Tech Design Spec – Supplier Sprint Pack

Product: Supplier Sprint Pack (Multilingual Supplier Outreach & Default Justification)

Version: v1.1

Prepared By: Filentra Founder

Date: 2025-06-23

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1. PURPOSE

This document defines the technical specification for the Supplier Sprint Pack, which automates multilingual supplier communication and fallback memo generation for CBAM compliance. It ensures declarants can prove “good faith effort” before applying EU default values, per Article 6 of the Implementing Regulation.

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2. INPUT STRUCTURE

2.1 Declarant-Uploaded Input File:

- XLS or CSV format

- Fields Required:

- Supplier Name (if available)

- CN Code

- Country of Origin

- Net Quantity (kg)

- Emission Type Requested (Actual / Default)

- Language Preference (optional)

- Supplier Email / Phone

- Declarant EORI (used for registry match)

2.2 Registry Data (if available):

- O3CI ID

- Installation Name

- Verification Presence (Y/N)

- Embedded Emissions (if actuals)

2.3 Internal Config / System Parameters:

- D0–D5 outreach logic calendar

- DeepL or RelevanceAI language routing

- Contact throttle (rate limiting config)

- PDF templates (memo + effort log)

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3. OUTPUT STRUCTURE

3.1 Supplier Response Log:

- Timestamped logs of all contact attempts

- Email body preview

- Language used

- Contact method (email/voice)

- Status: Replied / Not Replied / Invalid contact

3.2 Default Usage Memo:

- PDF report (Markdown-based)

- Justification note (“Supplier did not respond after 3 documented attempts”)

- Risk flag if fallback used for >20% of goods

3.3 ZIP Export:

- Memo PDF

- Effort log PDF

- Validated emissions file (XLS or JSON)

- Ready for Concierge or Express Fix

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4. CORE MODULES

4.1 Outreach Automation Engine:

- Triggered from dashboard or CLI

- D0: Email #1 (local language, explanation + data ask)

- D1: Voice Call #1

- D2: Email #2 (reminder + portal/excel links)

- D3: Voice Call #2 (escalation with CBAM risk flag warning)

- D4: Email #3 (final warning)

4.2 Language Router:

- Country → Default language → DeepL translation + template fill

- Manual override allowed for rare languages

- Test mode: preview language copy

4.3 Data Collector:

- Accepts:

- EU Excel Communication Template

- Upload from Supplier Portal (O3CI registry linked)

- Validates:

- Scope 1/2 completeness

- Unit and format

- CN Code match

4.4 Risk + QC Engine:

- Flags fallback usage >20%

- Detects:

- Exact match to EU default

- Outlier logic: ≥2x or ≤0.5x EU default

- Missing verifier → soft flag (until Jan 2026)

4.5 Memo Generator:

- Markdown → PDF with fallback memo content

- Effort log auto-attached

- Fallback trigger: No response by Day 5

- Optional insert to Risk Vault bundle

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5. EDGE CASE HANDLING

- Supplier reply after Day 5 → marked late; triggers override flow

- Language unsupported → fallback to English with notice

- Supplier replies with partial data → triggers retry

- Declarant error in contact file → reject with field name

- Portal submission but no EORI match → flag for Ops check

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6. UX / UI DESIGN

- Form upload from declarant dashboard

- Status tracker per supplier:

- “Awaiting reply”, “Retry sent”, “Default used”

- View logs

- Manual resend option

- Optional override to call-only mode

- Sprint progress dashboard with timeline

- PDF downloads embedded in log entries

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7. FILE VALIDATION

- XLS must match required column headers

- Supplier uploads parsed for:

- Missing fields

- Default flag mismatch

- Emission units

- Rejections logged with timestamp + reason

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8. STORAGE & SECURITY

- Supplier metadata retained for 30 days

- Email content NOT stored

- Memo PDFs stored 90 days for download

- GDPR Compliant:

- Article 6(b) legal basis

- Anonymized fallback triggers

- Contact info encrypted at rest

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9. API ENDPOINTS (Planned)

- POST /supplier-sprint/upload

- POST /supplier-sprint/trigger

- GET /supplier-sprint/status/{supplier\_id}

- GET /supplier-sprint/memo/{declarant\_id}

- GET /supplier-sprint/download/zip/{declarant\_id}

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10. ANALYTICS & EVENTS

- Events to Track:

- sprint\_triggered

- supplier\_contacted

- supplier\_responded

- audit\_log\_generated

- memo\_generated

- Funnel:

Upload → Trigger → Attempted → Responded → Memo Generated / Not

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11. DEPENDENCIES

- DeepL API

- UploadThing / Supabase / AWS S3 for XLS intake

- Stripe SKU: sprint\_pack

- Filentra Risk Vault integration

- O3CI registry intake (manual phase)

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12. POST-LAUNCH ROADMAP

- Self-service Supplier Portal

- Embedded translator UX preview for agents

- Declarant reminder module (“Download memo!”)

- CRM sync for supplier metadata

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13. OWNER

- Product Owner: Founder

- QA Lead: TBD

- Language QA: Freelance contractor (EU)