

Aurora Research Initiative (ARI)

Boundaries and Responsibilities (v1.0.0)

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ARI Boundaries and Responsibilities (v1.0.0)

This document formally defines the jurisdiction, responsibilities, and prohibitions governing the interaction between ARI, AWO, CRI-CORE, Waveframe Labs, and all Case Studies. It establishes the constitutional separation of powers required for long-term epistemic stability.

1. Purpose

The purpose of this document is to:

- prevent role bleeding between governance, method, engine, and applications
- mandate strict separation of authority
- ensure each subsystem operates within its allowed scope
- codify prohibitions that preserve epistemic integrity
- provide a binding reference during audits and future development

This document is legally binding within the Aurora Research Initiative governance framework.

2. ARI — Governance and Epistemic Authority

2.1 Responsibilities

ARI is responsible for:

- defining epistemic doctrine
- setting governance rules
- establishing metadata and provenance standards
- defining constraints for AWO and CRI
- approving structural changes to the ecosystem
- maintaining the institutional roadmap
- ensuring independence of validation

2.2 Explicit Prohibitions

ARI may **not**:

- implement method logic
- implement deterministic execution
- interpret scientific data or claims
- build tooling or workflows
- execute research workflows
- validate its own changes (requires log + review)

ARI governs.

ARI does not build.

3. AWO — Method and Workflow Framework

3.1 Responsibilities

AWO is responsible for:

- implementing ARI's procedural doctrine
- providing workflow-based reproducibility
- orchestrating reasoning steps
- handling metadata extraction (temporary until CRI takes over)
- producing transparent, auditable processes

3.2 Explicit Prohibitions

AWO may **not**:

- create or modify epistemic rules
- approve its own governance changes
- interpret scientific correctness
- embed deterministic enforcement
- override provenance or metadata obligations
- perform attestation or identity-binding
- bypass ARI constraints

AWO executes method.

AWO does not govern, enforce, or validate.

4. CRI-CORE — Deterministic Execution and Enforcement Engine

4.1 Responsibilities

CRI-CORE is responsible for:

- enforcing deterministic execution
- validating artifact integrity
- performing identity binding
- performing attestation independence checks
- running workflows without interpretation
- ensuring reproducible environmental capture

4.2 Explicit Prohibitions

CRI-CORE may **not**:

- interpret scientific or logical meaning
- alter workflow logic
- embed epistemic or governance rules
- approve or reject research claims
- modify metadata definitions
- act as a reasoning engine
- perform any method-level decision making

CRI enforces.

CRI does not reason, decide, or govern.

5. Waveframe Labs — Engineering and Implementation

5.1 Responsibilities

Waveframe Labs is responsible for:

- developing tools, engines, methods, simulators, and demos
- implementing AWO and CRI under ARI governance
- maintaining repositories
- performing engineering tasks
- creating case studies and applied demonstrations

5.2 Explicit Prohibitions

Waveframe Labs may **not**:

- define epistemic rules
- override ARI governance
- modify ARI doctrine or metadata policy
- collapse method and engine into one subsystem

- execute or approve governance-level decisions

Waveframe Labs builds under ARI authority.

6. Case Studies – Applied Research

6.1 Responsibilities

Case studies:

- apply AWO workflows
- run under CRI-CORE enforcement
- produce reproducible scientific artifacts
- demonstrate the validity of the Aurora ecosystem

6.2 Explicit Prohibitions

Case Studies may **not**:

- alter any governance or epistemic rules
- modify method logic
- modify deterministic engine behavior
- bypass provenance or metadata obligations
- self-govern under any circumstances

Case studies demonstrate.

They do not govern, interpret, or enforce.

7. Interfaces and Permissions

Layer	Can Modify	Cannot Modify
ARI	governance, doctrine, constraints	method logic, CRI internals
AWO	workflow code, method execution	governance, epistemics, CRI enforcement
CRI-CORE	deterministic execution engine	workflow logic, epistemics, governance
Waveframe Labs	tooling, demos	ARI doctrine, governance
Case Studies	applied research	any core system

8. Forbidden Cross-Layer Interactions

The following interactions are formally forbidden:

- AWO interpreting or approving governance
- CRI implementing method logic
- Waveframe Labs modifying ARI doctrine
- Case studies altering any upstream subsystem
- ARI performing execution
- Any layer self-approving structural changes
- Any silent or undocumented modifications
- Any bypass of provenance or metadata policy

Violations represent governance failures.

9. Revisions

All revisions require:

1. Approval by the ARI Institutional Coordinator
2. Governance log entry
3. Version increment
4. Backward linkage
5. Rationale included in the log

No silent changes permitted.
