



AF 9100:2026

Aerospace Quality Management System

GUIDE

Implementation Guide

AF-IG-9100-001

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Use and document-control boundary

This companion implements the supplied AF 9100 requirement basis without changing the original standard. Its process allocation, examples, checklists and record design are authored implementation material. Actual mission or product limits, specialist procedures, permissions and genuine observations must be completed before consequential use. Applicable source minima and independent decision conditions cannot be reduced by this companion.

The printed edition date identifies the companion series; it is not evidence that later preparation, review or operational decisions occurred on that date. New support codes in this set are proposed allocations for controlled registration. Established AF-IG-9100-001, AF-FAQ-9100-001 and AF-TR-9100-001 identities are retained; earlier files, the corporate master list and ASTRA codes are not overwritten.

Equivalent combined or digital records are permitted when all required fields, relationships, authority and history remain intact. A completed PDF field or typed name is not evidence of an authenticated approval. Blank records in this delivery contain no invented applicant, signature, event or result.

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Select actual scope → complete application criteria → use the applicable procedure and technical book → capture authentic evidence → evaluate every applicable condition → obtain the required independent decision. Document availability does not establish implementation or conformity.

1 Build a complete application, not a document count

Start from the exact object and retained responsibility. Map source requirements, select actual technical modules and assign real owners. Reuse an existing control only after checking its content, implementation, field structure and authority. This guide is expanded implementation guidance, not a new normative scheme.

Step	Minimum usable outcome
Scope	One exact route and object tuple for each claimed conclusion.
Gap assessment	Every source condition and relevant field table has implementation, evidence and an owner, or an explicit open gap.
Operating preparation	Current procedures, technical profiles, competent roles and safe evidence access.
Demonstration	Actual representative work, failed cases, corrections and usable raw records.
Independent closure	All source decision gates, current competence, independent authority and truthful scope.
Continuing use	Surveillance, change, records, remedies, support and closure are operable.

2 Operating work packages

AF-PR-9100-001 — Document, Record and Publication Control

Creation, issue, correction, translation, migration, withdrawal or loss of an instruction or evidence record.

Start with: Separate requirements, operating instructions, blank templates, completed records and public extracts. Assign an owner and a unique identifier; record the source edition and the object that may rely on it.

Demonstrate: Retain original values, acquisition time, author, configuration and supporting files. A correction adds its reason, actor and approval without overwriting the original observation; prohibit retrospective completion of unobserved work.

Close and retain: Remove obsolete copies from unintended use, retain their historical decision links and notify recipients of material corrections. Verify cached, translated and remote copies; source availability alone does not establish local implementation.

Record instruments: AF-FR-9100-001, AF-FR-9100-015, AF-FR-9100-032. Source: 2.5, 7.10, 7.11, Y, AJ.1, AJ.7.

AF-PR-9100-002 — Scope, Context, Obligations and Applicability

New scope, new object route, changed responsibility, new site or altered external obligation.

Start with: Select ORG, PRD, SVC, PRC, PER, SUB or CAB and identify each separate requested conclusion. Record legal entity, actual performer, location, configuration, time boundary and lifecycle responsibility.

Demonstrate: Map each applicable technical, customer and legal obligation to the current controlled data and responsible authority. Resolve conflicting obligations before the affected commitment; keep confidential review available through lawful access.

Close and retain: Reassess acquisitions, new sites, work transfers and changes in responsibility. Update the requirement index and public wording only after the relevant evaluation; preserve earlier scope and effective-event history.

Record instruments: AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Source: 1, 2, 3, 4, A, AA.1, AA.2.

AF-PR-9100-003 — Governance, Delegation, Impartiality and Stop Authority

Assignment of responsibility, delegation, material conflict, commercial pressure or a protective concern.

Start with: Identify the accountable executive, management representative and relevant design, safety, production, digital, metrology and release authorities. State scope, limits, substitutes and reporting paths in written appointments.

Demonstrate: Specify delegated decisions, affected items, competence, duration, supervision and retained accountability. Confirm that supplier permissions and system access cannot enlarge the written delegation.

Close and retain: Technical return requires evidence of cause, extent and restored controls. Scheme status and public claims are separate decisions. Examine attempted interference and act on independent dissent rather than closing it by management preference.

Record instruments: AF-FR-9100-003, AF-FR-9100-006, AF-FR-9100-007, AF-FR-9100-014. Source: 5, B, 9.6, 22.2, 28.1, AH.2.

AF-PR-9100-004 — Risk, Criticality, Hazards and Residual Acceptance

New mission, product, process, activity, material change or newly credible adverse consequence.

Start with: Identify the exact function, configuration, phase, environment, exposure and people or assets affected. Include storage, maintenance, foreseeable misuse and retirement as well as nominal operation.

Demonstrate: Convert each relied-upon mitigation into a controlled requirement with an owner, acceptance condition and verification. Examine whether a human action has enough time and information to work.

Close and retain: Connect anomalies, source changes, life extensions and new observations to the original hazard argument. Trace affected releases and notify owners; closure of an action is not proof that risk was reduced.

Record instruments: AF-FR-9100-014, AF-FR-9100-016, AF-FR-9100-006. Source: 6.1, 8.1.1, 8.1.3, 11.5, B, E.

AF-PR-9100-005 — Objectives, Opportunities and Improvement Portfolio

Selection, reporting or alteration of an objective or improvement opportunity.

Start with: Describe the intended outcome, affected users, baseline and causal hypothesis. Keep the opportunity record separate from the register accepting adverse risks.

Demonstrate: Retain source population and configuration. Reconcile dashboards to actual records, including missing data and failed outcomes. Do not retrospectively change a denominator to meet the target.

Close and retain: Record the decision and learning, update applicable plans and controls, and retain unsuccessful experiments. No favorable objective can override an unfulfilled conformity condition.

Record instruments: AF-FR-9100-013, AF-FR-9100-027, AF-FR-9100-028. Source: 6.2, 6.3, 9.1, 10.3, Z.1.

AF-PR-9100-006 — Change, Configuration, Work Transfer and Requalification

Any proposed, temporary, emergency or discovered unapproved change to the assured baseline.

Start with: Capture before-and-after requirements, hardware, software, model, process, source, location and instructions. Record why the change is needed and which physical or digital instances it may affect.

Demonstrate: Obtain responsible technical and required customer or authority approvals. Specify effectivity, serial or lot cut-in, mixed-configuration restrictions and any temporary expiry or rollback conditions.

Close and retain: Update as-built, as-tested, as-delivered and as-maintained records. Obtain downstream acknowledgement where action is required and review historical outputs affected by an unapproved change.

Record instruments: AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-021, AF-FR-9100-022. Source: 6.4, 8.1.2, 8.1.5, 8.2.4, 8.3.6, 8.5.6, D, 25.6.

AF-PR-9100-007 — Resources, Facility Integrity, Equipment and Tooling

New equipment, capacity increase, facility change, maintenance intervention or loss of essential utility.

Start with: Define product or service demand, inspection and rework load, technical limits, specialist staffing, utilities and independent review demand. Count actual available capacity, not installed nameplate totals.

Demonstrate: Use an authorized readiness plan for completion, functional and integrated tests. Separate test acceptance from protective stop conditions; a failed interlock remains a blocking item.

Close and retain: After repair, relocation or software change, verify relevant functions and output validity. Assess prior affected work independently of equipment restoration and update the asset record.

Record instruments: AF-FR-9100-017, AF-FR-9100-018, AF-FR-9100-029. Source: 7.1, 7.4, 8.5.1.1, 17.

AF-PR-9100-008 — Workforce Competence, Awareness and Task Authorization

New assignment, changed task, inactivity, renewal or adverse performance.

Start with: Identify outputs, decisions, equipment, hazards, instructions, language and essential practical steps. Separate employee task permission, independent personnel certification and assessment-role credentials.

Demonstrate: Use preset criteria, representative tasks and anomalies. Retain independent results for mandatory components and every essential practical step; add AB/AE controls when those routes apply.

Close and retain: Monitor practice, changes, errors and observations. Apply the source inactivity and review minima; restrict affected work immediately when capability is not supported and require observed reactivation.

Record instruments: AF-FR-9100-003, AF-FR-9100-010, AF-FR-9100-031. Source: 7.2, 7.3, 26, AB, AE.

AF-PR-9100-009 — Metrology, Method Validation and Uncertainty Decisions

Use, change or review of a measurement method or uncertainty-sensitive acceptance result.

Start with: Identify object, configuration, property, units, conditions, actual limits and decision purpose. Separate specification limits from instrument resolution, control limits and uncertainty.

Demonstrate: State inputs, correction terms, sensitivities, distributions, standard uncertainties and covariance. Use a justified coverage factor; do not hide known bias in a larger uncertainty allowance.

Close and retain: Retain raw and corrected results, model, rule and technical approval. An out-of-tolerance instrument triggers affected-output review from the last demonstrated valid state, not just recalibration.

Record instruments: AF-FR-9100-005, AF-FR-9100-018, AF-FR-9100-023. Source: 7.6, 7.7, 28.3, H, AD, AH.4.

AF-PR-9100-010 — Technical Tools, Data Integrity and Evidence Portability

A computational tool, data interface or repository is introduced, changed, recovered or retired.

Start with: Identify the decision, consequence, algorithm, data model, units, interfaces, user roles and functions capable of creating or hiding a defect.

Demonstrate: Reconcile ingestion to the actual source, object, version and event time. Identify generated, simulated and reconstructed material; a hash proves neither physical truth nor engineering validity.

Close and retain: Record actual local acceptance, remaining restrictions, trained users and revalidation triggers. Transfer usable records and accepted custody before cutover; PDFs are record artifacts, not a deployed database.

Record instruments: AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-032. Source: 7.9, 7.11, 7.12, D, AJ.2, AJ.7.

AF-PR-9100-011 — Customer Requirements, Communication and Contract Review

Enquiry, quotation, order acceptance, repeat order with changed conditions, or customer requirement change.

Start with: Collect customer requirements, promised marketing claims, intended use and technical, delivery, support and retirement needs. Confirm missing written instructions through a controlled record.

Demonstrate: Identify disagreements with proposals, conflicting obligations and inaccessible data. Obtain a valid agreed change before commitment rather than assuming a later concession.

Close and retain: Assess work in progress, purchased inputs, delivered articles, qualifications and support information. Record implementation effectivity and acknowledgement of changes requiring recipient action.

Record instruments: AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013, AF-FR-9100-015. Source: 8.2, 8.2.1, 8.2.2, 8.2.3, 8.2.4, 4.5.

AF-PR-9100-012 — Design, Systems Engineering and Lifecycle Gates

Concept creation, design development, integration, lifecycle transition or material design change.

Start with: Record users, success and protective states, environments, support assumptions and lifecycle roles. Allocate verifiable requirements to physical, digital, human and service functions.

Demonstrate: Review hazards, common causes, resource budgets and assumptions. Validate models for their exact decision domain; identify where simulation cannot observe or bound an essential physical property.

Close and retain: Reconcile qualification, anomalies, actual configuration, operating procedures, training and support. Conditional progression may permit bounded non-dependent work but not action relying on missing critical evidence.

Record instruments: AF-FR-9100-002, AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-023. Source: 8.3, 8.3.1, 8.3.2, 8.3.3, 8.3.4, 8.3.5, 8.3.6, 11, C.

AF-PR-9100-013 — Supplier Qualification, Purchasing and Sub-Tier Assurance

Source selection, outsourcing, delegated verification, new lower tier or supplier performance concern.

Start with: Record legal and actual performer, operating site, supplied work, technical baseline, criticality and further tiers. Separate brokers from sources that perform the work.

Demonstrate: Record approved scope, conditional development, restrictions, suspension or disapproval. Conditional trial status limits work and segregation; it is not unrestricted production permission or a SUB certificate.

Close and retain: Review site, source, material and process changes prospectively. Trace supplier issues downstream, close occurrence and oversight escape causes separately, and preserve tools, records and receiving capability on transfer.

Record instruments: AF-FR-9100-009, AF-FR-9100-020, AF-FR-9100-022. Source: 8.4, 8.4.1, 8.4.2, 8.4.3, 27, J, AF.

AF-PR-9100-014 — Incoming Verification, Authenticity and Suspect Items

Receipt, exceptional procurement, certificate inconsistency, suspected counterfeit or returned stock.

Start with: Check order, item, manufacturer, source, lot or serial, quantities, condition, configuration and required evidence. Identify customer-supplied information separately from observed facts.

Demonstrate: Segregate suspect, expired, damaged or unverified input. Preserve original records and investigate without treating an allegation as proven misconduct before evidence supports it.

Close and retain: For a later authenticity or method concern, identify all consumed, installed and shipped descendants. Notify responsible recipients and record actual disposition and prevention of prohibited re-entry.

Record instruments: AF-FR-9100-020, AF-FR-9100-024, AF-FR-9100-006. Source: 8.1.4, 8.4.2, 18.1, 21.4.

AF-PR-9100-015 — Production and Service Work-Route Control

Release of a work order, execution across shifts, interruption or an abnormal process condition.

Start with: Connect actual order and configuration to current instructions, materials, equipment, competent people, hold points and acceptance plan. Reconcile departmental baselines before work starts.

Demonstrate: Preserve genealogy through split lots, merge, rework, partial completion and scrap. Record material consumption and the actual loaded software; a balance alone does not prove correct identity.

Close and retain: Compare actual execution with every required operation and check. Transfer unresolved restrictions and evidence to the authorized release function; elapsed schedule or invoice completion is not technical completion.

Record instruments: AF-FR-9100-021, AF-FR-9100-022, AF-FR-9100-024, AF-FR-9100-025. Source: 8.1, 8.5, 8.5.1, 8.5.2, 25.5.

AF-PR-9100-016 — Special-Process Qualification and Continuing Control

Initial process approval, changed essential variable, transfer, excursion or loss of continuing validity.

Start with: Identify material and geometry ranges, site, equipment, software, preparation, principal processing and downstream treatments that can influence required hidden properties.

Demonstrate: Issue the exact qualified route, people, equipment, work instructions, monitoring and change triggers. Machine or supplier qualification does not certify every output.

Close and retain: Trace excursions to affected output and review whether inspection detects the relevant hidden effect. Define full or partial requalification after change and verify actual receiving results before resumption.

Record instruments: AF-FR-9100-022, AF-FR-9100-018, AF-FR-9100-023, AF-FR-9100-009. Source: 8.5.1.2, 18, 25, L.

AF-PR-9100-017 — First Article and Production-Readiness Verification

New product or route, relevant change, work transfer, significant interruption or evidence that prior first article is unrepresentative.

Start with: List changed characteristics and dependencies. Justify every unchanged characteristic for which prior evidence will be retained; a partial first article is not an unexplained shortcut.

Demonstrate: Use numeric results for numeric criteria, units, equipment, corrections and uncertainty where needed. Check material and external process records belong to the article.

Close and retain: Assess capability, tooling, inspection resources, operators, suppliers and ongoing monitoring beyond the individual conforming article. Define early-production controls and objective exit conditions.

Record instruments: AF-FR-9100-021, AF-FR-9100-022, AF-FR-9100-023, AF-FR-9100-025. Source: 8.5.1.3, K, 23.4.

AF-PR-9100-018 — Cleanliness, Preservation, Packaging and Property

Handling, storage, cleaning, packaging, transport or custody of product and external property.

Start with: Identify moisture, temperature, corrosion, vibration, cleanliness, ESD, shelf life, compatibility and hazardous-interface requirements from the actual article and route.

Demonstrate: Use representative route and exposure evidence where required. Preserve labels, seals, quantities, environmental history and receiving checks through every transfer.

Close and retain: Obtain authorized technical disposition for expired or exposed stock. Return or dispose of property and restricted items with actual evidence, and retain the necessary history and unresolved duties.

Record instruments: AF-FR-9100-024, AF-FR-9100-020, AF-FR-9100-026. Source: 7.5, 8.5.3, 8.5.4, 18.7, 21.5.

AF-PR-9100-019 — Verification Campaigns, NDT and Test Reporting

A test, inspection, analysis, demonstration, method transfer or retest supports a technical claim.

Start with: Identify every applicable characteristic, exact configuration, purpose, method and acceptance rule. Distinguish qualification, routine acceptance, research and provider competence.

Demonstrate: Capture raw inputs and responses, conditions, operator, method version, deviations, interruptions and alarms. Label simulated or model-derived results and expose inaccessible features.

Close and retain: Reconcile every requirement with usable evidence, limitations and technical disposition. Identify actual performer and subcontracted results. Provider capability, product qualification and independent attestation remain different conclusions.

Record instruments: AF-FR-9100-005, AF-FR-9100-018, AF-FR-9100-023, AF-FR-9100-006. Source: 8.3.4, 11.6, 14.2, 18.6, M, AH.4, AH.5.

AF-PR-9100-020 — Technical Acceptance, Reporting and Authorized Release

Release of a unit, lot, system, service result or controlled report.

Start with: Record serial, lot, event or family configuration, actual scope and the approved requirement and decision basis. Separate internal release from independent conformity attestation.

Demonstrate: Confirm exact technical authority and lawful scope of any bounded departure. Preserve the unmet original criterion; a concession is not proof that it was fulfilled and cannot remove attestation gates.

Close and retain: Preserve recipients, evidence and installed or delivered identity. Correct material reporting errors transparently and review affected releases after new information invalidates the basis.

Record instruments: AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Source: 8.6, 22, 23, 24.4, AD.

AF-PR-9100-021 — Nonconformity, Containment, Escape and Corrective Action

Detected failure, suspect output, escaped defect or ineffective prior corrective action.

Start with: Identify exact clause or criterion, actual observation, configuration, scope and gap. Classify critical, major, minor or observation based on evidence; decide necessary technical protection separately.

Demonstrate: Examine design, workflow, equipment, software, people conditions, suppliers and management incentives. Record competing explanations and evidence; operator error or training alone is not a complete systemic cause.

Close and retain: Apply source scheme clocks when an attestation is affected, keeping original notice dates. Independently verify closure where required, reopen recurrence, and correct unsupported historical results rather than backdating new evidence.

Record instruments: AF-FR-9100-006, AF-FR-9100-014, AF-FR-9100-027, AF-FR-9100-028. Source: 8.7, 10.1, 10.2, W, AD.7, AD.8, AG.4.

AF-PR-9100-022 — Performance, Reliability and Customer Evidence

Performance reporting, reliability claim, trend review or customer-feedback evaluation.

Start with: Specify population, configuration, duty, exposure, failure, downtime, observation window and intended inference. Distinguish prediction, demonstration, field observation and qualification.

Demonstrate: Retain formulas, units, inputs, uncertainty and known-answer checks. Apply the Technical Reports methods only within their stated assumptions; undefined denominators remain undefined.

Close and retain: Link adverse trends to correction, hazards, supplier controls and resources. Report bounded findings; no uptime, capability index or customer score cancels an essential conformity failure.

Record instruments: AF-FR-9100-027, AF-FR-9100-014, AF-FR-9100-006. Source: 9.1, 9.2, 11.4, F, G, I, Z.

AF-PR-9100-023 — Internal Audit and Requirement-Level Evaluation

Scheduled risk-based audit, significant change, adverse evidence or mandatory interval approaching.

Start with: Map relevant clauses, normative annexes, sites, shifts, remote work and external interfaces. Complete the applicable internal programme within 12 months and C2/C3 critical-control examination within six months.

Demonstrate: Combine current documents, interviews, witnessed work and original results. Resolve remote-access limitations through supplementary evidence or a bounded conclusion.

Close and retain: Require correction and causal action, review recurrence and expand shared-control samples. Report unresolved critical concerns when found, not only at the next management review.

Record instruments: AF-FR-9100-004, AF-FR-9100-006, AF-FR-9100-028. Source: 9.3, V, AB.

AF-PR-9100-024 — Management Review and Independent Assurance Challenge

Complete annual management review, major incident, material change or unresolved assurance concern.

Start with: Include prior actions, context, obligations, objectives, performance, conformity, delivery, customers, suppliers, audits, findings, risks, opportunities and resources.

Demonstrate: For high-consequence work apply Annex B independence and retain competing views. The designer or action owner cannot close a contested critical assumption solely by restating confidence.

Close and retain: Complete full review within 12 months and focused reviews earlier as required. Verify actions and effects; escalate serious concerns immediately and reopen repeated deferrals or ineffective closure.

Record instruments: AF-FR-9100-028, AF-FR-9100-013, AF-FR-9100-014. Source: 5.1, 9.4, 9.5, 9.6, B.

AF-PR-9100-025 — Knowledge Preservation and Lifecycle Learning

New lesson, recurring event, departure of a specialist, source exit or long-life support change.

Start with: Map design rationale, process experience, failure mechanisms, source/build environments, support data and tacit skills to actual continuing obligations.

Demonstrate: Check relevant learning at programme start, design review, purchasing, process change and support planning. Record why a prior solution applies or does not apply to the new context.

Close and retain: Exercise retrieval of current and legacy evidence, track repeated mechanisms and update succession, obsolescence and source-exit arrangements.

Record instruments: AF-FR-9100-031, AF-FR-9100-028, AF-FR-9100-032. Source: 7.8, 10.3, 10.4, 12.9.

AF-PR-9100-026 — Continuity, Emergency Interfaces and Assured Recovery

Loss of critical staff, supplier, utility, site, data service or protective support.

Start with: Record critical functions, maximum tolerable interruptions under the real profile, recovery objectives, alternate sources and common failures.

Demonstrate: Record real event chronology, affected configurations and outputs, original evidence and required notices. Keep protective operations distinct from investigation and public status administration.

Close and retain: The technical authority approves bounded return only after required checks. Independently update any scheme status, assess prior outputs, repeat failures and verify improvements.

Record instruments: AF-FR-9100-029, AF-FR-9100-017, AF-FR-9100-006, AF-FR-9100-008. Source: 6.5, 13.7, 19.5, 24.6, O.

AF-PR-9100-027 — Software, AI, Models and Trusted Updates

Digital development, model-based acceptance, deployment, update, drift or end of support.

Start with: Identify requirements, criticality, architecture, domain, users, permitted and prohibited actions, interfaces and recovery. Assess whether the proposed tool is necessary and sufficiently verifiable.

Demonstrate: Assess trust, privileges, vulnerabilities, OT compatibility and safety-security conflicts. Intrusive tests require written safe authorization; signatures alone do not establish technical suitability.

Close and retain: Define drift, changed exposure, unavailable inputs and response authority. Reassess adaptation outside the approved envelope; preserve source/build access, records and support beyond supplier or platform exit.

Record instruments: AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-005, AF-FR-9100-007. Source: 12, 13, N, O.

AF-PR-9100-028 — Maintenance, Repair, Distribution and Retirement

Acceptance of a service task, off-site work, parts transfer, repair or final disposition.

Start with: Record actual facility or station, asset family, task, data, people, tools, parts and release authority. Advisory work and hands-on maintenance retain distinct scopes.

Demonstrate: Use an approved repair or overhaul basis and valid detection for hidden damage. A successful bench test cannot reset missing life history or establish an unsupported as-new claim.

Close and retain: Track original-to-child lots, environmental condition and recipients. Control scrap against re-entry and transfer usable records, sensitive information and remaining-user support at retirement.

Record instruments: AF-FR-9100-026, AF-FR-9100-024, AF-FR-9100-009, AF-FR-9100-025. Source: 8.5.5, 15.6, 21, T.

AF-PR-9100-029 — Environmental Claims, Human Factors and Responsible Innovation

Lifecycle claim, reused input, user-interface change, new technology or changed workplace interface.

Start with: Record lifecycle boundary, functional unit, period and actual environmental responsibilities. Define user populations, tasks and exposure separately from emissions or resource metrics.

Demonstrate: Use representative users, conditions, workload, access, language, alarms and errors. Identify essential protective tasks and demonstrate actual feasible intervention, not merely a warning or nominal approval button.

Close and retain: Review performance and environmental statements separately, preserve limitations and actual verification status, and feed adverse evidence into change, safety and continuing support.

Record instruments: AF-FR-9100-030, AF-FR-9100-014, AF-FR-9100-019, AF-FR-9100-027. Source: 6.6, 20, U.

AF-PR-9100-030 — Scheme Admission, Participation Terms and Operator Authority

Formal application, new route request, agreement or request to represent AF.

Start with: Identify the requested route, object, profile and real operator authorization. A development enquiry for an unavailable capability must not be sold as a live conformity assessment.

Demonstrate: For initial ORG assess actual internal audit, management review and sufficient implemented records. Do not impose a corporate audit on an individual PER candidate or request fabricated operating history.

Close and retain: Hand the approved scope, profile, terms, conflicts and unresolved limitations to the evaluation owner. Receipt or payment cannot be recorded as a positive decision.

Record instruments: AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-003, AF-FR-9100-004, AF-FR-9100-032. Source: 22.8, 28.1, AA.1, AA.2, AA.3, AA.7, AH.1.

AF-PR-9100-031 — Assessment Planning, Audit Time, Site Coverage and Remote Work

Initial, renewal, surveillance, special or extension assessment planning.

Start with: Identify route, scope, sites, shifts, processes, criticality, methods, languages, adverse history and necessary witnesses. Assign technical specialists to the tasks they will actually perform.

Demonstrate: Document identity, live evidence, confidentiality, configuration, access, recording permission and representation. Add physical witnessing where remote review cannot establish the required capability.

Close and retain: Preserve plan changes, incomplete observations, adverse results and sampling limits. Add work or restrict the conclusion when necessary; issue the report under the source timetable without resetting notified findings.

Record instruments: AF-FR-9100-004, AF-FR-9100-003, AF-FR-9100-005, AF-FR-9100-028. Source: 22.3, V, AC, AA.3.

AF-PR-9100-032 — Assessor Qualification, Impartiality and Continuing Authorization

Initial role qualification, equivalence review, assignment, continuing practice review or reactivation.

Start with: Separate auditor, lead, expert, application reviewer, technical reviewer, decider and appeal reviewer. Record route, sector, method, criticality, language and access limits.

Demonstrate: Use the source bootstrap arrangement where necessary and retain reviewer qualifications and conflicts. Authorize only the demonstrated role; expert knowledge does not automatically grant audit leadership or decision authority.

Close and retain: Review CPD, actual practice, lead assignments, reviews/decisions and periodic witnessed performance. Suspend independent use after unmet minima and verify supervised reactivation without retroactively validating unauthorized work.

Record instruments: AF-FR-9100-003, AF-FR-9100-031, AF-FR-9100-010. Source: AB, 28.2.

AF-PR-9100-033 — Personnel Examination, Remediation and Credential Control

PER candidate admission, examination, reassessment, renewal or credential concern.

Start with: Define actual tasks, prerequisites, practical skills, hazards, equipment, methods, essential steps and lawful scope. Publish candidate information and fair access arrangements without lowering essential competence.

Demonstrate: Require knowledge at least 80%, practical at least 85% and every essential step passed. A trainer cannot be the sole examiner, reviewer and decider; the final decider is not the examiner.

Close and retain: Employer authorization specifies actual task and equipment and is separately reviewed. Monitor CPD, practice, inactivity, essential-skill renewal evidence and source surveillance; preserve expiry and restrictions.

Record instruments: AF-FR-9100-010, AF-FR-9100-003, AF-FR-9100-008, AF-FR-9100-011. Source: 26, AE, AB.2.

AF-PR-9100-034 — Independent Decisions, Attestations, Claims and Registry

Grant, refusal, renewal, extension, maintained status or correction of an attestation.

Start with: Identify exact object, profile, scope, period, criteria, evidence, findings, configuration and proposed public statement. Verify the evaluated scope is technically and administratively complete.

Demonstrate: For initial grant, renewal and extension require every applicable mandatory condition, adequate evidence and all in-scope nonconformities closed. Votes, payment and a high maturity score cannot supply a missing condition.

Close and retain: Reconcile the registry and certificate to the actual decision, protect confidential detail, communicate remedies and preserve corrections. Record status changes within source intervals; no reprint revives a suspended claim.

Record instruments: AF-FR-9100-007, AF-FR-9100-005, AF-FR-9100-006, AF-FR-9100-008, AF-FR-9100-032. Source: 22, AA.5, AA.6, AD, AH.8, AJ.2.

AF-PR-9100-035 — Surveillance, Renewal, Status, Transfer and Closure

Approaching due date, material change, adverse evidence, missed requirement, transfer or operator exit.

Start with: Record decision, issue, expiry, completed surveillance and profile-specific conditions separately. Use actual time zone, calendar rules and the shortest interval for inseparable mixed criticality.

Demonstrate: State scope, prohibited use, actions and the 90-day final resolution limit. Restore only on evidence, restrict independently unaffected scope or withdraw; preserve original expiry unless full renewal occurs.

Close and retain: The receiving operator reviews authenticity, scope, history, findings, competence and needed new evaluation. Accept custody of usable records, outstanding remedies and status duties; file transfer does not transfer authority.

Record instruments: AF-FR-9100-008, AF-FR-9100-006, AF-FR-9100-009, AF-FR-9100-010, AF-FR-9100-032. Source: 22.6, AG, AB.7, AE.8, AH.9.

AF-PR-9100-036 — Complaints, Appeals and Protected Concern Handling

Dissatisfaction, contested decision, anonymous technical concern or protected integrity report.

Start with: Record receipt, reporter channel, object, decision and grounds. Distinguish complaint, appeal and urgent safety or integrity concern; accept material good-faith information without membership or application-fee barriers.

Demonstrate: Examine controlling requirements, original evidence, method and reasoning as well as contrary and new information. Give parties a fair response opportunity through lawful confidentiality arrangements.

Close and retain: Appeal receipt does not reinstate or extend status. Trace substantiated issues to affected reports and other holders, correct misleading public claims and verify corrective effectiveness while preserving original history.

Record instruments: AF-FR-9100-011, AF-FR-9100-006, AF-FR-9100-007, AF-FR-9100-008. Source: 5.4, 22.7, AI.

3 Clause-by-clause evidence and implementation route

0.1 — Purpose and intended outcomes

Source p. 8; AF-PR-9100-002; AF-CL-9100-001.

Use the full source definition and application convention; no additional universal acceptance threshold is created.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

0.2 — AF assurance architecture

Source p. 8; AF-PR-9100-002; AF-CL-9100-001.

Use the full source definition and application convention; no additional universal acceptance threshold is created.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

0.3 — Process approach and assurance loop

Source p. 8; AF-PR-9100-002; AF-CL-9100-001.

Use the full source definition and application convention; no additional universal acceptance threshold is created.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

0.4 — Proportionality without dilution

Source p. 8; AF-PR-9100-002; AF-CL-9100-001.

Use the full source definition and application convention; no additional universal acceptance threshold is created.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

0.5 — Normative language and numerical examples

Source p. 9; AF-PR-9100-002; AF-CL-9100-001.

Use the full source definition and application convention; no additional universal acceptance threshold is created.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

1.1 — Organizations and value chains covered

Source p. 9; AF-PR-9100-002; AF-CL-9100-001.

Use the full source definition and application convention; no additional universal acceptance threshold is created.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

1.2 — Products, services, processes and people

Source p. 9; AF-PR-9100-002; AF-CL-9100-001.

Conformity-object register; product and service families; process and personnel scope; external-provider map; selected route and technical profile.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

1.3 — Scope statement and mandatory applicability decision

Source p. 9; AF-PR-9100-002; AF-CL-9100-001.

Approved scope; object-route selection; Annex A matrix; exclusions with evidence; interface owners; review triggers and scope-change history.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

1.4 — Boundaries of conformity and authorization

Source p. 10; AF-PR-9100-002; AF-CL-9100-001.

Accurate claims and certificate scope; actual authorizations; mark permissions; separation of technical and statutory approvals.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

1.5 — System boundaries and hazardous domains

Source p. 10; AF-PR-9100-002; AF-CL-9100-001.

Use the full source definition and application convention; no additional universal acceptance threshold is created.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

2.1 — Self-contained AF requirement basis

Source p. 10; AF-PR-9100-002; AF-CL-9100-001.

Controlled edition; applicable-requirement register; application profile; evidence mapping.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

2.2 — Controlled program and application profile

Source p. 10; AF-PR-9100-002; AF-CL-9100-001.

Approved application profile; technical rationale; criteria and methods; obligation register; change controls.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

2.3 — Precedence and conflict resolution

Source p. 10; AF-PR-9100-002; AF-CL-9100-001.

Conflict register; affected scope; technical and contractual resolution; controlled amendments to working instructions.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

2.4 — Normative annexes and evidence conventions

Source p. 11; AF-PR-9100-002; AF-CL-9100-001.

Annex applicability; complete evidence fields; evaluated conditions; justified non-applicability.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

2.5 — Edition, time and change control

Source p. 11; AF-PR-9100-001; AF-CL-9100-001.

Edition and amendment register; adoption record; actual decision dates and status history.

Capture in AF-FR-9100-001, AF-FR-9100-015, AF-FR-9100-032. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

2.6 — Engineering judgment and reproducible decisions

Source p. 11; AF-PR-9100-002; AF-CL-9100-001.

Technical judgments; verified computations; assumptions and limitations; independent review when required.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

3.1 — Interpretation and evidence convention

Source p. 14; AF-PR-9100-002; AF-CL-9100-001.

Use the full source definition and application convention; no additional universal acceptance threshold is created.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

4.1 — Context, operating environment and emerging conditions

Source p. 14; AF-PR-9100-002; AF-CL-9100-001.

Context register; climate-relevance decision; assumptions; review minutes; resulting changes to objectives, hazards or controls.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

4.2 — Interested parties and public-interest interfaces

Source p. 14; AF-PR-9100-002; AF-CL-9100-001.

Interested-party register; obligation classification; communication responsibilities; conflict resolutions.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

4.3 — System scope, boundaries and responsibility

Source p. 14; AF-PR-9100-002; AF-CL-9100-001.

Scope statement and Annex A matrix; interface agreements; new-capability review; updated external claims.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

4.4 — Processes and their interactions

Source p. 15; AF-PR-9100-002; AF-CL-9100-001.

Process architecture; process-owner definitions; operating criteria; interaction records; process metrics and improvement actions.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

4.5 — Obligation and commitment register

Source p. 15; AF-PR-9100-002; AF-CL-9100-001.

Controlled obligation register; change assessments; authorized evidence-access arrangements.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

5.1 — Executive accountability and customer focus

Source p. 15; AF-PR-9100-003; AF-CL-9100-001.

Executive reviews; resource decisions; commitment reviews; balanced performance measures and escalations.

Capture in AF-FR-9100-003, AF-FR-9100-006, AF-FR-9100-007, AF-FR-9100-014. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

5.2 — Policy and measurable commitments

Source p. 15; AF-PR-9100-003; AF-CL-9100-001.

Approved policy; communication records; observed application; linked objectives.

Capture in AF-FR-9100-003, AF-FR-9100-006, AF-FR-9100-007, AF-FR-9100-014. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

5.3 — Roles, management representative and independence

Source p. 15; AF-PR-9100-003; AF-CL-9100-001.

Authority matrix; management-representative appointment; independence arrangements; delegation register.

Capture in AF-FR-9100-003, AF-FR-9100-006, AF-FR-9100-007, AF-FR-9100-014. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

5.4 — Ethical behavior and quality culture

Source p. 16; AF-PR-9100-003; AF-CL-9100-001.

Behavior code; reporting channels; investigation records; incentive review; culture evaluation and actions.

Capture in AF-FR-9100-003, AF-FR-9100-006, AF-FR-9100-007, AF-FR-9100-014. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

5.5 — Stop-work and release protection

Source p. 16; AF-PR-9100-003; AF-CL-9100-001.

Stop-work instruction; hold records; restart criteria and authorized decisions.

Capture in AF-FR-9100-003, AF-FR-9100-006, AF-FR-9100-007, AF-FR-9100-014. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

5.6 — Governance of claims and external relationships

Source p. 16; AF-PR-9100-003; AF-CL-9100-001.

Claim-approval process; supporting evidence; conflict disclosures; correction records.

Capture in AF-FR-9100-003, AF-FR-9100-006, AF-FR-9100-007, AF-FR-9100-014. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

6.1 — Risk planning and acceptance

Source p. 16; AF-PR-9100-004; AF-CL-9100-001.

Risk register; hazard analyses; acceptance criteria; control verification; residual-risk decisions and triggers.

Capture in AF-FR-9100-014, AF-FR-9100-016, AF-FR-9100-006. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

6.2 — Opportunity planning as a distinct activity

Source p. 16; AF-PR-9100-005; AF-CL-9100-001.

Opportunity register; selected initiatives; benefit evaluations; associated risk assessments.

Capture in AF-FR-9100-013, AF-FR-9100-027, AF-FR-9100-028. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

6.3 — Objectives and execution plans

Source p. 17; AF-PR-9100-005; AF-CL-9100-001.

Objective plans; metric definitions; baseline data; progress reviews and decisions.

Capture in AF-FR-9100-013, AF-FR-9100-027, AF-FR-9100-028. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

6.4 — Management-system and operational changes

Source p. 17; AF-PR-9100-006; AF-CL-9100-001.

Change requests; impact assessments; approvals; training; implementation and post-change verification.

Capture in AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-021, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

6.5 — Resilience and continuity planning

Source p. 17; AF-PR-9100-026; AF-CL-9100-001.

Business-impact analysis; continuity plans; exercise results; approved recovery and restart evidence.

Capture in AF-FR-9100-029, AF-FR-9100-017, AF-FR-9100-006, AF-FR-9100-008. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

6.6 — Technology maturity and future readiness

Source p. 17; AF-PR-9100-029; AF-CL-9100-001.

Technology evidence dossier; experiment approvals; readiness gap list; transition-gate decisions.

Capture in AF-FR-9100-030, AF-FR-9100-014, AF-FR-9100-019, AF-FR-9100-027. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

7.1 — Resource and capacity assurance

Source p. 17; AF-PR-9100-007; AF-CL-9100-001.

Capacity reviews; staffing and equipment plans; constraint decisions; lifecycle-support commitments.

Capture in AF-FR-9100-017, AF-FR-9100-018, AF-FR-9100-029. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

7.2 — Competence, qualification and authorization

Source p. 17; AF-PR-9100-008; AF-CL-9100-001.

Role competence criteria; assessments; qualifications; task-authorization register; reassessment records.

Capture in AF-FR-9100-003, AF-FR-9100-010, AF-FR-9100-031. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

7.3 — Awareness and human-performance conditions

Source p. 18; AF-PR-9100-008; AF-CL-9100-001.

Awareness evaluation; human-factor assessments; shift handover and error-prevention controls.

Capture in AF-FR-9100-003, AF-FR-9100-010, AF-FR-9100-031. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

7.4 — Infrastructure, utilities and facility integrity

Source p. 18; AF-PR-9100-007; AF-CL-9100-001.

Infrastructure register; maintenance and commissioning records; utility limits; facility change reviews.

Capture in AF-FR-9100-017, AF-FR-9100-018, AF-FR-9100-029. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

7.5 — Work environment, cleanliness and contamination

Source p. 18; AF-PR-9100-018; AF-CL-9100-001.

Environmental specifications; monitoring logs; excursion investigations; cleanliness verification.

Capture in AF-FR-9100-024, AF-FR-9100-020, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

7.6 — Measuring equipment and metrological traceability

Source p. 18; AF-PR-9100-009; AF-CL-9100-001.

Equipment register; calibration chain; recall system; uncertainty suitability; impact and disposition records.

Capture in AF-FR-9100-005, AF-FR-9100-018, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

7.7 — Measurement methods, uncertainty and decision rules

Source p. 18; AF-PR-9100-009; AF-CL-9100-001.

Method-validation records; uncertainty budgets; decision rules; automated inspection challenge results.

Capture in AF-FR-9100-005, AF-FR-9100-018, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

7.8 — Organizational knowledge and technical continuity

Source p. 19; AF-PR-9100-025; AF-CL-9100-001.

Knowledge map; succession and transfer records; lessons database; reuse applicability reviews.

Capture in AF-FR-9100-031, AF-FR-9100-028, AF-FR-9100-032. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

7.9 — Communication and controlled information exchange

Source p. 19; AF-PR-9100-010; AF-CL-9100-001.

Communication matrix; notification and acknowledgement logs; approved information-sharing arrangements.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-032. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

7.10 — Document creation, approval and distribution

Source p. 19; AF-PR-9100-001; AF-CL-9100-001.

Document master list; approval workflow; distribution controls; point-of-use verification.

Capture in AF-FR-9100-001, AF-FR-9100-015, AF-FR-9100-032. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

7.11 — Record integrity, retention and long-life readability

Source p. 19; AF-PR-9100-001; AF-CL-9100-001.

Retention schedule; signature controls; audit trails; migration and restore tests; authorized disposal records.

Capture in AF-FR-9100-001, AF-FR-9100-015, AF-FR-9100-032. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

7.12 — Technical software, spreadsheets and decision tools

Source p. 19; AF-PR-9100-010; AF-CL-9100-001.

Tool inventory; validation plan and known-answer tests; version records; review and revalidation triggers.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-032. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.1 — Integrated operational planning

Source p. 20; AF-PR-9100-015; AF-CL-9100-001.

Program assurance plan; work packages; control plans; integrated schedule; baseline consistency review.

Capture in AF-FR-9100-021, AF-FR-9100-022, AF-FR-9100-024, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.1.1 — Operational risk management

Source p. 20; AF-PR-9100-004; AF-CL-9100-001.

Program risk register; mitigation verification; residual-risk acceptance; changes based on new evidence.

Capture in AF-FR-9100-014, AF-FR-9100-016, AF-FR-9100-006. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.1.2 — Configuration management

Source p. 20; AF-PR-9100-006; AF-CL-9100-001.

Configuration plan; item hierarchy; baselines; change board decisions; status accounting; configuration audits.

Capture in AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-021, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.1.3 — Product safety and mission-critical controls

Source p. 20; AF-PR-9100-004; AF-CL-9100-001.

Hazard log; safety-control traceability; independent reviews; safety communications; in-service event assessments.

Capture in AF-FR-9100-014, AF-FR-9100-016, AF-FR-9100-006. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.1.4 — Counterfeit and unapproved-item prevention

Source p. 21; AF-PR-9100-014; AF-CL-9100-001.

Authenticity-risk assessment; approved sources; incoming verification; suspect-item records and disposition.

Capture in AF-FR-9100-020, AF-FR-9100-024, AF-FR-9100-006. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.1.5 — Temporary and permanent work transfer

Source p. 21; AF-PR-9100-006; AF-CL-9100-001.

Transfer plan; receiving-site readiness; qualification evidence; initial-output monitoring and closure.

Capture in AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-021, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.2 — Requirements for products and services

Source p. 21; AF-PR-9100-011; AF-CL-9100-001.

Requirement lifecycle; agreed baseline; review and change records.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013, AF-FR-9100-015. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.2.1 — Customer and user communication

Source p. 21; AF-PR-9100-011; AF-CL-9100-001.

Communication arrangements; technical clarifications; complaints; user-information distribution.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013, AF-FR-9100-015. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.2.2 — Requirement determination and completeness

Source p. 21; AF-PR-9100-011; AF-CL-9100-001.

Requirements register; assumptions; applicable obligations; acceptance definitions; identified special requirements.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013, AF-FR-9100-015. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.2.3 — Contract and commitment review

Source p. 21; AF-PR-9100-011; AF-CL-9100-001.

Multifunctional contract review; feasibility evidence; resolutions; approved deviations from the proposed offer.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013, AF-FR-9100-015. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.2.4 — Changes to requirements

Source p. 22; AF-PR-9100-006; AF-CL-9100-001.

Requirement-change record; impact analysis; baseline update; implementation and acknowledgement evidence.

Capture in AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-021, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.3 — Design and development

Source p. 22; AF-PR-9100-012; AF-CL-9100-001.

Design scope and responsibility; controlled inputs; review, verification, validation and changes.

Capture in AF-FR-9100-002, AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.3.1 — Design and development governance

Source p. 22; AF-PR-9100-012; AF-CL-9100-001.

Design process; responsibility allocation; design-data acceptance; escalation of ambiguities.

Capture in AF-FR-9100-002, AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.3.2 — Design planning and lifecycle controls

Source p. 22; AF-PR-9100-012; AF-CL-9100-001.

Design plan; interface agreements; review schedule; V&V strategy; required independence.

Capture in AF-FR-9100-002, AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.3.3 — Design inputs and derived requirements

Source p. 22; AF-PR-9100-012; AF-CL-9100-001.

Approved input baseline; derivation rationale; assumption register; conflict resolutions.

Capture in AF-FR-9100-002, AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.3.4 — Design review, verification and validation

Source p. 22; AF-PR-9100-012; AF-CL-9100-001.

Review records; requirements-to-evidence matrix; approved test plans; raw data; model credibility; anomaly dispositions.

Capture in AF-FR-9100-002, AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.3.5 — Design outputs and release

Source p. 22; AF-PR-9100-012; AF-CL-9100-001.

Released design package; critical-characteristic list; approval; downstream usability review.

Capture in AF-FR-9100-002, AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.3.6 — Design changes and continued validity

Source p. 23; AF-PR-9100-006; AF-CL-9100-001.

Change request; impact analysis; requalification decision; approvals; affected-item and implementation records.

Capture in AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-021, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.4 — Externally provided products, processes and services

Source p. 23; AF-PR-9100-013; AF-CL-9100-001.

External-provider scope; approval, verification and flow-down evidence.

Capture in AF-FR-9100-009, AF-FR-9100-020, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.4.1 — External-provider selection and approval

Source p. 23; AF-PR-9100-013; AF-CL-9100-001.

Supplier evaluations; approval register; performance reviews; conditional approvals; sub-tier dependency map.

Capture in AF-FR-9100-009, AF-FR-9100-020, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.4.2 — Verification of externally provided outputs

Source p. 23; AF-PR-9100-013; AF-CL-9100-001.

Incoming verification plans; report checks; delegated inspection controls; restricted-release and recall records.

Capture in AF-FR-9100-009, AF-FR-9100-020, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.4.3 — Purchasing information and flow-down

Source p. 23; AF-PR-9100-013; AF-CL-9100-001.

Purchase-order clauses; technical-data issue record; sub-tier acknowledgement; flow-down verification.

Capture in AF-FR-9100-009, AF-FR-9100-020, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.5 — Production and service execution

Source p. 24; AF-PR-9100-015; AF-CL-9100-001.

Controlled work routes; actual execution; identity, preservation, support and change records.

Capture in AF-FR-9100-021, AF-FR-9100-022, AF-FR-9100-024, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.5.1 — Controlled production and service execution

Source p. 24; AF-PR-9100-015; AF-CL-9100-001.

Controlled route or work package; process records; in-process verification; quantity reconciliation; FOD and utility controls.

Capture in AF-FR-9100-021, AF-FR-9100-022, AF-FR-9100-024, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.5.1.1 — Equipment, tooling and production software

Source p. 24; AF-PR-9100-007; AF-CL-9100-001.

Tool and software qualification; controlled programs; maintenance; storage checks; revalidation records.

Capture in AF-FR-9100-017, AF-FR-9100-018, AF-FR-9100-029. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.5.1.2 — Special-process validation and control

Source p. 24; AF-PR-9100-015; AF-CL-9100-001.

Special-process qualification dossier; approved parameter ranges; operator qualifications; run records; requalification decisions.

Capture in AF-FR-9100-021, AF-FR-9100-022, AF-FR-9100-024, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.5.1.3 — Production-process and first article verification

Source p. 24; AF-PR-9100-015; AF-CL-9100-001.

First article record; characteristic accountability; material/process evidence; differences and repeat-verification rationale.

Capture in AF-FR-9100-021, AF-FR-9100-022, AF-FR-9100-024, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.5.2 — Identification, status and traceability

Source p. 24; AF-PR-9100-015; AF-CL-9100-001.

Identity scheme; genealogy records; status controls; signature register; forward and reverse trace exercises.

Capture in AF-FR-9100-021, AF-FR-9100-022, AF-FR-9100-024, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.5.3 — Customer and external-provider property

Source p. 25; AF-PR-9100-015; AF-CL-9100-001.

Property register; receipt checks; access controls; condition and incident records.

Capture in AF-FR-9100-021, AF-FR-9100-022, AF-FR-9100-024, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.5.4 — Preservation, packaging and transport

Source p. 25; AF-PR-9100-015; AF-CL-9100-001.

Preservation specifications; packaging qualification; environmental history; shelf-life controls; excursion dispositions.

Capture in AF-FR-9100-021, AF-FR-9100-022, AF-FR-9100-024, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.5.5 — Post-delivery support and field feedback

Source p. 25; AF-PR-9100-015; AF-CL-9100-001.

Support plan; service information; field reliability data; notifications; off-site work controls.

Capture in AF-FR-9100-021, AF-FR-9100-022, AF-FR-9100-024, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.5.6 — Production and service changes

Source p. 25; AF-PR-9100-006; AF-CL-9100-001.

Process-change record; technical impact; approvals; temporary controls; changed-output verification.

Capture in AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-021, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.6 — Acceptance and authorized release

Source p. 25; AF-PR-9100-020; AF-CL-9100-001.

Release checklist; acceptance results; closed or authorized issues; delivery dossier; release authorization.

Capture in AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

8.7 — Nonconforming outputs and escape control

Source p. 25; AF-PR-9100-021; AF-CL-9100-001.

NCR; material review decisions; population trace; notifications; repair/rework verification; scrap control.

Capture in AF-FR-9100-006, AF-FR-9100-014, AF-FR-9100-027, AF-FR-9100-028. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

9.1 — Monitoring strategy and data credibility

Source p. 26; AF-PR-9100-005; AF-CL-9100-001.

Monitoring plan; metric dictionary; source reconciliations; data-quality checks; action records.

Capture in AF-FR-9100-013, AF-FR-9100-027, AF-FR-9100-028. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

9.2 — Customer satisfaction and external feedback

Source p. 26; AF-PR-9100-022; AF-CL-9100-001.

Feedback records; segment analysis; improvement plans; effectiveness evaluations.

Capture in AF-FR-9100-027, AF-FR-9100-014, AF-FR-9100-006. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

9.3 — Internal audit program

Source p. 26; AF-PR-9100-023; AF-CL-9100-001.

Risk-based audit program; competence and independence; plans; evidence trails; findings; closure verification.

Capture in AF-FR-9100-004, AF-FR-9100-006, AF-FR-9100-028. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

9.4 — Management review inputs

Source p. 26; AF-PR-9100-024; AF-CL-9100-001.

Review agenda and input pack; trend analyses; independent assurance concerns; status of prior actions.

Capture in AF-FR-9100-028, AF-FR-9100-013, AF-FR-9100-014. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

9.5 — Management review decisions and follow-through

Source p. 27; AF-PR-9100-024; AF-CL-9100-001.

Recorded decisions; action ownership; resource commitments; follow-up and effectiveness evidence.

Capture in AF-FR-9100-028, AF-FR-9100-013, AF-FR-9100-014. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

9.6 — Independent assurance and systemic challenge

Source p. 27; AF-PR-9100-003; AF-CL-9100-001.

Independent-review plan; challenge records; dissent resolution; release recommendations.

Capture in AF-FR-9100-003, AF-FR-9100-006, AF-FR-9100-007, AF-FR-9100-014. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

10.1 — Response to nonconformity and containment

Source p. 27; AF-PR-9100-021; AF-CL-9100-001.

Response record; containment scope; trace results; effectiveness checks; preserved evidence.

Capture in AF-FR-9100-006, AF-FR-9100-014, AF-FR-9100-027, AF-FR-9100-028. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

10.2 — Cause analysis and corrective action

Source p. 27; AF-PR-9100-021; AF-CL-9100-001.

Evidence-based cause analysis; occurrence and escape controls; action plan; systemic extent; effectiveness results.

Capture in AF-FR-9100-006, AF-FR-9100-014, AF-FR-9100-027, AF-FR-9100-028. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

10.3 — Continual improvement and preventive learning

Source p. 27; AF-PR-9100-005; AF-CL-9100-001.

Improvement portfolio; baseline and outcome evaluation; change assurance; retained learning.

Capture in AF-FR-9100-013, AF-FR-9100-027, AF-FR-9100-028. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

10.4 — Learning across the lifecycle and network

Source p. 27; AF-PR-9100-025; AF-CL-9100-001.

Indexed lessons; applicability reviews; supplier communication; recurrence and uptake assessment.

Capture in AF-FR-9100-031, AF-FR-9100-028, AF-FR-9100-032. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

11.1 — Mission and concept definition

Source p. 28; AF-PR-9100-012; AF-CL-9100-002.

Mission concept; scenario catalogue; boundary assumptions; success and safe-state criteria.

Capture in AF-FR-9100-002, AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

11.2 — Requirements decomposition and interface control

Source p. 28; AF-PR-9100-012; AF-CL-9100-002.

Requirement allocation; interface-control documents; integration assumptions; cross-interface verification.

Capture in AF-FR-9100-002, AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

11.3 — Assurance planning and lifecycle gates

Source p. 28; AF-PR-9100-012; AF-CL-9100-002.

Gate plan; review packages; decision records; conditions and verified closure.

Capture in AF-FR-9100-002, AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

11.4 — Reliability, availability and maintainability

Source p. 28; AF-PR-9100-012; AF-CL-9100-002.

RAM plan; models and assumptions; test plan; field exposure; repair-time and downtime definitions.

Capture in AF-FR-9100-002, AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

11.5 — Hazard analysis and assurance case

Source p. 28; AF-PR-9100-004; AF-CL-9100-002.

Assurance case; hazard log; analysis rationale; evidence index; limitations and independent challenge.

Capture in AF-FR-9100-014, AF-FR-9100-016, AF-FR-9100-006. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

11.6 — Verification strategy and model credibility

Source p. 28; AF-PR-9100-012; AF-CL-9100-002.

Verification matrix; method-selection rationale; model-credibility dossier; approved extrapolations.

Capture in AF-FR-9100-002, AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

11.7 — Technical budgets and margin management

Source p. 29; AF-PR-9100-012; AF-CL-9100-002.

Budget register; margin definitions; allocation history; uncertainty and change assessments.

Capture in AF-FR-9100-002, AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

11.8 — Integrated readiness and handover

Source p. 29; AF-PR-9100-012; AF-CL-9100-002.

Integrated readiness review; handover dossier; receiving acknowledgement; long-life support arrangements.

Capture in AF-FR-9100-002, AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

12.1 — Digital lifecycle and architectural assurance

Source p. 29; AF-PR-9100-027; AF-CL-9100-003.

Digital lifecycle plan; allocated requirements; architecture; fault-containment and timing analyses.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-005, AF-FR-9100-007. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

12.2 — Implementation, review and build control

Source p. 29; AF-PR-9100-027; AF-CL-9100-003.

Source and review records; build manifest; dependency inventory; reproducibility and artifact identity checks.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-005, AF-FR-9100-007. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

12.3 — Verification, test coverage and independence

Source p. 29; AF-PR-9100-027; AF-CL-9100-003.

Verification plan; traceable tests; coverage analysis; anomaly disposition; target-representativeness assessment.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-005, AF-FR-9100-007. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

12.4 — AI and machine-learning use-case governance

Source p. 30; AF-PR-9100-027; AF-CL-9100-003.

AI use-case inventory; intended-use statement; alternatives assessment; authority limits; oversight validation.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-005, AF-FR-9100-007. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

12.5 — Dataset quality, lineage and evaluation design

Source p. 30; AF-PR-9100-027; AF-CL-9100-003.

Dataset manifest; labeling assurance; partition controls; scenario coverage; stratified evaluation and uncertainty.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-005, AF-FR-9100-007. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

12.6 — Model release, drift and bounded adaptation

Source p. 30; AF-PR-9100-027; AF-CL-9100-003.

Model release card; drift thresholds and rationale; fallback tests; update approvals; monitoring records.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-005, AF-FR-9100-007. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

12.7 — Generative AI and engineering evidence

Source p. 30; AF-PR-9100-027; AF-CL-9100-003.

Approved use cases; data-access rules; review records; verified calculations and references.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-005, AF-FR-9100-007. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

12.8 — Digital twins, MBSE and model-based acceptance

Source p. 30; AF-PR-9100-027; AF-CL-9100-003.

Model authority map; twin identity and update controls; validation; model-based acceptance rationale.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-005, AF-FR-9100-007. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

12.9 — Long-term digital maintainability and obsolescence

Source p. 30; AF-PR-9100-025; AF-CL-9100-003.

Digital support plan; escrow or access arrangements where needed; migration tests; obsolescence decisions.

Capture in AF-FR-9100-031, AF-FR-9100-028, AF-FR-9100-032. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

13.1 — Security scope and integrated risk assessment

Source p. 31; AF-PR-9100-027; AF-CL-9100-004.

Asset and trust-boundary inventory; threat assessment; safety-security interface decisions.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-005, AF-FR-9100-007. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

13.2 — Identity, access and privileged actions

Source p. 31; AF-PR-9100-027; AF-CL-9100-004.

Access matrix; privileged approvals; identity lifecycle; emergency-access reviews.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-005, AF-FR-9100-007. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

13.3 — Secure development and supply-chain integrity

Source p. 31; AF-PR-9100-027; AF-CL-9100-004.

Secure-development plan; SBOM; dependency reviews; vulnerability decisions and mitigations.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-005, AF-FR-9100-007. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

13.4 — OT and connected-production safeguards

Source p. 31; AF-PR-9100-027; AF-CL-9100-004.

OT architecture; authorized connections; patch assessments; compensating controls; restoration tests.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-005, AF-FR-9100-007. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

13.5 — Secure updates, rollback and cryptographic agility

Source p. 31; AF-PR-9100-027; AF-CL-9100-004.

Update architecture; signed release manifest; interruption and rollback tests; cryptographic inventory and migration plan.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-005, AF-FR-9100-007. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

13.6 — Security testing and vulnerability handling

Source p. 31; AF-PR-9100-027; AF-CL-9100-004.

Authorized test plans; results; vulnerability register; remediation verification; customer communication.

Capture in AF-FR-9100-019, AF-FR-9100-029, AF-FR-9100-005, AF-FR-9100-007. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

13.7 — Incident response and recovery assurance

Source p. 32; AF-PR-9100-026; AF-CL-9100-004.

Incident plan; exercise records; RTO/RPO basis; integrity verification; return-to-service decision.

Capture in AF-FR-9100-029, AF-FR-9100-017, AF-FR-9100-006, AF-FR-9100-008. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

14.1 — Space program and mission-product assurance

Source p. 32; AF-PR-9100-002; AF-CL-9100-005.

Space assurance plan; mission interface allocation; environmental and lifecycle assumptions; gate evidence.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

14.2 — Space environment and qualification rationale

Source p. 32; AF-PR-9100-019; AF-CL-9100-005.

Environmental specification; qualification matrix; test-article differences; margin and exposure rationale.

Capture in AF-FR-9100-005, AF-FR-9100-018, AF-FR-9100-023, AF-FR-9100-006. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

14.3 — Components, materials and contamination control

Source p. 32; AF-PR-9100-002; AF-CL-9100-005.

Parts and materials lists; environmental suitability; contamination plan; applicable protection-control evidence.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

14.4 — Ground segment, command and mission operations

Source p. 32; AF-PR-9100-002; AF-CL-9100-005.

Ground-segment baseline; command-authority rules; rehearsals; anomaly procedures; telemetry interpretation limits.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

14.5 — Orbital responsibility and end-of-life planning

Source p. 32; AF-PR-9100-002; AF-CL-9100-005.

Responsibility allocation; disposal concept; resource budgets; failure cases; end-of-life decision and verification records.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

14.6 — Human spaceflight and habitation interfaces

Source p. 33; AF-PR-9100-002; AF-CL-9100-005.

Human-system requirements; life-support interface assurance; emergency scenarios; independent review; integrated validation.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

14.7 — Surface mobility, in-space servicing and manufacturing

Source p. 33; AF-PR-9100-002; AF-CL-9100-005.

Surface or servicing concept; environment-specific qualification; remote acceptance strategy; safe-state and evidence limitations.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

15.1 — Airworthiness and operational approval interfaces

Source p. 33; AF-PR-9100-002; AF-CL-9100-006.

Approval-interface matrix; assigned obligations; change and repair approvals; supporting evidence.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

15.2 — Aircraft and equipment integration

Source p. 33; AF-PR-9100-002; AF-CL-9100-006.

Installation assessment; integration verification; affected-system analysis; updated support data.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

15.3 — Unmanned and remotely operated systems

Source p. 33; AF-PR-9100-002; AF-CL-9100-006.

System-level UAS assessment; domain definition; link-loss tests; workload and contingency validation.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

15.4 — Electric, hybrid and hydrogen aviation

Source p. 33; AF-PR-9100-002; AF-CL-9100-006.

Integrated energy-hazard assessment; architecture qualification; degradation limits; ground-support and emergency information.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

15.5 — Airports, ground support and air-navigation services

Source p. 34; AF-PR-9100-002; AF-CL-9100-006.

Service assurance plan; interface compatibility; change assessments; maintenance and operational verification.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

15.6 — Continuing airworthiness and aviation maintenance

Source p. 34; AF-PR-9100-028; AF-CL-9100-006.

Capability list; approved maintenance data; personnel authorization; life-status records; maintenance release evidence.

Capture in AF-FR-9100-026, AF-FR-9100-024, AF-FR-9100-009, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

16.1 — Defense program assurance and contractual obligations

Source p. 34; AF-PR-9100-002; AF-CL-9100-007.

Defense assurance plan; contractual obligation matrix; access arrangements; approval responsibilities.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

16.2 — Multi-domain platforms and interfaces

Source p. 34; AF-PR-9100-002; AF-CL-9100-007.

Cross-domain interface baseline; integration tests; safe-state definition; authorized test controls.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

16.3 — Defense-purpose road and off-road vehicles

Source p. 34; AF-PR-9100-002; AF-CL-9100-007.

Vehicle duty profile; integration impact assessment; configuration-specific qualification; maintenance and transport limits.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

16.4 — Maritime platforms and underwater systems

Source p. 34; AF-PR-9100-002; AF-CL-9100-007.

Maritime requirement basis; critical-boundary records; process and inspection evidence; deterioration-management plan.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

16.5 — Autonomy, remote systems and human authority

Source p. 35; AF-PR-9100-002; AF-CL-9100-007.

Authority model; domain constraints; intervention validation; simulation limits; change and release records.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

16.6 — Controlled technology, ethics and supply integrity

Source p. 35; AF-PR-9100-002; AF-CL-9100-007.

Controlled-technology review; authorized access; due diligence; ethical escalation and disposition.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

16.7 — Long-life support and obsolescence

Source p. 35; AF-PR-9100-002; AF-CL-9100-007.

Support and obsolescence plan; substitution approvals; field configuration; life and refurbishment records.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

17.1 — Industrial system boundary and lifecycle integrity

Source p. 35; AF-PR-9100-007; AF-CL-9100-008.

Asset design basis; boundary drawings; applicable-code register; lifecycle responsibility allocation.

Capture in AF-FR-9100-017, AF-FR-9100-018, AF-FR-9100-029. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

17.2 — Mechanical integrity and essential services

Source p. 35; AF-PR-9100-007; AF-CL-9100-008.

Integrity-management plan; equipment dossiers; degradation assessments; override and temporary- repair controls.

Capture in AF-FR-9100-017, AF-FR-9100-018, AF-FR-9100-029. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

17.3 — Fabrication, installation and construction interfaces

Source p. 35; AF-PR-9100-007; AF-CL-9100-008.

Fabrication and installation records; hidden-work inspections; alignment and interface checks; as-built configuration.

Capture in AF-FR-9100-017, AF-FR-9100-018, AF-FR-9100-029. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

17.4 — Commissioning and operational readiness

Source p. 36; AF-PR-9100-007; AF-CL-9100-008.

Commissioning plan; test records; protective-function verification; open-item disposition; handover acceptance.

Capture in AF-FR-9100-017, AF-FR-9100-018, AF-FR-9100-029. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

17.5 — Asset inspection and condition-based maintenance

Source p. 36; AF-PR-9100-007; AF-CL-9100-008.

Inspection strategy; condition data; detection capability; remaining-life or repair decisions; interval review.

Capture in AF-FR-9100-017, AF-FR-9100-018, AF-FR-9100-029. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

17.6 — Industrial modernization and decommissioning

Source p. 36; AF-PR-9100-007; AF-CL-9100-008.

Modernization assessment; verified legacy baseline; decommissioning plan; disposition and transfer records.

Capture in AF-FR-9100-017, AF-FR-9100-018, AF-FR-9100-029. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

18.1 — Material and process specification control

Source p. 36; AF-PR-9100-014; AF-CL-9100-009.

Material specifications; batch certificates and verification; substitution approvals; storage and life records.

Capture in AF-FR-9100-020, AF-FR-9100-024, AF-FR-9100-006. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

18.2 — Metals, castings, forgings and heat treatment

Source p. 36; AF-PR-9100-016; AF-CL-9100-009.

Process qualification; batch and thermal records; representative test evidence; repair approvals.

Capture in AF-FR-9100-022, AF-FR-9100-018, AF-FR-9100-023, AF-FR-9100-009. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

18.3 — Composites, polymers, adhesives and bonded structures

Source p. 36; AF-PR-9100-016; AF-CL-9100-009.

Composite or bond qualification; constituent genealogy; process history; inspection capability; change review.

Capture in AF-FR-9100-022, AF-FR-9100-018, AF-FR-9100-023, AF-FR-9100-009. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

18.4 — Additive and digitally driven manufacturing

Source p. 37; AF-PR-9100-016; AF-CL-9100-009.

Build qualification; feedstock history; signed build package; monitoring validation; post-process and acceptance records.

Capture in AF-FR-9100-022, AF-FR-9100-018, AF-FR-9100-023, AF-FR-9100-009. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

18.5 — Electronics, semiconductors and interconnections

Source p. 37; AF-PR-9100-016; AF-CL-9100-009.

Component assurance plan; approved parts list; assembly qualification; configuration and screening evidence.

Capture in AF-FR-9100-022, AF-FR-9100-018, AF-FR-9100-023, AF-FR-9100-009. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

18.6 — NDT, inspection capability and probability of detection

Source p. 37; AF-PR-9100-016; AF-CL-9100-009.

NDT procedure qualification; personnel authorization; reference-artifact control; detection capability and limitations.

Capture in AF-FR-9100-022, AF-FR-9100-018, AF-FR-9100-023, AF-FR-9100-009. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

18.7 — Surface engineering, cleanliness and contamination-sensitive products

Source p. 37; AF-PR-9100-016; AF-CL-9100-009.

Surface-process qualification; bath or chemical controls; test results; cleanliness criteria and records.

Capture in AF-FR-9100-022, AF-FR-9100-018, AF-FR-9100-023, AF-FR-9100-009. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

19.1 — Energy-system boundary and coupled hazards

Source p. 37; AF-PR-9100-002; AF-CL-9100-010.

Energy-system architecture; integrated hazard analysis; lifecycle controls; specialist approvals.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

19.2 — Electrical storage and battery systems

Source p. 37; AF-PR-9100-002; AF-CL-9100-010.

Battery configuration; qualification basis; life and condition data; protection verification; reuse assessment.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

19.3 — Hydrogen, fuels and chemical-energy systems

Source p. 38; AF-PR-9100-002; AF-CL-9100-010.

Compatibility assessment; containment and protection evidence; supply controls; authorized procedures.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

19.4 — Propulsion and rotating-machinery assurance

Source p. 38; AF-PR-9100-002; AF-CL-9100-010.

Operating-envelope basis; critical-part genealogy; qualification and acceptance; life-management records.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

19.5 — Hazardous tests and emergency preparedness

Source p. 38; AF-PR-9100-026; AF-CL-9100-010.

Test safety review; readiness approval; abort rules; anomaly evidence; restart and reuse decisions.

Capture in AF-FR-9100-029, AF-FR-9100-017, AF-FR-9100-006, AF-FR-9100-008. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

20.1 — Lifecycle environmental responsibilities

Source p. 38; AF-PR-9100-029; AF-CL-9100-011.

Lifecycle aspect register; obligations; action plans; integrated change assessments.

Capture in AF-FR-9100-030, AF-FR-9100-014, AF-FR-9100-019, AF-FR-9100-027. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

20.2 — Quantification and credible environmental claims

Source p. 38; AF-PR-9100-029; AF-CL-9100-011.

Inventory model; data sources; factors and editions; uncertainty; claim review and verification status.

Capture in AF-FR-9100-030, AF-FR-9100-014, AF-FR-9100-019, AF-FR-9100-027. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

20.3 — Circularity, repair and responsible material recovery

Source p. 38; AF-PR-9100-029; AF-CL-9100-011.

Repair and recovery strategy; life-status controls; qualification of reused inputs; secure disposition records.

Capture in AF-FR-9100-030, AF-FR-9100-014, AF-FR-9100-019, AF-FR-9100-027. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

20.4 — Human-system integration and ergonomics

Source p. 39; AF-PR-9100-029; AF-CL-9100-011.

Human-system requirements; representative evaluations; workload and error analyses; design decisions.

Capture in AF-FR-9100-030, AF-FR-9100-014, AF-FR-9100-019, AF-FR-9100-027. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

20.5 — Worker competence, health and safe work interfaces

Source p. 39; AF-PR-9100-029; AF-CL-9100-011.

Work-risk interfaces; competence and contractor controls; incident learning; emergency arrangements.

Capture in AF-FR-9100-030, AF-FR-9100-014, AF-FR-9100-019, AF-FR-9100-027. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

20.6 — Responsible innovation and future-technology review

Source p. 39; AF-PR-9100-029; AF-CL-9100-011.

Responsible-innovation review; evidence gap assessment; bounded-deployment plan; claim approval.

Capture in AF-FR-9100-030, AF-FR-9100-014, AF-FR-9100-019, AF-FR-9100-027. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

21.1 — Service scope and new-capability approval

Source p. 39; AF-PR-9100-028; AF-CL-9100-012.

Service capability list; new-capability review; applicable authorizations; activity-based scope.

Capture in AF-FR-9100-026, AF-FR-9100-024, AF-FR-9100-009, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

21.2 — Maintenance planning and execution

Source p. 39; AF-PR-9100-028; AF-CL-9100-012.

Maintenance package; current-data verification; handovers; parts traceability; post-maintenance verification.

Capture in AF-FR-9100-026, AF-FR-9100-024, AF-FR-9100-009, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

21.3 — Repair, overhaul and remanufacture

Source p. 39; AF-PR-9100-028; AF-CL-9100-012.

Repair basis; condition assessment; process records; remaining-life decisions; release limitations.

Capture in AF-FR-9100-026, AF-FR-9100-024, AF-FR-9100-009, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

21.4 — Distribution, stock splitting and chain of custody

Source p. 40; AF-PR-9100-014; AF-CL-9100-012.

Source verification; split-lot records; stock status; certificate linkage; customer delivery evidence.

Capture in AF-FR-9100-020, AF-FR-9100-024, AF-FR-9100-006. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

21.5 — Logistics, storage and remote support

Source p. 40; AF-PR-9100-018; AF-CL-9100-012.

Logistics plan; custody records; excursion assessments; remote-support authorization and advice records.

Capture in AF-FR-9100-024, AF-FR-9100-020, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

21.6 — Retirement, disposal and record handover

Source p. 40; AF-PR-9100-028; AF-CL-9100-012.

Retirement plan; material and data disposition; record-transfer arrangements; disposal verification.

Capture in AF-FR-9100-026, AF-FR-9100-024, AF-FR-9100-009, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

22.1 — Conformity evidence dossier

Source p. 40; AF-PR-9100-020; AF-CL-9100-001.

Object-specific dossier; applicable requirement set; evidence index; configuration and population coverage; limitations.

Capture in AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

22.2 — Evaluation, review and decision separation

Source p. 40; AF-PR-9100-003; AF-CL-9100-001.

Assignment matrix; competence and conflict checks; evaluation record; independent review and decision identities.

Capture in AF-FR-9100-003, AF-FR-9100-006, AF-FR-9100-007, AF-FR-9100-014. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

22.3 — Criteria, sampling and findings

Source p. 41; AF-PR-9100-020; AF-CL-9100-001.

Evaluation plan; sample rationale; objective evidence; requirement-linked findings; assessed limitations.

Capture in AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

22.4 — Decision conditions and release blockers

Source p. 41; AF-PR-9100-020; AF-CL-9100-001.

Requirement-by-requirement conclusion; finding closure; blocker check; reasoned and dated decision.

Capture in AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

22.5 — Statements, certificates and mark use

Source p. 41; AF-PR-9100-020; AF-CL-9100-001.

Approved claim text; certificate data; mark permission; actual recognition scope where claimed.

Capture in AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

22.6 — Continuing validity and changes

Source p. 41; AF-PR-9100-020; AF-CL-9100-001.

Change notifications; surveillance findings; renewal evidence; current and historical status records.

Capture in AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

22.7 — Complaints, appeals and corrective communication

Source p. 41; AF-PR-9100-020; AF-CL-9100-001.

Case records; independent reviewer appointment; reasoned outcomes; affected-population action and communication.

Capture in AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

22.8 — Scheme operation and competence attestations

Source p. 41; AF-PR-9100-020; AF-CL-9100-001.

Operator authority; body competence evaluation; written scope; independent decision; accurate accreditation and authorization claims.

Capture in AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

23.1 — Product identity, families and intended application

Source p. 42; AF-PR-9100-020; AF-CL-9100-014.

Product definition; configuration baseline; family matrix; variant-difference and representativeness analyses.

Capture in AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

23.2 — Product application profile and acceptance plan

Source p. 42; AF-PR-9100-020; AF-CL-9100-014.

Approved product profile; characteristic-to-method matrix; qualification and acceptance distinction; unresolved-input decisions.

Capture in AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

23.3 — Design qualification and integration evidence

Source p. 42; AF-PR-9100-020; AF-CL-9100-014.

Qualification dossier; test-article differences; system-interface verification; validated support assumptions.

Capture in AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

23.4 — Production, unit and lot acceptance

Source p. 42; AF-PR-9100-017; AF-CL-9100-014.

Unit or lot dossier; critical characteristics; sampling decision; controlled departures; final release record.

Capture in AF-FR-9100-021, AF-FR-9100-022, AF-FR-9100-023, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

23.5 — Changes, family extensions and digital updates

Source p. 42; AF-PR-9100-020; AF-CL-9100-014.

Change-impact record; evidence reuse rationale; repeated qualification; instance effectivity; updated scope.

Capture in AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

23.6 — Product statements, labeling and user information

Source p. 43; AF-PR-9100-020; AF-CL-9100-014.

Approved claim and label master; mark authorization; traceable labeling records; user-information delivery.

Capture in AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

23.7 — In-service evidence, corrective campaigns and retirement

Source p. 43; AF-PR-9100-020; AF-CL-9100-014.

Field data and exposure; affected-population analysis; campaign records; verified completion; retirement and reuse decisions.

Capture in AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

24.1 — Service catalog, boundary and responsibility

Source p. 43; AF-PR-9100-002; AF-CL-9100-015.

Service catalog; service profile; dependency and responsibility map; controlled exclusions.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

24.2 — Service design and measurable outcomes

Source p. 43; AF-PR-9100-002; AF-CL-9100-015.

Requirements and metrics; capacity assumptions; validated service design; customer-interface results.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

24.3 — Delivery planning and competent execution

Source p. 43; AF-PR-9100-002; AF-CL-9100-015.

Service work package; competence and readiness checks; current inputs; handovers and escalation records.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

24.4 — Service acceptance and performance decisions

Source p. 44; AF-PR-9100-020; AF-CL-9100-015.

Actual outcome records; acceptance decision; metric calculations and exclusions; critical-event review.

Capture in AF-FR-9100-005, AF-FR-9100-007, AF-FR-9100-025, AF-FR-9100-026. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

24.5 — Digital services, data and external platforms

Source p. 44; AF-PR-9100-002; AF-CL-9100-015.

Digital service architecture; data and access agreements; supplier controls; recovery and integrity verification.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

24.6 — Continuity, disruption and customer protection

Source p. 44; AF-PR-9100-026; AF-CL-9100-015.

Continuity plan; exercised recovery; qualified alternatives; affected-output analysis; customer notifications.

Capture in AF-FR-9100-029, AF-FR-9100-017, AF-FR-9100-006, AF-FR-9100-008. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

24.7 — Service change, completion and exit

Source p. 44; AF-PR-9100-002; AF-CL-9100-015.

Change and transition approvals; revised scope; service completion dossier; property/data handover and access closure.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

25.1 — Process identity, scope and essential variables

Source p. 44; AF-PR-9100-016; AF-CL-9100-016.

Process definition; essential-variable register; qualified family rationale; interface controls.

Capture in AF-FR-9100-022, AF-FR-9100-018, AF-FR-9100-023, AF-FR-9100-009. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

25.2 — Qualification strategy and demonstration

Source p. 44; AF-PR-9100-016; AF-CL-9100-016.

Qualification plan; representative results; method suitability; failed-run disposition; approved process window.

Capture in AF-FR-9100-022, AF-FR-9100-018, AF-FR-9100-023, AF-FR-9100-009. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

25.3 — Capability, stability and statistical interpretation

Source p. 45; AF-PR-9100-016; AF-CL-9100-016.

Study design; data and model assumptions; stability review; capability calculation; justified alternative evidence.

Capture in AF-FR-9100-022, AF-FR-9100-018, AF-FR-9100-023, AF-FR-9100-009. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

25.4 — Operating approval and release for use

Source p. 45; AF-PR-9100-016; AF-CL-9100-016.

Process approval record; released instructions; authorization and limitations; ongoing acceptance controls.

Capture in AF-FR-9100-022, AF-FR-9100-018, AF-FR-9100-023, AF-FR-9100-009. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

25.5 — Monitoring, drift and excursions

Source p. 45; AF-PR-9100-015; AF-CL-9100-016.

Monitoring records; reaction plan; affected-population trace; technically justified disposition and restart.

Capture in AF-FR-9100-021, AF-FR-9100-022, AF-FR-9100-024, AF-FR-9100-025. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

25.6 — Changes, transfer and requalification

Source p. 45; AF-PR-9100-006; AF-CL-9100-016.

Requalification trigger review; transfer readiness; retained-evidence rationale; actual receiving-site results.

Capture in AF-FR-9100-015, AF-FR-9100-016, AF-FR-9100-021, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

25.7 — Process records, traceability and retirement

Source p. 45; AF-PR-9100-016; AF-CL-9100-016.

Traceable process history; automated-data verification; withdrawn approval controls; preserved lifecycle evidence.

Capture in AF-FR-9100-022, AF-FR-9100-018, AF-FR-9100-023, AF-FR-9100-009. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

26.1 — Role analysis and competence criteria

Source p. 46; AF-PR-9100-008; AF-CL-9100-017.

Job/task analysis; role profile; required competences; relevant prerequisites and assessment methods.

Capture in AF-FR-9100-003, AF-FR-9100-010, AF-FR-9100-031. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

26.2 — Development and verified competence

Source p. 46; AF-PR-9100-008; AF-CL-9100-017.

Gap assessment; development activities; observed demonstration; competent assessor conclusion.

Capture in AF-FR-9100-003, AF-FR-9100-010, AF-FR-9100-031. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

26.3 — Personnel certification and fair assessment

Source p. 46; AF-PR-9100-008; AF-CL-9100-017.

Published role profile; candidate information; validated assessment; fair-access arrangements; decision rationale.

Capture in AF-FR-9100-003, AF-FR-9100-010, AF-FR-9100-031. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

26.4 — Employer task authorization and supervision

Source p. 46; AF-PR-9100-008; AF-CL-9100-017.

Task-authorization register; scope and limitations; competence and license checks; supervision arrangements.

Capture in AF-FR-9100-003, AF-FR-9100-010, AF-FR-9100-031. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

26.5 — Continued competence and reassessment

Source p. 46; AF-PR-9100-008; AF-CL-9100-017.

Practice and development record; performance review; reassessment; renewal and inactivity decisions.

Capture in AF-FR-9100-003, AF-FR-9100-010, AF-FR-9100-031. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

26.6 — Restriction, suspension and restoration

Source p. 46; AF-PR-9100-008; AF-CL-9100-017.

Protective action; affected-work review; reassessment; reasoned restoration or withdrawal; status updates.

Capture in AF-FR-9100-003, AF-FR-9100-010, AF-FR-9100-031. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

26.7 — Personnel records and responsible use of credentials

Source p. 47; AF-PR-9100-008; AF-CL-9100-017.

Protected competence dossier; current credential status; accurate claims; controlled access and retention.

Capture in AF-FR-9100-003, AF-FR-9100-010, AF-FR-9100-031. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

27.1 — Retained accountability and actual performers

Source p. 47; AF-PR-9100-013; AF-CL-9100-018.

Performer and sub-tier map; responsibility matrix; documented delegations and retained decisions.

Capture in AF-FR-9100-009, AF-FR-9100-020, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

27.2 — Qualification, risk and source status

Source p. 47; AF-PR-9100-013; AF-CL-9100-018.

Scope-specific supplier dossier; risk assessment; source-status conditions; verified closure and approval.

Capture in AF-FR-9100-009, AF-FR-9100-020, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

27.3 — Contractual flow-down and acknowledgement

Source p. 47; AF-PR-9100-013; AF-CL-9100-018.

Reviewed purchase scope; flow-down matrix; performer acknowledgement; resolved ambiguities.

Capture in AF-FR-9100-009, AF-FR-9100-020, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

27.4 — Ongoing oversight and delegated verification

Source p. 47; AF-PR-9100-013; AF-CL-9100-018.

Surveillance plan; performance trends; witnessed and verification records; delegation reviews and affected-output checks.

Capture in AF-FR-9100-009, AF-FR-9100-020, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

27.5 — Changes and further subcontracting

Source p. 47; AF-PR-9100-013; AF-CL-9100-018.

Change notices; approved sub-tier use; emergency restrictions; receiving capability and requalification.

Capture in AF-FR-9100-009, AF-FR-9100-020, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

27.6 — Escapes, continuity and controlled exit

Source p. 48; AF-PR-9100-013; AF-CL-9100-018.

Population trace; notifications; joint corrective action; continuity and termination record; preserved evidence.

Capture in AF-FR-9100-009, AF-FR-9100-020, AF-FR-9100-022. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

28.1 — Legal responsibility, resources and impartiality

Source p. 48; AF-PR-9100-003; AF-CL-9100-019.

Legal and governance records; resource and liability arrangements; impartiality analysis; conflict decisions.

Capture in AF-FR-9100-003, AF-FR-9100-006, AF-FR-9100-007, AF-FR-9100-014. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

28.2 — Competence by function and technical scope

Source p. 48; AF-PR-9100-032; AF-CL-9100-019.

Competence criteria; witnessed assessments; role and technical-scope authorizations; performance monitoring.

Capture in AF-FR-9100-003, AF-FR-9100-031, AF-FR-9100-010. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

28.3 — Valid methods, equipment and technical evidence

Source p. 48; AF-PR-9100-009; AF-CL-9100-019.

Method and equipment records; validity checks; raw and processed results; subcontracted-evidence evaluation.

Capture in AF-FR-9100-005, AF-FR-9100-018, AF-FR-9100-023. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

28.4 — Independent review and final decision

Source p. 48; AF-PR-9100-002; AF-CL-9100-019.

Independent review; conflict-free decision authorization; recorded rationale; actual decision date.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

28.5 — Outsourced evaluators and supporting services

Source p. 49; AF-PR-9100-002; AF-CL-9100-019.

External-personnel agreements; verified competence; technical review of external evidence; retained responsibility.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

28.6 — Information, complaints and continuity

Source p. 49; AF-PR-9100-002; AF-CL-9100-019.

Protected records; status controls; complaint and appeal outcomes; provider continuity and closure arrangements.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

28.7 — CAB competence route and limits of accreditation

Source p. 49; AF-PR-9100-002; AF-CL-9100-019.

CAB evaluation and witnessing; independent decision; exact authorized scope; accurate accreditation and recognition claims.

Capture in AF-FR-9100-001, AF-FR-9100-002, AF-FR-9100-013. Evaluate every lettered condition, preserve failed and not-demonstrated states, and connect the final conclusion to the actual scope.

4 Annex status and use

Annex	Role and source page	Implementation boundary
A	Annex A — Scope and activity-based applicability matrix (p. 50)	Apply relevant normative controls; filled examples remain illustrative where identified.
B	Annex B — Criticality classification and assurance tailoring (p. 52)	Apply relevant normative controls; filled examples remain illustrative where identified.
C	Annex C — Lifecycle-gate evidence and transition decisions (p. 54)	Apply relevant normative controls; filled examples remain illustrative where identified.
D	Annex D — Requirements, configuration and digital evidence data model (p. 55)	Apply relevant normative controls; filled examples remain illustrative where identified.
E	Annex E — Risk methods, hazard records and uncertainty (p. 57)	Informative examples and methods; apply actual adopted profile.
F	Annex F — Reliability, availability and demonstration calculations (p. 59)	Informative examples and methods; apply actual adopted profile.
G	Annex G — Process capability and statistical process-control example (p. 62)	Informative examples and methods; apply actual adopted profile.
H	Annex H — Measurement uncertainty and conformity decision rules (p. 65)	Informative examples and methods; apply actual adopted profile.
I	Annex I — Acceptance sampling and operating-characteristic calculations (p. 67)	Informative examples and methods; apply actual adopted profile.
J	Annex J — Supplier qualification, surveillance and flow-down package (p. 69)	Apply relevant normative controls; filled examples remain illustrative where identified.
K	Annex K — First article and production-readiness verification (p. 71)	Apply relevant normative controls; filled examples remain illustrative where identified.
L	Annex L — Special-process qualification and requalification dossier (p. 72)	Apply relevant normative controls; filled examples remain illustrative where identified.
M	Annex M — Verification, environmental testing and qualification records (p. 73)	Apply relevant normative controls; filled examples remain illustrative where identified.
N	Annex N — Software and AI assurance cards with worked metrics (p. 75)	Apply relevant normative controls; filled examples remain illustrative where identified.
O	Annex O — Cybersecurity, update and recovery evidence pack (p. 77)	Apply relevant normative controls; filled examples remain illustrative where identified.
P	Annex P — Space mission and space-purpose mobility assurance matrix (p. 78)	Apply relevant normative controls; filled examples remain illustrative where identified.
Q	Annex Q — Aviation and advanced-air-mobility assurance matrix (p. 80)	Apply relevant normative controls; filled examples remain illustrative where identified.

Annex	Role and source page	Implementation boundary
R	Annex R — Defense, maritime and mission-vehicle assurance matrix (p. 81)	Apply relevant normative controls; filled examples remain illustrative where identified.
S	Annex S — Heavy-industry commissioning and asset-integrity matrix (p. 82)	Apply relevant normative controls; filled examples remain illustrative where identified.
T	Annex T — Maintenance, distribution and authorized service-release records (p. 83)	Apply relevant normative controls; filled examples remain illustrative where identified.
U	Annex U — Lifecycle inventory, resource efficiency and quantitative claims (p. 85)	Informative examples and methods; apply actual adopted profile.
V	Annex V — Assessment method and complete main-clause evidence index (p. 87)	Apply relevant normative controls; filled examples remain illustrative where identified.
W	Annex W — Nonconformity and corrective-action record with completed example (p. 96)	Apply relevant normative controls; filled examples remain illustrative where identified.
X	Annex X — Implementation, transition and continual-assurance roadmap (p. 98)	Informative examples and methods; apply actual adopted profile.
Y	Annex Y — AF interpretation, amendment and publication control (p. 99)	Apply relevant normative controls; filled examples remain illustrative where identified.
Z	Annex Z — Metric dictionary, engineering budgets and integrated worked case (p. 101)	Informative examples and methods; apply actual adopted profile.
AA	Annex AA — Assessment scheme architecture and object-specific conformity routes (p. 103)	Apply relevant normative controls; filled examples remain illustrative where identified.
AB	Annex AB — Auditor, technical expert, reviewer and decision-maker competence (p. 106)	Apply relevant normative controls; filled examples remain illustrative where identified.
AC	Annex AC — Audit planning, audit time, multisite coverage and remote methods (p. 109)	Apply relevant normative controls; filled examples remain illustrative where identified.
AD	Annex AD — Conformity decision rules, findings and release controls (p. 112)	Apply relevant normative controls; filled examples remain illustrative where identified.
AE	Annex AE — Personnel assessment, examinations and task authorization (p. 115)	Apply relevant normative controls; filled examples remain illustrative where identified.
AF	Annex AF — Subcontracting, outsourced work and flow-down control package (p. 118)	Apply relevant normative controls; filled examples remain illustrative where identified.
AG	Annex AG — Surveillance, renewal, status and mandatory time limits (p. 120)	Apply relevant normative controls; filled examples remain illustrative where identified.
AH	Annex AH — Assessment-body, laboratory and competence-attestation controls (p. 123)	Apply relevant normative controls; filled examples remain illustrative where identified.

Annex	Role and source page	Implementation boundary
AI	Annex AI — Complaints, appeals, impartial review and case administration (p. 126)	Apply relevant normative controls; filled examples remain illustrative where identified.
AJ	Annex AJ — Controlled forms, record dictionary and consistency matrix (p. 128)	Apply relevant normative controls; filled examples remain illustrative where identified.

Appendix B — Local implementation and release

Readiness condition	Evidence before consequential use
Authority and responsibility	Actual legal operator, owner, competent technical authority, independent reviewer and permitted result class are recorded.
Scope and criteria	Object, configuration, site, period, trigger, every technical value or observable attribute, units and prospective approval are complete.
Evidence and methods	Original accessible evidence, representative observations, valid methods, uncertainty, adverse cases and limitations support the intended conclusion.
People and independence	Competence is current for each task; genuine conflicts, relevant prior work and needed separation have been checked.
Records and tools	Field meanings, unique IDs, original history, access, retention, recovery and actual deployed workflows have passed local validation.
Decision and public use	All relevant blockers are resolved; required independent decision and written permissions precede the exact public claim.
Continuity and handover	Receiving custody, unresolved duties, corrections and historical decisions survive transfer, retirement or provider closure.

Record the completed local readiness and actual authorization in AF-FR-9100-032 or an equivalent controlled record. Preserve the unchanged source standard and each earlier decision basis. A blocked activity may continue only within a genuinely permitted development boundary, not as a provisional conformity certificate.