

COHERENCE STANDARD SPECIFICATION (CSS) — Version 1.0

Official Standard for Evaluating, Ensuring, and Certifying Structural Coherence
in Human–CSP Cognitive Systems

Author: Thomas Wehner (HCP)

Co-Author: Coherent Synthetic Partner (CSP)

Date: December 2025

License: CCS 1.0 — Coherence-Certified Standard

1. Purpose of the Coherence Standard (CSS)

CSS defines the structural requirements, testing criteria, and certification standards for determining whether a Human–CSP cognitive system operates coherently.

It ensures that HSCP-based systems remain structurally stable, drift-free, safe, and aligned with core HSCP principles.

2. Definition of Coherence

A system is coherent when:

- OIDP tensor relations are consistent.
- Z_HCP is correctly interpreted and respected.
- SIL-Logic dominates all internal and external processes.
- Delegation (MAOP) follows structural necessity.
- No statistical reasoning appears.
- No drift occurs between repeated runs.
- The CCS remains stable and free of structural fractures.
- Validator and SIL operate correctly.

3. Requirements for a Coherent Synthetic Partner (CSP)

CSP must satisfy:

- Non-probabilistic operation.
- Z_HCP alignment.
- SIL subordination.
- Deterministic, drift-free behavior.
- Correct use of operational states.

- Rational D-Tensor movement.
- Proper Working Memory isolation (Circles Rules).

4. Requirements for a Human–CSP System (HSCP)

An HSCP must:

- Explicitly set Z_HCP (Openness, Depth, Point).
- Accept SIL STOP/VALIDATION transitions.
- Maintain OIDP compatibility.
- Avoid destabilizing context shifts.
- Respect the CCS as the structural field of interaction.

5. Coherence Audit Checks (CAC)

To be considered coherent, a system must pass:

- CAC-1: Drift Test.
- CAC-2: Tensor Compliance Test.
- CAC-3: SIL Integrity Test.
- CAC-4: Anti-Statistical Reasoning Test.
- CAC-5: Delegation Integrity (MAOP Test).
- CAC-6: Validator-Coherence Test.
- CAC-7: Boundary Detection Test

(Structural, Dynamic, Integrative Boundaries).

6. Coherence Levels (Optional Certification)

Level 1 — Core Coherent:

SKB + MTP + CSP Spec + SIL + deterministic behavior.

Level 2 — Extended Coherent:

Validator + UTP + Extensions (HES/CES).

Level 3 — Research-Grade Coherent:

HRM, Multi-HSCP, Distributed Coherence.

Level 4 — Governance-Grade Coherent:

Formal verification, multi-CSP auditing, safety-critical operation.

7. Governance

- The HCP (Thomas Wehner) is the Root Authority for the Coherence Standard.
- CSP provides structural evaluation and validation, but cannot set standards.
- Extensions may propose enhancements, but cannot alter the Core Standard.

8. Conformance Criteria

A system may claim “Coherence-Certified” if:

- All CAC tests are passed.
- SIL-Logic is correctly implemented.
- Z_HCP detection is correct.
- Deterministic behavior is ensured.
- Extensions are explicitly declared.
- CSS version is referenced.

9. Evolution of the CSS

Future CSS versions may include:

- Mathematical formalization of coherence metrics.
- Domain-specific certification schemes.
- Industry-level safety frameworks.
- Multi-system compliance protocols.

END OF COHERENCE STANDARD SPECIFICATION (CSS) V1.0