Requirements, Scope & NFRs (SAP ERP (Mock) — BA Case Study)

Scenario: Order-to-Cash (O2C) with credit and pricing controls

Target system: Mock SAP ERP (example reference: SAP S/4HANA SD + FI-AR + FSCM Credit Management)

Version: 0.1 (English-first)

Date: 2026-01-19

1) Scope

In scope
- Sales order management (create/change/cancel)
- Pricing conditions and overrides (with approvals)
- Credit checks and credit blocks (with release workflow)
- Delivery and goods issue status (high level)
- Billing (invoice / credit memo)
- Payment posting and simple dispute tracking
- Auditability and role-based access control (RBAC)

Out of scope
- Full warehouse management (WM/EWM) detail
- Detailed tax localization rules
- Integration to external payment gateways
- Complex revenue recognition

2) Assumptions
- Single company code, multiple sales areas (configurable)
- Pricing is condition-based; some conditions are approval-controlled
- Credit exposure is calculated using open orders + open invoices

3) Functional requirements (FR)

FR ID	Requirement	Priority	Acceptance notes
FR-O2C-001	The system shall create a sales order with customer, items, requested delivery date, and pricing conditions.	High	Order has unique ID and audit trail.
FR-O2C-002	The system shall support pricing overrides and capture the override reason.	High	Override requires approval per policy.
FR-O2C-003	The system shall perform credit check at order save and block if credit is exceeded.	High	Block reason is visible and reportable.
FR-O2C-004	The system shall allow authorized users to release a credit block with reason and audit log.	High	Segregation of duties enforced.
FR-O2C-005	The system shall create delivery status for logistics and update goods issue outcome.	Medium	Status is traceable to order.
FR-O2C-006	The system shall create billing invoices from delivered items and support credit memos.	High	Billing is auditable and linked.
FR-O2C-007	The system shall post payments against invoices and show open/cleared status.	Medium	Supports partial payment.
FR-O2C-008	The system shall support cancellations/returns with reason codes and credit memo creation.	High	Approval required above threshold.
FR-CTRL-001	The system shall provide audit logs for critical actions (pricing override, block release, credit memo).	High	Who/what/when/before-after.

FR-SEC-001	The system shall enforce RBAC and least privilege with role separation.	High	Prevents same user from approving own override if configured.

4) Non-functional requirements (NFR)

NFR ID	Category	Requirement
NFR-001	Security	RBAC enforced; privileged actions require approval and are audited.
NFR-002	Auditability	Critical actions must record before/after values and reason codes.
NFR-003	Performance	Sales order save should be responsive in peak hours.
NFR-004	Availability	System available during business hours; graceful error messaging.
NFR-005	Data integrity	Credit exposure and pricing calculations are consistent and reproducible.

5) Glossary

- O2C = Order-to-Cash
- SoD = Segregation of Duties