**PRD-32 — Subscriber Alerts for Product-Class Changes**

**Intent**

Let users and external systems subscribe to products/categories/jurisdictions and receive digest/webhook alerts on changes: PCV/PCT updates, overlays, valuation/tariff scenarios, DPP updates.

**Preconditions**

• Event bus already emits ProductUpdated, ClassificationChanged, ImpactDelta, OverlayChanged, ValuationScenarioReady, DPPPublished.

• Notification service and webhook signer.

**Steps**

• Subscribe UI/API: users pick watch targets (product, category, filter) + channels (email, in-app, webhook) + frequency (instant, hourly digest, daily).

• Debounce/Coalesce: events enter a holding bucket per subscriber; merge noisy updates into one compact message with WHY summaries and links.

• Delivery: Email/In-app digest with grouped changes. Webhook event batch (HMAC-signed, idempotent keys).

• AI Summarizer (advisory): drafts human-readable change notes; reviewer can tweak tenant-wide template.

• Failed Deliveries: retries with exponential backoff; dead-letter reporting.

• Unsubscribe & Privacy: per-watch link to mute; tenant admin can revoke any webhook.

**Edge cases**

• Subscriber moves tenants → migrate or require re-subscribe.

• Flapping changes → rate-limit and force manual review flag.

**Done when**

• Subscriptions deliver within chosen windows; no duplicate webhooks; every message references a Proof Bundle/decision link; mute/unsubscribe works instantly.