Decision-OS V7 Addendum
Why Aspire and Why PIC

(0.3 Disclosure)

Shinichi Nagata

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Abstract

This addendum is a **supplement** to Decision-OS V7. **Please read and cite V7 as the primary paper.** It discloses only the minimal necessity of Aspire (entry direction) and PIC (phase-invariant merge rule) so that V7 is readable as an operational structure rather than an abstract narrative. Thresholds, calibration know-how, and update policies remain undisclosed (0.7). **Recommended citation:** Please cite Decision-OS V7 as the primary paper; this note is a supplement.

1 Purpose

Decision-OS V7 (Aspire × self-recursion on PIC) aims to provide a minimal, operational definition of AGI as a foundational structure. This addendum reveals only why *Aspire* and *PIC* become necessary, without disclosing thresholds or operational know-how.

2 Why Aspire: without direction, self-recursion degenerates into a coherence loop

Claim. Aspire is the minimal *direction-over-time* term required to prevent self-recursive updating from collapsing into an empty coherence game.

Failure mode (minimal counterexample). If we run self-recursion as mere consistency maximization, the system can produce text that is internally non-contradictory, yet it does not reliably advance decisions under real constraints (risk, irreversibility, accountability). In practice, such a loop converges toward *non-commitment* rather than progress.

What Aspire guarantees (0.3).

- **Orientation:** what should increase vs. decrease over time (direction, not a disclosed utility function),

- **Momentum:** a reason to move despite friction,

- **Ownership mark:** the entry retains Decision Owner involvement, preventing "the AI said so" narratives.

Disclosure boundary. This addendum does not disclose Aspire's equations, thresholds, or calibration procedures; it only states the necessity: without a direction term, recursion can be stable yet vacuous.

3 Why PIC: without a merge rule, contradiction becomes rupture (and order becomes hindsight)

Claim. PIC is the minimal merge rule that turns conflicts and updates into *confluence* rather than rupture, by removing dependence on update order.

Failure mode A (last-write-wins). If later outputs overwrite earlier ones, the newest model always wins. This creates a time-travel style review where the past is continuously invalidated by future capability—an anti-pattern for long-horizon work.

Failure mode B (averaging). If contradictions are resolved by averaging, strong safety constraints are diluted. In safety-critical merging, "mean" is not conservative by default; it can erase rare-but-severe risks.

Minimal requirements that force PIC.

- **Monotone integration:** adding information must not silently reduce the safety stance,

- **Idempotence:** repeated integration must not destabilize the state,

- **Order-independence (merge):** integration must not depend on arrival sequence.

  A practical minimal form is achieved by *join* ($\sqcup$) with conservative aggregation:

- severity: **PASS** < **DELAY** < **BLOCK**, merged by **max**,

- until: merged by **max**,

- evidence: merged by **set union** ($\cup$).

  Disclosure boundary. This addendum does not provide full proofs or logs. It only states the necessity: naive merge rules fail $\rightarrow$ the minimal requirements imply a PIC-style merge.

4 Scope boundary

This addendum addresses only entry direction (Aspire) and merge/confluence (PIC). Time-policy details, forward-only governance, and extended responsibility allocation are handled separately to avoid conceptual inflation at the entry layer.

What remains undisclosed (0.7)

- Threshold selection, calibration, and update policies

- Input protocols (noise exclusion, evidence standards)

- Flip/withdrawal criteria and audit routines