**PRD-43 — Defense & Aerospace — ITAR Overlays & ML Categories**

**Intent**

Apply ITAR-specific overlays and US Munitions List (USML) category handling to products/BOM, with ownership look-through and advisory-only AI classification hints.

**Preconditions**

• Jurisdictional classification (PRD-04) active; Partner Store ownership graph (for 50%+ overlays) available.

• Overlay catalogs for USML categories, significant military equipment (SME) flags, exemptions, and country policies.

• Attachment vault for licenses/agreements and tech data access controls.

**Steps**

• Scope & Category: enable ITAR overlay; map products/components to USML categories where applicable; show preliminary advisory hints with WHY and human approval required.

• Tech Data Controls: mark attachments and fields that constitute technical data; enforce access controls and export markings.

• License & Agreement Links: associate products with required licenses/agreements; store validity and provisos; expose to order/shipment decisions.

• Ownership Look-Through: at order time, run partner ownership overlay (50% chain) alongside ITAR country policies; block/hold with chain-of-ownership WHY where relevant.

• Kit Cascade: for BOMs, roll up ITAR restrictions to the kit; most-restrictive policy wins; emit kit-level badges.

• Gate Hooks: enforce provisos and proviso-specific quantity/value counters; require approvals where mandated; log signed decision receipts.

• Change Hooks: on list/policy refresh, recompute overlays; publish ImpactDelta; queue license/proviso review tasks where affected.

**Edge cases**

• Mixed ITAR/EAR components in kits → segregate where possible; otherwise treat as ITAR-controlled until reviewed.

• Proviso conflicts across licenses → require compliance reviewer to resolve before shipment; block until resolution.

**Done when**

• USML category handling, license/proviso links, tech data controls, and ownership look-through all affect decisions deterministically with WHY/FIX, and audits reproduce decisions against the same snapshot.