its team, and compliant use of the allocation.
- **AMS:** ASEAN Member States; Indonesia, Malaysia, Philippines, Singapore, Brunei Darussalam, Vietnam, Lao PDR, Myanmar, Cambodia, and East Timor (Timor-Leste) participating in the ASEAN HPC initiative.
- **Quota:** the per-project limit on a resource (compute/SRU and storage) shared by the project's users; enforced by the scheduler and filesystem.
- **SRU (Service Resource Unit):** the normalized unit of compute allocation and accounting; each Call for Proposals states the per-category SRU ceilings.

3 Governance and Decision Rights

Funding allocation and scientific-program decisions rest with the AHSC and KISTI. The AHAC provides operational guidelines and oversight; the AHLM provisions and

operates accounts and resources; the PSC provides strategic guidance. This Policy is adopted and amended by the AHSC with AHAC inputs and is reported to the PSC.

4 User and Proposal Eligibility

The resource usage is restricted to non-military, peaceful research, education, and innovation. The AHSC or AHLM may decline or suspend accounts if national security, export-control, or sanctions obligations of the host country would be breached.

Those wishing to utilize AKF resources must submit a proposal. Each proposal is recognized as a single project, and once approved, user access will be granted to the principal investigator (PI) and team members named in the proposal.

4.1 Principal Investigator

The PI must:

- a) be a citizen of an AMS, and
- b) hold primary employment or an official affiliation with an institution physically located and legally operating within an AMS.

For the PI, **both conditions must be met**, and the PI is accountable for all activity under the project. The PI is responsible as the primary contact for the project; keeps the project member list current (adding and removing users); and ensures that each user added to the project has been properly verified by the AHLM.

4.2 Team Members

Team members must:

- a) be citizens of an AMS state and affiliated with AMS,
- b) researchers who are currently employed by, or officially affiliated with, an AMS institution,
- c) citizens of non-AMS and/or affiliated with institutions outside the ASEAN region.

To preserve the capacity-building intent, the following safeguards apply:

- a) The PI and at least half of the named team must satisfy the AMS PI-eligibility conditions in 4.1;
- b) Credentials remain personal and non-transferable, and each member holds an individual account;
- c) The PI remains solely accountable for access granted to non-AMS members and for their compliance.

4.3 Republic of Korea Participation

As the AKF is an ASEAN-Korea facility, researchers from the Republic of Korea (ROK) may participate as team members in any category and may co-lead collaborative projects. ROK participation counts toward regional-collaboration merit and does not consume an AMS inclusivity slot.

5 Access/Project Categories

Following international practice, the AKF offers lightweight fast-track modes for testing and scaling studies, and reviewed modes for production science. Categories map to the AKF resource classes in **Section 6**.

To ensure fair access across the ASEAN research community, a PI may normally hold only one active reviewed project per category at any given time. For example, **one active general project and one active collaborative project simultaneously, but not two active general projects**. This limit prevents a small number of PIs from monopolizing a category's allocation pool at the expense of first-time or less-established applicants, consistent with the AMS inclusivity principle.

Table 1 describes the project categories, duration, and each review process. An administrative review process is only for trial projects, involving education programs such as the ASEAN-HPC summer school or programs held by AHSC/AHLM. There is no scientific or technical review, since the whole point of projects in the trial category is a low-stakes, capped-allocation first touch of the system. Light scientific review by one AHSC member, to confirm that the proposed work is a reasonable undertaking for a student-level project, and that the compute and storage requested are proportionate to what the project needs.

Table 1. Project Categories

Categories	Description	Duration	Review Process
Collaborative Projects	Thematic, multi country projects announced through a special call. Collaboration must be between ASEAN Member States, the Republic of Korea, or ASEAN Dialogue Partners.	up to 1 year	Full peer review
General Projects	Reviewed on inclusivity, host-country affirmation, and scientific merit. May be initiated by individuals or groups from one or multiple ASEAN Member States.	3 months (extendable)	Light scientific; a single review by AHSC

Categories	Description	Duration	Review Process
Junior Projects	For undergraduate/graduate students; supervised by an AMS-eligible mentor who acts as PI or co-PI.	1 month (can be extended)	Light scientific; a single review by AHSC
Trial Projects	Created to give novice users a first experience with the facility. For educational purposes only.	2 weeks	Administrative ; Trial category is a low-stakes, capped-allocation first touch of the system

6 Computing and Storage Resources

The AKF comprises three compute classes and a tiered storage system. Applicants must request resources in the units below so that requests can be compared and allocated consistently. The AKF does not have a CPU-only node; it only has GPUs and NPUs for computing resources, as stated in Table 2.

Table 2. Computing Resource Classes

Classes	Description	Target Workload
GPU Cluster	16 GPU nodes featuring a total of 64 NVIDIA H200 SXM GPUs (4 accelerators per node), AMD EPYC™ 9335 processors (64 cores per node), and 1,536 GB of RDIMM memory per node, connected via a 400 Gbps InfiniBand interconnect.	Large-scale AI training, fine-tuning Foundation Models/Large Language Models (LLMs), and advanced simulation for computational science using GPU.
NPU Compute Class	7 NPU nodes equipped with 28 FuriosaAI RNGD NPUs (4 per node), AMD EPYC™ 9355 processors (32 cores per node), and 1,536 GB RAM per node, connected via a 400 Gbps InfiniBand interconnect.	Large-scale AI inference, real-time computer vision processing, natural language processing deployment, high-throughput production AI pipelines optimized and advanced simulation for computational science using CPU/NPU.

Classes	Description	Target Workload
CPU Compute Class	CPU clusters with total 224 cores AMD EPYC™ 9355 processors (32 cores per node), and 1,536 GB RAM per node, connected via a 400 Gbps InfiniBand interconnect.	CPU-based multithread and multinode for Scientific Computing.

AHSC will maintain the call for proposals for each category, and each call publishes the maximum service resource unit, including node count, wall-clock limit, and storage that can be requested per category, within the queue limits of the system configuration policy (e.g., GPU normal queue 48 h wall clock; NPU inference 48 h). The maximum service resource unit may be requested by each proposal (project) category.

Table 3. Maximum Service Resource Unit per Category

Category	Resource Allocation Category	Max Computing Resource	Home Storage Resource	Scratch Storage Flash/HDD
Trial	Small (fixed)	1 GPU	10GB	5TB / 10TB
Junior	Low	up to 2 GPU	20GB	10TB / 20TB
General	Medium	up to 1 node	30GB	10TB / 20TB
Collaborative	High	By negotiation	By negotiation	By negotiation

For storage, the AKF has two types: flash and HDD. The flash storage is for real-time ingestion, active training datasets, rapid checkpointing, and high-throughput I/O. For massive raw training sets, general-purpose workspace, and longer-term project storage, users can use the HDD (described in Table 4).

Table 4. Storage Classes

Classes	Description	Target Use Case
Flash	0.35 Peta Byte Usable	Active datasets, real-time data ingestion, high-throughput I/O, rapid checkpointing during model training.
HDD	3.65 Peta Byte Usable	Massive raw training sets and general-purpose workspace requirements.

The general storage allocation for each accepted proposal (project) will be as follows (Table 4):

Table 5. Storage Allocation per Accepted Proposal (Project)

Space	Quota	Purpose	Retention
/home	30 GB	Configuration, source, small files	Project lifetime; not backed up
/scratch_f (flash)	10 TB	Active datasets, checkpoints, high I/O	Purged ~30 days after last_accessed_date
/scratch_h (HDD)	20 TB	Large working sets, general workspace	Project lifetime; backed up; purged ~30 days after project data retention period ends

Note: Storage allocation is granted per project, not per individual user. For instance, the flash storage cap applies to the project's total usage across all team members combined, not as a separate quota for each person. If a project has one PI and four team members, and its total allocation is 10 TB, that 10 TB is a shared pool. If one team member alone consumes 9 TB, only 1 TB remains available for the PI and the other three team members combined, regardless of how much each of them individually still needs. Team members should coordinate their storage usage throughout the project period to avoid one member's activity unintentionally exhausting the allocation available to the rest of the team.

7 Proposal Review Process

The AKF uses transparent peer review, following the practice of its precedent, including an administrative eligibility check, independent scientific and technical assessment, and a committee allocation decision.

7.1 General Process

- The AHSC may initiate AKF Utilization programs through an open call for thematic focus areas, and the open call program may be phased or run year-round.
- Prospective users must submit a formal proposal to the AHSC for evaluation.
- Evaluation Framework.**

AHSC evaluates proposals against three primary criteria:

- Usage Quota** – allocation must ensure inclusivity among AMS and fair usage for the host country. AMS inclusivity ensures that the allocation represents all member states, promoting regional advancement and the democratization of HPC access; Host nation allocation gives Indonesia a larger quota in recognition of its infrastructure hosting and operational support. The quota for the host nation (Indonesia) is 35% from total computing and storage resources. 65 % remaining are divided equally to the remaining ASEAN member states.

- ii. **Scientific Merit and Regional Collaboration** – reviewers assess originality, methodology, and collaboration across AMS and South Korea. Proposals must demonstrate alignment with the ASEAN Plan of Action on Science, Technology, and Innovation (APASTI) agenda.
 - iii. **Computing Resource Justification** – proposals must justify all requested computing and storage allocations against the AKF infrastructure specification.
- d. The review process applies only to proposals in the Junior, General, and Collaborative categories; Trial proposals, by contrast, undergo administrative screening only and do not require scientific review. For junior and general categories, review is conducted by a single AHSC member from the same country or member state as the PI. Every AHSC member serves as the first-line reviewer for proposals originating from their own country. It is based on their familiarity with the national research context and institutions involved. Proposals in collaborative categories are treated differently, considering the possibility of large resource allocations and involvement of multi-country scope. These proposals must undergo full scientific peer review and may also include external reviewers (AHSC members from different states or subject-matter experts from a country other than the applicants). This is to provide an independent, cross-national perspective appropriate to the scale of resources and number of AMS involved.
- e. Upon acceptance, AHLM will create a project group along with user accounts for the PI and team members and configure the allocated computing and storage resources and activation period in accordance with AHSC's decision.

7.2 Proposal Review Criteria

AHSC reviewers score each proposal against the following weighted criteria (Table 6). Weights are indicative and subject to ratification by the AHSC ahead of each open call; they may be adjusted per project category.

Table 6. Review Criteria

Criterion	Weight	What Reviewers Assess
Scientific Merit & APASTI Alignment	40%	Originality, methodological soundness, and alignment with the APASTI 2026–2035 priority research areas
Computing Resource Justification	25%	Whether the requested computing resource, storage resource, and duration are proportionate to and justified by the proposed methodology

AMS Inclusivity and Host-Nation Quota Fit	25%	Contribution to balanced representation across AMS—applied by the AHSC across the <i>whole pool</i> of proposals, not scored proposal-by-proposal in isolation
Regional / Korea Collaboration	10%	Extent of genuine collaboration between AMS, or between an AMS and Korea

Priority is given to research aligned with the ASEAN Plan of Action on Science, Technology and Innovation (APASTI) 2026–2035. The following priority research areas are identified in APASTI:

1. Artificial Intelligence, Data Science and Advanced Computing
2. Climate, Disaster Risk Reduction and Digital Twins
3. Health, Bioinformatics and Precision Medicine
4. Food Security, Smart Agriculture and Water Systems
5. Advanced Materials, Semiconductors and Manufacturing
6. Energy Transition and Net-Zero Technologies
7. Ocean, Marine Science and Blue Economy
8. Cybersecurity and Trusted Digital Infrastructure
9. Innovation, Technology Commercialization and Digital Economy
10. Regional HPC Infrastructure and Human Capacity Development

7.3 Conflict of Interest

The AHSC reviewer must recuse from any proposal where they are a team member, share an institution with the PI, have a close collaboration or supervisory relationship within the last three years, or have any personal interest. Where no alternative reviewer exists, the assigned AHSC reviewer must formally declare the absence of any direct conflict of interest. By default, all reviewers sign a confidentiality and conflict of interest declaration; reviews are anonymous to applicants.

7.4 Notification, Revision, and Resubmission

The PI will be notified of the outcome by the date stated in the relevant call and will receive summary feedback alongside the decision. Notification will be issued within **15 working days of the application deadline**. No revisions may be made to a proposal once submitted; however, a rejected proposal may be revised and resubmitted under a subsequent call.

8 Core Terms and Conditions of Usage

8.1 Purpose and Acceptable Use

The AKF is for peaceful scientific research, education, and non-commercial innovation. Industrial and applied-innovation projects are eligible where results serve public research or capacity-building; **while purely commercial production workloads, cryptocurrency mining, and any unlawful activity are prohibited**. A separate Acceptable Use Policy states the binding details, which all users accept digitally before account activation. The complete, legally binding terms and conditions of usage are disseminated through myAKF platform. All users must digitally accept the full terms prior to account activation and re-accept upon material revision of the terms.

8.2 Accounts and Credentials

Each user must observe the following rules during AKF utilization:

1. Access privileges and credentials (SSH keys, usernames, passwords, OTPs) are strictly personal and non-transferable.
2. Account sharing is prohibited; each user holds an individual account under the project.
3. Users must submit jobs through the batch scheduler and observe assigned quotas and queue limits.
4. Users must comply with all cybersecurity controls mandated by AKF.

8.3 Software and Licensing

Users are responsible for holding valid licenses for all proprietary software they run, and for complying with open-source license terms. AKF provides a curated software stack (provided in different documentation); user-installed software must not violate licenses, security policy, or export controls.

8.4 Acknowledgement

Publications, datasets, and other outputs arising from AKF use must acknowledge AKF, the host country (Indonesia), and the ASEAN-Korea cooperation framework.

“...We acknowledge the ASEAN-Korea HPC Facility in Indonesia for providing the computing resources that enabled this research...”

8.5 Consequences of Breach

Violations of terms, including data misclassification, unauthorized cross-border transfer, or misuse of allocated resources, are handled under the incident and enforcement procedure and may result in suspension of access or referral to the user’s home institution and national authority.

9 Data Management, Protection, and Intellectual Property

9.1 Responsibility and Classification

Users (PI and team members) are solely responsible for the legality, safety, and content of their data and for holding the rights to use it. Each user must classify data based on its category: public, internal, confidential, or restricted so that appropriate handling applies.

9.2 Protection and Cross-border Handling

Because the AKF hosts data from researchers across ASEAN on Indonesian soil, users and AHLM must comply with Indonesia's Personal Data Protection Law (UU PDP) and with applicable data-protection law in the user's jurisdiction. Personal and sensitive data should be minimized, and where possible anonymized or pseudonymized, before upload. Cross-border transfer obligations rest with the PI.

9.3 Retention and Deletion

AKF storage is for active computation and is not an archive. When a project reaches its end date, its accounts stop computing but retain data-management access: login, read, download, and deletion, with no job submission for a data-retention period of 90 days, during which users must migrate their data to external storage. At the end of this period, the project data is deleted, storage quota is released, and the account is deactivated. Only non-confidential project metadata is retained for reporting. Backups, where provided, are for operational recovery, not user archiving.

9.4 Intellectual Property

Intellectual property in research results belongs to the researchers and their institutions per their own arrangements. The AKF claims no ownership of user results. Users grant the AKF the right to record non-confidential project metadata (title, abstract, outputs) for reporting and impact assessment.

10 Roles and Responsibilities

Role	Responsibility
AHSC	Owns and approves data governance and operational framework; sets the classification standard; adjudicates cross-border and inter-institutional disputes; first point of contact for incidents involving that state's researchers; monitor and evaluate outputs and outcomes generated by the project.

Role	Responsibility
AHAC	Overseeing and establishing general guideline of scientific program and operational of the AKF.
AHLM	Oversees day-to-day compliance at the host facility; liaises with Indonesia's national data protection authority; approves physical/technical controls for AKF activities hosted in Indonesia; monitor and evaluate resource utilization.
KISTI	Ensures compliance with Korean data protection law where Korean researchers or infrastructure are involved.
User/Researcher	Classifies data accurately at submission; complies with acceptable use and retention rules; reports incidents within 24 hours of discovery; provides final reports.

11 Monitoring and Evaluation

The AHSC monitors and evaluates resource use and research outcomes. Users must submit: a short progress report before any extension; and a final report within 30 days of project end summarizing work done, resources used, and outputs. The AHLM provides utilization data and the AHSC compiles an annual scientific-program report to the PSC, including inclusivity metrics (allocation and usage by AMS), scientific outputs, and utilization efficiency.

12 Utilization Platform

A platform will be adopted or developed to facilitate the AKF utilization processes, including proposal submission, account provisioning, data intake and classification, and terms-of-use acceptance. To optimize resources and accelerate deployment, this platform may leverage the existing digital frameworks of ASEAN COSTI, KISTI, or Indonesia (BRIN).

13 Suspension, Sanctions, and Termination

The AHLM may suspend an account or project immediately to contain a security, legal, or resource-abuse risk. The AHSC may impose graduated sanctions for breaches of this Policy or the Acceptable Use Policy: warning, reduction or withdrawal of allocation, and, for serious or repeated breaches, exclusion of the user or institution from future calls. Sanctioned users may request an appeal, but misuse involving unlawful activity may be referred to the relevant authorities.

14 End of Project and Account Continuity

14.1 End of Project and Data Retention

On reaching its end date, a project stops computing and enters the 90-day data-retention period, during which its accounts allow data management only (no job submission). After that period the project data is deleted, allocations are closed, and the accounts are deactivated and set dormant.

14.2 Account Continuity and Reactivation

A dormant account is retained and may be reactivated without re-registration if the user is approved onto a new project within two (2) years of the project end date. On reactivation, the account is re-provisioned under the new project's allocation; previously deleted data is not restored. If no new project is approved within two years, the account is permanently closed, and the person must undergo initial user registration again. Accounts terminated for cause may be excluded from data retention and reactivation at the AHSC's discretion.

15 Amendment

This general policy is reviewed periodically and at least once per year. Amendments are proposed and adopted by the AHSC with AHAC input, take effect on publication, and are reported to the PSC. Changes do not retroactively reduce allocations already granted for a running project.