

# Aurora Research Initiative (ARI)

ARI Institutional Coordinator

## Change Control and Versioning Policy (v1.0.0)

**Author:** Shawn C. Wright

**Affiliation:** Waveframe Labs — Independent Open-Science Research Entity

**ORCID:** 0009-0006-6043-9295

**Creation Date:** 2025-11-27

**Concept DOI:** <https://doi.org/10.5281/zenodo.17743096>

This document defines the **binding governance rules** for versioning, release control, and institutional change management across the Aurora Research Initiative (ARI), Aurora Workflow Orchestration (AWO), CRI-CORE, Waveframe Labs, and all Case Studies.

It establishes a **dual-versioning model** and mandates **global release tagging** for every version change, ensuring reproducibility, auditability, and long-term institutional stability.

---

### 1. Purpose

The purpose of this policy is to:

- prevent uncontrolled evolution of any subsystem
- enforce version discipline across all institutional layers
- define authoritative rules for version increments
- ensure every change is traceable and documented
- bind AWO and CRI evolution to ARI governance
- enable independent subsystem evolution without coupling
- maintain long-term reproducibility and provenance

This is a constitutional governance document and is binding for all contributors.

---

### 2. Dual Versioning Model

The Aurora ecosystem uses **independent versioning** for each subsystem, plus a **required global release tag** for every change.

## 2.1 Subsystem Versions

Each subsystem maintains its own semantic version:

- ARI\_VERSION
- AWO\_VERSION
- CRI\_VERSION
- LABS\_VERSION (optional)

- CASE\_STUDY\_VERSION (per project)

Each follows MAJOR.MINOR.PATCH.

## 2.2 Global Ecosystem Release Tag (Required)

Every version change **must** produce a unified global tag in the format:

ARI-x.y.z\_AWO-a.b.c\_CRI-d.e.f\_LABS-l.m.n\_CSNAME-u.v.w

This tag becomes the canonical provenance record for the entire ecosystem.

The tag is required **regardless of which subsystem changed**.

---

### 3. What Constitutes a Version Change

## 3.1 ARI Version Changes

Trigger MAJOR or MINOR bumps for:

- governance doctrine changes
- constraint modifications
- metadata or provenance rules
- role definitions
- institutional policy updates

PATCH for clarifications only.

---

## 3.2 AWO Version Changes

Trigger MAJOR or MINOR bumps for:

- workflow logic changes
- structural modifications
- metadata extraction behavior
- reasoning chain architecture
- enforcement of new method rules

PATCH for documentation-only fixes.

---

## 3.3 CRI Version Changes

Trigger MAJOR or MINOR bumps for:

- deterministic engine changes
- identity/attestation logic
- integrity validation behavior
- execution environment capture rules

PATCH for non-executable changes or comments.

---

## 3.4 Labs Version Changes

Trigger for: - new demos  
- engineering utilities  
- non-governance infrastructure

---

## 3.5 Case Study Version Changes

Each case study is versioned independently.

---

### 4. Change Classes

## 4.1 Breaking Change

A change that: - invalidates prior assumptions  
- alters subsystem guarantees  
- impacts reproducibility or determinism  
- modifies governance or subsystem contracts

Requires:

- MAJOR bump
- governance log entry
- IC approval
- new global release tag

## 4.2 Non-Breaking Change

Adds new features without violating constraints.

Requires:

- MINOR bump
- governance log entry
- new global release tag

## 4.3 Clarification Change

Documentation-level updates with **no impact** on logic or execution.

Requires:

- PATCH bump
- governance log entry
- new global release tag

## 4.4 Deprecated / Retired

Subsystems, documents, or versions may be retired but must remain accessible.

Requires:

- MAJOR or MINOR bump
  - deprecation notice
  - governance log entry
- 

## 5. Approval Workflow

All version changes require:

1. **ARI Institutional Coordinator approval**
2. **Governance log entry**
3. **Provenance verification**
4. **Metadata normalization (if applicable)**
5. **Doc Guard pass**
6. **Creation of a Global Ecosystem Release Tag**

No subsystem may approve its own version changes.

---

## 6. Release Cycle Requirements

Before any release:

- metadata must be valid and normalized
- provenance must be verified
- deterministic execution must pass for CRI changes
- reasoning-chain auditability must pass for AWO changes
- integrity hashes must be regenerated
- changelogs must be updated
- no silent modifications permitted

Releases are not allowed without complete compliance.

---

## 7. Special Rules

- ARI changes force **all** subsystems to re-anchor via a global release tag.
  - AWO may not trigger ARI version changes.
  - CRI may not alter AWO or ARI versioning.
  - Labs changes cannot modify upstream subsystem versions.
  - Case Studies may version themselves independently.
  - No circular dependencies permitted.
- 

## 8. Deprecation & Retirement Policy

Artifacts may be deprecated but must remain:

- accessible
- reproducible
- traceable
- versioned

Retirement requires explicit governance documentation.

---

## 9. Revision Rules

All revisions require:

1. ARI IC approval

2. Governance log entry
3. Version increment
4. Backward linkage
5. Rationale included

No silent revisions permitted.

---

© 2025 Waveframe Labs — Independent Open-Science Research Entity • Governed  
under the Aurora Research Initiative (ARI)