Aurora Research Initiative (ARI)

ARI Institutional Coordinator

Boundaries and Responsibilities (v1.0.0)

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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.

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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.

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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.

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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.

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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.

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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.

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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.

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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

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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.

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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.
