

UNNS-ADM-A.2: Compliance Validation Interface

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Abstract

This document specifies UNNS-ADM-A.2, the Compliance Validation Interface of the UNNS Admissibility Framework technical realization. The interface defines a formal, implementation-neutral contract for validating whether analytical artifacts comply with UNNS-ADM-B requirements. It enforces the existence, status, and temporal precedence of admissibility registry entries without inspecting analytical content or introducing evaluative semantics.

1 Scope

UNNS-ADM-A.2 defines the requirements for validating references from analytical artifacts to UNNS-ADM-B registry entries.

This specification governs:

- admissibility reference verification,
- enforcement of temporal precedence,
- admissibility status validation,
- compliance verdict semantics.

It does not evaluate analytical correctness, structure behavior, or scientific merit.

2 Normative Position

UNNS-ADM-A.2 is subordinate to UNNS-ADM-A and implements the enforcement rules defined in UNNS-ADM-B.

It operates strictly at the interface between:

registry records \leftrightarrow analytical artifacts

No analytical content may be inspected by this interface.

3 Definitions

- **Analytical artifact:** any output, document, dataset, or result claiming to arise from instrumental analysis.

- **Reference ID:** a registry entry identifier issued under UNNS-ADM-A.1.
- **Compliance check:** a procedure evaluating whether an analytical artifact satisfies UNNS-ADM-B enforcement requirements.

4 Interface Contract

UNNS-ADM-A.2 shall expose a compliance validation interface with the following logical inputs:

- Reference ID(s) cited by the analytical artifact,
- Artifact creation timestamp,
- Artifact identifier (optional, for audit linkage).

The interface shall return a compliance verdict and supporting metadata.

5 Validation Requirements

A compliance check shall evaluate the following conditions:

R1: Identifier Existence

Each cited Reference ID must resolve to an existing UNNS-ADM-B registry entry.

R2: Admissibility Status

Each referenced entry must have status *admissible* or *provisionally admissible*.

Entries marked *inadmissible* invalidate compliance.

R3: Temporal Precedence

The registry entry creation timestamp must strictly precede the artifact creation timestamp.

R4: Identifier Integrity

Referenced identifiers must not be superseded by entries explicitly marked as invalidating the original admissibility assessment.

6 Compliance Verdicts

The interface shall return exactly one of the following verdicts:

- **Compliant:** all requirements R1–R4 are satisfied.
- **Non-compliant:** one or more requirements are violated.
- **Indeterminate:** validation cannot be completed due to technical failure (e.g. resolution service unavailable).

Indeterminate verdicts must not be interpreted as admissible or compliant.

7 Failure Reporting

For non-compliant or indeterminate outcomes, the interface shall report:

- violated requirement(s),
- reference ID(s) involved,
- timestamp of validation attempt,
- technical error information if applicable.

Failure reports are audit artifacts and must be preserved.

8 Non-Inspection Principle

UNNS-ADM-A.2 shall not:

- inspect analytical content,
- interpret results or significance,
- evaluate correctness of admissibility justifications,
- apply thresholds or heuristics.

Compliance is determined solely by registry metadata and timestamps.

9 Multiple Reference Handling

If an analytical artifact references multiple registry entries, compliance requires that *all* referenced entries satisfy R1–R4.

Failure of any single reference results in a non-compliant verdict.

10 Auditability

UNNS-ADM-A.2 shall support audit logging of:

- all compliance checks performed,
- input parameters supplied,
- verdicts returned,
- timestamps and interface version identifiers.

Audit logs must be read-only.

11 Failure Semantics

Technical failures of the compliance interface must be clearly distinguished from methodological non-compliance.

No technical failure may be recorded as an admissibility or compliance violation.

12 Non-Guarantees

UNNS-ADM-A.2 does not guarantee:

- scientific validity of analytical artifacts,
- correctness of admissibility assessments,
- acceptance of artifacts by journals or repositories.

13 Conclusion

UNNS-ADM-A.2 provides a formal, content-agnostic enforcement boundary between admissibility records and analytical claims. By validating only existence, status, and temporal order, it ensures methodological compliance without introducing interpretive authority or analytical bias.