Comprehensive Requirements for the Global Trade License Hub (GTLH)

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1 Executive Summary & Strategic Positioning

The Global Trade License Hub (GTLH) is a SaaS-based, modular platform designed to bridge the gap between complex enterprise-grade solutions (e.g., SAP GTS) and the underserved mid-market/SME segment. Its differentiators include ease of implementation, configurability, and intelligent automation, ensuring rapid time-to-value and lower total cost of ownership while maintaining rigorous compliance. Leveraging AI/ML for predictive classification, smart document processing, and proactive regulatory change analysis, GTLH makes compliance accessible to organizations without large trade teams.

2 Document Management

2.1 Essential Trade Documents

- Transaction Documents: Commercial Invoice, Packing List, Sales Order, Proforma Invoice, Delivery Notes, Bill of Lading/Air Waybill.

- Compliance Documents: Export/Import Declarations (e.g., AES Filing, Customs Entry Forms), Certificates of Origin, End-User Statements, Ingress/Egress Documents.

- License & Certificate Management: Application supporting documents, Issued Licenses (e.g., BIS export licenses), Proof of Filing, Permits (e.g., FDA, USDA), Certificate of Conformity, License Renewal reminders and paperwork.

- Party Documentation: Customer-provided documents (e.g., import licenses, business registration), Denied Party Screening results documentation.

2.2 Document Management Lifecycle

- Ingestion: Support UI upload, API push from ERP/OMS, email parsing, SFTP.

- Classification & Data Extraction: AI-based OCR and NLP to classify document types and extract fields (e.g., Invoice Number, Date, Parties, Product Descriptions, Values, Weights).

- Version Control & Linkage: Versioned documents linked to trade transactions, products, business partners, and license requirements/exceptions.

- Storage & Retrieval: Secure, encrypted cloud storage with audit trails; instant retrieval via global search across text and metadata.

3 Master Data & Classifications

3.1 Mandatory Master Data Fields

Data Object	Key Fields
Product Master	Internal SKU, Detailed Description, Weight, Dimensions, Country of Origin, ECCN/USML Category, HS/HTS Code, Value, Schedule B Number
Business Partner Master	Legal Name, DBA Name, Addresses (Ultimate, Ship-to, Bill-to), Entity Type, Registration Numbers (e.g., DUNS), End-Use, Sanction/Screening Status

| Company Data | Company Entities, Filer IDs (e.g., AES ITN, Importer of Record #), Internal Party Codes |

3.2 Classification Management

- Centralized Repository: Single source of truth for product classifications.

- Automated Classification Support: AI-assisted HS/ECCN suggestion engine, human-in-the-loop validation.

- Regulatory Database Integration: Auto-updates from USHTS, EU Combined Nomenclature, Commerce Control List, with change impact analysis.

- Mapping Engine: Map one internal product to multiple HS codes by destination country.

4 License Determination Logic

4.1 Configurable Rulesets & Condition Technique

- Rule Builder: No-code/low-code interface for IF-THEN-ELSE rules based on product attributes, destination country, end-use, business partner attributes, and transaction details.

- Pre-Built Rule Templates: Out-of-the-box sets for EAR de minimis, ATF exemptions, EU Dual-Use regulations.

- Rule Precedence & Hierarchy: Manage conflicts via definable precedence levels.

4.2 Exception Handling & Advanced Scenarios

- De Minimis Rules: Configurable calculation engine for US and other thresholds.

- Quota Management: Track quota volumes, flag transactions exceeding limits.

- License Exception Application: Auto-apply valid exceptions (e.g., LVS, GBS, ENC).

- Escalation Paths: Auto-approve low-risk exceptions; route high-risk scenarios to compliance officers.

5 Customization & Workflow Configuration

5.1 Customer-Centric Customization

- Jurisdictional Profiles: Activate/deactivate specific regulatory jurisdictions.

- Custom Fields: Add company-specific data points to products, partners, transactions.

- Custom Document Types: Define unique document requirements.

- Workflow Designer: Visual tool for approval chains, exception routes, and task assignments.

5.2 User & Role Management

- Pre-defined Roles: Compliance Officer, Classifier, Shipping Clerk, Auditor, Administrator.

- Granular Permissions: Control CRUD access to functions and data fields.

- Approval Hierarchy: Multi-level approval chains based on value, risk, or destination.

6 Regulatory & Jurisdiction Support

6.1 Multi-Jurisdiction Features

- Global Sanction List Aggregation: Integrate OFAC, BIS, DDTC, UN, EU, UK HMRC lists with plain-language explanations.

- Jurisdiction-Specific Logic: Switch rule base based on origin/destination countries and regulatory body.

- Local Filing Requirements: Support for AES (US), Intrastat (EU), CBSA (Canada).

- Audit Preparedness: Store compliance snapshots with rule versions, lists, and data used.

7 Integration & Automation

7.1 Best Practices for Integration

- API-First Architecture: RESTful JSON APIs for core functions (e.g., validateLicense, screenParty).

- Pre-Built Connectors: Certified connectors for NetSuite, SAP Business One, Microsoft Dynamics 365, Oracle Cloud ERP.

- Event-Driven Triggers: Listen for ORDER_CREATED, SHIPMENT_POSTED events.

- Data Formats: Support EDI, XML, CSV for batch; JSON for real-time APIs.

7.2 Automation Points

- Auto-fetch documents from connected systems.

- Auto-submit license applications to SNAP-R, DTRADE where APIs allow.

- Auto-sync determination status to ERP.

8 Audit, Reporting & Compliance

8.1 Critical Capabilities

- Immutable Audit Trail: Log actions, decisions, data changes, document access.

- Pre-Built Report Library: Determination Outcomes, Screening Hits, License Utilization, Exceptions, Audit History.

- Custom Report Builder: Drag-and-drop interface for ad-hoc reports.

- Compliance Dashboards: Visualize Clearance Rates, Top Destinations, Exception Usage, Screening Hit Ratio.

- Compliance Scorecard: Monthly/quarterly health score for adherence.

9 User Experience & Support

9.1 UI/UX for Rapid Investigation

- Unified Case Management: Prioritized Compliance Inbox for alerts and tasks.

- 360-Degree View: Instant context for transaction details, classifications, screening history, documents.

- One-Click Actions: Approve, Deny, Request More Info, Escalate.

- Visual Workflow: Track transaction status in compliance process.

9.2   Onboarding & Support

- Interactive Onboarding Wizards: Guide setup for products, classifications, partners, rules.

- Contextual Help & Tooltips: Embedded regulatory and system guidance.

- In-App Training: Video tutorials, simulated exercises.

- Regulatory Update Bulletins: Notifications on regulatory changes and impacts.

10   Coverage Gaps & Innovation Opportunities

- AI-Powered Predictive Classification: Learn from user corrections for high auto-classification accuracy.

- Proactive Regulatory Change Impact Analysis: Flag affected products/partners for HS or sanctions changes.

- Embedded Compliance Expertise: Expert Assist feature connecting to trade consultants.

- Supply Chain Transparency Module: Screen tier-2 suppliers for risks.

- SME-Friendly Financial Guarantees: Compliance insurance for software errors.