Process Definition Document (PDD)

Date	21st Aug 2025
Project	GST Reconciliation (Zoho Books ↔ GSTR-2B)
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Stakeholders	Harpinder Singh, Mr. Neeraj Agg, Mr. Pawan Negi & Ms. Vandana Seth

1. Purpose & Outcome

Deliver a zero-install, browser-based app (PWA) that reconciles **Zoho Books** purchases with **GSTR-2B**, and outputs a single Excel file containing standardized summaries. Target outcome: **sub-second** processing, consistent reporting, and fewer manual errors.

2. Scope & Assumptions

In Scope - Upload of a monthly Excel with **two sheets**: *GSTR-2B* and *Zoho Data*. - Reconciliation logic with configurable **tolerance** (default ₹10). - Generation of six output sheets in a single workbook. - PWA install support on Chrome/Edge/iOS.

Out of Scope - Direct API fetch from GST portal / Zoho Books. - Workflow approvals, email automation, data archival.

Assumptions - Column headers are consistent with the provided template.

3. Inputs & Required Format

File: Excel (.xlsx) with sheets **"GSTR-2B"** and **"Zoho Data"**.
Required columns (both sheets): - *GSTIN of Supplier*, *Trade Name*, *Invoice Date*, *Invoice Number*, - *Invoice Value*, *Integrated Tax (IGST)*, *Central Tax (CGST)*, *State Tax (SGST)*, *Taxable Value*.

*The template **Input_Format.xlsx** is attached with the rollout email.*

4. Process Flow

4.1 AS-IS

1. Download **GSTR-2B** for the target period from the GST portal (Excel/CSV).

2. Export **Purchase Book** from **Zoho Books** for the same period.

3. Open a master workbook and **standardize headers/formats** (GSTIN, Trade Name, Invoice Date, Invoice Number, values). Normalize invoice numbers (trim/uppercase, remove spaces/dashes, unify slashes, drop leading zeroes).

4. Use Excel formulas (e.g., **VLOOKUP/INDEX-MATCH**) on **(GSTIN, Invoice Number)** to compare **Invoice Value**, **IGST/CGST/SGST**, and **Taxable Value**.

5. Create manual summaries: **Zoho Book Vs GSTR**, **GSTR Vs Zoho Book**, **Sum totals**, **Bills-wise**, **GSTIN-wise**, **Trade Name-wise** (pivots/totals).

6. Review exceptions (missing in Book/2B, minor value differences), apply an informal **tolerance** threshold, and annotate.

4.2 TO-BE

1. User opens the app → sets **Tolerance (₹)** if needed.

2. Uploads the source Excel.

3. App validates sheets/headers and **normalizes keys** (GSTIN → uppercase; Invoice No. → uppercase, strip spaces/dashes, unify slashes, drop leading zeroes).

4. Groups by **(GSTIN, Invoice Number)** and sums numeric fields.

5. Compares Zoho vs 2B, computes differences, applies tolerance. Auto-downloads reconciliation_output.xlsx with all summaries.

5. Matching Rules & Tolerance

- **Primary key**: *(GSTIN, Invoice Number)* after normalization.
- **Differences**: values within **±₹Tolerance** are treated as **0** (considered matched).
- **Status tags**: *Match*, *Missing in Book*, *Missing in 2B*, *Mismatch: Invoice/Tax/Taxable*.

6. Outputs (Single Excel)

1) **Zoho Book Vs GSTR** – invoice-level differences (Zoho → 2B).
2) **GSTR Vs Zoho Book** – invoice-level differences (2B → Zoho).
3) **Sum Function** – totals and net difference.
4) **Bills Wise Summary** – consolidated per bill (with status).
5) **GSTIN Wise Summary** – supplier-wise totals and differences.
6) **Trade Name Wise Summary** – trade-name roll-up of differences.

7. Non-Functional & Security

- **Performance**: typical runs complete in **milliseconds**.
- **Privacy**: processing happens **entirely in the browser**; files are not uploaded to servers.
- **Availability**: static app on Vercel; no server state.
- **Installability**: PWA support (Add to Home Screen / Install App).
- **Auditability**: tolerance value visible in UI; deterministic outputs.

8. Roles & RACI

Role	Responsibility	R	A	C	I
Accounts Users	Uploads file; reviews output	R			

Mr. Neeraj Aggarwal	Acceptance, tolerance policy		A	C	I
Harpinder Singh (RV)	Build, maintenance, fixes, domain/SSL, deploys	R		C	I

R: Responsible, A: Accountable, C: Consulted, I: Informed

9. Deployment & Access

- **URL**: https://recorv.vercel.app
- **Environments**: Dev → UAT → Prod (single URL after sign-off).
- **Install (PWA)**: Chrome/Edge → *Install app*; iOS Safari → *Add to Home Screen*.
- **Artifacts**: source in Drive; Vercel build logs retained.

10. Risks & Mitigation

Risk	Impact	Mitigation
Header mismatch / changed export	Processing fails	Provide template, validate headers, quick parser updates
Extremely large files	Slow processing	Recommend monthly splits; staged upload guidance
User confusion on tolerance	Recon disputes	Default ₹10, inline help text, training note

11. Acceptance Criteria

- The app accepts the template file and produces all **six** sheets.
- Differences within **±₹10** evaluate to **0** across all sheets.
- Total figures in **Sum Function** align with source totals.
- Performance: output generated in **≤ 2 seconds** for typical monthly files.
- PWA install prompt available; app loads offline with basic shell.

12. Change Control & Support

- **Contact**: Harpinder Singh (RV Solutions) – *Harpinder.singh@rvsolutions.in*

13. Sign-off

Name	Role	Signature	Date
Harpinder Singh	Owner / Developer		21-Aug-2025
Mr. Pawan Negi	Process Owner		22-Aug-2025
Mr. Neeraj Aggarwal	Approver		22-Aug-2025