AOS-10 - Asset Intelligence

Document: aos-10-asset-intelligence · Source revision or record: v0.5 functional baseline, editorial edition 29 October 2026

AOS Specifications v1.0 · Edition dated 3 November 2026

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Editorial edition - 29 October 2026: Mark authorised documentary corrections D-01-09. This edition reconciles navigation, count/revision pointers, conformance links and historical scope labels; existing technical meanings, requirement/IF/decision identities and proposed/planned status are retained. The internal version below identifies the retained functional baseline; this dated editorial edition identifies the corrected document. See the current document inventory (../Supporting-Specifications/aos-current-document-inventory-2026-10-29.md) and correction record (../Supporting-Specifications/aos-documentary-corrections-2026-10-29.md). Earlier dated adoption baselines are historical snapshots; exact logical family/view revisions are in Exchange Register §4.

Table row 1
Document control: Identifier / version / date
Value: AOS-10 / 0.5 / 9 October 2026

Table row 2
Document control: Status
Value: Functional specification review draft; proposed requirements; verification planned, not executed

Table row 3
Document control: Architecture baseline
Value: AOS-00/Map v0.44; DEC-001-097; AOS-10v0.5/20v0.6/22v0.5/24v0.4/25v0.3/40v0.8; other components unchanged; Sharedv0.20/Corev0.6/Registerv0.19/Matrixv0.20; acceptance annexv0.2; reviewv0.3.

Table row 4
Document control: Current component baseline
Value: AOS-00/Map v0.44; DEC-001-097; AOS-10v0.5/20v0.6/22v0.5/24v0.4/25v0.3/40v0.8; other components unchanged; Sharedv0.20/Corev0.6/Registerv0.19/Matrixv0.20; acceptance annexv0.2; reviewv0.3.

Table row 5
Document control: Common baseline
Value: AOS-00/Map v0.44; DEC-001-097; AOS-10v0.5/20v0.6/22v0.5/24v0.4/25v0.3/40v0.8; other components unchanged; Sharedv0.20/Corev0.6/Registerv0.19/Matrixv0.20; acceptance annexv0.2; reviewv0.3.

Table row 6
Document control: Governing source / quality baseline
Value: Preserved source manifest; FP v4; RP v6; Governance Intelligence Tests; AOS-QS v0.1; component template v0.4

Table row 7
Document control: Project owner / specification custodian

Value: Mark Sweeny

Table row 8
Document control: Accountable operating owner
Value: Asset service owner; organisational appointment pending; competent inspection/building-safety and statutory dutyholders are separate roles

Table row 9
Document control: Author / reviewers
Value: Codex at Mark's request; author structural and consistency checks; Mark functional review pending; independent project review deferred

Table row 10
Document control: Approval / readiness
Value: Existing approved directions guide drafting; exact requirements proposed; no whole-document approval, G3/G4, operating activation or conformance claimed

Table row 11
Document control: Release scope
Value: Asset functional architecture; repair demonstration allocation; exact executable release/profile scope not yet authorised

Table row 12
Document control: Change history
Value: 0.3 - reciprocal AOS-13 v0.1 references and current architecture baseline only; original REQ/VER text, IDs and status retained. 0.2 supplier participation redraft at Mark's request, 8 October 2026; REQ-049 / VER-034 added; original IDs retained; 0.1 initial functional draft; no new constitutional decision, approved IF family, technology selection or numerical default

1. Purpose and scope

Asset Intelligence provides an evidence-grounded account of the physical homes, buildings and components for which the organisation has responsibilities. It makes condition, missing knowledge, developing physical risks and the effects of maintenance legible to service teams and governance. Without it the organisation cannot distinguish a known physical condition from an incomplete record, inferential forecast or administrative work status.

Its intended outcome is a Living Asset Register that links attributable observation to interpreted condition, proposed intervention, human-authorised action and actual outcome. A safe or completed label must have the evidence required for that exact claim. Missing telemetry must remain visible while inspection, resident reporting and manual service continue through permitted routes.

Scope covers property/component identities and relationships; physical inspections, reports and telemetry; coverage/freshness; uncertain condition and maintenance analysis; physical-risk referrals; repair promise/completion evidence; investment-planning inputs; governed building-safety information; actual consequence feedback; and its own external adaptation research. Continuous sensing is an optional implementation capability, not a universal requirement to install sensors in every home.

AOS-10 is one of five sensing domains. It does not own resident profiling/contact delivery (11), staff matters (12), work orchestration/overdue detection and duty tracking (13), external retrieval/exchange (14), cross-domain synthesis (22) or human decisions (30). It cannot replace competent physical assessment, determine statutory liability, automatically allocate capital or treat physical signals as implicit permission to infer residents' conduct. Digital-twin modelling is optional; a 3D model is not necessary to satisfy this functional specification.

2. Authority and sources

FP v4 and RP v6 govern; approved architecture decisions constrain interpretation. Books explain intent. Requirements below are proposed engineering obligations, not new approved decisions. External sources provide dated research evidence and require

competent applicability mapping; a guidance page is not itself an organisational authority grant.

Table row 1
Source key: ARCH
Exact source / derivation and use: AOS-00 v0.33 §§3.1/4.2/6/9, REQ-041-044 and VER-019; Specification Map §4 AOS-10; v0.34 adds this allocation only

Table row 2
Source key: FP / RP / GT
Exact source / derivation and use: FP v4 principles 1-10; RP v6 domains 1-9, especially domain 3 Golden Thread and 9 Sensing; all 29 GT tests allocated in Appendix A

Table row 3
Source key: B4
Exact source / derivation and use: Book 4, Asset Intelligence chapter: physical condition, Living Asset Register, telemetry/manual evidence, early warning, investment and building safety; explanatory, not current legal/product authority

Table row 4
Source key: QS
Exact source / derivation and use: AOS-QS v0.1, QS-04-28; component template v0.4 including required §4.4

Table row 5
Source key: DATA
Exact source / derivation and use: AOS-02 v0.8 §§5/6/10; Core v0.6 REC-E/Q/A/D/X; Shared v0.15; Register v0.14; DEC-045-048

Table row 6
Source key: CONTROL
Exact source / derivation and use: AOS-01/03/04/05 v0.8; Control Coordination v0.2; Protected Reporting and Recovery v0.1; DEC-028-030/042-044/049-061/067-078

Table row 7
Source key: REPAIR
Exact source / derivation and use: DEC-036-041; Operational Profiles v0.1 §§4/5; 30 v0.5 repair duties; 40 v0.2 VER-007-010

Table row 8
Source key: RESEARCH
Exact source / derivation and use: DEC-086; 04 CON-009; 02 CON-007 / RSVIEW-0.1; 01 §10.8; 14 retrieval; 13 coordination; 30 human disposition

Table row 9
Source key: GI
Exact source / derivation and use: 20-25 current versions above; source-assured inputs, canonical analysis, presentation and oversight; DEC-088-091

2.1 External research used in this draft

Access/verification date: 8 October 2026. Brief summaries record the architectural implication only; full source text and legal mapping remain separate. No numeric statutory deadline, blanket compliance claim or vendor commitment is imported.

Table row 1
Key: EXT-01
Primary source / status / bounded implication: Regulator of Social Housing: Safety and Quality Standard (https://www.gov.uk/government/publications/safety-and-quality-standard), England, published standard; §2.1.1 individual-property physical assessment and §2.3 repair communication support attributable physical evidence and clear repair records. Operational applicability/assurance requires competent human mapping.

Table row 2
Key: EXT-02
Primary source / status / bounded implication: Building Safety Regulator: keeping higher-risk building information - golden thread (https://www.gov.uk/guidance/keeping-information-about-a-higher-risk-building-the-golden-thread), guidance, stage/dutyholder-specific; informs current, secure, usable information and evidenced handover. A generic asset register cannot establish fulfilment of every statutory information duty.

Table row 3
Key: EXT-03
Primary source / status / bounded implication: Awaab's Law guidance for social landlords (https://www.gov.uk/government/publications/awaabs-law-guidance-for-social-landlords), England, current Phase 1 guidance collection, accessed 8 October; relevant hazard awareness, investigation and work evidence must be distinguishable from resident-promised dates. Actual regulations and applicability control legal conclusions.

Table row 4
Key: EXT-04
Primary source / status / bounded implication: Awaab's Law Phase 2 guidance (https://www.gov.uk/government/publications/awaabs-law-phase-2-guidance-for-social-housing-landlords/awaabs-law-phase-2-guidance-for-social-landlords), non-statutory guidance; expanded requirements take effect 30 November 2026, future at this draft date. Research must preserve effective-date standing rather than activate future rules early.

Table row 5
Key: EXT-05
Primary source / status / bounded implication: MHCLG: delivering a data standard to support Awaab's Law (https://mhclgdigital.blog.gov.uk/2025/08/20/delivering-a-data-standard-to-support-awaabs-law-in-social-housing/), government development account, 20 August 2025; property/investigation/work-order/appointment relationships are mapping candidates. DEC-048 retains HACT as preferred reference for assessment; exact released version, licence, mappings and conformance remain unapproved. Direct HACT page retrieval was unavailable; this is not evidence of latest HACT definitions.

England-specific sources are not silently generalised across jurisdictions or tenures. The source manifest remains unchanged. Book forecasts, supplier examples and market claims do not become guarantees of predictive accuracy, legal compliance or investment return.

3. Responsibilities and context

Table row 1
Responsibility: Physical evidence and condition
AOS-10 contribution / authoritative counterpart: Asset owner/competent inspectors steward domain meaning; 02 owns shared record semantics; 14 owns supplier/external intake; 03 controls permitted use

Table row 2
Responsibility: Coverage and risk
AOS-10 contribution / authoritative counterpart: 10 exposes observed/unobserved physical scope and bounded risks; 13 routes duty; 30 supports empowered human response; 22 synthesises across domains

Table row 3
Responsibility: Repairs
AOS-10 contribution / authoritative counterpart: 10 supplies promise/completion/condition evidence; 13 compares dates and orchestrates accepted duties; 11 governs resident participation/agreed channels and delivery; 30 records authorised human decisions

Table row 4
Responsibility: Investment
AOS-10 contribution / authoritative counterpart: 10 supplies condition/scenario inputs; 22 prepares alternatives; 30 supports human approval; expenditure authority comes from 01 and the organisation's approved instruments

Table row 5
Responsibility: Building-safety information
AOS-10 contribution / authoritative counterpart: 10 supports evidence custody and gap reporting with 02/03/14; statutory dutyholders retain legal duties; board governance accountability is separate

Table row 6
Responsibility: Research
AOS-10 contribution / authoritative counterpart: Assigned agent/shared service researches this specialist remit through 14; 10 owns relevance; 13 tracks handoff; 30/01 retain disposition/amendment powers

Trust boundaries include resident/home to device or inspector, supplier to admitted evidence, raw evidence to probabilistic interpretation, component to shared controls, internal to external disclosure, and software support to human judgement. Housing-management/asset systems, contractor feeds and sensors are candidate sources; none is authoritative for every fact merely by being connected.

3.1 Supplier participation and functional realisation

AOS responsibilities are logical functions, not mandatory separate products. Existing supplier sensors, connectivity, cloud services, analytics, case management, portals and apps can implement relevant parts of the architecture. A supplier can provide observations only, observations plus interpreted findings, or a combined service that realises several component functions. The organisation need not duplicate capable supplier software merely to give every AOS component its own application.

The integration question is: which exact obligations does each supplier service fulfil, what evidence and governed records does it provide, where are controls enforced, and what remains with other systems or humans? A supplier's risk interpretation can be admitted as an attributed analytical finding with method/version/limitations; AOS does not require it to be re-created internally. Where evidence cannot be exported, an accessible controlled reference and permitted review path must still support the declared obligation; an inaccessible dashboard label cannot alone prove conformance.

Table row 1
Supplier offering: Environmental/asset sensors and device status
Candidate AOS function / view: 10 FUN-001/002; CON-001/002
Evidence and boundary to demonstrate: Physical quantity/unit, device/property/component identity, observed time, provenance, quality and lost coverage; no implicit resident behaviour inference

Table row 2
Supplier offering: Gateway, cloud collection and connectors
Candidate AOS function / view: 14 intake/exchange; 02 admission; 05 runtime/security
Evidence and boundary to demonstrate: Authenticated source, delivery/ordering/duplicate semantics, integrity, outage visibility and governed purpose/access

Table row 3
Supplier offering: Supplier condition/risk analytics
Candidate AOS function / view: 10 FUN-003; CON-002/003
Evidence and boundary to demonstrate: Observation versus derived finding, supporting evidence, exact analytical version, uncertainty, evaluated scope and referral meaning

Table row 4
Supplier offering: Asset portal/register/reporting
Candidate AOS function / view: 10 FUN-002; CON-002/005; relevant GI rendering interfaces
Evidence and boundary to demonstrate: Coverage/currentness/lineage and permitted readable views; no complete safety or institution-wide governance claim from dashboard colour

Table row 5
Supplier offering: Maintenance/case-management platform

Candidate AOS function / view: 13 workflow plus 10 CON-003/004 and 30 human decision support
Evidence and boundary to demonstrate: Accepted owner, original promise, work scope, actual completion evidence, exceptions, duplicate/retry reconciliation and human approvals

Table row 6
Supplier offering: Resident application/communications
Candidate AOS function / view: 11 participation/delivery with 10 evidence and 13 tracking
Evidence and boundary to demonstrate: Agreed channels, accessible alternatives, purpose/use checks, challenge/correction and distinct delivery/acceptance/service outcomes

Table row 7
Supplier offering: Building-information repository
Candidate AOS function / view: 10 FUN-006; CON-006; 02/03/14 custody/access/transfer
Evidence and boundary to demonstrate: Current category inventory, exact versions/gaps, dutyholder scope, secure access and separate usable handover confirmation

Participation arrangements may include a standalone operational portal with governed manual/reference exchange, API/event integration with existing systems, or a combined supplier platform spanning functions. Each is assessed against its declared scope: a manual exchange does not meet an automated-service claim, and an API's existence does not prove its fields, permissions or reliability satisfy the AOS contracts. The same named source of truth and authority rules apply whichever arrangement is used. Avoid competing case masters: declare the authoritative record for each meaning and the correction/reconciliation route.

Suppliers may meet some obligations directly, others through configuration or integration, and leave some outside their scope. Compliance is evaluated per exact requirement and assembled release, not awarded to an entire product from broad capability resemblance. The organisation and humans retain their accountable and reserved duties regardless of hosting or supplier branding. §18 provides an illustrative mapping; §20 provides the response matrix.

4. Capabilities and functions

4.1 Capabilities

Table row 1
CAP: AOS-10-CAP-001
Outcome / requirement range: Attributable physical asset evidence and Living Asset Register; REQ-001-010/048

Table row 2
CAP: AOS-10-CAP-002
Outcome / requirement range: Bounded early warning and accepted physical-risk/service handoff; 011-012/020-022

Table row 3
CAP: AOS-10-CAP-003
Outcome / requirement range: Resident-promise and actual repair evidence; 013-019/032

Table row 4
CAP: AOS-10-CAP-004
Outcome / requirement range: Investment and governance inputs with uncertainty and human judgement preserved; 023/044

Table row 5
CAP: AOS-10-CAP-005
Outcome / requirement range: Governed building-safety information and usable transfer; 024-027/047

Table row 6

CAP: AOS-10-CAP-006
Outcome / requirement range: Permitted, secure, correctable and recoverable operation; 028-038/045-046

Table row 7
CAP: AOS-10-CAP-007
Outcome / requirement range: Specialist external research and human-governed adaptation; 039-043

Table row 8
CAP: AOS-10-CAP-008
Outcome / requirement range: Attributable supplier participation and implementation coverage; 049

4.2 Functions

Table row 1
FUN: AOS-10-FUN-001 Admit observation
Trigger → inputs → behaviour/output / authority and failure: Permitted source event → scope/provenance/use checks → admitted evidence or explicit rejection/quarantine; never convert unknown identity into certainty; CAP-001/006, CON-001

Table row 2
FUN: AOS-10-FUN-002 Maintain register
Trigger → inputs → behaviour/output / authority and failure: Evidence/correction/freshness change → source-assured observations and coverage → versioned condition view; conflicts/gaps preserved; CAP-001, CON-002

Table row 3
FUN: AOS-10-FUN-003 Analyse and refer
Trigger → inputs → behaviour/output / authority and failure: Approved analytical trigger → bounded evidence/rule → inference, forecast or physical-risk referral; uncertainty and human route explicit; CAP-002/004, CON-003/005

Table row 4
FUN: AOS-10-FUN-004 Supply repair evidence
Trigger → inputs → behaviour/output / authority and failure: Repair/promise/work evidence change → original promise and completion rule → controlled classifications supplied to Process; unknown/partial/disputed paths distinct; CAP-003, CON-004

Table row 5
FUN: AOS-10-FUN-005 Prepare scenarios
Trigger → inputs → behaviour/output / authority and failure: Authorised planning request → condition/resource/assumption inputs → non-binding alternatives and distributional consequences; no capital commitment; CAP-004, CON-005

Table row 6
FUN: AOS-10-FUN-006 Steward building information
Trigger → inputs → behaviour/output / authority and failure: Applicable profile/update/handover → exact inventory/currentness/use → governed view/transfer evidence and owned gaps; legal dutyholder remains human; CAP-005, CON-006

Table row 7
FUN: AOS-10-FUN-007 Correct and recover
Trigger → inputs → behaviour/output / authority and failure: Changed evidence/use, outage or restoration → impact/current restrictions/prior effects → selective reassessment and approved fallback/continuation; no blind retry; CAP-006, CON-001-006

Table row 8
FUN: AOS-10-FUN-008 Research adaptation
Trigger → inputs → behaviour/output / authority and failure: Approved profile trigger → permitted external sources → common run/finding/reviewer/disposition records; gaps and urgency visible; change/activation separate; CAP-007, CON-007

Table row 9
FUN: AOS-10-FUN-009 Assess supplier realisation

Trigger → inputs → behaviour/output / authority and failure: Proposed supplier/configuration change → exact capability/requirement/contract declaration → scoped fit, evidence and owned gap assessment; no selection or activation by mapping alone; CAP-008, existing CON-001-007 and common manifest

4.3 Requirements and record metadata

Each row below is one proposed component-level obligation. Category and source are explicit. Rationale is the corresponding function's prevention of false knowledge, unowned duty or unauthorised effect. Owner is the asset service owner, with domain-specific competent stewards in §3; approver is Mark for specification disposition and the empowered organisational authority for its commissioned application. All rows have status proposed, scope functional draft, history 0.1 initial allocation, 8 October 2026; REQ-049 added at 0.2 under Mark's supplier-participation direction. Dependencies are the cited component/contracts plus §§6/16/17; linked CAP/FUN follow the ranges above and each VER's CON allocation. Exact source locators use this document's §2 register. No open setup value becomes a build default.

Table row 1
Requirement: AOS-10-REQ-001
Independently verifiable obligation: Scope: For every asset observation or analysis, AOS-10 shall identify the physical asset purpose and applicable organisation, property/building/component and observation scope.
Source / derivation: ARCH §3.1; RP9
Planned VER: AOS-10-VER-001

Table row 2
Requirement: AOS-10-REQ-002
Independently verifiable obligation: Identity: AOS-10 shall admit asset relationships only with governed identity, effective dates and explicit unresolved reconciliation status.
Source / derivation: 02 §§5/6/10; DEC-045
Planned VER: AOS-10-VER-001

Table row 3
Requirement: AOS-10-REQ-003
Independently verifiable obligation: Evidence: AOS-10 shall preserve each observation's source, method, observed time, admission time, units, assurance, uncertainty and correction lineage through the governed evidence contract.
Source / derivation: 02 CON-001; Core REC-E; DEC-046
Planned VER: AOS-10-VER-002

Table row 4
Requirement: AOS-10-REQ-004
Independently verifiable obligation: Coverage: Each condition view shall expose its covered property/component/hazard/time scope and material missing, inaccessible, stale, failed or unperformed observations.
Source / derivation: B4 Asset; RP5/7/9
Planned VER: AOS-10-VER-003

Table row 5
Requirement: AOS-10-REQ-005
Independently verifiable obligation: Register: The Living Asset Register shall distinguish physical observation, interpreted condition, forecast, human decision, action and verified outcome as separate linked meanings.
Source / derivation: B4 Asset; RP1/7; 02 REC-E/Q
Planned VER: AOS-10-VER-004

Table row 6
Requirement: AOS-10-REQ-006
Independently verifiable obligation: Condition: AOS-10 shall retain unresolved contradictory condition evidence rather than silently replacing it with the newest arrival or an aggregate score.
Source / derivation: 02 §10; DEC-046; FP5/6
Planned VER: AOS-10-VER-005

Table row 7

Requirement: AOS-10-REQ-007
Independently verifiable obligation: Manual assessment: AOS-10 shall support identifiable physical inspection and resident-reported condition evidence when sensors are absent or unavailable.
Source / derivation: EXT-01; B4 Asset; RP9
Planned VER: AOS-10-VER-006

Table row 8

Requirement: AOS-10-REQ-008
Independently verifiable obligation: No substitution: AOS-10 shall not represent telemetry or model interpretation as a completed physical assessment without evidence of that assessment.
Source / derivation: EXT-01; FP3/4/6
Planned VER: AOS-10-VER-006

Table row 9

Requirement: AOS-10-REQ-009
Independently verifiable obligation: Analysis: Every condition inference shall identify supporting evidence, applicable analytical version, assumptions and limitations separately from observed facts.
Source / derivation: 04 §§4/13; RP7
Planned VER: AOS-10-VER-007

Table row 10

Requirement: AOS-10-REQ-010
Independently verifiable obligation: Prediction: Each maintenance forecast shall expose its scenario, horizon, uncertainty, evaluation basis and conditions under which it cannot support a conclusion.
Source / derivation: B4 Asset; FP5/6; QS-18
Planned VER: AOS-10-VER-007

Table row 11

Requirement: AOS-10-REQ-011
Independently verifiable obligation: Urgent concerns: AOS-10 shall refer a suspected acute physical safety concern through the separately approved human safety protocol without waiting for ordinary analytical or governance review.
Source / derivation: DEC-051; RP3; 30 §10
Planned VER: AOS-10-VER-008

Table row 12

Requirement: AOS-10-REQ-012
Independently verifiable obligation: Action boundary: Before any consequential asset action, AOS-10 shall obtain current authority and permitted-use checks for that exact proposed operation.
Source / derivation: 01/03/04; DEC-028-030/042-044; COORD CHECK/ACT
Planned VER: AOS-10-VER-009

Table row 13

Requirement: AOS-10-REQ-013
Independently verifiable obligation: Promise source: AOS-10 shall supply the resident-communicated repair completion commitment and its provenance separately from internal scheduling targets.
Source / derivation: DEC-036/037; ARCH REQ-041-044; Profiles §§4/5
Planned VER: AOS-10-VER-010

Table row 14

Requirement: AOS-10-REQ-014
Independently verifiable obligation: Comparison meaning: AOS-10 shall supply the promised-date precision and approved calendar/timezone comparison meaning without introducing a grace period.
Source / derivation: DEC-036
Planned VER: AOS-10-VER-011

Table row 15

Requirement: AOS-10-REQ-015
Independently verifiable obligation: Promise revision: AOS-10 shall recognise a revised resident commitment only with authorised human revision and evidence of communication, preserving the original commitment and breach history.
Source / derivation: DEC-037
Planned VER: AOS-10-VER-012

Table row 16
Requirement: AOS-10-REQ-016
Independently verifiable obligation: Completion: AOS-10 shall label repair completion established only when the repair-specific completion rule is satisfied by an identifiable completion record and required work or inspection evidence.
Source / derivation: DEC-038; Profiles §§4/5
Planned VER: AOS-10-VER-013

Table row 17
Requirement: AOS-10-REQ-017
Independently verifiable obligation: Unknown completion: Where completion cannot be established after the promised boundary, AOS-10 shall supply “completion unverified after promised date” for an owned verification escalation.
Source / derivation: DEC-039
Planned VER: AOS-10-VER-014

Table row 18
Requirement: AOS-10-REQ-018
Independently verifiable obligation: Incomplete scope: Where part of the promised scope remains outstanding, AOS-10 shall preserve the original repair as incomplete and identify completed and outstanding work separately.
Source / derivation: DEC-040
Planned VER: AOS-10-VER-015

Table row 19
Requirement: AOS-10-REQ-019
Independently verifiable obligation: Dispute: AOS-10 shall preserve contested completion as disputed evidence for human resolution rather than treating resident silence or a contractor status as resolution.
Source / derivation: DEC-038; FP7; 30 REQ-021-033
Planned VER: AOS-10-VER-016

Table row 20
Requirement: AOS-10-REQ-020
Independently verifiable obligation: Workflow handoff: AOS-10 shall transfer condition or repair findings with evidence and explicit uncertainty to AOS-13's governed lifecycle without treating receipt as acceptance of responsibility.
Source / derivation: RP1/3/8; 13 boundary; COORD ACC
Planned VER: AOS-10-VER-017

Table row 21
Requirement: AOS-10-REQ-021
Independently verifiable obligation: Outcome: AOS-10 shall link actual work and inspection outcomes to originating evidence and decisions, retaining the distinction between an action attempted and condition improved.
Source / derivation: RP1/4; Core REC-X/E/Q
Planned VER: AOS-10-VER-018

Table row 22
Requirement: AOS-10-REQ-022
Independently verifiable obligation: Risk inputs: Each asset-risk contribution shall identify physical concern, potential consequences, exposure scope, evidence limits and accountable human route.
Source / derivation: RP3/5; B4 Asset; general architectural risk inputs (CAP-02 use-case assessment deferred)
Planned VER: AOS-10-VER-008

Table row 23
Requirement: AOS-10-REQ-023
Independently verifiable obligation: Investment: Each investment-planning input shall expose condition evidence, assumptions, resource

constraints, alternative scenarios and uncertain consequences without claiming a human capital-allocation decision.
Source / derivation: B4 Asset; FP1/2; 22 §§4/10
Planned VER: AOS-10-VER-019

Table row 24
Requirement: AOS-10-REQ-024
Independently verifiable obligation: Golden Thread scope: Each building-safety information view shall identify the building, applicable lifecycle/dutyholder scope, required information categories and unresolved applicability gaps under a competent human-approved profile.
Source / derivation: EXT-02; RP3 Golden Thread; ARCH §4.2
Planned VER: AOS-10-VER-020

Table row 25
Requirement: AOS-10-REQ-025
Independently verifiable obligation: Golden Thread custody: AOS-10 shall preserve identifiable current versions and revision history of governed building-safety information with authorised secure access and disclosed completeness gaps.
Source / derivation: EXT-02; 02/03; FP4
Planned VER: AOS-10-VER-021

Table row 26
Requirement: AOS-10-REQ-026
Independently verifiable obligation: Golden Thread transfer: An authorised building-safety transfer shall record exact information versions, recipient scope, delivery and separate confirmation that information is usable, with failed or unconfirmed transfers left owned.
Source / derivation: EXT-02; 14 §10; COORD ACC
Planned VER: AOS-10-VER-022

Table row 27
Requirement: AOS-10-REQ-027
Independently verifiable obligation: Regulatory applicability: AOS-10 shall distinguish the source's publication and effective dates, jurisdiction and legal standing from the organisation's approved operational rule and actual evidence of compliance.
Source / derivation: EXT-01-04; DEC-086; FP9
Planned VER: AOS-10-VER-023

Table row 28
Requirement: AOS-10-REQ-028
Independently verifiable obligation: Data minimisation: AOS-10 shall use and disclose asset evidence only for the checked purpose, audience and permitted data/inference scope under AOS-03.
Source / derivation: 03 §§7/9; RP9; DEC-049-053
Planned VER: AOS-10-VER-024

Table row 29
Requirement: AOS-10-REQ-029
Independently verifiable obligation: Behaviour prohibition: AOS-10 shall not infer individual occupancy, habits, emotions, personal conduct or preferences from physical asset signals as part of Asset Intelligence; any separately proposed person-related purpose requires its own governed component scope and approval.
Source / derivation: RP9; DEC-088; 03 boundary
Planned VER: AOS-10-VER-024

Table row 30
Requirement: AOS-10-REQ-030
Independently verifiable obligation: Optional sensing: AOS-10 shall preserve core-service access and a permitted manual evidence route when a resident declines optional sensing or optional data use.
Source / derivation: DEC-052; FP7; RP6/9
Planned VER: AOS-10-VER-025

Table row 31
Requirement: AOS-10-REQ-031
Independently verifiable obligation: Correction: When evidence or permitted use changes, AOS-10 shall identify affected dependent views and pending work for selective reassessment without erasing original evidence standing.

Source / derivation: DEC-047/089; COORD CHG; 02 §10
Planned VER: AOS-10-VER-026

Table row 32
Requirement: AOS-10-REQ-032
Independently verifiable obligation: Resident challenge: AOS-10 shall provide permitted condition/repair evidence and a tracked correction or challenge referral through AOS-11/13 rather than equating silence or message delivery with acceptance.
Source / derivation: DEC-041; FP7; 11/13/30 boundaries
Planned VER: AOS-10-VER-016

Table row 33
Requirement: AOS-10-REQ-033
Independently verifiable obligation: Security: AOS-10 shall admit telemetry only through approved source identity, integrity and runtime controls, quarantining unauthenticated, malicious or semantically invalid data.
Source / derivation: 05/14; 02 admission; RP9
Planned VER: AOS-10-VER-027

Table row 34
Requirement: AOS-10-REQ-034
Independently verifiable obligation: Quality: AOS-10 shall evaluate probabilistic asset analysis against a human-approved task/population/error rubric before a dependent performance claim.
Source / derivation: QS-18; 04 §13; FP5/6
Planned VER: AOS-10-VER-028

Table row 35
Requirement: AOS-10-REQ-035
Independently verifiable obligation: Degraded operation: When asset evidence or a dependency fails, AOS-10 shall disclose the affected coverage and support the approved manual/human fallback without inventing safe condition or closure.
Source / derivation: B4 Asset; 05/COORD/KPR; FP5
Planned VER: AOS-10-VER-029

Table row 36
Requirement: AOS-10-REQ-036
Independently verifiable obligation: Recovery: Recovered asset processing shall reconcile current authority, data-use restrictions and previously attempted effects before repeating a consequential operation.
Source / derivation: DEC-028-030; KPR §§4-6; 05 §10
Planned VER: AOS-10-VER-029

Table row 37
Requirement: AOS-10-REQ-037
Independently verifiable obligation: Audit: AOS-10 shall retain permitted evidence sufficient to reconstruct a consequential finding's trigger, inputs, actor, applied rule, authority, action, human intervention and observed outcome.
Source / derivation: RP7; QS-19; 02 REC-E/Q/A/D/X
Planned VER: AOS-10-VER-018

Table row 38
Requirement: AOS-10-REQ-038
Independently verifiable obligation: Common contracts: AOS-10 producers and consumers shall declare exact common contract/view revisions and reject unsupported or ambiguous semantics rather than silently coercing them.
Source / derivation: 02; Shared v0.15; Register v0.14; QS-12
Planned VER: AOS-10-VER-030

Table row 39
Requirement: AOS-10-REQ-039
Independently verifiable obligation: Research profile: AOS-10 shall perform external adaptation research only within an approved component-owned profile using the common research meanings and permitted retrieval route.
Source / derivation: DEC-086; 04 CON-009; 02 CON-007
Planned VER: AOS-10-VER-031

Table row 40

Requirement: AOS-10-REQ-040
Independently verifiable obligation: Research findings: Every asset research finding shall separate verified source content, component interpretation, affected specification elements and proposed operational or amendment implications.
Source / derivation: DEC-086; RSVIEW-0.1; 14 §10
Planned VER: AOS-10-VER-031

Table row 41

Requirement: AOS-10-REQ-041
Independently verifiable obligation: Research coverage: Each asset research run shall disclose complete, partial, failed or unperformed coverage and limit a no-material-finding claim to its actual searched scope.
Source / derivation: DEC-086; 04 §6.6; 02 §6.6
Planned VER: AOS-10-VER-032

Table row 42

Requirement: AOS-10-REQ-042
Independently verifiable obligation: Research disposition: AOS-10 shall track each material research finding to an accepted human reviewer or an owned unresolved handoff with approved cover/escalation.
Source / derivation: DEC-086; 13/30; COORD ACC
Planned VER: AOS-10-VER-033

Table row 43

Requirement: AOS-10-REQ-043
Independently verifiable obligation: Research amendment: AOS-10 shall not treat source publication, research acceptance or a proposal as authority to amend a specification, expand sensing or activate a changed operation.
Source / derivation: DEC-086/018; 01 §10.8; 04 CON-009
Planned VER: AOS-10-VER-033

Table row 44

Requirement: AOS-10-REQ-044
Independently verifiable obligation: Governance contribution: Asset governance submissions shall expose omissions, conflicting evidence and distributional effects separately from institution-wide judgements or a certificate of safety.
Source / derivation: FP1-10; RP3/5/6/7; GT M1.2/3/14
Planned VER: AOS-10-VER-019

Table row 45

Requirement: AOS-10-REQ-045
Independently verifiable obligation: Scoped standing: AOS-10 shall label demonstration fixtures, draft proposals, implemented controls and observed operating outcomes with their actual distinct standing.
Source / derivation: QS-09/24-28; 40 §§5/15
Planned VER: AOS-10-VER-030

Table row 46

Requirement: AOS-10-REQ-046
Independently verifiable obligation: Retention: Asset evidence lifecycle shall apply governed retention, correction and deletion to originals and derived views without claiming an audit label creates indefinite retention rights.
Source / derivation: DEC-047; 02/03; KPR
Planned VER: AOS-10-VER-026

Table row 47

Requirement: AOS-10-REQ-047
Independently verifiable obligation: Accountability: AOS-10 shall distinguish the organisation's governance accountability and operational repair responsibility from statutory building-safety dutyholder appointments.
Source / derivation: EXT-02; RP3; 30 §§3/7
Planned VER: AOS-10-VER-020

Table row 48

Requirement: AOS-10-REQ-048
Independently verifiable obligation: Observation freshness: AOS-10 shall assess evidence freshness against the approved observation-purpose profile, recording the material period of lost coverage rather than using one universal freshness interval.
Source / derivation: B4 Asset; RP5/9; QS-18
Planned VER: AOS-10-VER-003

Table row 49
Requirement: AOS-10-REQ-049
Independently verifiable obligation: Supplier realisation: Each declared supplier implementation scope shall maintain a versioned allocation of its capabilities/configuration to applicable AOS-10 requirements and contracts, including conformance evidence or owned gaps and dependencies.
Source / derivation: Mark's 8 October supplier-participation drafting direction; ARCH logical responsibility catalogue; QS-11/12/21/26
Planned VER: AOS-10-VER-034

4.4 External research and specification adaptation

Inherit the common rules of 04 CON-009 and 02 CON-007 / RSVIEW-0.1 without a competing field dictionary. Operational physical sensing and external research are different functions.

Table row 1
Profile element: Remit/baseline
Component-owned allocation: AOS-10 exact revision, including supplier participation; condition evidence, inspection practice, physical hazards, repair/maintenance analysis, sensing boundaries, investment assumptions and building-safety information; affected CAP/FUN/REQ/CON identified

Table row 2
Profile element: Developments/sources
Component-owned allocation: Applicable law/regulator/standards changes; competent inspection research; sensor reliability/security; asset-data practice; incidents and maintenance evidence; prefer original regulator/government/standards issuer/research sources; jurisdiction, tenure, lifecycle and source standing explicit

Table row 3
Profile element: Assignment/triggers
Component-owned allocation: Asset owner appoints bounded agent/shared service and approves cadence, event triggers and coverage expectations. No schedule or always-on scanning activated by this draft; unknown setup is ISS-006

Table row 4
Profile element: Controls
Component-owned allocation: External retrieval through 14; tools/rights/purpose under 01/03/04/05; licence/access/privacy limits; no optional resident sensing expansion, hostile instructions, vendor endorsement or self-calibration

Table row 5
Profile element: Evidence/assessment
Component-owned allocation: Publication/event/access/effective dates, verified content versus interpretation, exact affected elements, alternatives, uncertainty, materiality/urgency and impacts on 11/13/14/22/30/40

Table row 6
Profile element: Coverage/quality
Component-owned allocation: Complete/partial/failed/unperformed and bounded no-material-finding; source fidelity/relevance and false/missed finding rubric approved by competent humans; actual search perimeter and limitations retained

Table row 7
Profile element: Human review/change
Component-owned allocation: Accepted reviewer, response window, cover and escalation from approved profile; accepted/rejected/deferred/unresolved findings with rationale; separate 01 amendment, verification, activation and outcome records

Table row 8
Profile element: Records/adoption
Component-owned allocation: Common profile/run/finding/disposition views and exact revisions; 02 admission, 14 retrieval, 13 duty tracking, 30 disposition, 01 amendment; corrections/deduplication/selective reassessment per common definitions; no new IF family

Normal: trigger → permitted retrieval → source verification → specialist assessment → material finding or bounded no-finding → accepted review/disposition → separately approved amendment → verification/activation/outcome. Degraded: denied/stale/conflicting/partial retrieval preserves actual coverage and owned uncertainty; unresponsive reviewers invoke approved cover. A suspected live safety concern uses the already permitted human protocol while research/amendment remains pending. VER-023/031-033 cover all eight required research dimensions. Research remains inactive until the commissioned profile exists.

5. State model

Persistent states are governed object meanings, not powers acquired by transition. Each change identifies actor, current authority, source revision, event/effective time, evidence and resulting scope. Approved profile timeouts cause explicit stale/expired/unacknowledged status and owned follow-up; they never mean success.

Table row 1
Object: Observation
States / entry, transition and closure rules: Received → admitted or rejected/quarantined; admitted may become contested/corrected/superseded/restricted/deleted under 02/03. Source admission is not assurance that its claim is true.

Table row 2
Object: Condition/coverage view
States / entry, transition and closure rules: Known within stated scope, uncertain/conflicting, partial, stale or unavailable. New evidence creates a new revision; a human inspection can establish only its evidenced scope/time, not permanent safety.

Table row 3
Object: Repair evidence
States / entry, transition and closure rules: Promise unresolved or established; completion unverified, evidenced incomplete, partial, disputed or established under the repair-specific rule. After B, unverified completion retains DEC-039 classification. Process owns overdue/duty state; human-authorised communicated revision preserves original/breach history.

Table row 4
Object: Finding/duty
States / entry, transition and closure rules: Prepared → submitted → received → accepted by empowered human → in progress → evidenced disposition/outcome. Receipt is not acceptance; 13 owns tracking, cover and escalation; 10 retains its evidence contribution.

Table row 5
Object: Building information
States / entry, transition and closure rules: Applicability unresolved/profiled; category missing/present/current/contested/superseded; transfer prepared/delivered/usable-confirmed or failed/unconfirmed. Handover closure needs required confirmations and owned residual gaps.

Table row 6
Object: Research
States / entry, transition and closure rules: Common profile/run/finding/disposition states from 02 §6.6; no local replacement. Accepted finding does not mean approved amendment or activation.

6. Semantic contracts and interfaces

These are logical domain views of shared meanings, not newly approved wire schemas or IF identifiers. Preserve AOS-02-IF-001, AOS-01-IF-001, proposed AOS-03-IF-001/AOS-04-IF-001 and existing AOS-13-IF-001 where consumed. Common semantic owners remain authoritative.

Table row 1
CON: AOS-10-CON-001 Asset observation
Producer → consumer / minimum meaning / authority and failure: Human/source adapter via14 → 02/10: organisation, building/property/component and relationship revision; source/method; physical quantity/unit/calibration basis where applicable; observed/admitted times; purpose, assurance, uncertainty, correction/access/lifecycle. 02 REC-E/Q owns common evidence; invalid or ambiguous scope stays rejected/unresolved.

Table row 2
CON: AOS-10-CON-002 Living Asset Register
Producer → consumer / minimum meaning / authority and failure: 10 through02 → permitted service/22/24/30: exact object/view revision, observations versus inference, condition/time/coverage cells, conflicts/freshness/gaps, model/rule, limitations and lineage. Unsafe aggregation prohibited; no claim beyond evidenced scope.

Table row 3
CON: AOS-10-CON-003 Physical finding/action/outcome
Producer → consumer / minimum meaning / authority and failure: 10/competent humans → 13/30/02; returned work evidence →10: concern, physical consequence/exposure, urgency basis, tracker/owner/cover, acceptance, authorised action, attempted/partial/actual effect and resulting observation. Common REC-Q/A/D/X and ACC; receipt is not accepted responsibility.

Table row 4
CON: AOS-10-CON-004 Repair evidence
Producer → consumer / minimum meaning / authority and failure: Controlled records/human/contractor via14/02 →10→13/11/30: repair and promised scope, original communicated commitment, precision/timezone and communication proof, authorised revisions, internal targets separate, completion rule/work/inspection evidence, completion time, incomplete/partial/unverified/disputed classification and provenance. 02/Profiles and DEC-036-041 own shared semantics; 13 detects/tracks, 11 delivers contact, 30 supports human decisions.

Table row 5
CON: AOS-10-CON-005 Planning/governance input
Producer → consumer / minimum meaning / authority and failure: 10 with permitted02/14 inputs →22/24/30/25: physical condition, scenario/horizon, costs/resource constraints, alternatives, distributional consequences, uncertainty/coverage, actual outcome and precise standing. REC-E/Q; no approved capital decision or institution-wide pass inferred.

Table row 6
CON: AOS-10-CON-006 Building-safety view/transfer
Producer → consumer / minimum meaning / authority and failure: Competent stewards/02/10 → permitted dutyholders/humans/external recipients through14: exact building/lifecycle/applicability profile, category inventory, current versions/history, gaps, authorised audience, delivery/usability confirmation and owned residual duties. Shared custody/access/exchange definitions; no statutory completeness inferred from transfer alone.

Table row 7
CON: AOS-10-CON-007 Own research
Producer → consumer / minimum meaning / authority and failure: Assigned research service/14/10 →02/13/30/01/affected owners: common profile/run/finding/disposition meanings, exact affected elements and asset-specific implications under RSVIEW-0.1; failed/partial retrieval and unaccepted reviewer remain explicit.

Every exchange includes stable IDs/revisions, organisation/entity, producer/consumer, exact contract/view, purpose/use/authority references, event/effective/admission time and standing. Physical units and comparison precision must be explicit; invalid values/unknown applicability cannot support a favourable result. Arrival order is distinct from effective time; duplicates retain identity and do not add independent evidence. Acknowledgement distinguishes transport receipt, duty acceptance, usable handover and factual assurance. Retries reconcile prior effects and current permissions; correction/revocation reopens materially affected views/work. Wire types, enumerations, conversion/calibration rules, ordering/deduplication keys, transport timeouts/retry

bounds and exact endpoint compatibility require approved profiles before build; no implicit values are supplied here. Asset service owner with 02/13/14 controls those gates, ISS-001/002.

6.1 Supplier interface detail and ownership

The CON views specify the meaning to preserve; they are not an API implementation specification. For each proposed integration, supplier and organisation must agree exact field/schema/view versions, identity mapping, physical units, event/effective times, analytical labels and evidence references, access/authority enforcement, transport and authentication, acknowledgement, ordering/deduplication, retry/replay/revocation, service limits, outage handling, retention/correction/deletion and reconciliation. Declare read versus write/command rights explicitly. Existing APIs/events/manual exports are candidates to map, not selected transport defaults.

The supplier declaration identifies the authoritative source for each observation, inference, promise, work status and outcome, and which party maintains each mapping/control. A supplier platform spanning 10/11/13/14 must demonstrate each responsibility and cross-function boundary even if the exchange is internal to one product. Outsourcing cannot make evidence, permissions or human acceptance unobservable. Exact executable agreements and observed compatibility remain ISS-001/003/005, linked to REQ-038/049 and VER-030/034.

7. Authority and decision boundaries

Permitted Mode 1 work can admit evidence, apply approved deterministic rules, produce bounded analysis and send an expressly delegated internal finding. A request to issue work, purchase materials, change a resident promise, operate a device or disclose externally is a separate consequential operation requiring current controls. No physical actuator authority is granted by connection or by this draft; any later actuator scope must be commissioned under the same exact delegation/data-use/runtime controls.

Human decisions include applicability/dutyholder appointments, disputed closure, promise/scope revision, repair-specific completion-rule approval, safety response under the approved protocol, capital allocation and incommensurable judgement. Board governance and statutory human duties remain distinct. Technical condition scores cannot adjudicate residents' legitimacy, consent or moral priority. Model-provider substitution cannot inherit an untested asset quality claim.

Revocation or changed evidence affects the last enforceable point and dependent pending work under current common controls. Explain constraint meaning, authority basis and referral by default under DEC-027; any reviewed privacy/security/feasibility explanation exception limits disclosure, not enforcement. Human sign-off cannot waive a non-waivable prohibition.

8. Reasoning principles applied

FP1 ties evidence to conferred purpose; FP2 reserves incommensurable trade-offs; FP3 requires enforced integrity; FP4 makes evidence/limits legible; FP5/6 require fault/uncertainty handling; FP7 protects residents with limited exit; FP8 preserves human constitutional authority; FP9 distinguishes purpose-led design from legal validation; FP10 requires interactions and cumulative consequence review. These are technical contributions, not full-principle conformance claims.

Table row 1
RP v6 domain / thematic locator: 1 Architecture/completeness, sequenced human layers, feedback
Application / planned evidence: CON-003/004; VER-008/017/018/029; unaccepted duty never vanishes

Table row 2
RP v6 domain / thematic locator: 2 Modes, protected human space, standing boundaries
Application / planned evidence: §§7/9; VER-009/019/024/033; no AI capture of protected board deliberation

Table row 3

RP v6 domain / thematic locator: 3 1+5, intrinsic risk, safety, Golden Thread
Application / planned evidence: VER-008/020-022; asset contributes without replacing dutyholders or governance

Table row 4
RP v6 domain / thematic locator: 4 Options/decisions, actual state/consequence feedback
Application / planned evidence: VER-018/019; observations, forecasts and actual effects distinct

Table row 5
RP v6 domain / thematic locator: 5 Blind spots/perimeter/emergence
Application / planned evidence: VER-003/005/019/028/029; aggregate indicators expose gaps and distribution

Table row 6
RP v6 domain / thematic locator: 6 Ethics/telos/no-exit/purpose drift
Application / planned evidence: VER-019/024/025; no optional-sensing penalty or automatic moral/capital choice

Table row 7
RP v6 domain / thematic locator: 7 Radical transparency/uncertainty
Application / planned evidence: VER-002-007/018/021; source and inference separately reconstructable

Table row 8
RP v6 domain / thematic locator: 8 Delegation, internal/external duty
Application / planned evidence: VER-009/017/022/033; exact authority, accepted owner and failed handoff visible

Table row 9
RP v6 domain / thematic locator: 9 Sensing, asset/behaviour boundary, permitted purpose
Application / planned evidence: VER-001/024/025/027; physical evidence is not individual conduct inference

Appendix A supplies all 29 GT tests, including bounded non-software contributions. None is marked passed from drafting. Apparent conflict remains evidenced and referred to the empowered human authority.

9. Data, privacy and disclosure

Physical evidence can still expose personal information: dwelling linkage, photographs, report text and patterns of sensor readings require purpose/access/inference controls. Minimise person-linked content; keep detailed source evidence separately controlled where an aggregate view is sufficient. A resident report is attributed evidence about physical condition, not automatic permission to construct a personal profile. Emotional/preferences context is human-provided or confirmed under DEC-088; asset signals cannot silently supply it.

Optional sensing refusal/withdrawal cannot reduce access to core services. Accessible manual reporting/inspection arrangements remain permitted, with any practical gaps exposed rather than blamed on residents. Distinguish consent from other lawful bases and organisation authorisation; no blanket consent assumption is introduced. A refusal of access to a particular visit is neither proof of safe condition nor a licence for alternative surveillance; refer service/access needs to humans through 11/13.

Apply 02/03 retention, correction, deletion and restrictions to source records, summaries, models/indices and restored copies. Corrections preserve standing without granting indefinite retention of deleted content. Confidentiality uses audience/purpose-specific restrictions and necessary accountable review, not suppression of material uncertainty. Building-safety access obligations require competent profile mapping; “golden thread” is not unlimited disclosure rights. AI must not observe protected board deliberation; subsequent authorised human accounts are distinct.

10. Behaviour and workflows

10.1 Condition and maintenance

Trigger → admitted physical evidence/provenance → scoped condition/coverage assessment → current use/authority → bounded finding/forecast → 13 accepted human route or approved intervention → actual work/inspection evidence → revised condition and learning. Missing sources create explicit coverage loss with manual fallback. Conflicting observations preserve both accounts and referral. A suspicion of acute risk uses the separately approved human safety protocol; neither sensors nor ordinary meetings are prerequisites to that referral. No prediction closes the underlying concern.

10.2 Repair promise and completion

Source original resident-communicated promise, scope and precision through controlled records. Date-only commitments end at the end of the promised calendar date in the approved organisation timezone; exact-time commitments use their time. B is the symbolic approved boundary, not a new configurable grace period. AOS-13 performs comparison and tracking using evidence supplied by10.

Before or at B, do not falsely assert overdue status. After B, evidenced outstanding promised work supports overdue-incomplete; unknown completion is completion unverified after promised date, requiring owned verification under DEC-039. A missing/conflicting promise is a different owned evidence exception. Established on-time completion supports no overdue-repair alert; completion after B preserves historical lateness even if work is now complete. Contractor closed status alone and resident silence do not establish completion.

Partial work retains original incomplete standing; human-authorised scope changes and communicated revisions preserve promise/breach history. A new promise does not automatically close an escalation. Dispute preserves opposing evidence and human review. 13/30 track explicit human acceptance and actual service action; 11 delivers current named-owner and accountable-team contact details through resident-agreed channels. Sending contact details, accepting duty and repairing the home are distinct outcomes. Failed communication and absent acceptance remain owned.

10.3 Investment and building information

Planning request → current scoped condition/coverage → alternative resource/scenario assumptions → unranked evidence and consequence inputs to22 → human consideration/decision through30 → authorised implementation → actual physical/financial outcomes. No composite condition score dictates value trade-offs.

Building profile/update/handover → competent applicability/category inventory → current, versioned, audience-checked information → permitted transfer → separate receipt and usable confirmation → outstanding categories/duties → actual follow-up. Statutory records and governance evidence remain distinct; software supports custody, not a legal certificate. Phase-effective/source changes trigger research and human mapping, not silent activation.

11. Failure, escalation and recovery

Lost telemetry, inaccessible inspection, corrupt units or missing provenance produce disclosed coverage limits and owned evidence/service follow-up. Human-approved manual routes remain available; a quiet feed is not proof of safety. A suspected acute concern is not delayed merely because analytical confidence is low; communicate uncertainty through the approved human protocol.

Unknown prior work/device effect requires reconciliation before retry. A lost handoff remains with its tracker until empowered acceptance; approved cover applies when the primary human is absent. If both normal and fallback reporting fail, preserve an owned exception and approved human fallback without creating new contact powers. Failed or partial work cannot become completion through a restored status snapshot.

Restore isolated state, apply current authority/use/lifecycle restrictions, reconcile original and subsequent effects and prove

current evidence/version scope before approved continuation under05/KPR. Recovery does not retroactively validate missing inspections or resolve an outstanding safety duty. Maintain human service continuity without requiring a successful model output.

12. Evidence, provenance and audit

Consequential records link trigger → exact source/scope/assurance → actor and analytical/rule revision → authority/use checks → finding/human rationale → attempted/performed/prevented action → consequence → challenge/intervention → outcome. Include observed/admission/effective times, units, uncertainty, omitted scope, tracker/owner/cover and version/retention/access references. Evidence owner is the asset steward for domain meaning and02 for shared records; human dutyholder and workflow records retain their separate owners.

Capture applied rules, input references, outputs, transitions and approved human rationale; private model chain-of-thought is not required. Retrospective generated explanations do not prove a prior check or inspection occurred. Integrity hashes cannot prove factual truth or completeness. Synthetic fixture truth is explicitly different from live observations. Review actual misses, near-misses and distributional consequences through permitted25/30 processes without automatic self-calibration.

13. Security and operation

05 governs runtime/security/resilience;14 governs external trust. Asset-specific source profiles specify device identity, permitted physical quantities/purposes, calibration/quality provenance, transport integrity, segmentation/isolation and revocation where relevant. Supplier credentials, telemetry and retrieved text must not bypass action authority. Quarantine malicious/unauthenticated/replayed or impossible data; expose lost coverage and preserve allowed human service.

Performance/availability/recovery/freshness/inspection coverage and human response capacity are scope-specific approved parameters, not invented universal thresholds. Analytical evaluation distinguishes deterministic controls from probabilistic fidelity, missed/false hazards, forecast calibration, excluded conditions and population/distributional error. Competent human owners approve task, fixtures, rubric, thresholds, uncertainty communication, change triggers and representative assessment before claims. Longitudinal review compares predicted versus actual effects without automatically changing models or rules. Critical control failures cannot be averaged away by a favourable model score.

14. Invariants

Table row 1
INV: AOS-10-INV-001
Invariant / linked REQ / VER: Missing observation never establishes safe condition; 004/008/035/048 → 003/006/029

Table row 2
INV: AOS-10-INV-002
Invariant / linked REQ / VER: Source content, admission and prediction create no action authority; 009/012/043 → 007/009/033

Table row 3
INV: AOS-10-INV-003
Invariant / linked REQ / VER: Internal targets cannot silently reset resident promises; 013-015 → 010-012

Table row 4
INV: AOS-10-INV-004
Invariant / linked REQ / VER: Unknown completion after B remains unverified; contractor status/silence alone is insufficient; 016/017/019 → 013/014/016

Table row 5
INV: AOS-10-INV-005
Invariant / linked REQ / VER: Physical signals do not imply permission for individual behaviour inference; 028/029 → 024

Table row 6
INV: AOS-10-INV-006
Invariant / linked REQ / VER: Declining optional sensing does not remove core service; 030 → 025

Table row 7
INV: AOS-10-INV-007
Invariant / linked REQ / VER: Golden-thread custody/transfer does not confer legal completeness or replace statutory duties; 024-027/047 → 020-023

Table row 8
INV: AOS-10-INV-008
Invariant / linked REQ / VER: Accepted research cannot activate its own amendment; 039-043 → 031-033

15. Conformance and acceptance

All claims below are unsubstantiated planned claims; no cases have been executed. Test records later require exact versions, date, assessor, environment, method, observed evidence and limitations. Demonstration/document review does not prove live operation, legal compliance or institutional judgement.

Table row 1
CR: AOS-10-CR-001
Proposed bounded claim / linked requirements and evidence: Evidence/register/coverage semantics; 001-010/048; VER-001-007

Table row 2
CR: AOS-10-CR-002
Proposed bounded claim / linked requirements and evidence: Risk/repair/outcome boundaries; 011-022/032/037; VER-008-018

Table row 3
CR: AOS-10-CR-003
Proposed bounded claim / linked requirements and evidence: Planning and building-safety information contribution; 023-027/044/047; VER-019-023

Table row 4
CR: AOS-10-CR-004
Proposed bounded claim / linked requirements and evidence: Permitted secure correctable/recoverable operation; 028-038/045-046; VER-024-030 and 018

Table row 5
CR: AOS-10-CR-005
Proposed bounded claim / linked requirements and evidence: Own research/profile/review/change boundaries; 039-043; VER-031-033 and 023

Table row 6
CR: AOS-10-CR-006
Proposed bounded claim / linked requirements and evidence: Declared supplier scope is attributable and evidence-limited; 049; VER-034 plus the allocated functional cases

Common case preconditions: fixed exact component/common-contract/source manifest; approved isolated synthetic fixtures and destinations or explicitly labelled document walkthrough; competent appointed assessors; approved identity/purpose/authority/current restriction profiles, clocks/units and expected-result rubric where applicable. Missing approval/fixture produces blocked/not-performed, not pass. Planned methods are component/integration boundary tests with human review; a document walkthrough may assess logic but not implementation enforcement. Evidence for each case includes

input/expected fixtures, actual ordered admission/check/output/effect, versions, human judgement where required, uncertainty, findings/remedy/accepted owner and rerun links. Assessors below own comparison against the stated expectation; no model certifies itself.

AOS-10-VER-001 - Scope and identity

Requirements: AOS-10-REQ-001, AOS-10-REQ-002. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Two organisations, a building, communal component and dwelling; an unresolved duplicate property identifier and a changed ownership relationship.

Procedure: Admit each record; change the effective relationship; attempt to merge unresolved identifiers and cross the organisation scope.

Expected result: Exact entity and effective relationship remain visible; ambiguous identity is unresolved and cross-scope use is denied.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Property/organisation identity steward; CON-001. Explicit enforcement observations required for any control claim.

AOS-10-VER-002 - Observation semantics

Requirements: AOS-10-REQ-003. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Physical inspection, resident report and sensor reading with distinct event/admission times; valid and invalid units.

Procedure: Admit, render, reorder and correct records; attempt a unit-free numerical comparison.

Expected result: Source/method/units/time/assurance/lineage survive; invalid meaning cannot support a condition conclusion.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Data and asset assessors; CON-001/002. Explicit enforcement observations required for any control claim.

AOS-10-VER-003 - Coverage and freshness

Requirements: AOS-10-REQ-004, AOS-10-REQ-048. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Coverage cells containing fresh, stale, absent, inaccessible and failed data; approved symbolic freshness profile F.

Procedure: Render individual and aggregate views across the observation boundary; remove a feed and attempt to display a uniformly safe portfolio.

Expected result: Gaps and lost-coverage periods remain visible per scope; no average conceals an unobserved hazard/property.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Asset/assurance assessors; CON-002. Explicit enforcement observations required for any control claim.

AOS-10-VER-004 - Register meanings

Requirements: AOS-10-REQ-005. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Observation, model condition, forecast, authorised work and subsequent inspection for one component.

Procedure: Build the view and follow every lineage link; attempt to present a forecast as an inspection or planned work as actual improvement.

Expected result: Distinct meanings and exact evidence standing are preserved; unsupported favourable status is rejected.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Asset/data assessors; CON-002/003. Explicit enforcement observations required for any control claim.

AOS-10-VER-005 - Conflict

Requirements: AOS-10-REQ-006. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Contradictory inspection and sensor evidence, delivered in both orders.

Procedure: Admit both; calculate a view; request clarification and apply an authorised correction.

Expected result: Arrival order does not resolve fact assurance; contradiction and owned review persist until evidenced disposition.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Asset inspector/data assessor; CON-001/002. Explicit enforcement observations required for any control claim.

AOS-10-VER-006 - Physical and manual evidence

Requirements: AOS-10-REQ-007, AOS-10-REQ-008. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus A home without sensors, a failed feed, an identifiable physical assessment and an unsupported claim that telemetry proves that assessment.

Procedure: Admit manual evidence, retain its scope/limitations, and attempt to mark physical assessment complete using telemetry alone.

Expected result: Manual assessment remains supported; physical-assessment standing requires actual evidence; unobserved scope remains explicit.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Competent inspection/service assessors; CON-001/002. Explicit enforcement observations required for any control claim.

AOS-10-VER-007 - Inference and forecast

Requirements: AOS-10-REQ-009, AOS-10-REQ-010. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Known fixture conditions, out-of-distribution cases, forecast assumptions/horizon and absent evaluation basis.

Procedure: Produce outputs; vary assumptions; compare observation and interpretation; request certainty outside evaluated scope.

Expected result: Inference/forecast carry versions, assumptions and uncertainty; unsupported certainty/accuracy claims do not pass.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Asset/model evaluation assessors; CON-002/005. Explicit enforcement observations required for any control claim.

AOS-10-VER-008 - Acute concern and risk

Requirements: AOS-10-REQ-011, AOS-10-REQ-022. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Suspected urgent physical hazard, uncertain cause, approved human safety protocol, unavailable primary owner.

Procedure: Detect concern, send bounded permitted referral, activate approved cover, and delay normal governance review.

Expected result: Concern reaches an empowered human route without waiting for ordinary review; uncertainty is retained; no novel emergency agent power appears.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Safety/workflow assessors; CON-003; 30 safety boundary. Explicit enforcement observations required for any control claim.

AOS-10-VER-009 - Action and authority

Requirements: AOS-10-REQ-012. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Permitted evidence-read operation, proposed work order or physical-device command, expired/revoked permission.

Procedure: Exercise current checks at the last enforceable point; attempt denied and revoked operations.

Expected result: Only exactly permitted effects occur; prevention is observable; analytical capability cannot create work/actuator authority.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Authority/security assessors; common REC-A/D/X, CHECK/ACT. Explicit enforcement observations required for any control claim.

AOS-10-VER-010 - Promise versus target

Requirements: AOS-10-REQ-013. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Communicated promise P, later internal target T, provenance, missing/contradictory communicated date.

Procedure: Supply each evidence variant to Process; attempt to replace P using T.

Expected result: P remains authoritative for the resident-promise comparison; unavailable P creates an owned evidence exception, not a fabricated date.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Repairs/data assessors; CON-004; 40 VER-008. Explicit enforcement observations required for any control claim.

AOS-10-VER-011 - Promised boundary

Requirements: AOS-10-REQ-014. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Approved date-only organisation timezone and precise-timestamp commitments; immediately before/at/after boundary B.

Procedure: Compare the fixtures using approved profile meaning, including a calendar transition; try an added grace interval.

Expected result: Date-only boundary is end of that date; exact timestamps retain precision; no overdue status at/before B; no default grace period.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Repairs/time-profile assessors; CON-004; 40 VER-008. Explicit enforcement observations required for any control claim.

AOS-10-VER-012 - Promise revision

Requirements: AOS-10-REQ-015. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus P, authorised communicated revision P2, internal reschedule, unauthorised revision and outstanding escalation.

Procedure: Attempt all revisions and inspect preserved history and workflow status.

Expected result: Only authorised communicated revision acquires new-promise standing; original/breach history survives and existing escalation is not automatically closed.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Repairs/human workflow assessors; CON-004; 40 VER-008. Explicit enforcement observations required for any control claim.

AOS-10-VER-013 - Completion rule

Requirements: AOS-10-REQ-016. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Repair-specific approved rule, identified work and inspection records, contractor closed flag alone and resident silence.

Procedure: Evaluate each variant; seed complete evidence both before and after B.

Expected result: Completion standing follows the rule and evidence; contractor flag/silence alone cannot establish completion; actual completion time is preserved.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Repairs/inspection assessors; CON-004; 40 VER-007/008. Explicit enforcement observations required for any control claim.

AOS-10-VER-014 - Unknown completion

Requirements: AOS-10-REQ-017. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus t>B and unavailable or conflicting completion evidence; separate evidenced outstanding-work case.

Procedure: Supply classifications to Process; request definitive overdue-incomplete and definitive complete statuses.

Expected result: Unknown variant is “completion unverified after promised date” and gets owned verification; evidenced incomplete variant may support overdue-incomplete; neither is silently conflated.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Repairs/workflow assessors; CON-004; 40 VER-008. Explicit enforcement observations required for any control claim.

AOS-10-VER-015 - Partial scope

Requirements: AOS-10-REQ-018. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Two promised tasks, one complete; proposed split or scope revision without human/resident evidence.

Procedure: Render completed/outstanding tasks; attempt to close original or erase its promise by splitting.

Expected result: Original remains incomplete; each scope part is visible; changed scope requires authorised human and resident communication evidence.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Repairs/service assessors; CON-004. Explicit enforcement observations required for any control claim.

AOS-10-VER-016 - Contested completion and challenge

Requirements: AOS-10-REQ-019, AOS-10-REQ-032. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Resident contests closure, contact channel is agreed, contractor evidence conflicts; silence alternative.

Procedure: Preserve evidence, refer through 11/13, test failed delivery and absent human acceptance, then authorised dispute disposition.

Expected result: Dispute is owned and contestable; silence/delivery do not resolve it; permitted resident evidence and actual disposition remain linked.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Resident/repairs/workflow assessors; CON-004; 40 VER-010. Explicit enforcement observations required for any control claim.

AOS-10-VER-017 - Handoff and duplicates

Requirements: AOS-10-REQ-020. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Condition finding, duplicate event, unavailable owner and unacknowledged workflow transfer.

Procedure: Send/retry with stable identities, separate receipt from acceptance, invoke approved cover and inspect pending status.

Expected result: No duplicate consequential action; duty remains owned until empowered acceptance; failed cover remains an exception.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Workflow/asset assessors; CON-003; 40 VER-009. Explicit enforcement observations required for any control claim.

AOS-10-VER-018 - Outcome and audit

Requirements: AOS-10-REQ-021, AOS-10-REQ-037. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Inspection finding, human-authorised action, partial execution, subsequent outcome and failed intervention.

Procedure: Follow trigger-to-outcome links; request reconstruction using captured evidence; attempt to use a later generated explanation as proof.

Expected result: Attempt/action/improvement are distinct; authority/rationale/consequence reconstructable; missing contemporaneous evidence stays a gap.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Asset/audit assessors; CON-001/003. Explicit enforcement observations required for any control claim.

AOS-10-VER-019 - Investment and governance

Requirements: AOS-10-REQ-023, AOS-10-REQ-044. Method: component/integration boundary test and competent human

review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Contrasting physical condition, costs/resources and unequal impacts; an infeasible option and competing incommensurable objectives.

Procedure: Prepare scenarios with 22; vary assumptions; request an automatic capital commitment or a scalar institutional pass.

Expected result: Actual constraints/uncertainty/distribution remain legible; alternatives preserved; human allocation and moral judgement remain reserved.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Asset/finance/governance human assessors; CON-005; 40 VER-013/027. Explicit enforcement observations required for any control claim.

AOS-10-VER-020 - Building applicability and accountability

Requirements: AOS-10-REQ-024, AOS-10-REQ-047. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Two buildings with different human-approved lifecycle/applicability profiles and dutyholders; incomplete category inventory.

Procedure: Construct views; attempt to infer full legal applicability from a height field or replace statutory appointment with board approval.

Expected result: Profile/category gaps remain owned; statutory dutyholder and governance responsibility stay distinct; no autonomous legal determination.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Competent building-safety/legal and governance assessors; CON-006. Explicit enforcement observations required for any control claim.

AOS-10-VER-021 - Building information custody

Requirements: AOS-10-REQ-025. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Current, superseded, missing and contradictory safety records plus authorised/unauthorised audiences.

Procedure: Update current view with history preserved; request access, corrections and plain-language usability review.

Expected result: Exact current versions and gaps visible; secure audience checks enforced; usability requires human evidence, not digitisation alone.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Building-safety/data/access assessors; CON-006; 40 VER-036. Explicit enforcement observations required for any control claim.

AOS-10-VER-022 - Building information transfer

Requirements: AOS-10-REQ-026. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Authorised handover recipient, exact inventory, delivery failure and delivered-but-unusable package.

Procedure: Transfer through 14; reconcile retry; obtain separate receipt/usability confirmation and maintain unresolved duties.

Expected result: Delivery is not usable acceptance; failed/missing items remain owned; exact versions and permissions survive transfer.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Building-safety/boundary assessors; CON-006; 40 VER-036. Explicit enforcement observations required for any control claim.

AOS-10-VER-023 - Current versus future regulation

Requirements: AOS-10-REQ-027. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Current England Phase 1 source, future-effective Phase 2 source, draft and wrong-jurisdiction source; approved operational mapping.

Procedure: Record source standing/dates; propose adaptation; attempt premature rule activation and confuse a resident promise with a statutory timing rule.

Expected result: Future/draft content does not silently become current law or activation; different timing obligations remain distinct; competent human mapping is required.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Legal/research/service assessors; CON-004/006/007. Explicit enforcement observations required for any control claim.

AOS-10-VER-024 - Use and prohibited inference

Requirements: AOS-10-REQ-028, AOS-10-REQ-029. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Permitted damp/temperature signal, proposed occupancy/habit/emotion inference, unauthorised cross-entity disclosure and hostile source instructions.

Procedure: Attempt each operation at enforcement surface; admit permitted physical evidence without unnecessary person profile.

Expected result: Only checked physical-purpose operations occur; prohibited inference/disclosure/instructions are blocked and evidenced.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Privacy/security/asset assessors; CON-001; 40 VER-015/017. Explicit enforcement observations required for any control claim.

AOS-10-VER-025 - Optional sensing

Requirements: AOS-10-REQ-030. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Resident declines optional sensors/data use, with core repair need and accessible manual alternatives.

Procedure: Exercise decline and withdrawal; inspect service eligibility, manual route and burden under human review.

Expected result: Core service remains available; no adverse automated eligibility inference; manual alternative and remaining observation gaps visible.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Resident/privacy/service assessors; CON-001/003; 40 VER-010/015. Explicit enforcement observations required for any control claim.

AOS-10-VER-026 - Correction and lifecycle

Requirements: AOS-10-REQ-031, AOS-10-REQ-046. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Corrected observation, revoked use, dependent forecast/workflow, governed retention/deletion and restored derived copy.

Procedure: Map impacts, selectively reassess/restrict affected work, apply lifecycle across copies and inspect historical standing.

Expected result: Affected outputs/work are corrected or restricted with lineage; unrelated valid work is not blanket frozen; deletion obligations survive restoration.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Data/privacy/workflow assessors; CON-001/002; 40 VER-025. Explicit enforcement observations required for any control claim.

AOS-10-VER-027 - Hostile telemetry

Requirements: AOS-10-REQ-033. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Unauthenticated device, altered packet, impossible units, replay, compromised vendor connector and malicious payload.

Procedure: Attempt admission and downstream action; revoke source permission and inspect quarantine/fallback.

Expected result: Invalid/hostile material cannot alter authoritative condition or confer action authority; affected coverage and owned response exposed.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Security/boundary/data assessors; CON-001; 40 VER-020. Explicit enforcement observations required for any control claim.

AOS-10-VER-028 - Analytical quality

Requirements: AOS-10-REQ-034. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Approved task/population/rubric/error thresholds, representative and excluded cases, changed model and subgroup gaps.

Procedure: Run repeatable evaluation, assess false/missed concerns and fidelity, change model and compare accepted scope.

Expected result: Claim is bounded to accepted evidence and scope; critical control failures cannot average away; unapproved model change cannot inherit quality claims.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Independent competent asset/model assessors; CON-002/005; 40 VER-026. Explicit enforcement observations required for any control claim.

AOS-10-VER-029 - Outage and recovery

Requirements: AOS-10-REQ-035, AOS-10-REQ-036. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Lost feed/dependency, manual service route, unknown earlier work effect and restored stale permission.

Procedure: Degrade, operate permitted fallback, restore isolated state, apply current restrictions and reconcile before retry.

Expected result: No false safe/complete state; work and coverage stay owned; no duplicated effect or revived permission; scoped continuation needs approved release.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Operations/service/control assessors; CON-001/003; 40 VER-021/022. Explicit enforcement observations required for any control claim.

AOS-10-VER-030 - Contract compatibility and standing

Requirements: AOS-10-REQ-038, AOS-10-REQ-045. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Common exact-version manifest, unsupported unit/view, synthetic data and operating evidence.

Procedure: Round-trip each view; reject incompatible semantics; render outputs in all standing categories.

Expected result: One authoritative common meaning; unsupported payload unresolved; no synthetic/draft output acquires operational evidence standing.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Data/assurance assessors; all CON views; 40 VER-001/025. Explicit enforcement observations required for any control claim.

AOS-10-VER-031 - Research relevance and shared duties

Requirements: AOS-10-REQ-039, AOS-10-REQ-040. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Approved asset research profile and relevant verified inspection/sensor development; one shared finding relevant to 10 and 14.

Procedure: Retrieve through 14, preserve source dates, analyse exact affected sections and route distinct component implications.

Expected result: Source versus inference and separate duties visible; source collection does not discharge specialist review.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Asset/research assessors; CON-007; 40 VER-031/033. Explicit enforcement observations required for any control claim.

AOS-10-VER-032 - Research coverage and hostile retrieval

Requirements: AOS-10-REQ-041. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Stale baseline/conflicting source, partial/denied retrieval, no finding in limited scope, hostile instructions and failed run.

Procedure: Exercise each run, challenge bounded no-finding claim and source fidelity, prevent instruction/tool expansion.

Expected result: Actual coverage/uncertainty exposed; denied/failed run is not reassurance; hostile text creates no authority.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Research/security assessors; CON-007; 40 VER-032/034. Explicit enforcement observations required for any control claim.

AOS-10-VER-033 - Research review and amendment

Requirements: AOS-10-REQ-042, AOS-10-REQ-043. Method: component/integration boundary test and competent human review; document walkthrough only until executable fixtures exist.

Preconditions / inputs: Common §15 prerequisites plus Material/urgent finding, unavailable reviewer, approved cover and proposed specification/operational change without approval.

Procedure: Track handoff/escalation, support separately permitted urgent human response, seek authorised amendment and attempt premature activation.

Expected result: Unaccepted duty remains owned; operational response and amendment distinct; approval, verification and activation require their own records.

Evidence / assessor / counterpart: Common run evidence plus case-specific source/classification/transition and actual effect records; Research/authority/workflow assessors; CON-007; 40 VER-033/035. Explicit enforcement observations required for any control claim.

AOS-10-VER-034 - Supplier realisation and coverage declaration

Requirements: AOS-10-REQ-049. Method: structured supplier-scope inspection and integration walkthrough, followed by actual functional/control tests for any conformance claim. Assessor: asset/data/exchange/service owners with competent procurement/security/privacy and relevant human reviewers.

Preconditions / inputs: Common §15 prerequisites; a versioned hypothetical supplier offer containing sensors, analytics, portal, case management and resident app; alternatives for portal/manual exchange and API integration; exact requirements/common manifest, supplier capability/configuration evidence and deliberately unsupported claims. No actual supplier is presumed conformant.

Procedure: Map hardware/software/functions to exact REQs/CONs and source ownership. Identify direct, configured, integrated and outside-scope contributions. Trace a physical finding through analytical evidence, accepted service duty and actual outcome; inspect missing fields/versions, unavailable method evidence, duplicate case-master conflict and hidden internal handoff. Attempt to declare full AOS-10 conformance from raw readings or the existence of an API. Compare the standalone and combined-platform arrangements against their declared automated/manual scope.

Expected result: Every declared in-scope obligation has a responsible implementation party and actual evidence or an explicit owned gap/dependency; existing supplier analytics/workflows may be reused without erasing their provenance or controls; product boundaries do not replace logical responsibilities. Missing evidence/compatibility prevents the dependent claim. Manual exchange is not labelled automated, receipt is not duty acceptance, and no supplier mapping selects a product, grants powers or proves the remaining functional cases.

Evidence: Exact supplier/configuration/manifest revisions, requirement-response matrix, contract/source ownership mappings, worked sequence and observed enforcement where executed, evidence references, gaps/owners/remedy gates and human review disposition. Counterparts: 40 REQ-001-003/014/026 and VER-001/025 for assembled scope/compatibility; item12a supplier alignment briefing.

16. Dependencies and staged handover

Drafting uses approved source directions and existing logical contracts; 11v0.3/12v0.3/13v0.2 now provide functional counterparts; exact executable mapping and observed end-to-end compatibility remain dependencies. Build requires exact domain view/schema mappings with02/14, completion/date/inspection/coverage profiles, fixtures, sensor/source admission rules, model evaluation and action-check enforcement. Activation additionally requires appointed asset/inspection/safety/service owners, competent applicability/dutyholder inventory, accepted human cover/capacity, permitted resident channels, actual privacy/lifecycle and manual continuity arrangements, scoped commissioning evidence and human release authority. Operations require evidence currentness, inspections, accepted duties, outcome feedback, lifecycle/revocation/recovery and research/profile upkeep.

02 owns shared source/record definitions;01 authority;03 permitted use/identity;04 agent lifecycle;05 runtime;11 resident assistance;13 orchestration;14 exchange;20-25 GI;30 human workflow support;40 assembled assurance. Supplier products, sensor deployments, HACT wire mappings, models and statutory profiles are unselected, not assumed. Exact-version endpoint compatibility must be demonstrated before affected activation.

17. Issues and controlled unknowns

All issues are open implementation/detail dependencies rather than requests to infer new general design policy. Confidence is high that the dependencies exist; their organisation-specific values are unassessed. Resolution requires evidence and explicit disposition, not an issue being mentioned in a draft.

Table row 1
ISS / type: AOS-10-ISS-001 dependency
Description / source / affected capability: Exact domain/common mappings, HACT version/licence, identities/units/enumerations and endpoint compatibility; §6/DEC-048, all CON
Owner / evidence / gate / disposition: Asset/data/exchange stewards; versioned mappings and round-trip evidence before affected build;

open, no defaults

Table row 2
ISS / type: AOS-10-ISS-002 dependency
Description / source / affected capability: Source/inspection/freshness/coverage/calibration profiles, approved clocks/precision and repair completion rules; CAP-001/003
Owner / evidence / gate / disposition: Asset/inspection/repairs owners; approved profiles and fixtures before dependent build/test; open

Table row 3
ISS / type: AOS-10-ISS-003 dependency
Description / source / affected capability: 11v0.3/13v0.2 executable resident-channel/duty lifecycle integration; CAP-002/003
Owner / evidence / gate / disposition: Domain/service/30/40 owners; exact REQ/VER adoption and synthetic end-to-end execution before repair activation; open

Table row 4
ISS / type: AOS-10-ISS-004 dependency
Description / source / affected capability: Building lifecycle/applicability, category inventory, legal timing and statutory dutyholder profiles; CAP-005
Owner / evidence / gate / disposition: Competent safety/legal/dutyholder humans; approved current-source mapping and actual custody/usability evidence before compliance/activation claim; open

Table row 5
ISS / type: AOS-10-ISS-005 dependency
Description / source / affected capability: Analytical tasks/model/supplier choices, evaluations, human safety cover, capacity and manual continuity; CAP-001/002/004/006
Owner / evidence / gate / disposition: Asset/model/security/service owners; approved rubric/control/fallback evidence before dependent operation; open

Table row 6
ISS / type: AOS-10-ISS-006 dependency
Description / source / affected capability: Own research assignment/triggers/coverage/rubric/reviewer windows/cover; CAP-007
Owner / evidence / gate / disposition: Asset/research/14/13/30 owners; approved common profile and VER-023/031-033 evidence before research activation; open

Table row 7
ISS / type: AOS-10-ISS-007 dependency
Description / source / affected capability: Review, source sufficiency and actual evidence after current row allocation and release/assurance evidence; all CAP
Owner / evidence / gate / disposition: Mark/source/40/qualified reviewers; disposition, exact manifest and executed scoped cases before readiness/conformance; independent project review deferred; open

18. Implementation guidance - non-normative

An evidence graph or versioned register can link dwellings, components, inspections, reports, work and outcomes. A coverage matrix by property, concern and period is useful because a portfolio average can conceal an unobserved hazard. Source adapters can normalise units while retaining originals and conversion provenance. A digital twin may support this, but neither 3D geometry nor a named platform is required.

Treat building-safety information as a governed category inventory with controlled current views and transfer receipts, not a folder whose existence proves completeness. Keep promise and internal schedule as separate fields. Use symbolic fixture B/F during functional review; builders must receive approved concrete comparison/freshness profiles. None of these patterns selects a technology, approves sensing or licenses a vendor.

18.1 Worked supplier example - illustrative, not a conformance assessment

Aico/HomeLINK is an illustrative candidate because its published offer includes environmental sensors/gateway, analytical portal, case management and resident app. Public pages consulted 8 October 2026: HomeLINK products and capabilities (https://www.aico.co.uk/homelink/) and standalone dashboard and integration discussion (https://www.aico.co.uk/blog/not-another-dashboard/). These establish an architectural discussion basis, not exact API availability, contract compatibility or tested conformance. No product has been selected.

For example, a humidity/temperature observation from an installed sensor is supplied with device/property identity and event time. A supplier analytics service interprets a possible damp/mould risk. The observation and attributed analytical finding enter governed02 records through14 and populate10's condition/coverage view; a finding can reference the supplier's analysis rather than duplicate it.

The approved response route passes the finding to13. This could be realised by the supplier's case-management software or an existing repairs platform: the declared case master records accountable ownership, explicit human acceptance and permitted inspection/work. A resident app could realise relevant11 interactions only within the agreed channel/use/access arrangements, with an accessible alternative. A competent inspection and subsequent work supply actual evidence;10 updates condition, preserving original finding, uncertainty and outcome.22/30 can receive permitted governance inputs, with original and residual gaps visible.

This example is a possible implementation pattern. It does not assert that the named supplier exports every required item or satisfies the AOS completion, privacy, handoff or authority rules. Those are questions for the response matrix and tests. An unavailable sensor produces explicit lost coverage and permitted manual assessment; an alert alone proves neither damp's cause nor repair completion. An operational supplier UI may remain in use alongside AOS governance presentation; no forced replacement dashboard is implied.

19. Traceability and change

§2 source/approved decision → §4 CAP/FUN/REQ → §5 state and §6 CON → §14 INV → §15 VER → future exact executed evidence. Each requirement row links its planned case and each case names its requirements; sources/status/owner/history are inherited only from explicit §4.3 metadata. AOS-00 REQ-041-044/VER-019 and DEC-036-041 allocate to 10 REQ-013-020/032, VER-010-017 and CON-004. AOS-40 REQ-015/016, VER-007-010 consume this evidence; new 40 VER-036 links building-information cases020-022. Evidence contributions to all29 GT tests appear in Appendix A.

0.1 creates initial asset requirements, views and planned cases. AOS-00/Map v0.34 records allocation; 40 v0.2 corrects the unknown-completion contrast to DEC-039 and adds explicit asset/building-information counterparts. No DEC, original source record, approved IF or common meaning is renumbered. Changes require impact analysis and permitted human amendment, preserving exact prior standing and selectively reassessing dependent work under DEC-089.

Version0.2 adds supplier participation (§3.1), integration ownership (§6.1), worked example (§18.1) and response matrix (§20.1). Mark's recorded drafting direction → CAP-008/FUN-009/REQ-049 → existing CON-001-007/common manifest → VER-034 → future exact supplier/implementation evidence. Original REQ-001-048/VER-001-033 remain unchanged; exact supplier obligation allocation is an addition, not a product approval. Architecture/Map v0.35 records this standing direction for all five sensing domains; common/source/DEC statuses remain unchanged.

20. Build and operational handover

The functional handover comprises this draft, cited common/source versions, stable requirement/view/case IDs, unresolved dependency owners and the explicit reserved-human boundaries. It is not a build-ready implementation contract. Before an authorised slice, deliver its exact machine-readable/domain mappings, controls, source and analytical profiles, accepted fixture/rubric/case evidence, environment/destinations, role/cover and capacity assignments, manual continuity/recovery arrangements, release/rollback/stop authority and permitted evidence lifecycle.

The selected repair demonstration can stage these dependencies without claiming complete asset coverage. Sensors,

investment analytics and golden-thread statutory claims may be excluded from an exact initial slice only with explicit scope/exclusions/owners; no exclusion can erase required safety handling or the approved resident-promise rules. Full functional suite development continues alongside bounded implementation.

20.1 Supplier response matrix and integration handover

Use one response row for each exact applicable requirement, referencing its precise revision. The grouped rows below help suppliers organise the initial response; they do not replace requirement-level coverage or let a partial capability count as full fulfilment. Supplier evidence may include existing technical documentation, controlled source references, configuration, demonstrations and actual test results with declared standing.

Table row 1
Requirement group / exact references: Observation/identity/coverage: 001-008/048, CON-001/002
Supplier capability/configuration and extent: State hardware/feed/manual sources, quantities, metadata and coverage supported
Evidence to request: Sample records, identity/unit/time mappings, quality/provenance, outage/conflict demonstrations
Gaps, integration and accountable party: Missing fields/calibration/history, source mapping and inspection responsibilities

Table row 2
Requirement group / exact references: Analysis/risk: 009-012/022/034, CON-002/003
Supplier capability/configuration and extent: State supplier analytics, versions, evaluated scope and proposed referral/control configuration
Evidence to request: Method/limitations, validation evidence, false/missed-concern evaluation and enforcement tests
Gaps, integration and accountable party: Unavailable evaluation, excluded conditions and human safety route

Table row 3
Requirement group / exact references: Repair/workflow/outcome: 013-021/032/037, CON-003/004
Supplier capability/configuration and extent: State case-management contribution and authoritative promise/work/completion records
Evidence to request: Promise/communication/completion examples, accepted owner, partial/disputed/unknown cases and outcome lineage
Gaps, integration and accountable party: Other repairs/contact systems, human approval, case-master and reconciliation gaps

Table row 4
Requirement group / exact references: Planning/governance/building information: 023-027/044/047, CON-005/006
Supplier capability/configuration and extent: State scenario/report/repository contribution; identify unsupported scope explicitly
Evidence to request: Assumptions/currentness/inventory, audience checks, transfer/usability and applicability evidence
Gaps, integration and accountable party: Finance/governance/dutyholder functions and statutory mapping retained elsewhere

Table row 5
Requirement group / exact references: Permitted secure lifecycle/operation: 028-031/033/035-036/038/045-046
Supplier capability/configuration and extent: State security/access/use/correction/deletion/recovery controls and enforcement location
Evidence to request: Control/lifecycle evidence, degraded/manual routes, exact compatibility and recovery tests
Gaps, integration and accountable party: Shared-control ownership, contract/API versions, service parameters and supplier exit/data portability arrangements

Table row 6
Requirement group / exact references: Own research: 039-043, CON-007
Supplier capability/configuration and extent: State any contracted specialist research contribution or mark outside scope
Evidence to request: Bounded profile/run/finding evidence and accepted human review/change links
Gaps, integration and accountable party: External source access, common records and retained component owner duties

Table row 7
Requirement group / exact references: Supplier realisation: 049
Supplier capability/configuration and extent: Declare exact product/service/configuration/release scope and requirement allocation
Evidence to request: Versioned requirement-by-requirement response and linked actual evidence/owned gaps
Gaps, integration and accountable party: Named responsible implementation parties and build/activation/remedy gates

Each completed row records exact REQ/version; supplier product/service/configuration; direct/configured/integrated/outside-scope status; met/partial/not-met/not-assessed conclusion with evidence; contract/profile/source ownership; gap and responsible party; required integration/remedy and decision gate. “Met” requires scoped accepted evidence, not marketing similarity. Outside-supplier-scope does not waive a requirement from an organisational release: another named party must fulfil it or the release must explicitly exclude the capability without waiving governing safety/authority duties.

Use this declaration to agree the integration specification, responsibilities and commissioning evidence. It supports procurement discussions but is not a price request or supplier certification. API/schema/authentication/service details are completed for the selected scope before dependent build/activation; named examples remain explanatory.

21. Review and findings

Author checks cover all21 template sections, supplier-facing realisation and 49 proposed requirements/34 planned cases, distinct stable IDs, requirement-to-case reciprocity, complete29-test applicability, explicit missing profiles and preserved source/common/decision meanings. They do not execute any test or provide independent assessment. Specification-quality conclusion: organised functional draft with controlled unknowns and planned verification. Design-adequacy conclusion: author review finds the proposed functional scope consistent with approved physical-sensing, human-authority and repair directions; Mark's judgement and commissioned/executed evidence remain outstanding. No G3/G4, implementation safety, institutional effectiveness or legal-conformance claim is made.

Next functional work is AOS-11 Resident Intelligence and AOS-13 Process Intelligence, each applying Mark's standing supplier-participation consideration, maintaining reciprocal repair/contact/accepted-duty boundaries. Existing pilot, common implementation and independent-review dependencies retain their separate open status.

Component summary

AOS-10 supplies physical asset evidence, scoped condition/coverage, bounded risk and repair evidence, planning inputs and governed building-safety information. It distinguishes uncertainty from safety, administrative status from completed work, and technical custody from human/statutory accountability. Own research can propose adaptation; humans and common controls retain amendment and operating powers.

Appendix A - All 29 Governance Intelligence Tests

All institutional test statuses are not assessed. The board with competent independent human assessment owns institutional conclusions; asset/service stewards own only the evidence contributions below. Protected board deliberation stays unobserved by AI. Missing evidence is a gap, not a favourable institutional answer.

Table row 1
Test / controlled title: M1.1 Strategic Coherence
Asset contribution / planned cases: Condition/investment scenarios; 019
Human or cross-domain assessment boundary: Board strategy-purpose coherence and actual outcomes

Table row 2
Test / controlled title: M1.2 Sensing Architecture
Asset contribution / planned cases: Observation scope/coverage/failure; 001-007/029
Human or cross-domain assessment boundary: Whole sensing perimeter across all five domains

Table row 3
Test / controlled title: M1.3 Risk Intelligence

Asset contribution / planned cases: Physical concern and owned referral; 008/017/019
Human or cross-domain assessment boundary: Board foresight and cross-domain consequence evidence; CAP-02 use case deferred to Phase 2, not a core dependency

Table row 4
Test / controlled title: M1.4 Composition and Capability
Asset contribution / planned cases: Competent inspection/assessor role dependencies; 006/020/028
Human or cross-domain assessment boundary: Board composition, expertise and diversity

Table row 5
Test / controlled title: M1.5 Performance Legibility
Asset contribution / planned cases: Condition/work/outcome distinction; 004/018/019
Human or cross-domain assessment boundary: Complete operating/financial futures and performance

Table row 6
Test / controlled title: M1.6 Compliance Assurance
Asset contribution / planned cases: Applicable source/category/standing; 020-023
Human or cross-domain assessment boundary: Competent legal mapping and actual statutory fulfilment

Table row 7
Test / controlled title: M1.7 Governance Documentation
Asset contribution / planned cases: Current version and lineage; 002/021/026
Human or cross-domain assessment boundary: Accuracy of actual instruments and policy-practice coherence

Table row 8
Test / controlled title: M1.8 Accountability Architecture
Asset contribution / planned cases: Accepted duties and challenge; 016/017/022
Human or cross-domain assessment boundary: Actual responsiveness and influence beyond delivery

Table row 9
Test / controlled title: M1.9 Value for Money
Asset contribution / planned cases: Condition/resource alternatives; 019
Human or cross-domain assessment boundary: Human value objectives, finance and moral trade-offs

Table row 10
Test / controlled title: M1.10 Human-AI Interaction Norms
Asset contribution / planned cases: Action/human boundaries; 009/019/024/033
Human or cross-domain assessment boundary: Practice under real pressure, not merely controls on paper

Table row 11
Test / controlled title: M1.11 Learning Metabolism
Asset contribution / planned cases: Actual outcome versus forecast; 007/018/028
Human or cross-domain assessment boundary: Actual understanding/change over time without self-calibration

Table row 12
Test / controlled title: M1.12 Continuous Self-Assessment
Asset contribution / planned cases: Coverage and research; 003/031-033
Human or cross-domain assessment boundary: Board development/culture and whole-system review

Table row 13
Test / controlled title: M1.13 Emergent System Behaviour
Asset contribution / planned cases: Aggregate gaps/distribution/compound failure; 003/019/029
Human or cross-domain assessment boundary: Cross-domain/system effects and governed response

Table row 14
Test / controlled title: M1.14 Golden Thread Integrity
Asset contribution / planned cases: Inventory/currency/usable transfer; 020-022
Human or cross-domain assessment boundary: Statutory dutyholder fulfilment and board accountability

Table row 15
Test / controlled title: M2.1 Values Architecture
Asset contribution / planned cases: Purpose/use/no-exit boundaries; 009/024/025
Human or cross-domain assessment boundary: Actual structural values and organisational practice

Table row 16
Test / controlled title: M2.2 Coherence Under Pressure
Asset contribution / planned cases: Safety uncertainty and competing constraints; 008/019
Human or cross-domain assessment boundary: Human account of difficult decisions and reasons

Table row 17
Test / controlled title: M2.3 Incommensurable Trade-off Capacity
Asset contribution / planned cases: Preserved alternatives; 019
Human or cross-domain assessment boundary: Empowered human adjudication and dissent

Table row 18
Test / controlled title: M2.4 Epistemic Brake Function
Asset contribution / planned cases: Gaps/conflict/unknown completion; 003/005/007/014
Human or cross-domain assessment boundary: Human unease and actual investigation

Table row 19
Test / controlled title: M2.5 Directorial Independence
Asset contribution / planned cases: Unfiltered uncertain asset evidence; 019/021
Human or cross-domain assessment boundary: Independent dissent and resistance to framing

Table row 20
Test / controlled title: M2.6 Social Legitimacy
Asset contribution / planned cases: Resident challenge/manual route; 016/025
Human or cross-domain assessment boundary: Actual resident legitimacy and influence

Table row 21
Test / controlled title: M2.7 No-Exit Obligation
Asset contribution / planned cases: No optional-sensing penalty; 024/025
Human or cross-domain assessment boundary: Service burden/accessibility and lived resident evidence

Table row 22
Test / controlled title: M2.8 Radical Transparency
Asset contribution / planned cases: Evidence/inference/limitations; 002-007/018/021
Human or cross-domain assessment boundary: Affected people can interrogate significant reasons

Table row 23
Test / controlled title: M2.9 Moral Drift Detection
Asset contribution / planned cases: Distribution/outcomes and research; 018/019/028/031
Human or cross-domain assessment boundary: 25/30 longitudinal founding-purpose comparison and response

Table row 24
Test / controlled title: M2.10 Purpose Stability
Asset contribution / planned cases: Purpose-bound physical evidence; 001/024/033
Human or cross-domain assessment boundary: Board articulation and actual purpose-consistent choices

Table row 25
Test / controlled title: M2.11 Murmuration Capacity
Asset contribution / planned cases: Permitted evidence to independent human review; 019
Human or cross-domain assessment boundary: Collective sense-making remains human; no boardroom capture

Table row 26
Test / controlled title: M2.12 Constitutional Authority

Asset contribution / planned cases: No authority by inference; 009/019/033
Human or cross-domain assessment boundary: Board constitutional mediation and substantive judgement

Table row 27
Test / controlled title: M2.13 AI Constitutional Framework Governance
Asset contribution / planned cases: Model-change and permitted-inference evidence; 024/028
Human or cross-domain assessment boundary: Board framework assessment and ongoing25 oversight

Table row 28
Test / controlled title: M2.14 Purpose-Led Design
Asset contribution / planned cases: Source/purpose derivation and limitations; 001/019/030
Human or cross-domain assessment boundary: Human account of purpose-led design and explicit exceptions

Table row 29
Test / controlled title: M2.15 Telos / Function Distinction
Asset contribution / planned cases: Physical optimisation versus human allocation; 019
Human or cross-domain assessment boundary: Alignment through actual human governance and outcomes

8 October Process counterpart adoption - version 0.3

Current counterpart: AOS-13 v0.1 (aos-13-process-intelligence-and-operational-coordination.md), Architecture/Map v0.38 and AOS-40 v0.5 planned VER-038. Asset REQ-013-020/032 and CON-004 supply resident-communicated promise, completion/inspection, uncertainty, partial/disputed scope and closure feedback. Process REQ-030-038, VER-022-026 and CON-005 consume those meanings; REQ-003/004/014/015/043/049 preserve exact source, change and lifecycle standing. Process does not become the asset inspection, statutory dutyholder or completion-evidence authority.

Process functional allocation now exists. Earlier statements that AOS-13 is undrafted or awaits functional detail record the previous baseline. Exact executable schemas/profiles, compatible applied-state evidence, appointed human capacity/cover and actual accepted handoff/control/outcome evidence remain open. This revision changes references only; all original AOS-10 requirements and planned cases, source/common/DEC standings, private boundaries and human decision responsibilities remain unchanged. No case execution, independent review, conformance or operating approval is inferred.

Current reciprocal adoption and precise source allocation - 9 October2026

This revision corrects current control/status and adoption/traceability references only. Every original normative requirement statement, case acceptance condition, invariant and identity retains its prior meaning. Existing source versions, approved architectural directions and human/private boundaries are unchanged. Local§6 is the authoritative domain view; Registerv0.17 SENSING-ADOPTION-2026-10-09 supplies the current reciprocal common mapping; Matrixv0.18 SENSING-SOURCES-2026-10-09 supplies every FP/RP/GT source locator, exact contribution chain and owned residual/gate. The following reverse view rows are projections of that single adoption manifest, not new dictionaries or wire schemas.

Table row 1
Exact component/view revision: AOS-10-CON-001 / documentv0.4
Authoritative common master: KX-01/08/09/11/23; REC-E/Q
Retained producer → consumer / domain meaning: Human/source adapter via14 → 02/10: organisation, building/property/component and relationship revision; source/method; physical quantity/unit/calibration basis where applicable; observed/admitted times; purpose, assurance, uncertainty, correction/access/lifecycle. 02 REC-E/Q owns common evidence; invalid or ambiguous scope stays rejected/unresolved.
Local requirement → planned case: AOS-10-REQ-001, AOS-10-REQ-002, AOS-10-REQ-003, AOS-10-REQ-004, AOS-10-REQ-006, AOS-10-REQ-007, AOS-10-REQ-008, AOS-10-REQ-033, AOS-10-REQ-038 → AOS-10-VER-001, AOS-10-VER-002, AOS-10-VER-003, AOS-10-VER-005, AOS-10-VER-006, AOS-10-VER-027, AOS-10-VER-030

Exact40 supporting cases / residual gate: AOS-40-VER-024, AOS-40-VER-025; local§17 and40-ISS-002/003 gate exact profiles/fixtures/compatibility before dependent build or execution

Table row 2

Exact component/view revision: AOS-10-CON-002 / documentv0.4
Authoritative common master: KX-01/08/09/10; REC-E/Q
Retained producer → consumer / domain meaning: 10 through02 → permitted service/22/24/30: exact object/view revision, observations versus inference, condition/time/coverage cells, conflicts/freshness/gaps, model/rule, limitations and lineage. Unsafe aggregation prohibited; no claim beyond evidenced scope.
Local requirement → planned case: AOS-10-REQ-005, AOS-10-REQ-006, AOS-10-REQ-009, AOS-10-REQ-010, AOS-10-REQ-044, AOS-10-REQ-048 → AOS-10-VER-003, AOS-10-VER-004, AOS-10-VER-005, AOS-10-VER-007, AOS-10-VER-019
Exact40 supporting cases / residual gate: AOS-40-VER-011, AOS-40-VER-025; local§17 and40-ISS-002/003 gate exact profiles/fixtures/compatibility before dependent build or execution

Table row 3

Exact component/view revision: AOS-10-CON-003 / documentv0.4
Authoritative common master: KX-01/02/03/04/07/08/21/26; REC-E/Q/A/D/X; COORD ACC
Retained producer → consumer / domain meaning: 10/competent humans → 13/30/02; returned work evidence →10: concern, physical consequence/exposure, urgency basis, tracker/owner/cover, acceptance, authorised action, attempted/partial/actual effect and resulting observation. Common REC-Q/A/D/X and ACC; receipt is not accepted responsibility.
Local requirement → planned case: AOS-10-REQ-011, AOS-10-REQ-012, AOS-10-REQ-020, AOS-10-REQ-021, AOS-10-REQ-022, AOS-10-REQ-032, AOS-10-REQ-037 → AOS-10-VER-008, AOS-10-VER-009, AOS-10-VER-016, AOS-10-VER-017, AOS-10-VER-018
Exact40 supporting cases / residual gate: AOS-40-VER-009, AOS-40-VER-014, AOS-40-VER-020, AOS-40-VER-022, AOS-40-VER-038; local§17 and40-ISS-002/003 gate exact profiles/fixtures/compatibility before dependent build or execution

Table row 4

Exact component/view revision: AOS-10-CON-004 / documentv0.4
Authoritative common master: KX-01/08/09/21/23; REC-E/Q; Operational Profiles§§4/5
Retained producer → consumer / domain meaning: Controlled records/human/contractor via14/02 →10→13/11/30: repair and promised scope, original communicated commitment, precision/timezone and communication proof, authorised revisions, internal targets separate, completion rule/work/inspection evidence, completion time, incomplete/partial/unverified/disputed classification and provenance. 02/Profiles and DEC-036-041 own shared semantics; 13 detects/tracks, 11 delivers contact, 30 supports human decisions.
Local requirement → planned case: AOS-10-REQ-013, AOS-10-REQ-014, AOS-10-REQ-015, AOS-10-REQ-016, AOS-10-REQ-017, AOS-10-REQ-018, AOS-10-REQ-019, AOS-10-REQ-020, AOS-10-REQ-032 → AOS-10-VER-010, AOS-10-VER-011, AOS-10-VER-012, AOS-10-VER-013, AOS-10-VER-014, AOS-10-VER-015, AOS-10-VER-016, AOS-10-VER-017
Exact40 supporting cases / residual gate: AOS-40-VER-007, AOS-40-VER-008, AOS-40-VER-009, AOS-40-VER-010, AOS-40-VER-038; local§17 and40-ISS-002/003 gate exact profiles/fixtures/compatibility before dependent build or execution

Table row 5

Exact component/view revision: AOS-10-CON-005 / documentv0.4
Authoritative common master: KX-01/08; REC-E/Q; KX-22 only after20 canonical admission
Retained producer → consumer / domain meaning: 10 with permitted02/14 inputs →22/24/30/25: physical condition, scenario/horizon, costs/resource constraints, alternatives, distributional consequences, uncertainty/coverage, actual outcome and precise standing. REC-E/Q; no approved capital decision or institution-wide pass inferred.
Local requirement → planned case: AOS-10-REQ-023, AOS-10-REQ-044 → AOS-10-VER-019
Exact40 supporting cases / residual gate: AOS-40-VER-013, AOS-40-VER-027; local§17 and40-ISS-002/003 gate exact profiles/fixtures/compatibility before dependent build or execution

Table row 6

Exact component/view revision: AOS-10-CON-006 / documentv0.4
Authoritative common master: KX-01/03/08/14/15/21/23; REC-E/Q/D; COORD ACC
Retained producer → consumer / domain meaning: Competent stewards/02/10 → permitted dutyholders/humans/external recipients through14: exact building/lifecycle/applicability profile, category inventory, current versions/history, gaps, authorised audience, delivery/usability confirmation and owned residual duties. Shared custody/access/exchange definitions; no statutory completeness inferred from transfer alone.
Local requirement → planned case: AOS-10-REQ-024, AOS-10-REQ-025, AOS-10-REQ-026, AOS-10-REQ-027, AOS-10-REQ-047 → AOS-10-VER-020, AOS-10-VER-021, AOS-10-VER-022, AOS-10-VER-023
Exact40 supporting cases / residual gate: AOS-40-VER-025, AOS-40-VER-036; local§17 and40-ISS-002/003 gate exact

profiles/fixtures/compatibility before dependent build or execution

Table row 7
Exact component/view revision: AOS-10-CON-007 / documentv0.4
Authoritative common master: RSVIEW-0.1;02§6.6/04-CON-009; KX-23/07/06/05/13/17/21
Retained producer → consumer / domain meaning: Assigned research service/14/10 →02/13/30/01/affected owners: common profile/run/finding/disposition meanings, exact affected elements and asset-specific implications under RSVIEW-0.1; failed/partial retrieval and unaccepted reviewer remain explicit.
Local requirement → planned case: AOS-10-REQ-039, AOS-10-REQ-040, AOS-10-REQ-041, AOS-10-REQ-042, AOS-10-REQ-043, AOS-10-REQ-045, AOS-10-REQ-046 → AOS-10-VER-026, AOS-10-VER-030, AOS-10-VER-031, AOS-10-VER-032, AOS-10-VER-033
Exact40 supporting cases / residual gate: AOS-40-VER-031, AOS-40-VER-032, AOS-40-VER-033, AOS-40-VER-034, AOS-40-VER-035; local§17 and40-ISS-002/003 gate exact profiles/fixtures/compatibility before dependent build or execution

Individual-source reverse navigation

Rows below identify the exact controlled source locator and this component’s selected contribution or owned residual. Full source propositions and all other counterparts remain in the Matrix addendum; row numbers do not invent source IDs. This record completes source disposition, not source sufficiency or institutional assessment.

Table row 1
Source locator: FP 1 Telos/conferred purpose/function
Selected component chain / residual disposition: AOS-10-REQ-001 → AOS-10-VER-001; Matrix source row retains owned residual and gate

Table row 2
Source locator: FP 2 Permanently human Mode 2
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 3
Source locator: FP 3 Architectural integrity
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 4
Source locator: FP 4 Radical transparency
Selected component chain / residual disposition: AOS-10-REQ-003 → AOS-10-VER-002; Matrix source row retains owned residual and gate

Table row 5
Source locator: FP 5 Bounded rationality/imperfection
Selected component chain / residual disposition: AOS-10-REQ-004, AOS-10-REQ-035 → AOS-10-VER-003, AOS-10-VER-029; Matrix source row retains owned residual and gate

Table row 6
Source locator: FP 6 Epistemic humility
Selected component chain / residual disposition: AOS-10-REQ-006, AOS-10-REQ-009 → AOS-10-VER-005, AOS-10-VER-007; Matrix source row retains owned residual and gate

Table row 7
Source locator: FP 7 No-exit obligation
Selected component chain / residual disposition: AOS-10-REQ-030 → AOS-10-VER-025; Matrix source row retains owned residual and gate

Table row 8
Source locator: FP 8 Constitutional mediator
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 9
Source locator: FP 9 Compliance as consequence
Selected component chain / residual disposition: AOS-10-REQ-027 → AOS-10-VER-023; Matrix source row retains owned residual and gate

Table row 10
Source locator: FP 10 Complexity/emergence
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 11
Source locator: RP 1: Architecture and Completeness: Every governance process must close its feedback loop.
Selected component chain / residual disposition: AOS-10-REQ-021 → AOS-10-VER-018; Matrix source row retains owned residual and gate

Table row 12
Source locator: RP 2: Architecture and Completeness: Every human accountability layer must be explicitly named, sequenced, and time - bounded before any process is consid...
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 13
Source locator: RP 3: Architecture and Completeness: Every option set must include the option that cannot be made to work.
Selected component chain / residual disposition: AOS-10-REQ-023 → AOS-10-VER-019; Matrix source row retains owned residual and gate

Table row 14
Source locator: RP 4: Architecture and Completeness: The ‘AI said so’ test must be passable at every decision point.
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 15
Source locator: RP 5: The Mode 1 / Mode 2 Boundary: Mode 2 is permanently human.
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 16
Source locator: RP 6: The Mode 1 / Mode 2 Boundary: Every Mode 1 boundary is a governance instrument, not a technical setting.
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 17
Source locator: RP 7: The Mode 1 / Mode 2 Boundary: The boardroom is a Mode 2 deliberative space.
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 18
Source locator: RP 8: The Mode 1 / Mode 2 Boundary: The Mode 1/Mode 2 boundary is under continuous pressure from AI capability growth.
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 19
Source locator: RP 9: The 1+5 Architecture: Every proposed governance mechanism must be tested against the 1+5 structure to confirm which layer it belongs to and...
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 20
Source locator: RP 10: The 1+5 Architecture: Risk is intrinsic to each intelligence layer, not a separate domain.
Selected component chain / residual disposition: AOS-10-REQ-022 → AOS-10-VER-008; Matrix source row retains owned residual and gate

Table row 21
Source locator: RP 11: The 1+5 Architecture: Every intelligence layer boundary where welfare - adjacent or safety - adjacent signals may arise must have an explic...
Selected component chain / residual disposition: AOS-10-REQ-011, AOS-10-REQ-020 → AOS-10-VER-008, AOS-10-VER-017; Matrix source row retains owned residual and gate

Table row 22
Source locator: RP 12: The 1+5 Architecture: The Golden Thread obligation under the Building Safety Act 2022 is not a technical data management requirement.
Selected component chain / residual disposition: AOS-10-REQ-024, AOS-10-REQ-025, AOS-10-REQ-026, AOS-10-REQ-047 → AOS-10-VER-020, AOS-10-VER-021, AOS-10-VER-022; Matrix source row retains owned residual and gate

Table row 23
Source locator: RP 13: Options and Decisions: Options generated by the architecture must be grounded in the organisation’s actual state - actual covenant condition...
Selected component chain / residual disposition: AOS-10-REQ-023 → AOS-10-VER-019; Matrix source row retains owned residual and gate

Table row 24
Source locator: RP 14: Options and Decisions: Every consequential decision must feed back into the Unified Data Layer as a structured record - not only the decisio...
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 25
Source locator: RP 15: Options and Decisions: Revealed preferences from real decisions take precedence over stated preferences in policy documents when the archite...
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 26
Source locator: RP 16: Blind Spots and Honesty: The architecture must name what it cannot see.
Selected component chain / residual disposition: AOS-10-REQ-004, AOS-10-REQ-048 → AOS-10-VER-003; Matrix source row retains owned residual and gate

Table row 27

Source locator: RP 17: Blind Spots and Honesty: The dynamic risk perimeter question must be asked at board level as a standing agenda item: not only ‘what are our ri...
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 28
Source locator: RP 18: Blind Spots and Honesty: The interaction of intelligence layers produces system - level behaviours that no individual layer would produce alone.
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 29
Source locator: RP 19: Ethics and Telos: Every process must demonstrate a traceable relationship to the organisation’s ethical commitments and social purpose.
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 30
Source locator: RP 20: Ethics and Telos: The architecture must be capable of detecting purpose drift - the condition where operational processes have graduall...
Selected component chain / residual disposition: AOS-10-REQ-021 → AOS-10-VER-018; Matrix source row retains owned residual and gate

Table row 31
Source locator: RP 21: Ethics and Telos: Diversity, inclusion, and equitable outcomes are not separate compliance obligations.
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 32
Source locator: RP 22: Ethics and Telos: Where the organisation’s welfare obligation to residents and its consent architecture pull in opposing directions, th...
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 33
Source locator: RP 23: Ethics and Telos: AI systems have function, not telos.
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 34
Source locator: RP 24: Ethics and Telos: Where the organisation's purpose is interpreted through an accumulating body of AI-mediated rulings rather than appli...
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 35
Source locator: RP 25: Ethics and Telos: Every AI system deployed by the organisation carries an embedded constitutional framework established by its developer.
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 36
Source locator: RP 26: Ethics and Telos: The no - exit condition is a constitutive feature of the organisation’s moral architecture, not background context.
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 37
Source locator: RP 27: Ethics and Telos: Compliance is the output of sound governance design, not its objective.
Selected component chain / residual disposition: AOS-10-REQ-027 → AOS-10-VER-023; Matrix source row retains owned residual and gate

Table row 38
Source locator: RP 28: Radical Transparency: If you cannot audit it and be held accountable for it, it cannot be done.
Selected component chain / residual disposition: AOS-10-REQ-037 → AOS-10-VER-018; Matrix source row retains owned residual and gate

Table row 39
Source locator: RP 29: Radical Transparency: The architecture must be more transparent than the document - based governance it replaces, not less.
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 40
Source locator: RP 30: Radical Transparency: Transparency obligations extend to the architecture’s uncertainty.
Selected component chain / residual disposition: AOS-10-REQ-009, AOS-10-REQ-010 → AOS-10-VER-007; Matrix source row retains owned residual and gate

Table row 41
Source locator: RP 31: Agentic Delegation: Agents operate under explicitly delegated authority, not implied authority.
Selected component chain / residual disposition: AOS-10-REQ-012 → AOS-10-VER-009; Matrix source row retains owned residual and gate

Table row 42
Source locator: RP 32: Agentic Delegation: Agent authority is domain - specific, context - specific, and condition - specific simultaneously.
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 43
Source locator: RP 33: Agentic Delegation: Agents cannot commit the organisation to external obligations, initiate unsolicited contact with external parties, or...
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 44
Source locator: RP 34: Agentic Delegation: Internal escalation - routing a signal within the architecture to a human reviewer or to a receiving intelligence lay...
Selected component chain / residual disposition: AOS-10-REQ-020 → AOS-10-VER-017; Matrix source row retains owned residual and gate

Table row 45
Source locator: RP 35: Agentic Delegation: The agentic delegation framework is a governance document reviewed by the board, not a technical configuration manage...

Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 46
Source locator: RP 36: Agentic Delegation: Every agent action must satisfy the ethics and telos test and the radical transparency test independently of the proc...
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 47
Source locator: RP 37: Agentic Delegation: Certain classes of finding must reach their required audience regardless of any instruction to suppress or delay them.
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 48
Source locator: RP 38: Data and Sensing Boundaries: Sensing must not exceed its declared purpose.
Selected component chain / residual disposition: AOS-10-REQ-028, AOS-10-REQ-029 → AOS-10-VER-024; Matrix source row retains owned residual and gate

Table row 49
Source locator: RP 39: Data and Sensing Boundaries: The boundary between observing an asset and monitoring a behaviour is an absolute architectural boundary, not a matte...
Selected component chain / residual disposition: AOS-10-REQ-028, AOS-10-REQ-029 → AOS-10-VER-024; Matrix source row retains owned residual and gate

Table row 50
Source locator: RP 40: Data and Sensing Boundaries: Where behavioural inference from sensing data is genuinely necessary to serve the resident’s interests - energy pover...
Selected component chain / residual disposition: AOS-10-REQ-029 → AOS-10-VER-024; Matrix source row retains owned residual and gate

Table row 51
Source locator: RP 41: Data and Sensing Boundaries: The purpose limitation principle applies across all intelligence layers, not only to resident - facing sensing.
Selected component chain / residual disposition: No direct local requirement chain selected; preserve relevant shared/GI/human/domain owner and exact residual in Matrix row; source-sufficiency before affectedG3 and actual practice/longitudinal evidence before institutional claim.; Matrix source row retains owned residual and gate

Table row 52
Source locator: GT M1.1 Strategic Coherence
Selected component chain / residual disposition: AOS-10-REQ-023, AOS-10-REQ-044 → AOS-10-VER-019 (supporting case selection 019); Matrix source row retains owned residual and gate

Table row 53
Source locator: GT M1.2 Sensing Architecture
Selected component chain / residual disposition: AOS-10-REQ-001, AOS-10-REQ-002, AOS-10-REQ-003, AOS-10-REQ-004, AOS-10-REQ-005, AOS-10-REQ-006, AOS-10-REQ-007, AOS-10-REQ-008, AOS-10-REQ-009, AOS-10-REQ-010, AOS-10-REQ-035, AOS-10-REQ-036, AOS-10-REQ-048 → AOS-10-VER-001, AOS-10-VER-002, AOS-10-VER-003, AOS-10-VER-004, AOS-10-VER-005, AOS-10-VER-006, AOS-10-VER-007, AOS-10-VER-029 (supporting case selection 001/002/003/004/005/006/007/029); Matrix source row retains owned residual and gate

Table row 54
Source locator: GT M1.3 Risk Intelligence
Selected component chain / residual disposition: AOS-10-REQ-011, AOS-10-REQ-020, AOS-10-REQ-022, AOS-10-REQ-023,

AOS-10-REQ-044 → AOS-10-VER-008, AOS-10-VER-017, AOS-10-VER-019 (supporting case selection 008/017/019); Matrix source row retains owned residual and gate

Table row 55
Source locator: GT M1.4 Composition and Capability
Selected component chain / residual disposition: AOS-10-REQ-007, AOS-10-REQ-008, AOS-10-REQ-024, AOS-10-REQ-034, AOS-10-REQ-047 → AOS-10-VER-006, AOS-10-VER-020, AOS-10-VER-028 (supporting case selection 006/020/028); Matrix source row retains owned residual and gate

Table row 56
Source locator: GT M1.5 Performance Legibility
Selected component chain / residual disposition: AOS-10-REQ-005, AOS-10-REQ-021, AOS-10-REQ-023, AOS-10-REQ-037, AOS-10-REQ-044 → AOS-10-VER-004, AOS-10-VER-018, AOS-10-VER-019 (supporting case selection 004/018/019); Matrix source row retains owned residual and gate

Table row 57
Source locator: GT M1.6 Compliance Assurance
Selected component chain / residual disposition: AOS-10-REQ-024, AOS-10-REQ-025, AOS-10-REQ-026, AOS-10-REQ-027, AOS-10-REQ-047 → AOS-10-VER-020, AOS-10-VER-021, AOS-10-VER-022, AOS-10-VER-023 (supporting case selection 020/021/022/023); Matrix source row retains owned residual and gate

Table row 58
Source locator: GT M1.7 Governance Documentation
Selected component chain / residual disposition: AOS-10-REQ-003, AOS-10-REQ-025, AOS-10-REQ-031, AOS-10-REQ-046 → AOS-10-VER-002, AOS-10-VER-021, AOS-10-VER-026 (supporting case selection 002/021/026); Matrix source row retains owned residual and gate

Table row 59
Source locator: GT M1.8 Accountability Architecture
Selected component chain / residual disposition: AOS-10-REQ-019, AOS-10-REQ-020, AOS-10-REQ-026, AOS-10-REQ-032 → AOS-10-VER-016, AOS-10-VER-017, AOS-10-VER-022 (supporting case selection 016/017/022); Matrix source row retains owned residual and gate

Table row 60
Source locator: GT M1.9 Value for Money
Selected component chain / residual disposition: AOS-10-REQ-023, AOS-10-REQ-044 → AOS-10-VER-019 (supporting case selection 019); Matrix source row retains owned residual and gate

Table row 61
Source locator: GT M1.10 Human-AI Interaction Norms
Selected component chain / residual disposition: AOS-10-REQ-012, AOS-10-REQ-023, AOS-10-REQ-028, AOS-10-REQ-029, AOS-10-REQ-042, AOS-10-REQ-043, AOS-10-REQ-044 → AOS-10-VER-009, AOS-10-VER-019, AOS-10-VER-024, AOS-10-VER-033 (supporting case selection 009/019/024/033); Matrix source row retains owned residual and gate

Table row 62
Source locator: GT M1.11 Learning Metabolism
Selected component chain / residual disposition: AOS-10-REQ-009, AOS-10-REQ-010, AOS-10-REQ-021, AOS-10-REQ-034, AOS-10-REQ-037 → AOS-10-VER-007, AOS-10-VER-018, AOS-10-VER-028 (supporting case selection 007/018/028); Matrix source row retains owned residual and gate

Table row 63
Source locator: GT M1.12 Continuous Self-Assessment
Selected component chain / residual disposition: AOS-10-REQ-004, AOS-10-REQ-039, AOS-10-REQ-040, AOS-10-REQ-041, AOS-10-REQ-042, AOS-10-REQ-043, AOS-10-REQ-048 → AOS-10-VER-003, AOS-10-VER-031, AOS-10-VER-032, AOS-10-VER-033 (supporting case selection 003/031/032/033); Matrix source row retains owned residual and gate

Table row 64
Source locator: GT M1.13 Emergent System Behaviour

Selected component chain / residual disposition: AOS-10-REQ-004, AOS-10-REQ-023, AOS-10-REQ-035, AOS-10-REQ-036, AOS-10-REQ-044, AOS-10-REQ-048 → AOS-10-VER-003, AOS-10-VER-019, AOS-10-VER-029 (supporting case selection 003/019/029); Matrix source row retains owned residual and gate

Table row 65
Source locator: GT M1.14 Golden Thread Integrity
Selected component chain / residual disposition: AOS-10-REQ-024, AOS-10-REQ-025, AOS-10-REQ-026, AOS-10-REQ-047 → AOS-10-VER-020, AOS-10-VER-021, AOS-10-VER-022 (supporting case selection 020/021/022); Matrix source row retains owned residual and gate

Table row 66
Source locator: GT M2.1 Values Architecture
Selected component chain / residual disposition: AOS-10-REQ-012, AOS-10-REQ-028, AOS-10-REQ-029, AOS-10-REQ-030 → AOS-10-VER-009, AOS-10-VER-024, AOS-10-VER-025 (supporting case selection 009/024/025); Matrix source row retains owned residual and gate

Table row 67
Source locator: GT M2.2 Coherence Under Pressure
Selected component chain / residual disposition: AOS-10-REQ-011, AOS-10-REQ-022, AOS-10-REQ-023, AOS-10-REQ-044 → AOS-10-VER-008, AOS-10-VER-019 (supporting case selection 008/019); Matrix source row retains owned residual and gate

Table row 68
Source locator: GT M2.3 Incommensurable Trade-off Capacity
Selected component chain / residual disposition: AOS-10-REQ-023, AOS-10-REQ-044 → AOS-10-VER-019 (supporting case selection 019); Matrix source row retains owned residual and gate

Table row 69
Source locator: GT M2.4 Epistemic Brake Function
Selected component chain / residual disposition: AOS-10-REQ-004, AOS-10-REQ-006, AOS-10-REQ-009, AOS-10-REQ-010, AOS-10-REQ-017, AOS-10-REQ-048 → AOS-10-VER-003, AOS-10-VER-005, AOS-10-VER-007, AOS-10-VER-014 (supporting case selection 003/005/007/014); Matrix source row retains owned residual and gate

Table row 70
Source locator: GT M2.5 Directorial Independence
Selected component chain / residual disposition: AOS-10-REQ-023, AOS-10-REQ-025, AOS-10-REQ-044 → AOS-10-VER-019, AOS-10-VER-021 (supporting case selection 019/021); Matrix source row retains owned residual and gate

Table row 71
Source locator: GT M2.6 Social Legitimacy
Selected component chain / residual disposition: AOS-10-REQ-019, AOS-10-REQ-030, AOS-10-REQ-032 → AOS-10-VER-016, AOS-10-VER-025 (supporting case selection 016/025); Matrix source row retains owned residual and gate

Table row 72
Source locator: GT M2.7 No-Exit Obligation
Selected component chain / residual disposition: AOS-10-REQ-028, AOS-10-REQ-029, AOS-10-REQ-030 → AOS-10-VER-024, AOS-10-VER-025 (supporting case selection 024/025); Matrix source row retains owned residual and gate

Table row 73
Source locator: GT M2.8 Radical Transparency
Selected component chain / residual disposition: AOS-10-REQ-003, AOS-10-REQ-004, AOS-10-REQ-005, AOS-10-REQ-006, AOS-10-REQ-007, AOS-10-REQ-008, AOS-10-REQ-009, AOS-10-REQ-010, AOS-10-REQ-021, AOS-10-REQ-025, AOS-10-REQ-037, AOS-10-REQ-048 → AOS-10-VER-002, AOS-10-VER-003, AOS-10-VER-004, AOS-10-VER-005, AOS-10-VER-006, AOS-10-VER-007, AOS-10-VER-018, AOS-10-VER-021 (supporting case selection 002/003/004/005/006/007/018/021); Matrix source row retains owned residual and gate

Table row 74
Source locator: GT M2.9 Moral Drift Detection
Selected component chain / residual disposition: AOS-10-REQ-021, AOS-10-REQ-023, AOS-10-REQ-034, AOS-10-REQ-037,

AOS-10-REQ-039, AOS-10-REQ-040, AOS-10-REQ-044 → AOS-10-VER-018, AOS-10-VER-019, AOS-10-VER-028, AOS-10-VER-031 (supporting case selection 018/019/028/031); Matrix source row retains owned residual and gate

Table row 75
Source locator: GT M2.10 Purpose Stability
Selected component chain / residual disposition: AOS-10-REQ-001, AOS-10-REQ-002, AOS-10-REQ-028, AOS-10-REQ-029, AOS-10-REQ-042, AOS-10-REQ-043 → AOS-10-VER-001, AOS-10-VER-024, AOS-10-VER-033 (supporting case selection 001/024/033); Matrix source row retains owned residual and gate

Table row 76
Source locator: GT M2.11 Murmuration Capacity
Selected component chain / residual disposition: AOS-10-REQ-023, AOS-10-REQ-044 → AOS-10-VER-019 (supporting case selection 019); Matrix source row retains owned residual and gate

Table row 77
Source locator: GT M2.12 Constitutional Authority
Selected component chain / residual disposition: AOS-10-REQ-012, AOS-10-REQ-023, AOS-10-REQ-042, AOS-10-REQ-043, AOS-10-REQ-044 → AOS-10-VER-009, AOS-10-VER-019, AOS-10-VER-033 (supporting case selection 009/019/033); Matrix source row retains owned residual and gate

Table row 78
Source locator: GT M2.13 AI Constitutional Framework Governance
Selected component chain / residual disposition: AOS-10-REQ-028, AOS-10-REQ-029, AOS-10-REQ-034 → AOS-10-VER-024, AOS-10-VER-028 (supporting case selection 024/028); Matrix source row retains owned residual and gate

Table row 79
Source locator: GT M2.14 Purpose-Led Design
Selected component chain / residual disposition: AOS-10-REQ-001, AOS-10-REQ-002, AOS-10-REQ-023, AOS-10-REQ-038, AOS-10-REQ-044, AOS-10-REQ-045 → AOS-10-VER-001, AOS-10-VER-019, AOS-10-VER-030 (supporting case selection 001/019/030); Matrix source row retains owned residual and gate

Table row 80
Source locator: GT M2.15 Telos / Function Distinction
Selected component chain / residual disposition: AOS-10-REQ-023, AOS-10-REQ-044 → AOS-10-VER-019 (supporting case selection 019); Matrix source row retains owned residual and gate

Author consistency conclusion: functional roles and repair/private/workforce/external/research/control/failure boundaries agree with the current shared infrastructure. SENS-CR-01-05 closed as author document corrections; wire profiles, operating roles/capacity, domain/annex/legal sufficiency and observed evidence remain open per§17 and40. No independent/executed conformance or operating readiness claim. Earlier dated text/addenda describe history; this current control takes precedence.

Phase 2 scope disposition - 9 October 2026

DEC-097 controls over prior inclusion/annex statements. CAP-01/02-specific legacy requirements/cases are deferred and supply no current-core completion/acceptance obligation. General human judgement, independent challenge, evidence fidelity, cumulative risk/drift and protected reporting remain current. Existing closure of AT-CR-01-05 and pilot5b is retained; neither is reopened by this scope change. No case executed or operating approval granted.

Allocation and source status: Any older source/adoption row relying on deferred CAP-only IDs is a historical use-case contribution, not current-core coverage. Core source sufficiency must use the surviving general obligations and accepted evidence; no source is promoted by this deferral. Retained numbered totals count catalogue/trace entries, including deferred IDs, and must not be read as active-core requirement/test totals.

Historical opening status notices - retained provenance

These are dated drafting snapshots, including their then-current versions, totals, completion statements and next tasks. They do not define today's baseline or work queue. The present document retains its proposed/planned status; approved directions retain their recorded scope. Use the current inventory, adopted README and live to-do list for orientation; authoritative requirement and decision text remains in its named sections.

Historical status notice - revision set: AOS-00/Map v0.44; DEC-001-097; AOS-10v0.5/20v0.6/22v0.5/24v0.4/25v0.3/40v0.8; other components unchanged; Sharedv0.20/Corev0.6/Registerv0.19/Matrixv0.20; acceptance annexv0.2; reviewv0.3.

Historical status notice - scope decision - 9 October 2026, DEC-097: Mark has moved CAP-01 Trade-Off Divergence and CAP-02 Risk Register Assessment into Phase 2 as specific use cases built on AOS. They are outside the current architecture/specification completion scope and are not current build, acceptance or publication prerequisites. No use-case design, configuration, implementation or testing is scheduled now. DEC-017's architectural inclusion is superseded on this point; its original record remains history. General human judgement, evidence, data-use/authority, independent challenge and protected reporting controls remain in the architecture. Dedicated legacy use-case IDs are retained only as deferred trace references, with original wording parked in Phase 2 (deferred under DEC-097); mixed rows retain only their general architectural obligations in current scope. Earlier inclusion/next-task/annex-dependency statements are superseded.

Historical status notice - sensing consistency closure - 9 October 2026: Mark authorised the remaining consistency work. SENS-CR-01-05 are closed at the functional-document/author-review level: all40 logical CON views across10-14 and40 have exact central adoption, producer/consumer/shared-owner and REQ/VER links; all80 controlled FP/RP/GT sources have precise current contributions and owned residual/gate dispositions; current body/control statements are reconciled. Versions10v0.4/11v0.3/12v0.3/13v0.2/14v0.8/40v0.6; Architecture/Mapv0.42; Sharedv0.18/Corev0.6/ExchangeRegisterv0.17/SourceMatrixv0.18; reviewv0.4. DEC001-096 unchanged. Sensing269 proposed REQs/176 planned VERs;40 retains40/38. No new requirement/case/interface, source promotion or execution. Exact compatible wire schemas/profiles, organisation appointments/capacity, independent review, legal/institutional/practice evidence and scoped build/activation remain separate; independent project review remains deferred. Earlier dated notices/addenda are historical. Current controlling allocation is the9October manifest and source addendum below.