AEROSPACE FEDERATION

AF-PR-9600-014

Perception, Fusion and State Integrity

Space / Aviation / Defense

FIRST EDITION

AF 9600 SUPPORTING DOCUMENT

Aerospace Federation
af.org

Document identity and use

FIRST EDITION MANUSCRIPT - Prepared for Aerospace Federation review

Field	Controlled identity
Document	AF-PR-9600-014 - Perception, Fusion and State Integrity
Parent standard	AF 9600 - Artificial Intelligence, Autonomous Systems & Interoperability
Edition / language	FIRST EDITION / English master text
Family	Procedures
Primary source anchors	19; Annex F
Suggested local owner	Procedure owner identified in execution table
Authority	Publisher approval and effective date are not assigned. Local use requires authorized adoption and completed parameters.

Use with the main standard

This document implements the identified AF 9600 clauses and annexes. Read the complete applicable requirements in the main standard. The source anchors are navigation references; a template does not replace technical judgement, evidence, permission or eligible approval.

AF-ML-9600-001 lists the complete supporting set. AF-CM-9600-001 maps the main clauses and annexes to working documents. AF-TP-9600-001 establishes the common local parameter baseline; add the relevant discipline profiles.

Record control

Identify the object, configuration, record owner and dates. Reference attachments by stable identifier and version. Keep superseded evidence and decisions traceable. Use the approved local retention, access and authentication arrangements. No technical limit, numerical limit, interval or acceptance value is assigned by a blank template.

Implementation model: Translate the stated responsibilities and controls into the actual organization. Informative examples remain explanatory; use approved programme-specific values for operational decisions.

1 Purpose, trigger and inputs

A measurement, perception or fusion chain is evaluated or changed.

Required inputs: Sensor baseline, transformation chain, reference evidence and consumer needs.

Use the complete parent requirements at 19; Annex F. Assign an eligible owner to each step; retain the actual baseline and time of each significant action.

2 Controlled execution

Step / responsible role	Required action	Retained output
1 / Perception owner	Identify measurements, calibration, transforms and timing.	Measurement-chain record
2 / Fusion analyst	Assess uncertainty, correlation and association ambiguity.	Fusion argument
3 / Examiner	Test representative scenes, degradation and observability loss.	Perception evidence
4 / System reviewer	Verify consumer interpretation and protective response.	State-integrity decision

Decision control: Precision and repeated observations shall not be mistaken for accuracy or independence.

2.1 Exceptions and escalation

Preserve the observed condition, affected object, evidence and decision state. Refer a deviation or anomaly to its eligible technical authority. Record why a departure is acceptable, what remains blocked and whether readiness, qualification, acceptance or release must be reconsidered.

3 Closure and handoff

Valid state estimates with age, uncertainty and degradation semantics.

The receiving owner verifies the outputs. Open items retain an owner, due basis and blocked scope; a due date does not authorize closure.

3.1 Working records

AF-FR-9600-014, AF-TP-9600-006, AF-CL-9600-013, AF-TR-9600-001. Consult AF-ML-9600-001 for titles and locations. Reopen affected steps when configuration, conditions, evidence validity or delegated authority changes. Verify the actual technical handoff during assurance review.