Functional Specification Document

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# 1. Document Information

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Document Title | Project Name | Client Name | Prepared By (Author, Department) | Document Version & Date |
| SAP Making Tax Digital report | SAP | PWC AI Asset | PWC AI Asset | 1.0, 01.09.2025 |

# 2. Introduction

This document outlines the technical specification for the SAP Making Tax Digital (MTD) report. The purpose of this document is to define the requirements and scope for generating a downloadable report from SAP to support the Making Tax Digital initiative. The scope includes providing monthly stock details for all materials maintained in SAP MM across various plants and storage locations, with the output designed to assist in inventory monitoring, reconciliation, and monthly closing activities. The intended audience for this document includes SAP technical consultants, functional consultants, and business stakeholders involved in tax reporting and compliance.

# 3. Business Requirement Overview

The business requires a new SAP report to support the Making Tax Digital (MTD) project. The main objective is to create a downloadable CSV file from SAP, based on the existing Adhoc VAT report, with enhancements such as additional output fields, improved file format, and the ability to run discrete or grouped report outputs (e.g., by GL, VAT code, etc.). The new report must address the limitation of non-time-dependent VAT rates in SAP by implementing time-dependent recovery logic, ensuring that historical data reflects the correct VAT rates as of the posting period. The solution aims to streamline inventory monitoring, reconciliation, and monthly closing activities, while providing accurate, compliant, and user-friendly tax reporting outputs.

# 4. Business Process Flow

Start

→ User initiates SAP MTD report generation

→ Selection screen: User selects report type (Summary, Details, Calendarised, Summary by VAT Code, Summary by GL Account, Summary by Profit Centre, Royal Mail Input Tax Accrual) and enters parameters (Company Code, Tax Code, Posting Periods, Document Type, Profit Centre, Special VAT Codes, etc.)

→ System validates input parameters (mandatory fields, value checks, date ranges, etc.)

→ [If "Enable File to be Chosen" is selected]

→ User selects previously generated file and download location

→ System checks required fields

→ User downloads file

→ End

→ [Else]

→ System executes report in background

→ Data is extracted from SAP tables (BKPF, BSEG, T001, T007A, LFA1, etc.) according to selection criteria

→ Time-dependent VAT recovery logic is applied

→ Data is collated and formatted as per selected report type

→ Output is generated as a CSV file with required columns and formatting

→ Completion report is generated and available as spool

→ User downloads the generated file

→ End

# 5. Functional Scope

In-Scope items:

1. The solution will provide a new output from SAP for the Making Tax Digital (MTD) project, enabling users to download monthly stock details for all materials maintained in SAP MM across various plants and storage locations, including warehouses.

2. The report will assist in inventory monitoring, reconciliation, and monthly closing activities.

3. The new report will be based on the existing SAP Adhoc VAT report, with enhancements such as additional fields in the output, output as a downloadable CSV file (instead of a spooled SAP report), and discrete downloads for each current adhoc output (e.g., output by GL, summary by VAT code).

4. The report will use time-dependent VAT recovery rates, ensuring that data for periods always reflects the correct VAT rate at the time of posting, addressing the limitation where SAP VAT values are not time-dependent.

5. The selection screen will include radio buttons for running reports individually, with options to run summary reports together or individually, and the ability to save input parameters as a variant.

6. The program will only run in the background to generate new files, with the ability to select and download previously generated files from the server.

7. The selection screen will include fields for Company Code (mandatory), Tax Code (optional), Posting Periods (mandatory), Document Type (optional), Profit Centre (optional), Partially Recoverable Car Hire (mandatory), and Wholly Recoverable Car Hire (mandatory), with appropriate validations and lookups.

8. The report will provide multiple output formats: Calendarised Report, Summary Report, Details Report, Summary by VAT Code, Summary by GL Account, Summary by Profit Centre, and Royal Mail – Input Tax Accruals Download, each with specific layouts and sorting requirements.

9. All output files will be in CSV format, with a single header record, no totaling or sub-totaling, currency values without commas, and dates in dd.mm.yyyy format.

10. The report will include derived values such as Basic Income, Basic Expenditure, Output VAT, Partially Recoverable VAT, Wholly Recoverable VAT, VAT on Acquisitions, and VAT Control a/cs Balance, with logic for each field as outlined in the payload.

11. The report will include additional fields such as Tax Flag, Document Type, Document Date, Posting Date, and Vendor VAT Registration, with specific logic for population and validation.

12. The report will include a completion report detailing user, start/end date and time, and filenames generated, available as a spool output.

13. Authorization requirements will restrict report access to users with appropriate roles, such as Tax User and Finance Controller.

Out-of-Scope items:

1. The additional MTD report mentioned in version 2.0 is no longer required and will not be developed.

2. The solution does not include the replication of the existing VAT report ZPFRR029V3 layout, which provides a different report per Company Code and a totals report for all Company Codes; this can be achieved by users through sorting and totaling in Excel.

3. The report will not provide any totaling or sub-totaling within the CSV output files.

4. The solution does not address any changes to the underlying SAP MM or FI data structures beyond what is required for the report output.

5. The solution does not include any enhancements or changes to the SAP spooled report output format, as the focus is on downloadable CSV files.

6. The report does not provide any on-screen display or interactive analysis; all outputs are file-based.

7. The solution does not include any changes to the process of monthly closing activities, which are assumed to be completed before report execution.

8. The solution does not include any performance optimization for the lookup of Vendor VAT Registration or Tax Flag, though it is noted that these may impact performance.

# 6. Functional Solution Approach

The business requirement to generate a Making Tax Digital (MTD) report from SAP will be addressed by enhancing the existing Adhoc VAT report functionality. The new solution will introduce additional fields to the output and change the output format to a downloadable CSV file, eliminating the need for manual manipulation of SAP spooled reports. The report will provide discrete downloads for each current adhoc output, such as output by GL, summary by VAT code, and others, with the flexibility to run summary reports together or individually.

The solution will ensure that VAT recovery rates are applied based on the time of posting, using time-dependent recovery logic, rather than applying current rates to historical data. This will guarantee that VAT rates are accurate for the period in which the data was posted.

A comprehensive selection screen will be provided, featuring radio buttons and checkboxes to allow users to select specific reports or groups of reports. Input parameters such as company code, tax code, posting periods, document type, and profit centre will be validated against SAP standard tables. The selection screen will also allow users to choose previously generated files for download, with appropriate validation and error handling for mandatory fields.

The output files will be generated in CSV format with a single header row and no sub-totalling, ensuring compatibility with downstream processes and ease of use in Excel. Each report type (calendarised, summary, details, summary by VAT code, summary by GL account, summary by profit centre, and Royal Mail Input Tax Accruals) will have a defined layout and sorting logic, as specified in the requirements. All currency values will be formatted without commas, and dates will be in dd.mm.yyyy format.

The program will run in the background, and a completion report will be generated as a spool output, listing the user, execution times, and filenames produced. Authorization checks will ensure that only users with appropriate roles can access the report. The solution will be developed in ABAP and deployed in SAP GUI or Fiori, with the assumption that monthly closing activities are completed before execution to ensure data accuracy.

# 7. Functional Requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Requirement ID | Requirement Description | Business Rule | Priority | Comments |
| 1 | Create a download from SAP for the "Making Tax Digital" project, based on the existing Adhoc VAT report with enhancements. | Output must be a downloadable CSV file, not a spooled SAP report; additional fields to be included; discrete downloads for each output type (GL, VAT code, etc.). | [To Be Filled] | Based on existing Adhoc VAT report with enhancements. |
| 2 | Output to be downloadable CSV file. | File must have a single header record, no sub-totalling, currency values without commas, dates in dd.mm.yyyy format. | [To Be Filled] | Ensures compatibility with downstream processes. |
| 3 | Add additional fields to the output. | Fields such as Company Code, Name, Period, Basic Income, Basic Expenditure, Output VAT, Partially Recoverable VAT, Wholly Recoverable VAT, VAT on Acquisitions, VAT Control a/cs Balance, and others as per report type. | [To Be Filled] | Field mapping and logic detailed in Data Source section. |
| 4 | Discrete download for each current adhoc output (e.g., output by GL, summary by VAT code, etc.). | Selection screen must allow individual or grouped report execution via radio buttons and checkboxes. | [To Be Filled] | Flexibility for users to run reports as needed. |
| 5 | Use time-dependent VAT recovery rates for historical data. | VAT rates must be applied based on the posting period, not current rates, to ensure accuracy for historical data. | [To Be Filled] | Addresses issue with non-time-dependent VAT values in SAP. |
| 6 | Provide a comprehensive selection screen with validation. | Input parameters (company code, tax code, periods, document type, profit centre) must be validated against SAP tables; mandatory fields enforced; error messages for missing/invalid input. | [To Be Filled] | Ensures data integrity and user guidance. |
| 7 | Allow users to select and download previously generated files. | If "Enable File to be Chosen" is selected, only file selection and download location are mandatory; all other mandatory fields are ignored. | [To Be Filled] | User-friendly file retrieval and download process. |
| 8 | Generate output files in defined layouts for each report type. | Each report (calendarised, summary, details, summary by VAT code, summary by GL account, summary by profit centre, Royal Mail Input Tax Accruals) must follow specified field order and sorting logic. | [To Be Filled] | Layouts and sorting detailed in Output Format section. |
| 9 | Generate a completion report as spool output. | Completion report must include user, start/end date-time, and filenames produced. | [To Be Filled] | Up to 7 filenames, as per program logic. |
| 10 | Restrict report access to authorized users. | Only users with appropriate roles (e.g., Tax User, Finance Controller) can execute the report. | [To Be Filled] | Authorization checks required. |
| 11 | Program to run in background only. | Execution must be in background; confirmation message shown when job is executed. | [To Be Filled] | Ensures performance and user experience. |
| 12 | Assumptions and constraints. | Report developed in ABAP, deployed in SAP GUI or Fiori; monthly closing activities must be completed before execution. | [To Be Filled] | Ensures data accuracy and technical feasibility. |

# 8. Interfaces & Integration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Interface ID | Source System | Target System | Data/Message Type | Frequency/Mode | Description |
| - | SAP | External (User Download) | CSV File | Batch (Background Execution) | Outbound interface to generate and provide downloadable CSV files containing Making Tax Digital (MTD) VAT report data from SAP for inventory monitoring, reconciliation, and monthly closing activities. Files are generated in background and made available for user download via SAP GUI selection screen. |

# 9. Output

[Error: Section Output not found in LLM output.]

# 10. UI Requirement

[Error: Section UI Requirement not found in LLM output.]

# 11. Authorization & Security

|  |  |  |  |
| --- | --- | --- | --- |
| Role/Profile | Authorization Object | Access Level | Description |
| Tax User | [To Be Filled] | [To Be Filled] | Report should only be accessible to users with the appropriate roles, such as Tax User. |
| Finance Controller | [To Be Filled] | [To Be Filled] | Report should only be accessible to users with the appropriate roles, such as Finance Controller. |

# 12. Error Handling & Notifications

1. If the "Royal Mail – Input Tax Accrual" (P\_ITA) checkbox is selected, the Posting Date From (P\_BUDAT\_FROM) and Posting Date To (P\_BUDAT\_TO) fields must be entered. An error message should be shown if the report is executed with P\_ITA selected but no entry in the posting date from and to fields.

2. A check should be made on the values in the Posting Date From and To fields. They must be a date, in the correct format and valid. The From date must be lower than the To date.

3. If the "Enable File to be Chosen" button (P\_VIEW) is selected, then the Choose File (P\_FILE) and Choose Download Location (P\_DESTPATH) fields will be available for input. All other mandatory fields should be ignored if this button is selected; the user should not be required to enter any information in the Company, Posting Periods, Report Options, or Special VAT Codes sections.

4. If the "Download File" button (P\_DOWN) is selected, there should be a check that there are values in both the Choose File and Choose Download Location fields. An error message should be shown if either or both of the fields are not populated. All other mandatory fields should be ignored if this button is selected.

5. Before the program can be executed, the parameters should be checked and an error issued if there is any issue with the contents of the parameter field (as outlined in the technical field requirements).

6. When the program is executed in background, a message should be shown to confirm that the job is being executed in background.

# 13. Assumptions & Dependencies

1. The report will be developed using ABAP and deployed in SAP GUI or Fiori.

2. Monthly closing activities are completed before report execution to ensure data accuracy.

3. For the details report, if a profit centre(s) are added in the parameters on the selection screen, then if a document contains a GL line item with the profit centre, all the GL line items on that document (except customer and vendor line items) will be shown regardless of the other line items' Profit Centre content.

4. A document line item should only appear once in the report.

5. A GL line should only appear once in the report.

6. If there is an entry in the Profit Centre parameters (S\_PRCTR), all GL line items for a document will be included in the report. This may result in additional GL line items with VAT codes not in the parameters (S\_MWSKZ) being included.

7. The report has the ability, and dependent on parameters, to show both Input and Output Tax, not just Input Tax as the name suggests.

# 14. Test Scenarios

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | Objective | Input Data | Expected Output | Actual Result/Status | Sign-off/Comments |
| TC01 | Verify selection screen mandatory and optional fields | Enter valid Company Code(s), Periods, Years, select Summary Report radio button | Selection screen accepts input, allows variant save, enables report execution |  |  |
| TC02 | Validate Company Code field lookup and validation | Enter invalid Company Code | Error message shown, field validated against T001 |  |  |
| TC03 | Validate Tax Code field lookup and dropdown | Enter Company Code, check Tax Code dropdown | Dropdown shows relevant VAT codes as per T007A-MWSKZ for entered Company Code |  |  |
| TC04 | Validate Posting Periods input and checks | Enter From/To Periods and Years, with From > To | Error message shown, period/year validation as per T009 and GJHAR |  |  |
| TC05 | Verify Report Options radio/check box logic | Select multiple summary report checkboxes, verify individual and group execution | Only allowed combinations enabled, correct reports executed |  |  |
| TC06 | Validate mandatory fields for Royal Mail Input Tax Accrual | Select P\_ITA, leave Posting Date From/To blank | Error message shown, fields become mandatory |  |  |
| TC07 | Validate Document Type and Profit Centre lookup | Enter values, check dropdowns | Dropdowns show valid entries from T003-BLART and CEPC-PRCTR |  |  |
| TC08 | Verify Enable File to be Chosen logic | Select Enable File to be Chosen button | Only file selection fields enabled, other mandatory fields ignored |  |  |
| TC09 | Validate Choose File dropdown and restriction by date | Open Choose File dropdown | All files in AL11 location shown, restriction by date of last change available |  |  |
| TC10 | Validate Choose Download Location dropdown | Open Choose Download Location dropdown | All available server locations shown for selection |  |  |
| TC11 | Validate Download File button logic | Select Download File without populating required fields | Error message shown if Choose File or Download Location not populated |  |  |
| TC12 | Validate selection parameter checks before background execution | Enter invalid or missing parameters, execute in background | Error message shown, program not executed |  |  |
| TC13 | Validate background execution message | Execute report in background | Confirmation message shown that job is being executed in background |  |  |
| TC14 | Validate CSV output format for Calendarised Report | Run report with Display Calendarised Report checked | CSV file generated with correct header, columns, data, no totals/subtotals, correct date and currency formats |  |  |
| TC15 | Validate CSV output format for Summary Report | Run report with Display Summary Report checked | CSV file generated per specification, sorted by Company Code |  |  |
| TC16 | Validate CSV output format for Details Report | Run report with Display Details Report checked | CSV file generated with all required fields, correct sorting, vendor VAT registration populated where applicable |  |  |
| TC17 | Validate CSV output format for Summary by VAT Code | Run report with Display Summary by VAT Code checked | CSV file generated per specification, sorted by Company Code and VAT Code |  |  |
| TC18 | Validate CSV output format for Summary by GL Account | Run report with Display Summary by GL Account checked | CSV file generated per specification, sorted by Company Code, GL Account, VAT Code |  |  |
| TC19 | Validate CSV output format for Summary by Profit Centre | Run report with Display Summary by Profit Centre checked | CSV file generated per specification, sorted by Company Code, GL Account, Profit Centre, VAT Code |  |  |
| TC20 | Validate CSV output format for Royal Mail Input Tax Accrual | Run report with Royal Mail Input Tax Accrual checked and valid posting dates | CSV file generated with correct filters applied, correct fields and sorting |  |  |
| TC21 | Validate currency and date formats in output | Run any report, review output | Currency fields have no commas, dates in dd.mm.yyyy format |  |  |
| TC22 | Validate completion report generation | Execute report | Completion report generated as spool, includes user, start/end date/time, all filenames |  |  |
| TC23 | Validate authorization checks | Attempt to run report with insufficient roles | Access denied, appropriate error message shown |  |  |

# 15. Sign-Off

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Signature | Date |
| Prepared By | RTR |  | 01.09.2025 |
| Approved By |  |  |  |
| Client Sign-Off |  |  |  |

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