

## Product Name: Trustap Instant Verify

### Contacts:

- Product Manager: Zubair Akhtar
- Engineering Lead: XXXX
- Design Lead: XXXX

### 1. Executive Summary

This product requirement document describes building **Trustap Instant Verify**; a progressive verification system integrated with Trustap's marketplace payment platform.

It responds to an identified market opportunity (losing competitive deals to Stripe Connect and Adyen due to 24-48hour manual KYC delays), is aligned with our company strategy of enabling scalable marketplace payments, and leverages our unique competitive edge (escrow-backed transaction safety) with Phase 1 MVP planned for Q2 2026.

### Success Criteria:

- Reduce seller onboarding time from 24-48 hours to <60 seconds for 65% of applicants
- Increase seller activation rate from 42% to 68% within 6 months
- Maintain fraud rate below 0.3% (current baseline: 0.2%)
- Enable 10,000+ additional sellers in first 6 months post-launch
- Reduce "verification status" support tickets by 30%

### 2. Market Opportunity

The global marketplace payments sector has shown a consistent growth rate of 18.2% CAGR (Juniper Research, 2024) due to the explosion of peer-to-peer marketplaces, creator economy platforms, and social commerce. Currently at an early growth stage (23% market penetration in EU/UK), providing ample room for capturing substantial value. TAM projected at \$2.4 trillion by 2028.

**Market Growth Stage:** Emerging to early growth. High-velocity marketplaces (Facebook Marketplace integrations, Vinted-style platforms, Depop) demand instant seller activation to compete effectively.

**Current Pain Point:** Traditional KYC processes create 18-36hour delays. Internal data shows 31% of sellers abandon onboarding during document upload phase. Competitors offering instant activation (Stripe Connect Express accounts) are winning deals we're losing.

**Potential Business Value:** Each 1% increase in seller activation rate translates to approximately €180k in annual transaction fee revenue (based on current partner GMV averages). Target 26% increase = €4.7M annual incremental revenue.

### **3. Strategic Alignment**

Trustap Instant Verify aligns with our company's focus on becoming the trusted payments infrastructure for European marketplaces. It directly supports our mid-term objective of achieving 50+ marketplace partnerships by 2027 by removing the primary objection ("onboarding is too slow") raised in 60% of lost sales opportunities (Q4 2025 Sales retrospective).

**Vision Alignment:** Our vision is to make peer-to-peer transactions as safe and frictionless as traditional e-commerce. Manual verification delays contradict "frictionless"—this product resolves that tension.

**Playing to Strengths:** We maintain our core differentiator (escrow-backed safety) while matching competitors on activation speed. This is a "table stakes" feature that unlocks our ability to compete, not a pivot away from our core value proposition.

#### **Company Objectives Supported:**

- **Short-term:** Win 3+ competitive marketplace RFPs in H1 2026 by citing instant onboarding
  - **Mid-term:** Increase partner GMV by 25% through higher seller supply
  - **Long-term:** Establish Trustap as the default choice for high-velocity European marketplaces
- 

## **4. Customer & User Needs**

### **4.1 Market Segments & Personas**

#### **Primary Segment: High-Volume C2C Marketplaces**

- Examples: Facebook Marketplace integrations, Vinted-style fashion resale, Depop, local classified platforms
- Characteristics: 10,000+ sellers, rapid listing velocity, price sensitivity, mobile-first

#### **Secondary Segment: Niche/Vertical Marketplaces**

- Examples: Vintage furniture, collectibles, handmade goods
- Characteristics: 1,000-5,000 sellers, higher AOV, quality-focused, trust-critical

#### **User Personas:**

1. **"Casual Seller Sarah"** (65% of volume)
  - Age: 25-40, selling occasional items (wardrobe clearout, unused electronics)
  - Jobs-to-be-done: List item quickly, get paid safely, minimal effort
  - Pain points: "I don't want to upload my passport to sell a €30 jacket"
  - Constraints: Mobile-only, expects instant gratification

2. "**Power Seller Paul**" (25% of volume)
  - Age: 30-55, semi-professional reseller (10+ transactions/month)
  - Jobs-to-be-done: Scale operations, access higher limits, minimize platform risk
  - Pain points: "Verification delays cost me sales opportunities"
  - Constraints: Needs higher transaction limits quickly
3. "**Marketplace Owner Maria**" (B2B customer)
  - Role: Product/Operations lead at marketplace platform
  - Jobs-to-be-done: Maximize seller supply, minimize operational overhead, maintain trust & safety
  - Pain points: "Manual KYC review doesn't scale; we need self-service"
  - Constraints: Budget for payment processing, regulatory compliance requirements

## 4.2 Prioritized User Problems

### **Problem 1: Verification Delay Causes Drop-Off** (Severity: High, Frequency: Very High)

- 31% of sellers abandon during document upload (internal analytics, n=12,847 onboarding attempts, Q4 2025)
- Importance: 9/10, Satisfaction: 3/10 (partner surveys, n=8 marketplace partners)
- Impact: Lost GMV estimated at €2.1M annually

### **Problem 2: Unclear Timeline Creates Anxiety** (Severity: Medium, Frequency: High)

- 22% of support tickets are "When will I be verified?" inquiries
- Users report feeling "in limbo" with no visibility into process
- Impact: Poor user experience, support cost burden

### **Problem 3: One-Size-Fits-All Creates Friction** (Severity: Medium, Frequency: Medium)

- Low-risk sellers (selling a €20 book) face same process as high-risk sellers (luxury watches)
- Partners want flexibility to customize verification based on their risk appetite
- Impact: Lost competitive deals to platforms offering tiered onboarding

## Geographic/Regulatory Constraints:

- Phase 1 limited to UK/Ireland (GDPR-compliant infrastructure already in place)
- Phase 2 expansion to EU requires country-specific AML screening thresholds
- Must maintain AMLD5 compliance for all transaction tiers

## 5. Value Proposition & Messaging

### 5.1 Problem-Solution Mapping by Segment

#### For Casual Sellers (Segment 1):

- **Problem:** "I don't want to upload documents to sell one item"
- **Solution:** Instant activation with email + phone verification only
- **Benefit:** Sell within 60 seconds, no document uploads for transactions under €500
- **Messaging:** "Start selling in under a minute—no paperwork, just safety."

#### For Power Sellers (Segment 2):

- **Problem:** "Verification delays cost me sales opportunities"
- **Solution:** Fast-track to higher limits via ID upload OR automatic upgrade after 10 successful sales
- **Benefit:** Unlock €2,000/transaction in 2-4 hours, or automatically after building trust
- **Messaging:** "Grow your limits as fast as you grow your business—no waiting."

#### For Marketplace Owners (B2B):

- **Problem:** "Manual KYC doesn't scale and loses me sellers"
- **Solution:** 65% auto-approval with AI risk scoring, self-service tier configuration
- **Benefit:** 26% increase in seller activation, 30% reduction in support costs
- **Messaging:** "Scale seller supply without scaling ops—instant verification that protects your marketplace."

### 5.2 Competitive Differentiation

#### vs. Stripe Connect Express:

- **Similarity:** Instant activation for low-risk sellers
- **Differentiation:** We add escrow protection (they don't). Message: "Instant activation WITH buyer/seller protection—not just speed."

#### vs. Adyen Marketplaces:

- **Similarity:** Enterprise-grade compliance infrastructure
- **Differentiation:** We offer self-service onboarding (they require 24-48hr manual review). Message: "Enterprise reliability, consumer-grade speed."

#### vs. Mangopay:

- **Similarity:** EU-focused marketplace payments
- **Differentiation:** We offer progressive verification (they require full KYC upfront). Message: "Start small, grow fast—verification that scales with you."

### 5.3 Key Messaging

**Headline:** "Verify sellers in 60 seconds. Protect transactions forever."

#### Supporting Points:

- "65% of sellers live instantly—no documents, no delays"
- "Escrow-backed safety on every transaction, regardless of tier"
- "AI-powered risk scoring maintains <0.3% fraud while maximizing approval rates"

## 6. Competitive Advantage

### 6.1 Defensibility

#### What makes this defensible?

Our competitive advantage stems from combining instant verification **WITH** escrow protection—a combination competitors don't offer:

1. **Proprietary Risk Model:** Our multi-year transaction dataset (4.2M transactions across 47 marketplace partners) trains a fraud detection model competitors can't replicate without similar data. 18-month competitive lead.
2. **Regulatory Moat:** We've already built GDPR-compliant, AMLD5-approved infrastructure across UK/EU. Competitors entering these markets face 6-12 month compliance buildouts.
3. **Integration Network:** Existing partnerships with Onfido, Trulioo, and ComplyAdvantage give us preferential pricing and priority support. New entrants pay premium rates.
4. **Escrow IP:** Our core escrow logic (patent pending) creates switching costs. Marketplaces can't easily migrate to competitors without rebuilding escrow workflows.

### 6.2 Why Competitors Won't Copy Immediately

**Stripe:** Their Connect Express product already exists but lacks escrow. Adding escrow would cannibalize their simpler offering and complicate their product suite. Unlikely to prioritize.

**Adyen:** Enterprise-focused with 24-48hr SLAs baked into contracts. Shifting to instant verification would require operational restructuring and contract renegotiations. 12-18 month timeline minimum.

**Mangopay:** Limited R&D budget (€8M annual vs. our €3M). They're focused on geographic expansion, not product innovation. Unlikely to prioritize until we prove market demand.

### 6.3 Durability (3-Year Outlook)

**Year 1:** First-mover advantage in "instant verification + escrow" positioning. Win deals competitors can't match.

**Year 2:** Network effects from transaction data improve risk model accuracy faster than competitors can catch up. Fraud rate advantage widens.

**Year 3:** Marketplace partners have integrated custom tier configurations into their workflows (switching cost). Even if competitors copy features, we retain customers.

**Risk Mitigation:** Continue investing in fraud detection ML, expand compliance coverage to new markets (Nordics, DACH), and build partner lock-in through API customization options.

## 7. Product Scope and Use Cases

### 7.1 Key Capabilities & Features

#### Core Capability 1: Risk-Based Instant Verification

**Feature:** Automated risk scoring engine that assigns sellers to Tier 1/2/3 based on identity signals

##### Tasks Product Must Perform Exceptionally Well:

- Collect minimal identity data (email, phone, name, DOB, address) with <45 second form completion time
- Execute real-time risk assessment using third-party data providers (Onfido, Trulioo) in <5 seconds
- Assign tier with 65% Tier 1 approval rate while maintaining <0.3% fraud rate
- Display clear tier assignment with transaction limits and upgrade path

**Desired Customer Outcome:** Casual sellers activate instantly without friction; marketplace owners see 26% increase in activation rate

**Design Prototype:** [Link to Figma: Instant Verification Flow v1.2]

**High-Risk Assumption:** Risk model can achieve 65% auto-approval at <0.3% fraud rate

**Test Method:** A/B test with 10% traffic on 2 pilot partners for 30 days; measure approval rate vs. fraud/chargeback incidents

#### Core Capability 2: Progressive Tier Upgrades

**Feature:** Automated and manual upgrade paths from Tier 1 → Tier 2 → Tier 3

##### Tasks Product Must Perform Exceptionally Well:

- Detect when seller attempts transaction above current limit and prompt for upgrade
- Process ID upload → OCR verification → tier upgrade in <4 hours (95th percentile)
- Automatically upgrade Tier 1 sellers to Tier 2 after 10 successful deliveries + 0 disputes + 30 days tenure
- Send push notifications when upgrade is approved

**Desired Customer Outcome:** Power sellers unlock higher limits without manual intervention; 40% of Tier 1 sellers upgrade within 30 days

**Design Prototype:** [Link to Figma: Tier Upgrade Flows v1.0]

**High-Risk Assumption:** Sellers will proactively upload ID when hitting limits (vs. abandoning transaction) **Test Method:** Usability testing with 20 users; measure intent to upload ID vs. abandon when shown limit-hit prompt

### Core Capability 3: Partner Configuration Dashboard

**Feature:** Self-service interface for marketplace partners to customize tier limits and verification requirements

#### Tasks Product Must Perform Exceptionally Well:

- Allow partners to set custom transaction limits per tier (e.g., €300/€1,500 instead of default €500/€2,000)
- Enable/disable specific verification methods (e.g., require bank verification for all Tier 2 sellers)
- Provide real-time analytics on auto-approval rates, fraud rates, and support ticket volume
- Offer staging environment for testing configuration changes before going live

**Desired Customer Outcome:** Marketplace owners reduce configuration support requests by 50%; partners launch custom tier structures within 1 week

**Design Prototype:** [Link to Figma: Partner Dashboard v2.1]

**High-Risk Assumption:** Partners have sufficient knowledge to configure tiers safely (won't set limits so high they increase fraud risk) **Test Method:** Partner interviews (n=5) to validate UI comprehension; add warning modals for risky configurations

## 7.2 User Flows

### User Flow 1: Casual Seller - Instant Activation

1. Seller clicks "Start Selling" on marketplace
2. Enters email + phone → receives OTP codes → verifies (30 seconds)
3. Enters name, DOB, address (20 seconds)
4. System runs risk assessment (5 seconds)
5. Seller assigned Tier 1 → redirected to create first listing (10 seconds)
6. **Total time:** 65 seconds from signup to listing live

### User Flow 2: Power Seller - ID Upload for Higher Limits

1. Tier 1 seller attempts to list €800 item (above €500 limit)
2. System shows prompt: "Upload ID to unlock €2,000 limit"
3. Seller uploads photo of driver's license via mobile camera
4. OCR extracts data, liveness check confirms authenticity (automated, 2 hours)
5. System upgrades to Tier 2 → sends push notification
6. Seller re-lists item at €800

7. **Total upgrade time:** 2-4 hours (no manual intervention)

### User Flow 3: Marketplace Owner - Configure Custom Tiers

1. Partner logs into Trustap dashboard
2. Navigates to "Verification Settings" → "Tier Configuration"
3. Adjusts Tier 1 limit to €300 (instead of default €500) for vintage marketplace
4. Enables "Require bank verification for Tier 2" toggle
5. Previews changes in staging environment
6. Clicks "Go Live" → changes apply to new seller signups within 5 minutes
7. **Configuration time:** <15 minutes, zero engineering support needed

## 8. Non-Functional Requirements

### 8.1 General Requirements

#### Performance:

- Risk assessment API must return tier assignment in <5 seconds for 95% of requests
- Dashboard analytics queries must load in <2 seconds for datasets up to 100,000 sellers
- ID upload → OCR verification must complete in <4 hours for 95th percentile

#### Scalability:

- System must support 50,000 concurrent seller verifications during partner launch events
- Handle 500,000 total sellers across all partners by end of Year 1
- Database must scale to 10M+ verification events without performance degradation

#### Reliability:

- 99.9% uptime SLA for verification API (max 43 minutes downtime/month)
- Graceful degradation: if third-party APIs fail, route to Tier 3 (manual review) instead of blocking signup
- Auto-retry logic for transient failures (3 attempts with exponential backoff)

#### Security:

- GDPR compliance: Tier 1 data stored with 90-day retention, Tier 2/3 with 7-year retention (AML requirement)
- PCI DSS Level 1 compliance for all payment data handling
- End-to-end encryption for ID document uploads (AES-256)
- Role-based access control (RBAC) for partner dashboard (admin/viewer roles)

## **Peak Load Expectations:**

- Black Friday equivalent: 5,000 signups/hour across all partners
- Partner launch event: 10,000 signups in first 24 hours for single large marketplace

## **8.2 AI-Specific Requirements**

### **AI Architecture:**

- **Risk Scoring Model:** Gradient boosting classifier (XGBoost) trained on historical transaction data + third-party identity signals
- **Fallback Logic:** If ML model unavailable, fall back to rule-based scoring (conservative thresholds)
- **RAG Integration (Future):** Retrieval-augmented generation for support chatbot answering verification FAQs

### **Accuracy & Reliability:**

- Risk model must achieve **65% Tier 1 approval rate** on holdout test set (n=5,000 historical signups)
- **False positive rate <5%:** Low-risk sellers incorrectly flagged for manual review
- **False negative rate <0.3%:** Fraudulent sellers incorrectly auto-approved (measured via fraud/chargeback incidents)
- Hallucination/error limit: N/A (not using generative AI in critical path)

### **Ethical Standards:**

- No discrimination based on protected characteristics (GDPR Article 22 compliance)
- Bias testing: Model performance must not vary >5% across demographic groups (age, gender, nationality)
- Explainability: Risk scores must include reason codes (e.g., "Low email domain reputation," "Phone carrier flagged")

### **Measurement & Validation:**

- **Primary Metric:** F1 Score for fraud detection (target: 0.85+)
- **Secondary Metrics:** Precision (target: 0.80+), Recall (target: 0.75+)
- **A/B Testing:** Shadow mode for 30 days comparing new model vs. baseline before full rollout
- **Ongoing Monitoring:** Monthly model retraining on past 90 days of transaction data; drift detection alerts if approval rate drops >10%

### **Maintaining Quality Over Time:**

- Automated feedback loop: Fraud/chargeback incidents fed back into training data within 24 hours

- Quarterly model audits by Compliance team to validate bias metrics
- Partner-specific model tuning: High-risk verticals (luxury goods) get stricter thresholds

## 9. Go-to-Market Approach

### Phase 1: MVP Launch (Weeks 1-8, Target: Q2 2026)

**Target Segment:** High-volume C2C marketplaces in UK & Ireland only

#### Build Scope:

- Tier 1 instant verification (email/phone/identity data → risk score → auto-approve)
- Manual Tier 2/3 fallback (existing KYC flow for sellers not auto-approved)
- Basic partner dashboard (view-only tier analytics, no self-service configuration yet)
- Integration with Onfido for identity verification

#### Release Strategy:

- **Pilot Partners:** 2 marketplaces (1 high-volume: 10,000+ sellers, 1 niche: 2,000 sellers)
- **Traffic Rollout:** 10% of new signups routed to Instant Verify, 90% to legacy flow (A/B test)
- **Success Metrics:**
  - 60% auto-approval rate in pilot (target: 65% by Phase 2)
  - <0.4% fraud rate over 30-day pilot period
  - 20% increase in seller activation rate vs. control group
  - 2 pilot partners commit to full rollout

#### Value Demonstration:

- Weekly reports to pilot partners showing activation rate lift and fraud metrics
- Case study: "[Partner Name] activates 800 additional sellers in 30 days with Instant Verify"
- Sales enablement: Arm sales team with pilot results for competitive RFPs

#### Evidence for Acceleration:

- Pilot partner testimonial videos for marketing site
- Quantified impact data (e.g., "€120k incremental GMV in first month")
- Technical validation: 99.5% uptime, <3s average verification time

### Phase 2: Automation & Scale (Weeks 9-16, Target: Q3 2026)

#### Expansion Scope:

- Automated Tier 2 verification (ID upload → OCR → auto-upgrade in <4 hours)
- Expand to EU markets (Germany, France, Spain) with localized AML screening

- Partner self-service tier configuration dashboard
- Auto-upgrade logic (Tier 1 → Tier 2 after 10 transactions + 30 days)

**Target Segment:** Add niche/vertical marketplaces + 3 existing partners upgrading from legacy flow

#### **Release Strategy:**

- 100% traffic to Instant Verify for pilot partners (graduate from A/B test)
- Onboard 5 new marketplace partners using Instant Verify as default
- Geographic expansion: Germany launch with localized compliance (BaFin requirements)

#### **Success Metrics:**

- 65% auto-approval rate achieved
- 40% of Tier 1 sellers upgrade to Tier 2 within 30 days
- 30% reduction in "verification status" support tickets
- 5 new partners onboarded with <1 week time-to-launch

#### **Win Conditions:**

- Win 2 competitive RFPs vs. Stripe Connect citing instant onboarding
- Partner NPS >50 (baseline: 32 for legacy KYC flow)
- Featured in industry publication (e.g., Fintech Times) as innovation leader

### **Phase 3: Intelligence & Optimization (Weeks 17-24, Target: Q4 2026)**

#### **Advanced Features:**

- Machine learning risk model v2.0 (fraud pattern detection, behavioral biometrics)
- Real-time limit adjustments based on transaction velocity (e.g., increase limit after 5 consecutive successful sales)
- Partner API for custom verification workflows (e.g., luxury marketplace requires video call for >€5k items)
- Multi-currency support (USD, EUR, GBP tier limits)

**Target Segment:** All segments, focus on enterprise marketplace partnerships

#### **Success Metrics:**

- 70% auto-approval rate (stretch goal)
- <0.25% fraud rate (improvement from Phase 2)
- 50+ marketplace partners using Instant Verify
- €4.7M incremental annual revenue from activation rate improvement

#### **Market Position:**

- Recognized as "best-in-class instant verification for European marketplaces"
- Case studies with 10+ partners demonstrating ROI
- Competitive win rate >60% in RFPs where instant onboarding is requirement

## **Appendix A: Open Questions & Decisions Needed**

1. **Risk Tolerance Decision** (Owner: CFO + Head of Compliance, Deadline: Week 2)
  - What fraud rate are we willing to accept to hit 65% auto-approval?
  - Recommendation: <0.3% aligns with industry benchmarks; need CFO sign-off
2. **Tier Naming Convention** (Owner: Marketing + Product, Deadline: Week 3)
  - Transparent labels (Tier 1/2/3) vs. gamified names (Bronze/Silver/Gold)?
  - Recommendation: Bronze/Silver/Gold for consumer-facing, Tier 1/2/3 for B2B dashboard
3. **Default vs. Opt-In for Partners** (Owner: Sales + Product, Deadline: Week 4)
  - Should instant verification be default for new partners or opt-in?
  - Recommendation: Default for new partners, opt-in for legacy partners (change management risk)
4. **Pricing Strategy** (Owner: Finance + Product, Deadline: Week 5)
  - Do we charge partners extra for instant verification or bundle as competitive moat?
  - Recommendation: Bundle in standard pricing to maximize adoption; revisit in Year 2 if market leader
5. **Third-Party Vendor Selection** (Owner: Engineering + Procurement, Deadline: Week 6)
  - Onfido vs. Trulioo for identity verification (cost, coverage, API reliability)?
  - Recommendation: Onfido for Phase 1 (better EU coverage), add Trulioo as fallback in Phase 2

## **Appendix B: Success Metrics Dashboard (Post-Launch Monitoring)**

### **Weekly Tracking:**

- Auto-approval rate by tier
- Fraud/chargeback incidents (count + rate)
- Seller activation rate (signups → first transaction within 24 hours)
- Support ticket volume (verification-related)

### **Monthly Tracking:**

- Partner GMV growth (vs. pre-Instant Verify baseline)

- Tier upgrade rates (Tier 1 → 2, Tier 2 → 3)
- Model performance (F1 score, precision, recall)
- Competitive win/loss analysis (deals where instant onboarding was deciding factor)

#### Quarterly Business Review:

- Incremental revenue from activation rate improvement
- Cost per verification (third-party API fees + engineering support)
- Partner NPS and retention
- Roadmap prioritization based on partner feedback

#### Appendix C: Competitive Analysis

Competitor	Instant Verification	Transaction Limits	Upgrade Path	Escrow Protection	Target Market
Stripe Connect Express	<input checked="" type="checkbox"/> Yes	\$2,000/week initially	Auto after 10 transactions	<input checked="" type="checkbox"/> No	Global, high-volume
Adyen Marketplaces	<input checked="" type="checkbox"/> No (24-48hr)	Custom per partner	Manual review	<input checked="" type="checkbox"/> No	Enterprise EU/US
Mangopay	<input checked="" type="checkbox"/> Partial (EU only)	€1,000/month	Document upload required	<input checked="" type="checkbox"/> Partial	EU mid-market
PayPal Marketplaces	<input checked="" type="checkbox"/> Partial (legacy users)	\$10,000/month	Manual review	<input checked="" type="checkbox"/> Partial	Global, SMB
Trustap (current)	<input checked="" type="checkbox"/> No	N/A (full KYC)	N/A	<input checked="" type="checkbox"/> Yes	EU C2C marketplaces
Trustap Instant Verify	<input checked="" type="checkbox"/> Yes	€500/€2k (Tier 1)	Auto + manual	<input checked="" type="checkbox"/> Yes	EU C2C + vertical

**Key Competitive Insight:** Stripe Express captures 68% of their marketplace seller volume despite lower limits. Instant activation drives supply growth more than high limits. We can win by combining Stripe's speed with our unique escrow protection.

---

**Document Status:** Draft v1.0 for stakeholder review

**Next Steps:**

1. Schedule technical feasibility review with Engineering (Week 1)
2. Legal/Compliance sign-off on tiered verification model (Week 2)
3. Identify 2 pilot partners (Week 3)
4. Finalize success criteria for pilot → full rollout decision (Week 4)