

# User Acceptance Testing (UAT)

## Documentation

### Purchase Order Cycle Portal - CAPM Solution

#### Document Control

Item	Details
Document Title	User Acceptance Testing (UAT) Documentation - PO Billing in CAPM
Project Name	CAPM Purchase Order Billing Solution Module
Version	1.0
Date	03 December 2025
Prepared By	Testing & Quality Assurance Team
Reviewed By	Project Manager & Business Lead
Approved By	Business Stakeholders

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## 1. Executive Summary

This User Acceptance Testing (UAT) documentation outlines the comprehensive testing strategy and test cases for validating the CAPM-based Purchase Order Cycle application on SAP BTP. The UAT ensures that the system meets all business requirements and functional specifications defined in the Functional Design Document (.

The Purchase Order Cycle solution digitizes the complete procurement workflow from vendor and material master data management through Purchase Order creation, Goods Receipt posting, Vendor Invoice creation, and Invoice Printing. UAT will validate this end-to-end process with real business scenarios and actual user roles.

#### UAT Objectives:

- Verify functional requirements match FDD specifications
- Validate business process workflows and approvals
- Ensure data integrity across all entities
- Confirm user interface usability and accessibility

- Validate security and role-based access controls
  - Test error handling and validation rules
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## 2. UAT Scope and Objectives

### 2.1 Scope - In Scope

The following modules and functionalities are included in UAT testing:

#### 1. Vendor Management

- Create, edit, view, and deactivate vendors
- Vendor search and filtering
- Mandatory field validation and unique constraint checking
- GST and tax ID management

#### 2. Material Management

- Create, edit, view, and deactivate materials
- Material classification and UoM (Unit of Measurement)
- Standard pricing and tax configuration
- Material search functionality

#### 3. Purchase Order Lifecycle

- PO creation with Draft status
- PO submission and approval workflows
- Approval routing based on threshold values
- PO rejection and closure
- Status transitions and workflow validation
- Item-level quantity and pricing validation

#### 4. Goods Receipt Management

- GR creation against approved POs
- Partial receipt scenarios
- Received quantity validation
- GR posting and status management
- PO item status updates (Open → Partially Received → Fully Received)

#### 5. Vendor Invoice Management

- Invoice creation with Draft status
- Invoice referencing PO and GR
- Quantity and price validation
- Tax and discount calculations
- Invoice status workflow (Draft → Verified → Posted)
- Invoice rejection and cancellation

## **6. Invoice Printing**

- PDF generation with company and vendor details
- Invoice line items and totals formatting
- Print logging and timestamp tracking
- Print authorization based on invoice status

## **7. Reporting and Dashboards**

- Open PO listing with filters
- Pending GR tracking
- Pending Invoice reports
- Vendor-wise spend analysis
- Invoice status reports by date range

## **8. Security and Authorization**

- Role-based access control for all user roles
- Data visibility restrictions by role
- Audit trail for creations and modifications
- User activity logging

## 2.3 UAT Objectives

Objective	Success Criteria
<b>Functional Completeness</b>	All FDD requirements implemented and working as designed
<b>Business Process Validation</b>	End-to-end PO-GR-Invoice workflows execute successfully
<b>Data Integrity</b>	No data loss, corruption, or inconsistency across entities
<b>User Acceptance</b>	Business users confirm system meets operational needs
<b>Authorization &amp; Security</b>	Role-based access controls enforced; audit trails maintained
<b>Error Handling</b>	Validation errors caught and reported clearly to users
<b>Usability</b>	Fiori UI intuitive; users complete tasks without extensive training
<b>Documentation</b>	User guides and system documentation accurate and complete

## 3. UAT Stakeholders and Roles

### 3.1 UAT Team Composition

Role	Responsibility	Effort
Business Analyst	Coordinate UAT, map requirements to test cases	Full-time
Procurement Manager	Lead business validation, approved test results	60%
Finance Manager	Validate invoice and payment workflows	60%
Store Manager	Test GR processes and inventory updates	60%
QA Lead	Design test cases, manage execution, track defects	Full-time
QA Testers (2)	Execute test cases, log issues, document results	Full-time
System Administrator	Configure test environment, manage user access	40%
CAPM Developer (On-call)	Support environmental issues, debug failures	As needed

Project Manager	Oversee UAT timeline, escalate blockers	40%
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## 3.2 User Roles to Be Tested

Each user role defined in the FDD will have dedicated test scenarios:

1. **Requester:** Create initial purchase requests (optional, future scope)
2. **Buyer:** Create, edit, submit, approve POs
3. **Store Clerk:** Record goods receipts; update inventory
4. **AP Accountant:** Create and verify vendor invoices
5. **Approver:** Approve/reject high-value POs and invoices
6. **Admin:** Maintain master data, configurations, and user access

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## 4. UAT Test Strategy

### 4.1 Testing Approach

The UAT testing approach follows a **multi-cycle methodology** with two primary test execution cycles:

- **Cycle 1 - Functional Validation:** Execute critical path test cases covering primary workflows and core functionality. Focus on discovering major gaps and functional defects.
- **Defect Resolution:** Triage, prioritize, and resolve identified issues with development team support. Retest critical fixes.
- **Cycle 2 - Comprehensive Testing:** Execute full test case suite including remaining scenarios. Verify all previous fixes. Final validation before go-live.

### 4.2 UAT Phases and Timeline

The UAT lifecycle consists of **7 key phases** spanning approximately **15 weeks**:

Phase	Duration	Key Activities	Success Criteria
UAT Planning	2 weeks	Finalize scope, allocate resources, define timeline	Planning doc approved
Test Case Design	3 weeks	Design 100+ test cases, prepare test data	All cases peer-reviewed
Environment Setup	2 weeks	Configure BTP, load master data, validate connectivity	Env ready for testing
Cycle 1 Execution	3 weeks	Execute critical path tests, log all defects	Critical functions verified
Defect Resolution	2 weeks	Triage issues, fix high-priority defects, retest	80% defects resolved
Cycle 2 Execution	2 weeks	Verify fixes, execute remaining test cases	All tests pass/closed
Sign-off	1 week	Final approval, go-live readiness confirmation	Business sign-off obtained

## 4.3 Test Case Categories

Test cases are organized by functional module and user scenario:

Category	# Cases	Focus Area
<b>Vendor Management</b>	15	CRUD operations, search, validation rules
<b>Material Management</b>	15	CRUD operations, classification, pricing
<b>Purchase Order</b>	35	Creation, submission, approval, rejection, closure
<b>PO Line Items</b>	20	Quantity/price validation, status tracking, updates
<b>Goods Receipt</b>	20	Single & partial receipts, quantity validation, posting
<b>Vendor Invoice</b>	35	Creation, validation, verification, posting
<b>Invoice Printing</b>	10	PDF generation, formatting, logging
<b>Reports &amp; Dashboards</b>	15	Open POs, pending GRs, invoice status, spend analysis
<b>Authorization &amp; Security</b>	15	Role-based access, data visibility, audit trails
<b>Error Handling &amp; Validation</b>	10	Mandatory fields, business rules, error messages

<b>Negative Scenarios</b>	10	Boundary testing, edge cases, invalid inputs
<b>Integration Scenarios</b>	10	End-to-end workflow validation
<b>TOTAL</b>	<b>215</b>	Comprehensive coverage of all functionalities

## 5. UAT Test Environment

### 5.1 Environment Configuration

The UAT environment mirrors production with:

- **SAP BTP Account:** Dedicated subaccount with Cloud Foundry runtime
- **CAPM Application:** Latest development build deployed to UAT
- **Database:** Isolated MongoDB or SAP HANA instance (no production data)
- **Authentication:** XSUAA configured with test users and roles
- **Connectivity:** Direct access to test vendor and material systems (if integrated)

### 5.2 Test Data Requirements

#### Master Data Setup

- **10 Test Vendors:** Varying sizes, payment terms, GST numbers, statuses
- **20 Test Materials:** Mix of raw materials and services; different UoMs and pricing
- **Test Users:** One user per role (Buyer, Store Clerk, AP Accountant, Approver, Admin) with appropriate role assignments
- **Configuration Data:** Approval thresholds, tolerance limits, PO numbering sequences

#### Sample Test Scenarios

1. **Small PO ( $\leq 50,000$ ):** Auto-approved scenario
2. **Medium PO (50,000 - 500,000):** Requires Approver sign-off
3. **Large PO ( $> 500,000$ ):** High-value approval workflow
4. **Partial Receipt:** Multiple GRs against single PO
5. **Over-Receipt:** Validation failure scenario
6. **Price Variance:** Invoice tolerance testing
7. **Tax Calculation:** Complex line-level tax scenarios

### 5.3 Environment Sign-off

Before UAT execution begins:

- ☐ All systems deployed and operational
- ☐ Master data loaded and verified
- ☐ Test users created with correct roles
- ☐ Connectivity to external systems confirmed
- ☐ Backup and recovery procedures tested
- ☐ Environment signed off by System Administrator

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## 6. UAT Test Cases



## 6.1 Vendor Management Test Cases

### TC-VN-001: Create Vendor - Valid Input

Field	Value
<b>Test Case ID</b>	TC-VN-001
<b>Scenario</b>	Create a new vendor with all mandatory and optional fields
<b>Preconditions</b>	User logged in with Admin role; Vendor Master maintenance app open
<b>Test Steps</b>	1. Click "Create Vendor" button \ 2. Enter Vendor Code: "ACME-001" \ 3. Enter Vendor Name: "ACME Corporation" \ 4. Enter Address: Complete street, city, state, country, postal code \ 5. Enter GST No: "18AABCT1234H1Z0" \ 6. Set Payment Terms: "30 Days" \ 7. Set Active Flag: ON \ 8. Click "Save" button
<b>Expected Result</b>	Vendor saved successfully; confirmation message displayed; Vendor appears in list with correct details
<b>Actual Result</b>	✓ PASS
<b>Test Data Used</b>	ACME Corporation details as above
<b>Comments</b>	Vendor successfully created and searchable by code/name

### TC-VN-002: Create Vendor - Duplicate Vendor Code

Field	Value
<b>Test Case ID</b>	TC-VN-002
<b>Scenario</b>	Attempt to create vendor with duplicate vendor code
<b>Preconditions</b>	Vendor "ACME-001" already exists in system
<b>Test Steps</b>	1. Click "Create Vendor" \ 2. Enter Vendor Code: "ACME-001" (duplicate) \ 3. Enter Vendor Name: "ACME New" \ 4. Fill other mandatory fields \ 5. Click "Save"
<b>Expected Result</b>	Error message: "Vendor Code already exists"; Vendor NOT created; User remains on form
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Duplicate check working as expected

### TC-VN-003: Edit Vendor - Change Payment Terms

Field	Value
<b>Test Case ID</b>	TC-VN-003
<b>Scenario</b>	Edit existing vendor to change payment terms
<b>Preconditions</b>	Vendor "ACME-001" exists with Payment Terms "30 Days"
<b>Test Steps</b>	1. Search and open Vendor "ACME-001" \ 2. Click "Edit" \ 3. Change Payment Terms from "30 Days" to "45 Days" \ 4. Click "Save"
<b>Expected Result</b>	Vendor updated successfully; Payment Terms now show "45 Days"; Change audit trail recorded
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Edit functionality and audit trail working correctly

### TC-VN-004: Deactivate Vendor - Cannot Use in New PO

Field	Value
<b>Test Case ID</b>	TC-VN-004
<b>Scenario</b>	Deactivate vendor and verify it cannot be selected in new PO
<b>Preconditions</b>	Vendor "ACME-001" active; PO creation app open
<b>Test Steps</b>	1. Go to Vendor Management app \ 2. Search "ACME-001" \ 3. Click "Deactivate" button \ 4. Confirm deactivation \ 5. Go to PO creation app \ 6. Click Vendor lookup; search for "ACME-001"
<b>Expected Result</b>	Vendor successfully deactivated; Vendor NOT available in PO vendor lookup
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Inactive vendor correctly filtered from lookup lists

### TC-VN-005: Vendor Search - By Name

Field	Value
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<b>Test Case ID</b>	TC-VN-005
<b>Scenario</b>	Search vendor by partial name
<b>Preconditions</b>	Multiple vendors in system (ACME, Beta Supplies, Gamma Ltd)
<b>Test Steps</b>	1. Open Vendor Master app \ 2. Enter search text: "Beta" in Vendor Name field \ 3. Click Search / Press Enter
<b>Expected Result</b>	Only vendors matching "Beta" displayed; Results include "Beta Supplies", etc.
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Search functionality working correctly with partial matches

## 6.2 Purchase Order Test Cases

### TC-PO-001: Create PO - Draft Status

Field	Value
<b>Test Case ID</b>	TC-PO-001
<b>Scenario</b>	Create a new Purchase Order in Draft status
<b>Preconditions</b>	User logged in as Buyer; Vendor "ACME-001" active; Material "MAT-001" active
<b>Test Steps</b>	1. Open PO Management app \ 2. Click "Create PO" \ 3. Select Vendor: "ACME-001" \ 4. Enter Delivery Date: 15 Dec 2025 \ 5. Click "Add Item" \ 6. Select Material: "MAT-001" \ 7. Enter Quantity: 100 \ 8. Enter Net Price: 500 per unit \ 9. System calculates GST (18%) \ 10. Click "Save"
<b>Expected Result</b>	PO created with ID generated; Status shows "Draft"; Line items correctly calculated; PO appears in list
<b>Actual Result</b>	✓ PASS
<b>Test Data Used</b>	Vendor: ACME-001, Material: MAT-001, Qty: 100, Price: 500
<b>Comments</b>	PO creation and calculations working correctly

### TC-PO-002: Submit PO - Auto-Approval (Low Value)

Field	Value
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<b>Test Case ID</b>	TC-PO-002
<b>Scenario</b>	Submit PO with value below auto-approval threshold; PO auto-approved
<b>Preconditions</b>	PO with total value 25,000 (below 50,000 threshold) in Draft status
<b>Test Steps</b>	1. Open Draft PO (value 25,000) \ 2. Click "Submit" button \ 3. Confirm submission
<b>Expected Result</b>	PO status automatically changes to "Approved"; No approver notification sent; PO ready for GR
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Auto-approval threshold working as expected

### TC-PO-003: Submit PO - Pending Approval (High Value)

Field	Value
<b>Test Case ID</b>	TC-PO-003
<b>Scenario</b>	Submit PO with value above approval threshold; status = Submitted (pending approval)
<b>Preconditions</b>	PO with total value 250,000 (above 50,000 threshold) in Draft status
<b>Test Steps</b>	1. Open Draft PO (value 250,000) \ 2. Click "Submit" button \ 3. Confirm submission
<b>Expected Result</b>	PO status changes to "Submitted"; Approver role receives notification; PO NOT yet approved
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Submission workflow and threshold logic working correctly

### TC-PO-004: Approve PO - As Approver

Field	Value
<b>Test Case ID</b>	TC-PO-004
<b>Scenario</b>	Approver reviews and approves submitted PO
<b>Preconditions</b>	PO in "Submitted" status; User logged in as Approver role
<b>Test Steps</b>	1. Open PO Management app (Approver view) \ 2. Filter by Status: "Submitted" \ 3. Open submitted PO \ 4. Review line items and total value \ 5. Click "Approve" button \ 6. Optionally add approval remarks \ 7. Click "Confirm"

<b>Expected Result</b>	PO status changes to "Approved"; Approval timestamp recorded; Original Buyer receives notification
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Approval workflow and notification system functioning

### TC-PO-005: Reject PO - As Approver

Field	Value
<b>Test Case ID</b>	TC-PO-005
<b>Scenario</b>	Approver reviews and rejects submitted PO
<b>Preconditions</b>	PO in "Submitted" status; User logged in as Approver role
<b>Test Steps</b>	1. Open submitted PO in Approver view \ 2. Click "Reject" button \ 3. Enter rejection reason: "Pricing not competitive" \ 4. Click "Confirm"
<b>Expected Result</b>	PO status changes to "Rejected"; Rejection reason logged; Buyer notified; PO not converted to GR
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Rejection workflow working correctly

### TC-PO-006: PO Modification After Approval - Read-Only

Field	Value
<b>Test Case ID</b>	TC-PO-006
<b>Scenario</b>	Attempt to modify approved PO; verify read-only enforcement
<b>Preconditions</b>	PO in "Approved" status
<b>Test Steps</b>	1. Open Approved PO \ 2. Attempt to change Delivery Date \ 3. Attempt to modify line item quantity \ 4. Verify "Edit" button is disabled or grayed out
<b>Expected Result</b>	PO fields are read-only/disabled; No modifications allowed; Warning message if user attempts edit
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Read-only enforcement working as expected

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## 6.3 Goods Receipt Test Cases

### TC-GR-001: Create GR - Against Approved PO

Field	Value
<b>Test Case ID</b>	TC-GR-001
<b>Scenario</b>	Create Goods Receipt against approved PO with full quantity
<b>Preconditions</b>	Approved PO with order Qty = 100 units (status = "Open")
<b>Test Steps</b>	1. Open GR Management app \ 2. Click "Create GR" \ 3. Select PO: "PO-001" \ 4. System displays PO items with open quantities (100) \ 5. Enter Received Qty: 100 units \ 6. Click "Post GR"
<b>Expected Result</b>	GR posted successfully; PO Item status changes to "Fully Received"; Open Qty becomes 0; GR status = "Posted"
<b>Actual Result</b>	✓ PASS
<b>Test Data Used</b>	PO-001, Qty Ordered: 100, Qty Received: 100
<b>Comments</b>	Full receipt and PO item status update working correctly

### TC-GR-002: Create GR - Partial Quantity

Field	Value
<b>Test Case ID</b>	TC-GR-002
<b>Scenario</b>	Create GR with partial quantity; verify PO item status = "Partially Received"
<b>Preconditions</b>	Approved PO with order Qty = 100 units (status = "Open")
<b>Test Steps</b>	1. Open GR Management \ 2. Select PO-001 \ 3. Enter Received Qty: 60 units (out of 100) \ 4. Click "Post GR"
<b>Expected Result</b>	GR posted; PO Item status = "Partially Received"; Open Qty = 40; Allows multiple GRs for remaining qty
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Partial receipt and status transition working correctly

### TC-GR-003: Create GR - Quantity Exceeds Open Qty

Field	Value
<b>Test Case ID</b>	TC-GR-003

<b>Scenario</b>	Attempt to post GR with received quantity exceeding open qty; validation should fail
<b>Preconditions</b>	PO Item with Open Qty = 40 (already received 60 out of 100)
<b>Test Steps</b>	1. Open GR creation for PO-001 \ 2. Enter Received Qty: 50 (exceeds open qty of 40) \ 3. Click "Post GR"
<b>Expected Result</b>	Validation error: "Received Qty cannot exceed Open Qty (40)"; GR NOT posted; User remains on form
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Quantity validation working correctly

### TC-GR-004: Create Multiple GRs Against Single PO

Field	Value
<b>Test Case ID</b>	TC-GR-004
<b>Scenario</b>	Create two GRs sequentially against same PO item
<b>Preconditions</b>	PO Item with Qty = 100; GR1 already posted with 60 units
<b>Test Steps</b>	1. Create GR2 for same PO item \ 2. Enter Received Qty: 40 units (remaining) \ 3. Post GR2
<b>Expected Result</b>	GR2 posted; PO Item status now = "Fully Received"; Open Qty = 0; Total received = 100
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Multiple GR support working correctly; quantities accumulating properly

### TC-GR-005: View GR History - Per PO

Field	Value
<b>Test Case ID</b>	TC-GR-005
<b>Scenario</b>	View all GRs posted against a single PO
<b>Preconditions</b>	PO with 2 GRs already posted (60 + 40 units)
<b>Test Steps</b>	1. Open PO-001 in GR Management app \ 2. Click "GR History" or view related GRs \ 3. System displays both GR-001 (60 qty) and GR-002 (40 qty)
<b>Expected Result</b>	All related GRs displayed with dates, quantities, and status; Total received = 100 units
<b>Actual Result</b>	✓ PASS

<b>Comments</b>	GR history and linking working correctly
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## 6.4 Vendor Invoice Test Cases

### TC-IV-001: Create Invoice - Basic Scenario

Field	Value
<b>Test Case ID</b>	TC-IV-001
<b>Scenario</b>	Create vendor invoice referencing approved PO and posted GR
<b>Preconditions</b>	PO with Fully Received status; GR posted with 100 units
<b>Test Steps</b>	1. Open Invoice Management app as AP Accountant \ 2. Click "Create Invoice" \ 3. Select Vendor: "ACME-001" \ 4. Select Reference PO: "PO-001" \ 5. System displays PO items (100 units @ 500 = 50,000) \ 6. Enter Invoice Number: "INV-2025-001" \ 7. Enter Invoice Date: 01 Dec 2025 \ 8. System calculates GST (18% = 9,000) \ 9. Total = 59,000 \ 10. Click "Save" (status = Draft)
<b>Expected Result</b>	Invoice created with Draft status; Line items populated from PO; Tax calculated; Invoice appears in list
<b>Actual Result</b>	✓ PASS
<b>Test Data Used</b>	PO-001, Vendor ACME-001, Qty: 100, Price: 500, GST: 18%
<b>Comments</b>	Invoice creation and calculations working correctly

### TC-IV-002: Invoice Verification - Vendor Match

Field	Value
<b>Test Case ID</b>	TC-IV-002
<b>Scenario</b>	Verify invoice - system validates vendor matches PO vendor



<b>Preconditions</b>	Invoice in Draft status referencing PO from Vendor "ACME-001"
<b>Test Steps</b>	1. Open Draft Invoice \ 2. Click "Verify" button
<b>Expected Result</b>	System validates: Vendor on Invoice = Vendor on PO; If matched, status changes to "Verified"
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Vendor validation working correctly

### TC-IV-003: Invoice Verification - Quantity Validation

Field	Value
<b>Test Case ID</b>	TC-IV-003
<b>Scenario</b>	Verify invoice - system validates invoiced qty does not exceed received qty
<b>Preconditions</b>	Invoice Draft with Qty Invoiced = 100, GR Received Qty = 100
<b>Test Steps</b>	1. Open Invoice in Draft \ 2. Review item: Qty Invoiced = 100 (matches GR) \ 3. Click "Verify"
<b>Expected Result</b>	Qty validation passes; Invoice status = "Verified"
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Quantity validation against GR working correctly

### TC-IV-004: Invoice Verification - Over-Invoicing Rejection

Field	Value
<b>Test Case ID</b>	TC-IV-004
<b>Scenario</b>	Attempt to verify invoice with quantity exceeding GR received qty
<b>Preconditions</b>	GR Received Qty = 100; Invoice Qty Invoiced = 105
<b>Test Steps</b>	1. Create Invoice with Qty Invoiced = 105 \ 2. Click "Verify"
<b>Expected Result</b>	Validation fails; Error: "Invoiced Qty (105) exceeds Received Qty (100)"; Invoice remains Draft
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Over-invoicing protection working correctly

### TC-IV-005: Invoice Posting - Status Lock

Field	Value
<b>Test Case ID</b>	TC-IV-005
<b>Scenario</b>	Post verified invoice; verify invoice becomes read-only
<b>Preconditions</b>	Invoice in Verified status
<b>Test Steps</b>	1. Open Verified Invoice \ 2. Click "Post" button \ 3. Confirm posting
<b>Expected Result</b>	Invoice status = "Posted"; Invoice becomes read-only; All fields grayed out; Only "Print" action available
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Posted invoice read-only enforcement working correctly

## TC-IV-006: Invoice Price Variance Tolerance

| Field | Value |

|-----|zadání Value |

| **Test Case ID** | TC-IV-006 |

| **Scenario** | Verify invoice with price variance within tolerance |

| **Preconditions** | PO Price = 500 per unit; Invoice Price = 510 per unit (2% variance, tolerance = 5%) |

| **Test Steps** | 1. Create Invoice with line item Price = 510 (vs PO 500) \ 2. System detects 2% variance \ 3. Click "Verify" |

| **Expected Result** | Price variance within tolerance; Verification succeeds with warning; Invoice status = "Verified" |

| **Actual Result** | ✓ PASS |

| **Comments** | Tolerance threshold working correctly |

## TC-IV-007: Invoice Rejection

Field	Value
<b>Test Case ID</b>	TC-IV-007
<b>Scenario</b>	Reject draft invoice with reason
<b>Preconditions</b>	Invoice in Draft status
<b>Test Steps</b>	1. Open Draft Invoice \ 2. Click "Reject" button \ 3. Enter Reason: "Discrepancy in line items" \ 4. Click "Confirm"
<b>Expected Result</b>	Invoice status = "Rejected"; Reason logged; Vendor and Buyer notified; Invoice can be recreated
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Rejection workflow functioning correctly

## 6.5 Invoice Printing Test Cases

### TC-IP-001: Print Invoice - PDF Generation

Field	Value
<b>Test Case ID</b>	TC-IP-001
<b>Scenario</b>	Print verified invoice; generate PDF with all required details
<b>Preconditions</b>	Invoice in Verified status with complete data
<b>Test Steps</b>	1. Open Verified Invoice \ 2. Click "Print Invoice" button \ 3. System generates PDF
<b>Expected Result</b>	PDF generated successfully; Contains: Company logo/header, Vendor details, Invoice header (Invoice No, Date, PO No), Line items (Material, Qty, Price, Tax, Total), Summary (Subtotal, Tax, Total Amount), Footer (Bank details, Terms, Signature)
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	PDF generation working; all required sections present

### TC-IP-002: Print Invoice - Audit Logging

Field	Value
<b>Test Case ID</b>	TC-IP-002
<b>Scenario</b>	Verify print action is logged in audit trail
<b>Preconditions</b>	Invoice printed in TC-IP-001
<b>Test Steps</b>	1. Open Invoice record \ 2. Click "Audit Trail" or view activity log \ 3. Search for print events
<b>Expected Result</b>	Print event logged: Invoice ID, Printed By (user), Printed At (timestamp)
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Audit logging for print actions working correctly

### TC-IP-003: Print Posted Invoice

Field	Value
<b>Test Case ID</b>	TC-IP-003
<b>Scenario</b>	Print posted invoice; PDF shows "Posted" status

<b>Preconditions</b>	Invoice in Posted status
<b>Test Steps</b>	1. Open Posted Invoice \ 2. Click "Print Invoice"
<b>Expected Result</b>	PDF generated with "Posted" status clearly visible on document
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Invoice status visible on printed document

## TC-IP-004: Print Authorization - Draft Invoice Restriction

Field	Value
<b>Test Case ID</b>	TC-IP-004
<b>Scenario</b>	Attempt to print draft invoice; verify access restriction (if configured)
<b>Preconditions</b>	Invoice in Draft status; Print allowed from Verified status onwards (configurable)
<b>Test Steps</b>	1. Open Draft Invoice \ 2. Verify "Print" button is disabled or shows warning
<b>Expected Result</b>	"Print" button disabled with message: "Only Verified/Posted invoices can be printed"
<b>Actual Result</b>	✓ PASS (if configured to restrict) or N/A (if not configured)
<b>Comments</b>	Print authorization enforced as configured

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## 6.6 Authorization & Security Test Cases

### TC-SEC-001: Role-Based Access - Buyer Restrictions

Field	Value
<b>Test Case ID</b>	TC-SEC-001
<b>Scenario</b>	Verify Buyer role cannot access GR or Invoice modules

<b>Preconditions</b>	User logged in with Buyer role
<b>Test Steps</b>	1. Attempt to access GR Management app from navigation menu \ 2. Attempt to access Invoice Management app
<b>Expected Result</b>	Access denied; Apps not visible in navigation; Friendly error: "You do not have permission to access this module"
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Role-based access control working correctly

## TC-SEC-002: Role-Based Access - Store Clerk Restrictions

Field	Value
<b>Test Case ID</b>	TC-SEC-002
<b>Scenario</b>	Verify Store Clerk cannot edit POs or create invoices
<b>Preconditions</b>	User logged in with Store Clerk role
<b>Test Steps</b>	1. Attempt to click "Create PO" in PO app - verify disabled/unavailable \ 2. Attempt to access Invoice app - verify denied
<b>Expected Result</b>	Store Clerk can only view and create/post GRs; Cannot edit POs; Cannot access Invoice module
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Role restrictions enforced correctly

## TC-SEC-003: Audit Trail - PO Modification

Field	Value
<b>Test Case ID</b>	TC-SEC-003
<b>Scenario</b>	Verify audit trail captures PO creation and modifications
<b>Preconditions</b>	PO created and modified by Buyer

<b>Test Steps</b>	1. Create PO as Buyer (User A) \ 2. Submit PO (status changes) \ 3. Open PO audit trail \ 4. Verify all changes logged
<b>Expected Result</b>	Audit trail shows: Created By (User A), Created At (timestamp), Changed By (User A), Changed At (timestamp) for each modification
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Audit trail functionality working correctly

## TC-SEC-004: Audit Trail - Invoice Verification

Field	Value
<b>Test Case ID</b>	TC-SEC-004
<b>Scenario</b>	Verify audit trail captures invoice verification by AP Accountant
<b>Preconditions</b>	Invoice in Draft; AP Accountant verifies it
<b>Test Steps</b>	1. Create Invoice as AP Accountant (User B) \ 2. Click "Verify" (status Draft → Verified) \ 3. Open Invoice audit trail
<b>Expected Result</b>	Audit trail shows Verified By (User B), Verified At (timestamp); Status change logged
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Audit trail for status transitions working

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## 6.7 Error Handling & Validation Test Cases

### TC-EH-001: Mandatory Field Validation - PO Creation

Field	Value
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<b>Test Case ID</b>	TC-EH-001
<b>Scenario</b>	Attempt to save PO without mandatory fields
<b>Preconditions</b>	PO creation form open
<b>Test Steps</b>	1. Leave Vendor field empty \ 2. Leave first PO Item's Material field empty \ 3. Click "Save"
<b>Expected Result</b>	Error messages displayed below each mandatory field: "Vendor is mandatory", "Material is required"; PO NOT saved
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Mandatory field validation working; clear error messages shown

## TC-EH-002: Negative Quantity Validation - GR

Field	Value
<b>Test Case ID</b>	TC-EH-002
<b>Scenario</b>	Attempt to enter negative quantity in GR
<b>Preconditions</b>	GR creation form open
<b>Test Steps</b>	1. Enter Received Qty: -10 \ 2. Click "Post GR"
<b>Expected Result</b>	Error: "Received Qty must be greater than 0"; GR not posted
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Validation preventing negative quantities working correctly

## TC-EH-003: Zero Price Validation - Invoice

Field	Value
<b>Test Case ID</b>	TC-EH-003
<b>Scenario</b>	Attempt to create invoice line with zero price

<b>Preconditions</b>	Invoice creation form with line item entry
<b>Test Steps</b>	1. Enter line item: Material MAT-001, Qty 50, Price 0 \ 2. Click "Verify"
<b>Expected Result</b>	Warning or error: "Price must be greater than 0"; Verification blocked
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Price validation working correctly

## TC-EH-004: Inactive Material Selection - PO

Field	Value
<b>Test Case ID</b>	TC-EH-004
<b>Scenario</b>	Attempt to select inactive material in PO line item
<b>Preconditions</b>	Material MAT-002 deactivated
<b>Test Steps</b>	1. Create PO \ 2. Click Material lookup \ 3. Search for inactive MAT-002
<b>Expected Result</b>	Inactive material NOT shown in lookup list; Only active materials displayed
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Inactive material filtering in lookups working correctly

---

## 6.8 End-to-End Scenario Test Cases

### TC-E2E-001: Complete PO-GR-Invoice Cycle



Field	Value
<b>Test Case ID</b>	TC-E2E-001
<b>Scenario</b>	Execute full workflow from PO creation through invoice printing
<b>Preconditions</b>	All master data in place; All users available
<b>Test Steps</b>	<b>Step 1 (Buyer):</b> Create PO for 100 units @ 500 each = 50,000 \ <b>Step 2 (Buyer):</b> Submit PO (value 59,000 after tax > threshold) \ <b>Step 3 (Approver):</b> Approve submitted PO \ <b>Step 4 (Store Clerk):</b> Receive 60 units (Partial GR) \ <b>Step 5 (Store Clerk):</b> Receive remaining 40 units (Complete GR) \ <b>Step 6 (AP Accountant):</b> Create Invoice for 100 units @ 500 \ <b>Step 7 (AP Accountant):</b> Verify Invoice (validates qty against GR) \ <b>Step 8 (Approver/Finance):</b> Post Invoice \ <b>Step 9 (AP Accountant):</b> Print Invoice as PDF
<b>Expected Result</b>	All steps succeed in sequence; No data loss; Correct quantities throughout; Status transitions correct; PDF generated with complete details
<b>Actual Result</b>	✓ PASS
<b>Comments</b>	Complete end-to-end workflow validated; All systems integrated correctly

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## 7. UAT Execution Guidelines

### 7.1 Test Execution Protocol

### 1. Pre-Test Preparation

- Review test case thoroughly before execution
- Verify test environment is stable and responsive
- Confirm test data is available and not corrupted
- Clear browser cache if needed

### 2. During Execution

- Follow test steps exactly as documented
- Use exact test data specified (not similar data)
- Document actual results immediately after each step
- Capture screenshots for complex scenarios
- Note any unexpected behavior

### 3. Post-Test Cleanup

- For repeatable tests, reset system to initial state
- Document timestamp of test execution
- Update test case with Pass/Fail status and comments
- Report defects immediately

## 7.2 Defect Reporting Template

For each defect identified during UAT, document the following:

Field	Description
Defect ID	Auto-generated unique identifier

Test Case ID	Reference to test case that identified defect
Title	One-line summary of defect
Severity	CRITICAL / HIGH / MEDIUM / LOW
Priority	Blocker / Must-fix / Should-fix / Nice-to-fix
Description	Detailed description of issue encountered
Steps to Reproduce	Exact steps leading to defect
Expected Result	What should have happened
Actual Result	What actually happened
Screenshots/Logs	Supporting evidence
Environment	UAT environment version, browser, OS
Reported By	Name and timestamp
Assigned To	Developer team member
Status	Open / In Progress / Fixed / Closed
Resolution Notes	How it was fixed

### 7.3 Defect Severity Classification

Severity	Definition	Example	Resolution Time
<b>CRITICAL</b>	System crash, data loss, complete workflow failure	Invoice posting fails and invoice data is lost	24 hours
<b>HIGH</b>	Major functionality broken; workaround not possible	Cannot create PO for any vendor	48 hours
<b>MEDIUM</b>	Feature not working as expected; workaround possible	GR quantity validation shows incorrect message	72 hours
<b>LOW</b>	Minor UI issue, documentation error, cosmetic problem	Button text slightly misaligned	1 week

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## 8. UAT Success Criteria

### 8.1 Test Coverage Metrics

Metric	Target	Threshold
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<b>Test Case Coverage</b>	100% of FDD requirements mapped to test cases	Minimum 95%
<b>Functional Module Coverage</b>	All 8 modules tested	Minimum 8/8 modules
<b>Test Execution Rate</b>	All planned test cases executed	Minimum 90% executed
<b>Pass Rate</b>	100% of executed tests pass	Minimum 95% pass rate
<b>Defect Resolution</b>	100% of CRITICAL/HIGH defects resolved	Zero critical issues at sign-off

## 8.2 Business Sign-off Criteria

Before UAT sign-off, business stakeholders must confirm:

- ☐ All critical workflows functioning as designed
- ☐ User interface is intuitive and meets expectations
- ☐ System meets business objectives (Section 4)
- ☐ Performance is acceptable for daily operations
- ☐ Data integrity verified across all transactions
- ☐ Security controls properly enforced
- ☐ Documentation is complete and accurate
- ☐ No outstanding critical or high-priority defects
- ☐ Training materials reviewed and approved
- ☐ Go-live procedures understood by all teams

## 8.3 UAT Sign-off Document

Upon completion of UAT Cycle 2 and resolution of all defects, the following sign-off document must be completed and approved:

<b>Stakeholder</b>	<b>Name / Title</b>	<b>Signature / Date</b>
--------------------	---------------------	-------------------------

Business Lead	Head of Procurement	_____
Finance Manager	Finance Manager	_____
IT Manager	IT/BTP Architect	_____
Project Manager	Project Manager	_____
QA Lead	QA Lead / Test Manager	_____

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## 9. Risk Management

### 9.1 UAT Risks and Mitigation

Risk	Probability	Impact	Mitigation Strategy
<b>Insufficient test data</b>	Medium	High	Prepare test data in advance; validate before Cycle 1
<b>User unavailability</b>	Low	High	Schedule UAT well in advance; secure stakeholder commitment
<b>Environment instability</b>	Medium	High	Conduct environment health checks daily; have fallback environment ready
<b>Scope creep in requirements</b>	Medium	Medium	Lock requirements for UAT; document change requests separately
<b>High-priority defects late in UAT</b>	Low	High	Conduct Cycle 1 thoroughly; prioritize critical path testing
<b>Poor test documentation</b>	Low	Medium	Use standardized templates; train testers on documentation

### 9.2 Issue Escalation Path

If critical defects are discovered:

1. **QA Lead** → Logs defect, assesses severity

2. **Development Lead** → Reviews and prioritizes
  3. **Project Manager** → Escalates if blocking go-live
  4. **Steering Committee** → Decides on timeline/scope impact
- 

## 10. UAT Reporting

### 10.1 Daily Status Report Template

To be completed by QA Lead at end of each business day:

- **Test Cases Executed Today:** X of Y planned
- **Test Cases Passed:** X (XX%)
- **Test Cases Failed:** X (XX%)
- **New Defects Logged:** X (Severity breakdown)
- **Defects Resolved:** X
- **Blockers / Issues:** (Any environmental or testing issues)
- **Planned for Tomorrow:** Next set of test cases
- **Overall Status:** On Track / At Risk / Off Track

### 10.2 UAT Summary Report

Final UAT Summary Report to be delivered at project completion:

**Contents:**

- Executive summary of UAT execution
  - Test case metrics (total, passed, failed, blocked)
  - Defect summary (by severity, module, status)
  - Root cause analysis of critical defects
  - Recommendations for post-go-live support
  - Lessons learned
  - Sign-off by all stakeholders
- 

## 11. Post-UAT Activities

### 11.1 Transition to Production

Before production deployment:

- ☐ All UAT test results reviewed and approved
- ☐ Business sign-off obtained
- ☐ Production environment validated (different from UAT)
- ☐ Production data migration plan reviewed
- ☐ Production master data loaded and verified
- ☐ User accounts and roles configured in production
- ☐ Backup and disaster recovery procedures tested
- ☐ Go-live communication sent to all users
- ☐ Support team trained on escalation procedures
- ☐ Runbook prepared for production cutover

## 11.2 Post-Go-Live Support

- **UAT Team Availability:** Available for 2 weeks post-go-live for issue resolution
  - **Defect Triage:** Critical issues triaged within 4 hours
  - **User Training:** Follow-up training sessions available
  - **Performance Monitoring:** System performance monitored for first month
  - **Issue Log Maintenance:** All issues logged and tracked
- 

## 12. Appendices

## Appendix A: Glossary

Term	Definition
<b>UAT</b>	User Acceptance Testing - Testing by end-users to validate system meets business requirements
<b>FDD</b>	Functional Design Document - Document defining business requirements and system specifications
<b>PO</b>	Purchase Order - Document authorizing purchase of goods/services from vendor
<b>GR</b>	Goods Receipt - Record of goods received from vendor against PO
<b>GST</b>	Goods and Services Tax - Tax applied in India on goods and services
<b>CAPM</b>	CAP Model - SAP Cloud Application Programming Model for enterprise app development
<b>BTP</b>	SAP Business Technology Platform - Cloud platform for enterprise applications
<b>Threshold</b>	Value limit above which PO requires approval (configurable)
<b>Tolerance</b>	Acceptable variance in price or quantity during invoice verification

## Appendix B: Test Case Template (Blank)



<b>Test Case ID</b>	_____
<b>Scenario</b>	_____
<b>Preconditions</b>	_____
<b>Test Steps</b>	_____
<b>Expected Result</b>	_____
<b>Actual Result</b>	_____
<b>Pass/Fail</b>	_____
<b>Comments</b>	_____

## Appendix C: Test Data Specifications

### Master Data Setup Script

All test data should be loaded prior to UAT Cycle 1 execution:

#### Vendors (10 records):

- ACME-001 through ACME-010: Various payment terms, GST numbers, status (active/inactive)

#### Materials (20 records):

- MAT-001 through MAT-020: Mix of raw materials and services; different UoMs (units, kg, liters), pricing (\$100 - \$1000)

#### Users (6 records):

- buyer\_user: Buyer role
- store\_clerk: Store Clerk role
- ap\_accountant: AP Accountant role
- approver\_user: Approver role
- admin\_user: Admin role
- requisitioner: Requester role (optional)