Technical Specification Document

# Index

1. Document Information 1

2. Introduction 1

3. Transport Management 1

4. Requirement Overview 1

5. Solution Approach 1

6. SAP Object Details 1

7. Data Declarations & SAP Tables Used 1

8. Smartform Layout 1

9. Smartform Details 1

10. User Interface Details 1

11. Processing Logic & Control Flow 1

12. Detailed Logic Block Descriptions 1

13. Output Details 1

14. Enhancements & Modifications 1

15. Flow Diagram 1

16. Error Handling & Logging 1

17. Performance Considerations 1

18. Security & Authorizations 1

19. Test Scenario 1

20. Sign-Off 1

# 1. Document Information

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document Title | Project Name | SAP System/Release Version | Client Name | Prepared By (Author, Department) | Document Version & Date |
|  |  |  |  | PWC AI Asset |  |

# 2. Introduction

This document provides the technical specification for the SAP SmartForm ZIT\_RGPNRGP\_SF. The objective is to define the structure, logic, and integration points for the SmartForm, which is designed to handle and display gate pass information, vendor and organizational data, material data, and graphical elements for branding purposes. The scope includes the configuration of pages, windows, ABAP code integration, and data retrieval from relevant SAP tables. The intended audience for this document includes SAP ABAP developers, technical consultants, and project stakeholders involved in the design, development, and maintenance of the SmartForm.

# 3. Transport Management

|  |  |  |  |
| --- | --- | --- | --- |
| Development Package | Transport Request Number | Sequence/Dependency | Description |
| [To Be Filled] | [To Be Filled] | [To Be Filled] | [To Be Filled] |

# 4. Requirement Overview

The business requirement is to generate a comprehensive gate pass document using SAP SmartForms, which consolidates and displays information related to gate pass transactions, vendor and plant details, material data, and organizational information. The objective is to automate the retrieval and presentation of this data from various SAP tables, ensuring accurate and efficient documentation for gate pass processing. The solution aims to enhance operational efficiency, data accuracy, and compliance with organizational standards for gate pass management.

# 5. Solution Approach

1. The SmartForm is structured with a hierarchical design, consisting of a main page (%PAGE1) and multiple windows (%GRAPHIC1, %WINDOW2, %NEWWINDOW3, %WINDOW1, MAIN), each serving a specific purpose such as displaying graphics, handling gate pass data, presenting vendor and plant information, and processing material data.

2. ABAP code is integrated within the windows to perform data processing, such as formatting serial numbers, determining gate pass types, retrieving address and department information, and calculating totals. The code interacts with SAP tables like ZIT\_RGPNRGP, T001P, T001W, LFA1, and ADRC to fetch and display relevant data.

3. Conditional logic and field mapping are used to dynamically control the display and processing of information based on transaction types, personnel numbers, and plant codes. The design ensures modularity, maintainability, and clear separation of concerns between graphical presentation, data retrieval, and business logic.

# 6. SAP Object Details

|  |  |  |  |
| --- | --- | --- | --- |
| Object Type | Object Name | Description | Related Main Program/Module |
| SmartForm | ZIT\_RGPNRGP\_SF | Main SmartForm for gate pass documentation |  |
| Page | %PAGE1 | Main page of the SmartForm | ZIT\_RGPNRGP\_SF |
| Window | %GRAPHIC1 | Graphical window for displaying images or logos | %PAGE1 |
| Window | %WINDOW2 | Window for displaying and processing gate pass information | %PAGE1 |
| Window | %NEWWINDOW3 | Window for displaying personnel and location data | %PAGE1 |
| Window | %WINDOW1 | Window for displaying vendor and organizational data | %PAGE1 |
| Window | MAIN | Main window for processing and displaying material data | %PAGE1 |
| Table Node | ZIT\_RGPNRGP | Custom table for gate pass records | %WINDOW2 |
| Table Node | T001P | Table for plant and personnel area information | %WINDOW2, %NEWWINDOW3, %WINDOW1 |
| Table Node | T001W | Table for plant data | %NEWWINDOW3, %WINDOW1 |
| Table Node | LFA1 | Table for vendor master data | %WINDOW1 |
| Table Node | ADRC | Table for address data | %NEWWINDOW3 |

# 7. Data Declarations & SAP Tables Used

|  |  |  |  |
| --- | --- | --- | --- |
| Declaration Name | Data Type/Object | Description | Usage Context |
| --- | --- | --- | --- |

# 8. Smartform Layout

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Page | Window | Element | Type | Description |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Alternative 1 | Caption | New Alternative 1 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Graphic 1 | Caption | New Graphic 1 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | FORMNAME:ZIT\_RGPNRGP\_SF | Form Name | Smartform form name |
| %PAGE1 | %GRAPHIC1 | NAME:LUMINOUS | Name | Name element in graphic window |
| %PAGE1 | %WINDOW2 | CAPTION:New Loop 1 | Caption | New Loop 1 caption in window 2 |
| %PAGE1 | %WINDOW2 | CAPTION:New Program Lines 1 | Caption | New Program Lines 1 caption in window 2 |
| %PAGE1 | %WINDOW2 | CAPTION:New Program Lines 5 | Caption | New Program Lines 5 caption in window 2 |
| %PAGE1 | %WINDOW2 | CAPTION:New Text 1 | Caption | New Text 1 caption in window 2 |
| %PAGE1 | %WINDOW2 | CAPTION:New Window 2 | Caption | New Window 2 caption |
| %PAGE1 | %WINDOW2 | FORMNAME:ZIT\_RGPNRGP\_SF | Form Name | Smartform form name |
| %PAGE1 | %NEWWINDOW3 | CAPTION:New Loop 1 | Caption | New Loop 1 caption in new window 3 |
| %PAGE1 | %NEWWINDOW3 | CAPTION:New Program Lines 5 | Caption | New Program Lines 5 caption in new window 3 |
| %PAGE1 | %NEWWINDOW3 | CAPTION:New Program Lines 7 | Caption | New Program Lines 7 caption in new window 3 |
| %PAGE1 | %NEWWINDOW3 | CAPTION:New Text 18 | Caption | New Text 18 caption in new window 3 |
| %PAGE1 | %NEWWINDOW3 | CAPTION:Plant Add | Caption | Plant Add caption in new window 3 |
| %PAGE1 | %NEWWINDOW3 | FORMNAME:ZIT\_RGPNRGP\_SF | Form Name | Smartform form name |
| %PAGE1 | %WINDOW1 | CAPTION:Footer | Caption | Footer caption in window 1 |
| %PAGE1 | %WINDOW1 | CAPTION:Header | Caption | Header caption in window 1 |
| %PAGE1 | %WINDOW1 | CAPTION:Main Area | Caption | Main Area caption in window 1 |
| %PAGE1 | %WINDOW1 | CAPTION:New Column 19 | Caption | New Column 19 caption in window 1 |
| %PAGE1 | %WINDOW1 | CAPTION:New Column 20 | Caption | New Column 20 caption in window 1 |
| %PAGE1 | %WINDOW1 | CAPTION:New Line 4 | Caption | New Line 4 caption in window 1 |
| %PAGE1 | %WINDOW1 | CAPTION:New Program Lines 3 | Caption | New Program Lines 3 caption in window 1 |
| %PAGE1 | %WINDOW1 | CAPTION:New Program Lines 6 | Caption | New Program Lines 6 caption in window 1 |
| %PAGE1 | %WINDOW1 | CAPTION:New Table 2 | Caption | New Table 2 caption in window 1 |
| %PAGE1 | %WINDOW1 | CAPTION:New Text 14 | Caption | New Text 14 caption in window 1 |
| %PAGE1 | %WINDOW1 | CAPTION:New Text 16 | Caption | New Text 16 caption in window 1 |
| %PAGE1 | %WINDOW1 | CAPTION:New Text 17 | Caption | New Text 17 caption in window 1 |
| %PAGE1 | %WINDOW1 | CAPTION:New Window 1 | Caption | New Window 1 caption |
| %PAGE1 | %WINDOW1 | FORMNAME:ZIT\_RGPNRGP\_SF | Form Name | Smartform form name |
| %PAGE1 | %WINDOW1 | NAME:%LTYPE1 | Name | Name element in window 1 |
| %PAGE1 | MAIN | CAPTION:Footer | Caption | Footer caption in main window |
| %PAGE1 | MAIN | CAPTION:Header | Caption | Header caption in main window |
| %PAGE1 | MAIN | CAPTION:Main Area | Caption | Main Area caption in main window |
| %PAGE1 | MAIN | CAPTION:Main Window | Caption | Main Window caption |
| %PAGE1 | MAIN | CAPTION:New Column 1 | Caption | New Column 1 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Column 10 | Caption | New Column 10 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Column 11 | Caption | New Column 11 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Column 12 | Caption | New Column 12 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Column 13 | Caption | New Column 13 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Column 2 | Caption | New Column 2 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Column 3 | Caption | New Column 3 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Column 4 | Caption | New Column 4 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Column 5 | Caption | New Column 5 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Column 6 | Caption | New Column 6 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Column 7 | Caption | New Column 7 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Column 8 | Caption | New Column 8 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Column 9 | Caption | New Column 9 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Display Option | Caption | New Display Option caption in main window |
| %PAGE1 | MAIN | CAPTION:New Line 1 | Caption | New Line 1 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Line 2 | Caption | New Line 2 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Line 3 | Caption | New Line 3 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Program Lines 2 | Caption | New Program Lines 2 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Program Lines 4 | Caption | New Program Lines 4 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Table 1 | Caption | New Table 1 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Text 10 | Caption | New Text 10 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Text 11 | Caption | New Text 11 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Text 12 | Caption | New Text 12 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Text 13 | Caption | New Text 13 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Text 15 | Caption | New Text 15 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Text 19 | Caption | New Text 19 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Text 2 | Caption | New Text 2 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Text 3 | Caption | New Text 3 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Text 4 | Caption | New Text 4 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Text 5 | Caption | New Text 5 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Text 6 | Caption | New Text 6 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Text 7 | Caption | New Text 7 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Text 8 | Caption | New Text 8 caption in main window |
| %PAGE1 | MAIN | CAPTION:New Text 9 | Caption | New Text 9 caption in main window |
| %PAGE1 | MAIN | FORMNAME:ZIT\_RGPNRGP\_SF | Form Name | Smartform form name |
| %PAGE1 | MAIN | NAME:%LTYPE1 | Name | Name element in main window |
| %PAGE1 | MAIN | NAME:%LTYPE2 | Name | Name element in main window |
| %PAGE1 | %GRAPHIC1 | CAPTION:Footer | Caption | Footer caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:Header | Caption | Header caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:Main Area | Caption | Main Area caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:Main Window | Caption | Main Window caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Column 1 | Caption | New Column 1 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Column 10 | Caption | New Column 10 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Column 11 | Caption | New Column 11 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Column 12 | Caption | New Column 12 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Column 13 | Caption | New Column 13 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Column 19 | Caption | New Column 19 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Column 2 | Caption | New Column 2 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Column 20 | Caption | New Column 20 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Column 3 | Caption | New Column 3 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Column 4 | Caption | New Column 4 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Column 5 | Caption | New Column 5 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Column 6 | Caption | New Column 6 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Column 7 | Caption | New Column 7 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Column 8 | Caption | New Column 8 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Column 9 | Caption | New Column 9 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Display Option | Caption | New Display Option caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Line 1 | Caption | New Line 1 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Line 2 | Caption | New Line 2 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Line 3 | Caption | New Line 3 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Line 4 | Caption | New Line 4 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Loop 1 | Caption | New Loop 1 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Program Lines 1 | Caption | New Program Lines 1 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Program Lines 2 | Caption | New Program Lines 2 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Program Lines 3 | Caption | New Program Lines 3 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Program Lines 4 | Caption | New Program Lines 4 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Program Lines 5 | Caption | New Program Lines 5 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Program Lines 6 | Caption | New Program Lines 6 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Program Lines 7 | Caption | New Program Lines 7 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Table 1 | Caption | New Table 1 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Table 2 | Caption | New Table 2 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 1 | Caption | New Text 1 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 10 | Caption | New Text 10 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 11 | Caption | New Text 11 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 12 | Caption | New Text 12 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 13 | Caption | New Text 13 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 14 | Caption | New Text 14 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 15 | Caption | New Text 15 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 16 | Caption | New Text 16 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 17 | Caption | New Text 17 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 18 | Caption | New Text 18 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 19 | Caption | New Text 19 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 2 | Caption | New Text 2 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 3 | Caption | New Text 3 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 4 | Caption | New Text 4 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 5 | Caption | New Text 5 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 6 | Caption | New Text 6 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 7 | Caption | New Text 7 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 8 | Caption | New Text 8 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Text 9 | Caption | New Text 9 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Window 1 | Caption | New Window 1 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:New Window 2 | Caption | New Window 2 caption in graphic window |
| %PAGE1 | %GRAPHIC1 | CAPTION:Plant Add | Caption | Plant Add caption in graphic window |
| %PAGE1 | %GRAPHIC1 | FORMNAME:ZIT\_RGPNRGP\_SF | Form Name | Smartform form name |
| %PAGE1 | %GRAPHIC1 | NAME:%LTYPE1 | Name | Name element in graphic window |
| %PAGE1 | %GRAPHIC1 | NAME:%LTYPE2 | Name | Name element in graphic window |
| %PAGE1 | %GRAPHIC1 | NAME:LUMINOUS | Name | Name element in graphic window |

# 9. Smartform Details

The SmartForm described is structured around the form name ZIT\_RGPNRGP\_SF and is organized on a single page, %PAGE1. The form is composed of several windows and a graphic section, each serving distinct purposes and utilizing specific fields, tables, and ABAP code to achieve their functionality.

Form Name: ZIT\_RGPNRGP\_SF

This is the main SmartForm object, referenced throughout all windows and elements.

Page: %PAGE1

All windows and graphical elements are placed on this page, providing a unified layout for the form's content.

Window: %GRAPHIC1

This window is dedicated to graphical content, such as images or logos, and does not contain any fields, tables, or ABAP code. Its primary purpose is to enhance the visual presentation of the SmartForm, supporting branding or informational needs.

Window: %WINDOW2

%WINDOW2 is designed to handle the display and processing of gate pass information. It utilizes the following fields: BREAK-POINT (for debugging), WA\_DISPLAY\_2-PERNR (personnel number), and WA\_DISPLAY\_2-TRAN\_TYPE (transaction type). The tables T001P (plant-related information) and ZIT\_RGPNRGP (gate pass records) are accessed. The ABAP code in this window includes logic to process serial numbers by removing leading zeros and selecting corresponding records from ZIT\_RGPNRGP. There is also conditional logic to determine the type of gate pass (RETURNABLE or NON RETURNABLE) based on WA\_DISPLAY\_2-TRAN\_TYPE. Additionally, commented-out code suggests potential retrieval of department descriptions from T001P using personnel numbers.

Window: %NEWWINDOW3

%NEWWINDOW3 is responsible for handling and displaying personnel and location data. It uses fields such as BREAK-POINT, T001W-ADRNR (address number from plant table), WA\_DISPLAY\_2-PERNR, WA\_DISPLAY\_2-TRAN\_TYPE, and WA\_DISPLAY\_3-WERKS (plant code). The tables ADRC (address data), T001P (personnel data), and T001W (plant data) are referenced. The ABAP code includes logic to determine the gate pass type based on WA\_DISPLAY\_2-TRAN\_TYPE and retrieves address information from ADRC using the address number from T001W. There are also commented-out sections for debugging and for retrieving department descriptions from T001P.

Window: %WINDOW1

%WINDOW1 is focused on displaying vendor and organizational data. It uses fields from the WA\_DISPLAY structure, including LIFNR (vendor number), NAME1 (vendor name), POSTING\_DATE, REMARK, SL\_NO (serial number), SPECIAL\_I, VECHILE\_NO, VENDOR\_CST, VENDOR\_LST, VORNA, WERKS (plant), and BTRTL (personnel area). The window interacts with tables LFA1 (vendor master), T001P (personnel area), and T001W (plant master). The ABAP code performs zero-padding of the vendor number to a length of 10, retrieves the plant name from T001W based on the plant code, and fetches vendor address details from LFA1 using the padded vendor number. It also retrieves the department description from T001P using the personnel area. BREAK-POINT is used for debugging.

Window: MAIN

The MAIN window is the primary processing area for displaying and calculating material data. It uses fields such as SFSY-DATE (system date), SFSY-TIME (system time), SY-SUBRC (return code), and fields from the WA\_DISPLAY structure: AMOUNT, MAKTX (material description), MATNR (material number), MSEHT (unit of measure), WESCH (weight), and WA\_DISPLAY\_1-SL\_NO (sequence number). The ABAP code checks SY-SUBRC to ensure successful operations, reads entries from the internal table IT\_DISPLAY into wa\_display\_1 based on SL\_NO, and calculates running totals for V\_TOTAL and V\_SUBTOTAL using WA\_DISPLAY-AMOUNT. BREAK-POINT is present for debugging but commented out.

Graphic: %GRAPHIC1

This graphic section is referenced in the form and is associated with the %GRAPHIC1 window, serving as a static graphical element for the form.

Captions and Elements

Each window and graphic includes multiple captions, such as "Footer," "Header," "Main Area," and various program lines, columns, and text elements, which help organize the layout and content within each window. These captions are used to structure the form visually and functionally.

Fields and Tables

Fields are distributed across the windows according to their functional requirements, with some fields (like BREAK-POINT) used for debugging and others for data display and processing. Tables are referenced in ABAP code for data retrieval and manipulation, supporting the form's dynamic content.

ABAP Code

The ABAP code embedded in the windows is responsible for data processing, retrieval, formatting, and conditional logic. It includes operations such as zero-padding, conditional checks, data selection from tables, and running total calculations. Commented-out code indicates areas considered for debugging or future enhancements.

Overall, the SmartForm is structured to provide a comprehensive solution for displaying gate pass, vendor, personnel, plant, and material information, with each window and element serving a specific role in the form's layout and data processing logic.

# 10. User Interface Details

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Source (Table/Structure) | Default Value | Description |
|  |  |  |  |

# 11. Processing Logic & Control Flow

- The SmartForm execution begins on %PAGE1, which contains several windows: %GRAPHIC1, %WINDOW2, %NEWWINDOW3, %WINDOW1, and MAIN.

- In the %GRAPHIC1 window, no ABAP code or data processing occurs; it is reserved for displaying static graphical content such as images or logos.

- The %WINDOW2 window processes gate pass information:

- It manipulates the serial number (SL\_NO) by removing leading zeros.

- It selects records from the ZIT\_RGPNRGP table where the serial number matches the processed value.

- Conditional logic checks the transaction type (WA\_DISPLAY\_2-TRAN\_TYPE):

- If 'RGP', sets the type as 'RETURNABLE GATE PASS'.

- If 'NRGP', sets the type as 'NON RETURNABLE GATE PASS'.

- There is commented-out code for potentially retrieving department descriptions from T001P based on personnel numbers.

- The %NEWWINDOW3 window handles personnel and location data:

- Conditional logic determines the gate pass type based on WA\_DISPLAY\_2-TRAN\_TYPE, similar to %WINDOW2.

- Retrieves the plant address number (ADRNR) from T001W using the plant code (WA\_DISPLAY\_3-WERKS).

- Uses the address number to fetch address details (NAME1, CITY1, STREET, SORT1, SORT2) from the ADRC table.

- Contains commented-out code for debugging and for retrieving department descriptions from T001P.

- The %WINDOW1 window displays vendor and organizational data:

- Retrieves the plant name from T001W using the plant code (WA\_DISPLAY-WERKS).

- Pads the vendor number (LIFNR) with leading zeros to a length of 10.

- Fetches vendor address details (NAME1, NAME2, ORT01) from LFA1 using the padded vendor number.

- Retrieves the department description from T001P using the personnel area (WA\_DISPLAY-BTRTL).

- Includes commented-out BREAK-POINT statements for debugging.

- The MAIN window manages material data display and calculations:

- Checks the result of previous operations using SY-SUBRC.

- If successful, clears the work area wa\_display\_1 and reads entries from IT\_DISPLAY into wa\_display\_1 based on SL\_NO.

- Increments a counter S.

- Calculates the total amount (V\_TOTAL) from WA\_DISPLAY-AMOUNT and accumulates it into V\_SUBTOTAL.

- Contains commented-out BREAK-POINT statements for debugging.

# 12. Detailed Logic Block Descriptions

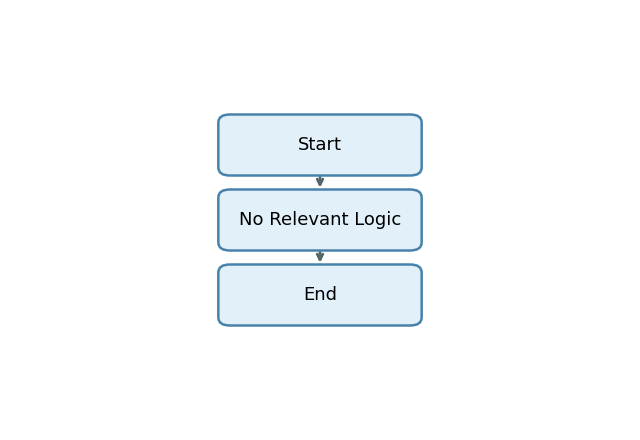
# 13. Output Details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Output Type | Format/Layout | Output Destination | Description |  |
|  | ------------- | -------------- | -------------------- | ------------- |  |

# 14. Enhancements & Modifications

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type | Name | Impacted Object | Location | Description |
| --- | --- | --- | --- | --- |

# 15. Flow Diagram



Start -> No Relevant Logic -> End

# 16. Error Handling & Logging

# 17. Performance Considerations

# 18. Security & Authorizations

|  |  |  |  |
| --- | --- | --- | --- |
| Object/Check Type | Name | Check Logic/Location | Description |
| --- | --- | --- | --- |

# 19. Test Scenario

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case | Objective | Input Data | Expected Output | Actual Result/Status | Sign-off/Comments |
| TC01: Serial Number Processing | Verify serial number is processed by removing leading zeros and fetching correct gate pass record | SL\_NO = '0000012345' in WA\_DISPLAY\_2, ZIT\_RGPNRGP contains SL\_NO = '12345' | IT\_DISPLAY populated with record where SL\_NO = '12345' | Pending |  |
| TC02: Gate Pass Type Determination (RGP) | Ensure correct gate pass type is set for 'RGP' transaction | WA\_DISPLAY\_2-TRAN\_TYPE = 'RGP' | V\_RGPNRGP = 'RETURNABLE GATE PASS' | Pending |  |
| TC03: Gate Pass Type Determination (NRGP) | Ensure correct gate pass type is set for 'NRGP' transaction | WA\_DISPLAY\_2-TRAN\_TYPE = 'NRGP' | V\_RGPNRGP = 'NON RETURNABLE GATE PASS' | Pending |  |
| TC04: Plant Address Retrieval | Validate plant address is fetched correctly from ADRC via T001W | WA\_DISPLAY\_3-WERKS = valid plant, T001W contains ADRNR, ADRC contains address | P\_NAME1, P\_CITY1, P\_STREET, P\_SORT1, P\_SORT2 populated with correct address data | Pending |  |
| TC05: Vendor Address Zero Padding | Ensure vendor number is zero-padded to length 10 before LFA1 lookup | WA\_DISPLAY-LIFNR = '12345', LFA1 contains LIFNR = '0000012345' | v\_P\_ADD1, v\_P\_ADD2, v\_P\_ADD3 populated from LFA1 | Pending |  |
| TC06: Department Description Retrieval | Validate department description is fetched from T001P | WA\_DISPLAY-BTRTL = valid, T001P contains BTEXT | V\_DEPT\_DESC populated with department description | Pending |  |
| TC07: Material Amount Calculation | Verify running total and subtotal calculation for material amounts | WA\_DISPLAY-AMOUNT = 100, V\_SUBTOTAL = 200 | V\_TOTAL = 100, V\_SUBTOTAL = 300 | Pending |  |
| TC08: Handling of Missing Serial Number | Negative: Test behavior when SL\_NO does not exist in ZIT\_RGPNRGP | SL\_NO = '99999' (not in ZIT\_RGPNRGP) | IT\_DISPLAY remains empty or error handled gracefully | Pending |  |
| TC09: Invalid Plant Code | Negative: Test address retrieval with invalid plant code | WA\_DISPLAY\_3-WERKS = 'XXXX' (not in T001W) | No address data retrieved, error handled gracefully | Pending |  |
| TC10: Invalid Vendor Number | Negative: Vendor number not found in LFA1 after zero-padding | WA\_DISPLAY-LIFNR = '99999', LFA1 does not contain '0000099999' | v\_P\_ADD1, v\_P\_ADD2, v\_P\_ADD3 remain empty or error handled | Pending |  |
| TC11: Invalid Department Code | Negative: Department code not found in T001P | WA\_DISPLAY-BTRTL = 'ZZZZ' (not in T001P) | V\_DEPT\_DESC remains empty or error handled | Pending |  |
| TC12: Output Format Verification | Ensure all required fields and captions are displayed in output | All relevant fields populated | Output contains all captions, fields, and correct data mapping | Pending |  |
| TC13: Debugging Points | Ensure BREAK-POINTs are commented out and do not interrupt execution | All code sections | No execution interruption due to BREAK-POINT | Pending |  |
| TC14: Page and Window Flow | Verify correct flow between %PAGE1, MAIN, %WINDOW1, %WINDOW2, %NEWWINDOW3, %GRAPHIC1 | Trigger SmartForm print | All windows and graphics rendered as per design | Pending |  |

# 20. Sign-Off

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

Document generated by PWC AI-powered ABAP Tech Spec Assistant.