

Document 1- Business case document template

➤ Why is this project initiated?

Answer:

The project was initiated to automate and streamline the processing of the **G File**, which contains records of payments that have already been received and accounted for in the respective GL accounts in accrual form. This file includes confirmed payment data, and the initiative aims to ensure accurate financial reporting, reduce manual intervention, and improve efficiency in handling already-settled transactions.

➤ What are the current problems?

Answer :

❓ **Manual Processing Effort** – G File data is often processed manually, increasing workload and chances of human error.

❓ **Data Duplication Risks** – Without proper validations, duplicate entries may be recorded for already received payments.

❓ **Delayed Reconciliation** – Manual or semi-automated processes delay timely reconciliation of received payments with financial records.

❓ **Lack of Real-time Visibility** – There is no real-time tracking or dashboard to monitor confirmed payments reflected in the GL.

❓ **Error-Prone Accrual Matching** – Matching payments to the accrual entries can be inaccurate or inconsistent without automation.

❓ **Inconsistent File Formats** – G File data may be received in inconsistent formats, causing difficulties in ingestion and processing.

❓ **Limited Validation Rules** – Absence of strong validation checks increases the risk of processing incorrect or incomplete data.

❓ **Audit Challenges** – Difficulty in tracking changes or justifying entries in G File during audits due to missing traceability or logs.

➤ **With this project how many problems could be solved?**

Answer : This project addresses **all 8 identified problems**, offering a comprehensive solution by automating and streamlining the processing of the G File. Specifically, it will:

1. **Eliminate manual efforts** by automating data ingestion and validation.
2. **Prevent data duplication** through system-level checks.
3. **Accelerate reconciliation** with automated matching against accruals.
4. **Enable real-time visibility** of confirmed payments via dashboards or reports.
5. **Ensure accurate accrual matching** through rule-based processing.
6. **Standardize file formats** with pre-defined templates and validations.
7. **Enforce strong validation rules** to detect incomplete or incorrect data.
8. **Enhance audit readiness** with complete traceability and system logs.

Thus, the project is expected to **fully resolve all major issues currently faced** in the handling of the G File.

➤ **What are the resources required?**

Answer : To successfully implement the GST reporting automation project, a mix of human, technical, financial, and supplementary resources will be required. These resources ensure smooth execution, regulatory compliance, and timely delivery of the project.

1) People – Project Team Members

- **Business Analysts (BAs):** Responsible for gathering business requirements, mapping GST rules, and ensuring the solution aligns with current tax regulations.
- **Finance & Tax Experts:** Validate the GST logic, tax calculations, and legal compliance of the reports.
- **Developers & System Integrators:** Build the reporting tool, automate data extraction, integrate systems, and generate reports.
- **Quality Assurance (QA) Testers:** Ensure that reports are accurate, data validations are working, and the system functions as expected.
- **Project Manager:** Manages the overall timeline, resources, and communication to keep the project on track.
- **Client-side Stakeholders:** Involve finance managers, compliance officers, and IT administrators for requirement validation, approvals, and user acceptance testing (UAT).

2) Time – Implementation Timeline

- **Total Project Duration:** Estimated 4 to 6 months
- **Phases Include:**
 - ✓ Requirements & Design: 4–5 weeks
 - ✓ Development & Integration: 8–10 weeks
 - ✓ Testing & UAT: 3–4 weeks
 - ✓ Deployment & Training: 2 weeks
 - ✓ Buffer for changes/regulatory updates: 2 weeks

3. Budget – Cost Allocation

- **Hardware & Infrastructure:** ₹50,000 – ₹1,00,000 (for servers or cloud platforms)
- **Software Licensing & Tools:** ₹75,000 – ₹1,50,000 (reporting and database tools)
- **Training & Documentation:** ₹20,000 – ₹50,000
- **Professional Services & Development:** ₹1,50,000 – ₹3,00,000
- **Total Estimated Budget:** ₹3,00,000 – ₹5,00,000
- **Contingency Reserve:** 10% of total budget for unexpected needs (regulatory updates or validations)

4. Other Resources

- **Third-party GST Software Evaluation:** To benchmark functionality and ensure solution is competitive.

➤ How much organizational change is required to adopt this technology?

Answer : Adopting the GST Compliance Reporting System will need some moderate changes in how the organization works, especially in processes, training, and using the new system. The finance, tax, and IT teams will need to adjust, but these changes will make GST reporting faster, easier, and more accurate in the long run.
Key Areas of Organizational Change:

1. Staff Training:

- People using the system (finance, accounts, tax, IT) will need training.

- Training materials, guides, and workshops will help them learn the new system.
- Before the system goes live, users will test it to get comfortable.

2. Policy Updates:

- Company rules on handling GST data and documents will be updated to fit the new system.
- The system will follow GST rules strictly, reducing mistakes and increasing compliance.
-

3. Team Coordination:

- Better teamwork between departments (finance, tax, IT) will be needed during setup and use.
- Regular communication will help everyone stay informed and on track.

5. No Big Structural Changes:

- The organization won't need to change its structure or hire many new people.
- Existing teams will keep doing their jobs, just with better tools.
- Less need for outside consultants as the system handles much of the work automatically.

➤ Time frame to recover ROI?

Answer : The return on investment (ROI) for the GST Compliance Reporting System can be recovered in **12 to 18 months** after it's implemented. This depends on how big the company is, how many transactions it handles, and how much of the process is automated.

Key Factors Contributing to ROI Recovery:

1. Less Manual Work:

- ✓ The system does tasks like report creation and data checking automatically.
- ✓ This saves time and reduces workload, which means lower costs and higher productivity from day one.

2. Fewer Errors and Penalties:

- ✓ Automated, accurate filings help avoid mistakes that could lead to fines or audits.

- ✓ It also reduces the number of notices or questions from tax officers.

3. Better ITC Claims:

- ✓ The system helps claim Input Tax Credit (ITC) correctly, which improves cash flow.
- ✓ Even a small improvement (like 2–5%) can save a lot of money.

4. Less Need for Outside Help:

- ✓ Businesses won't need to rely much on external tax consultants for routine work, saving consulting fees.

5. Grows with Your Business:

- ✓ As your transactions increase, the system can handle the extra load without needing more staff.
- ✓ This keeps costs stable as the business grows.

Estimated ROI Timeline:

- ✓ **6–12 months:** Medium or large companies may start seeing savings early, especially if they did a lot of manual work before.
 - ✓ **12–18 months:** Most companies will fully recover their investment through savings on time, penalties, ITC, and consultant fees.
-

➤ How to identify Stakeholders?

Answer : Identifying stakeholders for the **GST Compliance Reporting System** is a critical step to ensure all relevant parties are involved in gathering requirements, validating compliance logic, and supporting smooth implementation. Stakeholders are individuals or groups who are directly or indirectly affected by the system or influence its success.

Steps to Identify Stakeholders:

- ✧ **Analyze Business Functions Impacted:**
Start by identifying departments and roles involved in GST-related activities. For this project, these include:
- ✧ **Finance & Accounting Teams** – responsible for invoice processing, payments.
- ✧ **Tax & Compliance Officers** – ensure correct GST filings, ITC claims, and legal compliance

- ✧ **IT/Admin Teams** – manage data sources, integrations, and system security
- ✧ **Project Sponsor or Senior Management** – approve the project scope, budget, and strategic alignment
- ✧ **Review Existing Processes & Systems:**
Analyze current GST workflows, tools, and reporting processes. This helps identify:
 - ✓ Who generates invoices or maintains sales/purchase records
 - ✓ Who handles filing and compliance tasks
 - ✓ Who manages technical platforms from where data will be extracted
- ✧ **Conduct Stakeholder Interviews & Workshops:**
Organize meetings with key departments to understand their roles and involvement. This also helps discover:
 - ✓ End users who will interact with the system
 - ✓ Approvers for reports and returns
 - ✓ Support roles (e.g., legal, audit teams)
- ✧ **Use the RACI Matrix Framework:**
Categorize stakeholders based on their role:
 - ✓ **Responsible:** Business Analysts, Developers, QA
 - ✓ **Accountable:** Project Manager
 - ✓ **Consulted:** Finance Managers, Compliance Officers, Tax Experts
 - ✓ **Informed:** IT Admins, Department Heads, End Users

Examples of Key Stakeholders in GST Compliance Reporting System:

- ✧ **Internal Stakeholders:**
 - ✓ Finance & Accounts Teams
 - ✓ Taxation & Compliance Officers
 - ✓ IT/Admin Team
 - ✓ Senior Management
 - ✓ End Users of GST dashboards

✧ **External Stakeholders:**

- ✓ Government Tax Portals/APIs
 - ✓ GST Consultants (if involved initially)
 - ✓ Vendors/Partners sharing data
-

Document 2: BA Strategy

Answer :

1) Elicitation Techniques:

a) We'll conduct **Joint Application Development (JAD) sessions** to bring finance, tax, and IT teams together for discussions.

b) We'll also organize **Focus Groups** with end-users (like the finance and compliance team) to understand their day-to-day GST needs (like invoicing, ITC, filing).

c) Since this is a **Waterfall model**, we'll collect and finalize all requirements at the beginning.

2) Stakeholder Analysis:

We will use a **RACI Matrix** to define who does what:

- **Responsible:** Business Analysts, Developers, Testers
- **Accountable:** Project Manager
- **Consulted:** Finance Leads, Tax Experts, Compliance Officers
- **Informed:** IT Admins, Business Heads

This helps everyone know their role and when to give feedback or approvals.

3) Documentation:

a) **BRD (Business Requirement Document)** – What the business needs

b) **FRS (Functional Requirements)** – Step-by-step processes and GST logic

c) **SRS (Software Requirements)** – How the system should behave, including rules and validations

d) **Solution Design Document** – Technical mapping and how reports/calculations will be handled

e) **Test Plan/Test Cases** – For testing dashboards, filings, and GST reports

4) Sign-Offs and Approvals:

- We'll get sign-off on the SRS before starting development to lock the scope.
- After UAT (User Testing), a Client Acceptance Form will be signed to confirm successful delivery.
- All important documents (BRD, FRS, SRS) will go through formal review and approval.

5) Communication Channels:

- a) Use **workshops, JAD sessions, interviews, and focus groups** to gather and clarify requirements.
- b) We'll analyze **old reports, systems, and audit data** to understand current practices.
- c) During UAT, **questionnaires** will be used to gather feedback from users.
- d) Technical documents like **High-Level Design (HDD)** and **Application Design (ADD)** will be shared with developers and other stakeholders.

6) Change Request Handling:

If something needs to change after sign-off:

- We'll first **check if the change is possible (feasibility)**
- Then do **impact analysis** (time, logic, and dependencies)
- Estimate effort with the team
- Only after client **approval**, the change will be made and documents updated

7) Project Progress Updates:

- a) Regular **status meetings and dashboards** will keep stakeholders informed
- b) We'll use **Requirement Traceability Matrix (RTM)** and **Use Case Diagrams** to track everything
- c) Share **test results and design docs** to show we're on track
- d) **Walkthroughs during UAT** will help users understand the system and give feedback

8) UAT and Final Sign-Off:

After users test the system and approve it (UAT),

- The **Client will sign a Project Acceptance Form**
- Then we'll deploy the solution
- **User manuals and training materials** will be shared for easy onboarding

Document 3- Functional Specifications

Project name	GST Compliance Reporting System
Customer name	HDFC Bank
Project Version	1.0
Project Sponsor	Chief Financial Officer (CFO) or Mr. Samudra Sen
Project Manager	Mr. Pankaj Sutar
Project Initiation date	13 March 2025

Req ID	Req Name	Req Description	Priority
FR0001	Login	User should be able to log in to the application to perform GST compliance operations	High
FR0002	User Role Management	Admin should be able to create, update, and manage user roles and permissions.	High
FR0003	GST AMC Master Upload	Upload AMC details linked to individual products via GST AMC Master..	High
FR0004	GST Product Category Master Upload	Upload product category and subcategory data via GST Product Category Master.	High
FR0005	GST Account Master Upload	Upload dummy account details for collection parking via GST Account Master.	High
FR0006	GST GL Account Master Upload	Upload GL account details via GST GL Account Master.	High
FR0007	GST Branch-State Mapping Upload	Upload branch code to state code mappings via GST Branch-State Code Master.	High
FR0008	Master Data Validation	Validate G File data against uploaded GST masters.	High
FR0009	G File Payment Confirmation	Process only confirmed payment records in the G File	High
FR0010	G File Upload Interface	Provide interface to upload G File generated from Xcelerate.	Medium
FR0011	G File Format Validation	Validate structure and format of the G File.	High
FR0012	G File Status Report Generation	Generate G File Status Report showing processing status.	High
FR0013	Scheduler – G File Generation	Scheduler task to generate G File from Xcelerate.	High
FR0014	Scheduler – G File Consumption	Scheduler task to consume G File from Xcelerate.	High
FR0015	Error Logging for G File	Log detailed errors for failed G File entries.	High

FR0016	Audit Trail for Master Uploads	Maintain audit trail of GST master uploads.	Medium
FR0017	Duplicate Entry Check	Restrict duplicate entries in G File processing.	High
FR0018	Real-time G File Processing Status	Provide real-time status of G File processing.	Medium
FR0019	Master Dependency Check	Restrict processing if required masters are missing or outdated.	High
FR0020	Email Notification for Scheduler Failures	Email alert for G File scheduler task failures	Medium

Document 4- Requirement Traceability Matrix

Req ID	Req Name	Req Description	Design	D1	T1	D2	T2	UAT
FR0001	Login	User should be able to log in to the application to perform GST compliance operations	YES	✓	✓	✓	✓	✓
FR0002	User Role Management	Admin should be able to create, update, and manage user roles and permissions.	YES	✓	✓	✓	✓	✓
FR0003	GST AMC Master Upload	Upload AMC details linked to individual products via GST AMC Master..	YES	✓	✓	✓	✓	✓
FR0004	GST Product Category Master Upload	Upload product category and subcategory data via GST Product Category Master.	YES	✓	✓	✓	✓	✓
FR0005	GST Account Master Upload	Upload dummy account details for collection parking via GST Account Master.	YES	✓	✓	✓	✓	✓
FR0006	GST GL Account Master Upload	Upload GL account details via GST GL Account Master.	YES	✓	✓	✓	✓	✓
FR0007	GST Branch-State Mapping Upload	Upload branch code to state code mappings via GST Branch-State Code Master.	YES	✓	✓	✓	✓	✓
FR0008	Master Data Validation	Validate G File data against uploaded GST masters.	YES	✓	✓	✓	✓	✓
FR0009	G File Payment Confirmation	Process only confirmed payment records in the G File	YES	✓	✓	✓	✓	✓
FR0010	G File Upload Interface	Provide interface to upload G File generated from Xcelerate.	YES	✓	✓	✓	✓	✓
FR0011	G File Format Validation	Validate structure and	YES	✓	✓	✓	✓	✓

		format of the G File.						
FR0012	G File Status Report Generation	Generate G File Status Report showing processing status.	YES	✓	✓	✓	✓	✓
FR0013	Scheduler – G File Generation	Scheduler task to generate G File from Xcelerate.	YES	✓	✓	✓	✓	✓
FR0014	Scheduler – G File Consumption	Scheduler task to consume G File from Xcelerate.	YES	✓	✓	✓	✓	✓
FR0015	Error Logging for G File	Log detailed errors for failed G File entries.	YES	✓	✓	✓	✓	✓
FR0016	Audit Trail for Master Uploads	Maintain audit trail of GST master uploads.	YES	✓	✓	✓	✓	✓
FR0017	Duplicate Entry Check	Restrict duplicate entries in G File processing.	YES	✓	✓	✓	✓	✓
FR0018	Real-time G File Processing Status	Provide real-time status of G File processing.	YES	✓	✓	✓	✓	✓
FR0019	Master Dependency Check	Restrict processing if required masters are missing or outdated.	YES	✓	✓	✓	✓	✓
FR0020	Email Notification for Scheduler Failures	Email alert for G File scheduler task failures	YES	✓	✓	✓	✓	✓

Document 5- BRD Template

Overview :

The system is designed to automate GST-related processes using various master uploads such as AMC, Product Category, GL Accounts, and Branch-State mappings. It includes functionality to generate and consume G Files through scheduled tasks, ensuring only confirmed payment data is processed. Validations against master data, error logging, and duplicate checks enhance data accuracy. Real-time status tracking and audit trails provide transparency and compliance. Additionally, user login, role management, and email notifications ensure secure and responsive operations.

- **File Upload Maker.**

General Features/ Functionalities

- Navigation – GST Reporting > File Upload Maker.
- This module supports uploading G File,
- After uploading of file, system will display total record, valid record and invalid record.
- System will allow export of invalid record in .xlsx format, exported file will contain exception remark column.

Input/ Output Fields and Validations for File Upload Maker Screen.

Field Name	Field Type (Input/ Output)	Validation/ Business Logic	Remarks
G file upload	• Label		
	• Checkbox	• Navigation – GST Reporting > File Upload Maker > File Upload Maker tab. • System will display profile mapping after clicking on upload button.	
Product Category	• Dropdown	• Mandatory. • Navigation – GST Reporting > File Upload Maker > File Upload Maker tab. • System will add Values from GST Product Category Master in this dropdown.	
Sub Category	• Dropdown	• Mandatory if Product Category has Sub – Category. • Navigation – GST Reporting > File Upload Maker > File Upload Maker tab. • System will populate this dropdown with values from the GST Product Category Master.	

Month	• Dropdown	• Mandatory. • Navigation – GST Reporting > File Upload Maker > File Upload Maker tab. • System to add below Values in Dropdown – - JAN - FEB - MAR - APR - MAY - JUN - JUL - AUG - SEP - OCT - NOV - DEC	
Year	• Dropdown	• Mandatory. • Navigation – GST Reporting > File Upload Maker > File Upload Maker tab. • System will add Year in YYYY Format in this dropdown. For Ex – 2012.	
Session ID	• Dropdown	• Navigation – GST Reporting > File Upload Maker > File Upload Export tab. • System will display session id on the basis of selection of from and to date.	

Commands and Actions

Browse	• Navigation – GST Reporting > File Upload Maker > File Upload Maker tab. • This button will be used for browsing file for selection.
Click here to Upload	• Navigation – GST Reporting > File Upload Maker > File Upload Maker tab. • This button will be used for uploading the selected file.
Export Invalid Records	• Navigation – GST Reporting > File Upload Maker > File Upload Export tab. • System will export invalid records from that session.

G File Upload:

•G File- The file where the payment is already received in the respective GL account as in the accrual form. This file consists of data where the payment is received and confirmed.

•Navigation – GST Reporting > File Upload Maker.

•The user will select the Product Category for which the G File needs to be uploaded. If the selected Product Category has an associated Sub-Category, a Sub-Category

dropdown will be displayed and must be selected. The user will then specify the month and year for which the G File is to be uploaded.

- The G file must always be in .txt format and use a pipe (|) as the delimiter.
Validation Message: "Invalid file format or delimiter. Expected a .txt file with pipe-separated values."

- This file contains the Transaction price of the services provided to the client for which GST needs to be calculated.

- The system will treat the most recently uploaded file as the final version

- If any validation error occurs during the file upload, the system will reject the entire G File, and the user will be required to re-upload it.

- If same file name is tried to upload in the system then a message should be prompted stating the file already exists. Would you like to overwrite it? If the user clicks yes; system will allow to upload the file and replace the existing records in the database with the new records details from the file

- After successful validation when the file gets uploaded in the system it will display a message stating the count of records in the file and the total transaction price amount.

- Sample G File format is as attached below.


GSE_G_InputFile_Sa
mple.txt

Input/ Output Fields and Validations for G File.

Field Name	Field Type (Input/ Output)	Validation/ Business Logic	Remarks
Account ID	• Input • Numeric • Varchar (10)	• Mandatory. • The system will validate the Account ID value against the GST Account ID Master.	

Transaction Priced Charge	- Input - Varchar (10)	- Mandatory. - System will allow decimal up to 2 places. - If the 'Transaction Price Charge' value is less than or equal to 0, the system will display the message: 'Transaction Price Charge value cannot be less than or equal to 0.'	It will contain Charges w.r.t particular transaction.
Charge Inclusive of Tax	- Input - Alphabet - Char (1)	- Mandatory. - It will contain only two Values – Y / N.	Describes if tax is included in charge
Transaction Date	- Input - Numeric - Char (14)	- Mandatory. - Date Format - YYYYMMDDHHMMSS.	This Date will contain Upload Date and Time.
Source State	- Input - Numeric - Char (2)	- Mandatory. - The system will validate the Source State value against the GST Branch Code Master.	
Destination State	- Input - Numeric - Char (2)	- Mandatory. - The system will validate the Destination State value against the GST Branch Code Master.	
Customer_Name	- Input - Varchar (50)	- Mandatory. - The system will validate the Customer_Name value against the GST AMC Master.	
GSTIN	- Input - Alphanumeric - Char (15)	The system will validate the GSTIN value against the GST AMC Master.	
GL_Code	- Input - Varchar (50)	- Mandatory. - Format is Branch code-GL account number. - This value is a combination value derived from two masters. The first half is the Branch code that should be validated from branch code and state code mapping master (For now consider Destination State Branch Code) and second half is the GL account number that should be validated from GL_account master.	
Product Category	- Input - Varchar (50)	- Mandatory. - The system will validate the Product Category value against the GST Product Category Master.	

Month Year	- Input - Char (5)	- Mandatory. - Format is Month Name in 3 Characters and Year in 2 Character – MMMYY. - Month Name (MMM) will be validated from Month field Dropdown. - Year Name (YY) will be validated from Year Dropdown where system will check the last two characters in Year.	
------------	---	--	--

Field Name	Action	Validation Message
Account ID	Mandatory Field Validation	Account ID is mandatory.
	Validation with GST Account ID Master.	Invalid Account ID: Value not found in GST Account ID Master.
Transaction Priced Charge	Mandatory Field Validation	Transaction Priced Charge is mandatory.
	'Transaction Price Charge' amount is zero or negative	Transaction Price Charge value cannot be less than or equal to 0.
	Length Check (10 characters)	Input exceeds maximum allowed length of 10 characters for Transaction Priced Charge.
Charge Inclusive of Tax	Mandatory Field Validation	Charge Inclusive of Tax is mandatory.
	Value check (Y/N only)	Invalid value for Charge Inclusive of Tax: Only 'Y' or 'N' are allowed.
Transaction Date	Mandatory Field Validation	Transaction Date is mandatory.
	Transaction Date Format	Invalid Transaction Date Format.
Source State	Mandatory Field Validation	Source State is mandatory.
	Validation with GST Branch Code Master.	Invalid Source State: Value not found in GST Branch Code Master.
Destination State	Mandatory Field Validation	Destination State is mandatory.
	Validation with GST Branch Code Master.	Invalid Destination State: Value not found in GST Branch Code Master.
Customer_Name	Mandatory Field Validation	Customer_Name is mandatory.
	Validation with GST AMC Master.	Invalid Customer_Name: Value not found in GST AMC Master.
GSTIN	Validation with GST AMC Master.	Invalid GSTIN: Value not found in GST AMC Master.
GL_Code	Validate the first part before the hyphen against the GST Branch Code master.	Invalid GL_Code: The Value before the hyphen does not match any valid GST Branch Code Master.
	Validate the Second part after the hyphen against the GST GL_account master.	Invalid GL_Code: The Value after the hyphen does not match any valid GST GL_account Master.
	Mandatory Field Validation	GL_Code is mandatory.
Product Category	Mandatory Field Validation	Product Category is mandatory.
	Validation with GST Product Category Master.	Invalid Product Category: Value not found in GST Product Category Master.
Month Year	Mandatory Field Validation	Month Year is mandatory.
	Validate the Month Part against the Month Field.	Invalid Month: The Value in Month Part does not match with Value from Month Dropdown.

	Validate the Year Part against the Year Field.	Invalid Month: The Value in Year Part does not match with Value from Year Dropdown.
--	--	---

- **Scheduler Details :**

1) Scheduler Task to generate the G files for Xcelerate.

- System will generate the G.txt file in the required format.
- System will copy the generated G.txt file to the configured SFTP path.
- Upon successful generation of the G.txt file, system will create a confirmation file named G.Text.Done.
- System will ensure that the G.txt file is copied to the SFTP path only after successful generation and creation of the G.Text.Done file.
- If any step fails (e.g., file generation, file copy, or .Done creation), the system will halt further processing.
- System will maintain detailed logs capturing the status (success/failure) of each step in the process.
- System will fetch and use the following SFTP configuration parameters from the web.config file:
 - Host Name (IP Address)
 - Port Number
 - User ID
 - Encrypted Password
 - SshHostKeyFingerprint (optional)

2) Scheduler Task to consume the G files (output) from Xcelerate

- The response received from Xcelerate for the G.txt will be stored by system in database.
- System should monitor the shared location for the response file, following the defined file naming convention.
- The response file from Xcelerate must be a pipe-separated (|) text file.
- Logs must be maintained to track the file processing activity, including success and failure cases.
- Frequency of file pickup and processing must be configurable and validated as per business requirements.

- **Master for G-file**

GST Product Category Master – Maker.

- Product Category and Subcategory related details will be uploaded through this Master.
- Navigation - Master > Master Upload Maker > GST Product Category Master.

- Only .xlsx/.xls file format will be allowed for upload of file. Validation message for wrong file format upload – **“Invalid file format. Please upload an Excel file with .xlsx or .xls extension.”**
-
- Refer Below Sample file for GST Product Category Master –



Category Master.xlsx

Input/ Output Fields and Validations for GST Product Category Master File.

Field Name	Field Type (Input/ Output)	Validation/ Business Logic	Remarks
Product Category	• Input • Varchar (50)	• Mandatory. • It will accept special characters like “/”, “-”, “_”, “\”.	
Sub - Category	• Input • Varchar (50)	• Non - Mandatory. • It will accept special characters like “/”, “-”, “_”, “\”.	
HSN / SAC Code	• Input • Numeric • Char (6)	• Mandatory. • It will be numeric number identifying the Product category. Also one HSN code can have multiple categories mapped to it.	
Active	• Input • Alphabet • Char (1)	• Mandatory. • It will contain only two Values – Y / N.	

Field Name	Action	Validation Message
Product Category	Mandatory Field Validation	Product Category is mandatory.
	Special Character Check	Invalid character found in Product Category: Only '/', '-', '_', and '' are allowed.
	Length Check (50 characters)	Input exceeds maximum allowed length of 50 characters for Product Category.
Sub Category	Special Character Check	Invalid character found in Sub-Category: Only '/', '-', '_', and '' are allowed.
	Length Check (50 characters)	Input exceeds maximum allowed length of 50 characters for Sub-Category.
HSN / SAC Code	Mandatory Field Validation	HSN Code is mandatory.
	Length Check (6 Digits)	HSN Code must have 6 – digit numeric value.
Active	Mandatory Field Validation	Active Field is mandatory.
	Value check (Y/N only)	Invalid value for Active field: Only 'Y' or 'N' are allowed.

2) GST AMC Master – Maker.

- Details of the various AMCs with respect to the individual product will be uploaded through this Master.
- Navigation - Master > Master Upload Maker > GST AMC Master.
- Only .xlsx/.xls file format will be allowed for upload of file. Validation message for wrong file format upload – “**Invalid file format.** Please upload an Excel file with .xlsx or .xls extension.”
- Refer Below Sample file for GST AMC Master –



Client Master.xlsx

Input/ Output Fields and Validations for GST AMC Master File.

Field Name	Field Type (Input/ Output)	Validation/ Business Logic	Remarks
AMC Name	• Input • Varchar (50)	• Mandatory.	
Product Category	• Input • Varchar (50)	• Mandatory. • It will accept special characters like “ / ” , “ - “ , “ _ “ , “ \ ” .	It should match with the value in Product Category master for the given client.
Sub - Category	• Input • Varchar (50)	• Non - Mandatory. • It will accept special characters like “ / ” , “ - “ , “ _ “ , “ \ ” .	It should match with the value in Product Category master for the given client.
AMC GSTIN	• Input • Alphanumeric	• Mandatory. • If the State Code has a leading zero (e.g., 01, 07), it should be retained and	

	Char (15)	considered as valid. Leading zeros must not be removed during validation or processing. GSTIN Validations – GSTIN should contain exactly 15 characters. <table><tr><td>First two characters</td><td>Numeric – State Code</td></tr><tr><td>From 3rd to 7th characters</td><td>Alphabet in Capital</td></tr><tr><td>From 8th to 11th characters</td><td>Numeric</td></tr><tr><td>12th character</td><td>Alphabet in Capital</td></tr><tr><td>13th character</td><td>Numeric</td></tr><tr><td>14th character</td><td>Alphabet – Z by Default</td></tr><tr><td>15th characters</td><td>Alpha numeric (Alphabet in Capital)</td></tr></table>	First two characters	Numeric – State Code	From 3 rd to 7 th characters	Alphabet in Capital	From 8 th to 11 th characters	Numeric	12 th character	Alphabet in Capital	13 th character	Numeric	14 th character	Alphabet – Z by Default	15 th characters	Alpha numeric (Alphabet in Capital)	
First two characters	Numeric – State Code																
From 3 rd to 7 th characters	Alphabet in Capital																
From 8 th to 11 th characters	Numeric																
12 th character	Alphabet in Capital																
13 th character	Numeric																
14 th character	Alphabet – Z by Default																
15 th characters	Alpha numeric (Alphabet in Capital)																
AMC PAN	- Input - Alphanumeric - Char (10)	- Non – Mandatory. - PAN Validations – PAN should contain exactly 10 characters. <table><tr><td>First 5 characters</td><td>Alphabet in Capital</td></tr><tr><td>From 6th to 9th characters</td><td>Numeric</td></tr><tr><td>Last 10th character</td><td>Alphabet in Capital</td></tr></table>	First 5 characters	Alphabet in Capital	From 6th to 9 th characters	Numeric	Last 10 th character	Alphabet in Capital									
First 5 characters	Alphabet in Capital																
From 6th to 9 th characters	Numeric																
Last 10 th character	Alphabet in Capital																
HSN / SAC Code	- Input - Numeric - Char (6)	- Mandatory. - It will be numeric number identifying the Product category. Also one HSN code can have multiple categories mapped to it.	It should match with the value in Product Category master for the given client.														
State Code	- Input - Numeric - Char (2)	- Mandatory. - State Code should contain exactly 2 characters except 00. - If the State Code has a leading zero (e.g., 01, 07), it should be retained and considered as valid. Leading zeros must not be removed during validation or processing.															
Addressee	- Input - Varchar (50)	- Mandatory. - The details of the concerned person in respective corporate who will be taking the service															
Add1	- Input - Varchar (50)	Mandatory.															
Add2	- Input - Varchar (50)	Non - Mandatory.															
Add3	- Input - Varchar (50)	Non - Mandatory.															
Add4	- Input - Varchar (50)	Non - Mandatory.															
PIN	Input	Mandatory.															

	- Numeric - Char (6)	PIN must have 6 digit Numeric Value.	
State	- Input - Varchar (50)	Mandatory.	
Active	- Input - Alphabet - Char (1)	- Mandatory. - It will contain only two Values – Y / N.	

Field Name	Action	Validation Message
AMC Name	Mandatory Field Validation	AMC Name is mandatory.
	Length Check (50 characters)	Input exceeds maximum allowed length of 50 characters for AMC Name.
Product Category	Mandatory Field Validation	Product Category is mandatory.
	Match Value with Product Category Master	Product Category does not match with value in Product Category Master.
Sub - Category	Match Value with Product Category Master	Sub - Category does not match with value in Product Category Master.
AMC GSTIN	Mandatory Field Validation	GSTIN is mandatory.
	GSTIN Format	Invalid GSTIN Format.
AMC PAN	PAN Format	Invalid PAN Format.
HSN / SAC Code	Mandatory Field Validation	HSN Code is mandatory.
	Match Value with Product Category Master	HSN Code does not match with value in Product Category Master.
State Code	Mandatory Field Validation	State Code is mandatory.
	State Code Format	Invalid State Code Format.
Addressee	Mandatory Field Validation	Addressee is mandatory.
	Length Check (50 characters)	Input exceeds maximum allowed length of 50 characters for Addressee.
Add1	Mandatory Field Validation	Add1 is mandatory.
	Length Check (50 characters)	Input exceeds maximum allowed length of 50 characters for Add1.
Add2	Length Check (50 characters)	Input exceeds maximum allowed length of 50 characters for Add2.
Add3	Length Check (50 characters)	Input exceeds maximum allowed length of 50 characters for Add3.
Add4	Length Check (50 characters)	Input exceeds maximum allowed length of 50 characters for Add4.
PIN	Mandatory Field Validation	PIN is mandatory.
	PIN Format	Pin Code must have 6 – digit Numeric Value.

State	Mandatory Field Validation	State Field is mandatory.
	Length Check (50 characters)	Input exceeds maximum allowed length of 50 characters for Product Category.
Active	Mandatory Field Validation	Active Field is mandatory.
	Value check (Y/N only)	Invalid value for Active field: Only 'Y' or 'N' are allowed.

3) GST Account ID Master.

- Details regarding the various dummy accounts in which the collection amount is parked will be uploaded through this Master.
- Navigation - Master > Master Upload Maker > GST Account ID Master.
- Only .xlsx/.xls file format will be allowed for upload of file. Validation message for wrong file format upload – **“Invalid file format. Please upload an Excel file with .xlsx or .xls extension.”**
- Refer Below Sample file for GST Account ID Master –



Dummy Account
Master.xlsx

Input/ Output Fields and Validations for GST Account ID Master File.

Field Name	Field Type (Input/ Output)	Validation/ Business Logic	Remarks
Account ID	• Input • Numeric • Varchar (10)	• Mandatory.	
Account Name	• Input • Varchar (50)	• Mandatory.	
IFSC Code	• Input • Varchar (11)	• Non – Mandatory. • IFSC Code should mandatorily have 11 Alphanumeric Characters.	
Product Category	• Input • Varchar (50)	• Mandatory. • It will accept special characters like “ / ”, “ - ”, “ _ ”, “ \ ”.	It should match with the value in Product Category master for the given client
Sub - Category	• Input • Varchar (50)	• Non - Mandatory. • It will accept special characters like “ / ”, “ - ”, “ _ ”, “ \ ”.	It should match with the value in Product Category master for the given client

Active	• Input • Alphabet • Char (1)	• Mandatory. • It will contain only two Values – Y / N.	
--------	---	--	--

Field Name	Action	Validation Message
Account ID	Mandatory Field Validation	Account ID is mandatory.
	Length Check (10 characters)	Input exceeds maximum allowed length of 10 characters for Account ID.
	Account ID Format	Account ID must have Numeric Value.
Account Name	Mandatory Field Validation	Account Name is mandatory.
	Length Check (50 characters)	Input exceeds maximum allowed length of 50 characters for Account Name.
IFSC Code	Mandatory Field Validation	IFSC Code is mandatory.
	IFSC Code Format.	Invalid IFSC Code Format.
Product Category	Mandatory Field Validation	Product Category is mandatory.
	Match Value with Product Category Master	Product Category does not match with value in Product Category Master.
Sub - Category	Match Value with Product Category Master	Sub - Category does not match with value in Product Category Master.
Active	Mandatory Field Validation	Active Field is mandatory.
	Value check (Y/N only)	Invalid value for Active field: Only 'Y' or 'N' are allowed.

4) GST GL Account Master.

- Details regarding the various GL accounts will be uploaded through this master.
- Navigation - Master > Master Upload Maker > GL Account Master.
- Only .xlsx/.xls file format will be allowed for upload of file. Validation message for wrong file format upload – **“Invalid file format. Please upload an Excel file with .xlsx or .xls extension.”**
- Refer Below Sample file for GST GL Account Master –



Input/ Output Fields and Validations for GST GL Account Master File.

Field Name	Field Type (Input/ Output)	Validation/ Business Logic	Remarks
Account ID	• Input • Numeric • Varchar (18)	• Mandatory.	
Account Name	• Input • Varchar (50)	• Mandatory.	

Product Category	- Input - Varchar (50)	- Mandatory. - It will accept special characters like “/”, “-”, “_”, “\”.	It should match with the value in Product Category master for the given client
Sub - Category	- Input - Varchar (50)	- Non - Mandatory. - It will accept special characters like “/”, “-”, “_”, “\”.	It should match with the value in Product Category master for the given client
Type of GL	- Input - Varchar (100)	Non – Mandatory.	
Active	- Input - Alphabet - Char (1)	- Mandatory. - It will contain only two Values – Y / N.	

Field Name	Action	Validation Message
Account ID	Mandatory Field Validation	Account ID is mandatory.
	Length Check (18 characters)	Input exceeds maximum allowed length of 18 characters for Account ID.
	Account Number Format	Account Number must have Numeric Value.
Account Name	Mandatory Field Validation	Account Name is mandatory.
	Length Check (50 characters)	Input exceeds maximum allowed length of 50 characters for Account Name.
Product Category	Mandatory Field Validation	Product Category is mandatory.
	Match Value with Product Category Master	Product Category does not match with value in Product Category Master.
Sub - Category	Match Value with Product Category Master	Sub - Category does not match with value in Product Category Master.
Type of GL	Length Check (100 characters)	Input exceeds maximum allowed length of 50 characters for Type of GL.
Active	Mandatory Field Validation	Active Field is mandatory.
	Value check (Y/N only)	Invalid value for Active field: Only 'Y' or 'N' are allowed.

5) GST Branch and State Code Mapping Master.

- Details regarding the various branch codes respective to the state code will be uploaded through this master.
- Navigation - Master > Master Upload Maker > Branch and State Code Mapping Master.
- Only .xlsx/.xls file format will be allowed for upload of file. Validation message for wrong file format upload – **“Invalid file format.** Please upload an Excel file with .xlsx or .xls extension.”
- Refer Below Sample file for GST Branch and State Code Mapping Master –



Branch Codes
Statewise.xlsx

Input/ Output Fields and Validations for GST Branch and State Code Mapping Master File.

Field Name	Field Type (Input/ Output)	Validation/ Business Logic	Remarks
State Code	- Input - Numeric - Char (2)	- Mandatory. - State Code should contain exactly 2 characters except 00. - If the State Code has a leading zero (e.g., 01, 07), it should be retained and considered as valid. Leading zeros must not be removed during validation or processing.	
Branch Code	- Input - Numeric - Char (4)	- Mandatory. - Branch Code should contain exactly 4 characters except 0000. - If the Branch Code has a leading zero (e.g., 0118), it should be retained and considered as valid. Leading zeros must not be removed during validation or processing.	As discussed with Rushang – Branch Code will be Validated from Branch Master (19.0.2025).
State	- Input - Varchar (50)	Mandatory.	
Active	- Input - Alphabet - Char (1)	- Mandatory. - It will contain only two Values – Y / N.	

Field Name	Action	Validation Message
State Code	Mandatory Field Validation	State Code is mandatory.
	State Code Format	Invalid State Code Format.
Branch Code	Mandatory Field Validation	Branch Code is mandatory.
	Branch Code Format	Invalid Branch Code Format.
	Validation with Branch Master	
State	Mandatory Field Validation	State Field is mandatory.
	Length Check (50 characters)	Input exceeds maximum allowed length of 50 characters for Product Category.
Active	Mandatory Field Validation	Active Field is mandatory.
	Value check (Y/N only)	Invalid value for Active field: Only 'Y' or 'N' are allowed.

1. Document Revisions

Date	Version Number	Document Change
23 March 2025	0.1	Initial Draft
01 April 2025	0.2	Added business objective and problem statement
06 April2025	0.3	Included stakeholder list and RACI matrix
10 April 2025	1.0	Drafted BRD and FRS sections
15 April2025	1.1	Updated requirement list and added use case diagrams
24 April 2025	1.2	Added SRS and validation rules
1 May 2025	1.3	Included UI wireframes and screen mockups

2. Approvals

Role	Name	Title	Signature	Date
Project Sponsor	Ramesh Mehta	VP - Corporate Finance	R Mehta	2 May 2025
Business Owner	Sunita Agarwal	Head Tax & Compliance	S Agarwal	3 May 2025
Project Manager	Nikhil Sharma	Sr. IT Project Manager	N Sharma	4 May 2025
System Architect	Priya Iyer	Solution Architect	P Iyer	5 May 2025
Development Lead	Manish Raut	Tech Lead - Web Development	M Raut	6 May 2025
User Experience Lead	Anjali Verma	UX Designer	A Verma	7May2025
Quality Lead	Deepak Joshi	QA Manager	D Joshi	8May 2025
Content Lead	Shweta Kulkarni	Documentation Specialist	S Kulkarni	9May2025

3. RACI Chart for This Document

Role	Responsible	Accountable	Consulted	Informed
Business Analyst	✓			
Project Manager		✓		✓
Developers	✓			
QA Team	✓			
Finance Team			✓	
Tax/Compliance Team			✓	
IT Support				✓

4) Introduction

4.1. Business Goals

- Ensure GST compliance and avoid penalties
- Improve accuracy of GST and income reports
- Replace old IHA tool with new IBO system
- Generate GST invoices with digital signatures
- Automate credit note and GST reversal process
- Claim maximum eligible Input Tax Credit (ITC)
- Provide easy-to-download reports (Excel/PDF)
- Reduce need for external consultants
- Maintain audit-ready records with tracking
- Build a scalable, future-ready system

4.2. Business Objectives

- **To provide an IT solution for:**
 - Automating GST reporting, invoice generation, and return filing
 - Replacing the existing IHA utility with a centralized, web-based solution in the IBO system
 - Managing Input Tax Credit (ITC) calculations and claims
 - Reducing manual errors by integrating finance and tax data in one system
 - Enabling extraction of reports in Excel/PDF formats for management use
 - Supporting real-time data validation and compliance with GST laws

- Providing role-based access and dashboard views for Finance, Tax, and IT teams

Mobile Application for Android and iOS (if applicable):

- Allow GST report status tracking and notifications on mobile
- View invoices, filing due dates, and ITC status
- Enable finance team members to approve tasks on the go

E-Learning Management System (if applicable):

- Train users on the new GST system and its features
- Provide step-by-step video tutorials and guides for using the portal
- Track learning progress and feedback

4.3. Business Rules

- **Follow GST deadlines** – All GST returns must be filed on time as per government rules.
- **Use proper invoice format** – Invoices must have correct GSTIN, tax details, and HSN/SAC codes.
- **Digital signatures are a must** – All invoices should be digitally signed by the authorized person.
- **Keep data for 8 years** – All records must be saved safely for future audits.
- **Access based on roles** – Only authorized users should see or edit certain data.
- **Need approval before filing** – Reports and returns must be approved before submission.
- **Any system changes need approval** – Changes to logic or reports must go through a process.
- **Track everything with logs** – Every change or submission should be logged for audits.
- **Monthly data check** – GST and income data must be checked and matched every month.
- **Master data must be correct** – Client and tax information must be accurate and up-to-date.
- **Data must be secure** – All financial data should be protected and shared only with the right people.
- **Train users properly** – All users should be trained and follow standard procedures.

4.4. Background

The GST Compliance Reporting System was initiated after management decided to phase out the outdated IHA utility, which lacked automation and integration. Manual processes were causing delays, errors, and compliance risks. To address these issues, a new web-based system under the IBO platform was proposed. This solution aims to centralize GST and income tax operations, improve accuracy, reduce manual effort, and ensure better compliance through automation and real-time reporting.

Expected benefits include:

- Faster and error-free GST filings
- Improved compliance and reduced penalties
- Better collaboration between teams
- Time and cost savings through automation
- Clear audit trails and data traceability

4.6. Project Scope

The objective is to develop a web-based GST Compliance Reporting System within the IBO platform that replaces the existing IHA utility. The system will automate GST filings, invoice generation, credit note issuance, tax reconciliation, and report generation.

It aligns with business objectives by improving compliance, reducing manual effort, ensuring data accuracy, and increasing operational efficiency. The system will also interact with existing finance and invoicing tools to fetch and process transaction data seamlessly.

5. Assumptions

- Every client (manufacturer) of HDFC Bank will have a valid GSTIN number.
- Users can only upload master data into the system; no manual entry will be allowed.
- The system will not calculate any GST values.
- Each product category will have a unique Account ID for GL (General Ledger) purposes.
- The Product Master data changes very rarely—about once a year.

- Even small differences in Unique Codes (like presence or absence of a hyphen) will be treated as different codes.
 - ✓ Example: "TPP-BondsE-Commerce64738" and "TPPBondsE-Commerce64738" are considered two different codes.
- If a user uploads an Excel file with multiple sheets, the system will ask them to pick one sheet. Only that selected sheet will be uploaded.

7 Risk

- **Technological Risk:**
 - New web technologies used in the system may not be fully compatible with existing HDFC infrastructure.
- **Skills Risk:**
 - There may be a shortage of developers or testers with expertise in GST compliance or financial systems.
- **Political Risk:**
 - Future changes in government tax policies or regulations may impact the project scope or design.
- **Business Risk:**
 - If the project is canceled, teams may have to return to the outdated IHA system, leading to inefficiencies and non-compliance risks.
- **Requirements Risk:**
 - Some user needs may be misunderstood or missed during requirement gathering, especially from tax or finance teams.
- **Other Risks:**
 - Data quality issues during migration from IHA to the new system could cause delays or reporting errors.

8) Business Process Overview

AS-IS (Legacy System - IHA Utility)	TO-BE (Proposed GST Compliance System in IBO Portal)
In-house desktop utility (IHA)	Web-based integrated system within IBO portal
Limited to specific machines and users	Accessible via web across departments (IT, Finance, Tax)
Partially manual with Excel-based validation	GST calculation logic handled externally, only data validation and report extraction in system
Non-scalable, error-prone, slow	Centralized, user-friendly, secure and faster
High risk due to manual steps and errors	Improved accuracy, tracking, and timely compliance

9) Business Requirements

- The system should allow uploading of invoice and master data in a predefined format.
- The system must support GST report generation for monthly, quarterly, and annual filings.
- Users should be able to generate and download tax invoices and credit notes.
- The system should validate uploaded files and prompt for sheet selection in multi-sheet Excel files.
- The system must provide audit trail functionality for tracking changes made by users.
- A dashboard should display status updates on data uploads, report generation, and filings.
- The system should support user access control based on roles (e.g., Admin, Finance, IT).
- Reports should be exportable in Excel and PDF formats.

- The system must reconcile GST and income entries against internal ledgers.
- The system should send automated alerts or reminders for upcoming GST filing deadlines.