



QUANTITY ENGINEER / QS PLAYBOOK

JD | SOPs | Policies | Registers | Formats

Use: This is the operating manual for the Quantity Engineer / QS role. Follow Swara Authority & Escalation Matrix strictly. No measurement or billing without joint measurement and IR/quality clearance. Variation (VO) must be approved in writing before execution. Maintain an audit trail for every commercial decision (BOQ, CS, WO, MB, RA bills, VO, reconciliation, cost report, final account).

Section	Evidence / File Location (suggested)
QS Job Description (JD) + KPI Scorecard	00_Admin & Governance / HR / JDs
QS Phase Map (Phase 0-11) - responsibilities & evidence	00_Admin & Governance / Role Playbooks
QS SOPs (SOP-01 to SOP-18) - one-by-one	05_Tenders & Contracts / SOPs
QS Policies (POL-01 to POL-12) - one-by-one	00_Admin & Governance / Policies / Commercial
QS Registers (REG-01 to REG-18) - printable templates	05_Tenders & Contracts / Registers
QS Formats/Templates (FMT-01 to FMT-18) - printable templates	05_Tenders & Contracts / Formats
Escalation Triggers + Mandatory Message Format	00_Admin & Governance / Escalations
30-60-90 day onboarding plan (QS)	00_Admin & Governance / HR / Onboarding

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- Appendix B - 30-60-90 day onboarding plan (QS)

1. Role Overview & Job Description (QS)

Role purpose: Own commercial discipline for project packages - BOQ, tender support, rate analysis, measurement, billing, variation control, cost reporting and final accounts. The QS ensures that every payment and every extra is measurable, approved, and auditable.

Grade reference: L4 (Manager/Lead) as per Swara Salary Grade Structure (typical monthly band: A 80k | B 1.10L | C 1.40L).

Reporting: Reports to PM-HO (functional). Works day-to-day with PM-S and SSE/SE for measurement and package execution; coordinates with ACC-H/ACC-O for payment packs; coordinates with PUR-M for market rates and vendor onboarding.

1.1 Key responsibilities (must-do)

- Create BOQ and quantity take-off with drawing references; maintain BOQ version control.
- Build benchmark rates / SOR and support negotiation and award decisions.
- Prepare CS, negotiation minutes, and award recommendation notes for approvals.
- Maintain contract/WO annexures and commercial clauses (measurement rules, VO clause, retention/BG).
- Run joint measurement and maintain MB/measurement evidence (photos, IR clearance).
- Prepare RA bills and ensure certification pack completeness; track payment status.
- Identify and control variations (VO) with written approvals before execution.
- Run cement/steel reconciliation and trigger recoveries/back-charges when required.
- Publish monthly cost report: budget vs committed vs actual vs forecast (EAC).
- Close final bills, retention, BG tracking and commercial close-out with zero open liabilities.
- Support claims/dispute responses with evidence and clause references.

1.2 Routine (daily / weekly / monthly)

Daily:

- Coordinate with site for measurement priorities (critical path packages, concealed works).
- Track pending approvals (CS/WO/VO) and highlight ageing items.
- Update RA bill status and document gaps; close gaps quickly.

Weekly:

- Run joint measurement sessions and update MB/REG-07.
- Review package progress vs billing; flag under-billing or over-claim risks.
- Review reconciliation snapshots with STORE (cement/steel).
- Align with PM-S on upcoming tenders/awards and VO priorities.

Monthly:

- Publish cost report (REG-13) with forecast and top risks.
- Reconcile cement/steel and issue recovery notes if variance beyond tolerance.
- Review retention/BG tracker and upcoming expiry/release milestones.
- Run internal audit sample for 1-2 packages: missing docs, VO compliance, measurement evidence.

1.3 KPI Scorecard (track monthly)

- Budget variance vs forecast EAC (target: within approved tolerance).
- VO approval cycle time (initiation to approval days).
- RA bill turnaround time (measurement to certified submission).
- Documentation compliance: % RA bills with complete audit trail (target: 100%).
- Reconciliation variance cases beyond tolerance (target: minimal; with closure actions).
- Final bill closure cycle time after completion (days).
- Audit observations (commercial) and closure time.

1.4 Commercial authority summary (quick view)

Decision / Transaction	Initiate	Review	Approve	Execute / Owner	Key controls
Tender CS + Award recommendation (package)	QS	PM-S + PM-HO	PM-HO / OWN (as per value)	PM-HO/PM-S	Min 3 quotes; CS normalization; approvals attached
Subcontract appointment / Work Order issue	PM-S / SSE (with QS)	PM-HO + ACC-H	OWN (or DIR)	PM-HO / PM-S	WO must include scope/BOQ/terms; no start without WO
Vendor bills certification (RA) - site packages	SSE/SE + QS	PM-S	PM-S	ACC-O (payment)	Joint measurement + IR clearance + retention/deductions
Non-BOQ variation rate approval	PM-S + QS	PM-HO + APM + ACC-H	OWN	PM-S	VO in writing before execution; budget impact captured
Monthly cost report submission	QS	PM-HO + ACC-H	PM-HO / OWN (as required)	QS	Committed + actual + forecast; top risks/actions
Retention release recommendation	QS + PM-S	PM-HO + ACC-H	PM-HO / OWN	ACC-O	DLP closure evidence; BG validity check

1.5 Tools & file discipline (non-negotiable)

- Maintain all commercial records in ERP/folder within 24 hours of creation/signature.
- Use the registers in Section 5 as your daily control system (do not rely on memory).
- For every decision, keep evidence: quotes, CS, approvals, minutes, measurements, photos.
- Follow naming: DocType-Package-RefNo-Date-vX (example: RA-Civil-R03-2026-02-27-v1).

2. Phase Map (Phase 0-11) - QS responsibilities & evidence

Use this map to know what the QS must deliver in each project phase. Keep outputs filed in the suggested folders so audits and handovers are smooth.

Phase	QS key actions	Key outputs	Suggested folder
Phase 0 - Governance & Setup	Set up commercial control pack, cost heads, registers, and tender calendar. Align approval routes and templates.	Commercial pack baseline assumptions log	00_Admin & Governance / 05_Tenders & Contracts
Phase 1 - Due Diligence	Support feasibility cost checks, risk provisions, demolition/strengthening cost assumptions, and early package strategy.	Preliminary cost note risk allowances	06_Budget & Finance / Feasibility
Phase 2 - Feasibility & Offer Structuring	Prepare preliminary cost plan and cashflow inputs; validate offer terms impact on cost and timeline.	Cost plan v0/v1 cashflow inputs	06_Budget & Finance / Feasibility
Phase 3 - Society Consensus & Documentation	Support commercial clauses in term sheet: rent, corpus, parking, amenities, escalation. Clarify measurement and extra work rules.	Commercial clause note assumptions	04_Legal & Documentation
Phase 4 - Agreements & Legal Closure	Review agreements for payment triggers, retention, VO clause, penalty, dispute resolution. Align with Legal Officer.	Commercial review note	04_Legal & Documentation
Phase 5 - Design Finalization & VE	Run BOQ updates and value engineering proposals with approvals; update SOR benchmarks.	BOQ v2 VE log SOR updates	03_Design / 05_Tenders & Contracts
Phase 6 - Approvals & RERA	Support cost compliance needs, project bank/collection logic (where applicable), and package tender readiness.	Approval readiness notes tender pack list	06_Budget & Finance / 07_Compliance
Phase 7 - Vacate & Transit	Budget control for transit shifting, vacate support contracts; tender enabling works if needed.	Vacate support cost log	07_Transit / 05_Tenders
Phase 8 - Demolition & Enabling Works	Tender demolition/enabling packages, track debris disposal claims with measurement evidence.	Demolition CS/WO measurement records	05_Tenders & Contracts / 08_Demolition
Phase 9 - Construction Execution	Main QS role: measurement, RA bills, VO control, reconciliation, monthly cost reports, claims management.	MB RA packs VO recon cost reports	09_Construction / Commercial
Phase 10 - Completion & Closeout	Final accounts, NOCs, retention plan, vendor closure and commercial closeout report.	Final settlement packs closeout report	10_Closeout
Phase 11 - DLP & Post-Handover	Track DLP costs, recoveries, and retention release recommendations with evidence.	DLP cost tracker retention release notes	11_DLP / Commercial

3. SOPs (In-depth, One-by-One) - QS

SOP-01 to QS SOP-18

Use these SOPs exactly as written. Each SOP lists objective, trigger, inputs, step-by-step, outputs and escalation rules. Maintain evidence in the specified registers and formats.

QS SOP-01: Commercial Control Pack Setup (Project Start)

Objective: Create a clean commercial baseline so every rupee is traceable (BOQ, rates, packages, registers, folder structure).

Trigger / Frequency: At project start (Phase 0/1) and before any tender/WO is issued.

Inputs:

- Approved concept/feasibility note (or last available drawings)
- Project WBS/cost heads from PM-HO/APM
- Standard Swara contract clauses (commercial) + authority matrix
- ERP project code + folder structure access

Step-by-step:

- [] Create project folder structure: 05_Tenders & Contracts / 06_Budget & Finance / 03_Design / 09_Site Records (as applicable).
- [] Create registers: BOQ Master, Tender Log, CS Log, WO Register, MB Index, RA Bill Tracker, VO Register, Reconciliation, Retention/BG tracker.
- [] Set up BOQ version control: BOQ v0 (concept) -> v1 (tender) -> v2 (IFC) with assumptions log.
- [] Create package strategy list (civil, RMC, steel, masonry, plaster, tiles, paint, MEP, lifts, facade, etc.) with tentative tender dates.
- [] Align approval routes with PM-HO/ACC-H (no WO/variation without written approval).
- [] Publish 'Commercial Calendar' for the first 60 days: tendering plan, measurement cycle, cost report dates.

Outputs / Evidence:

- Commercial Control Pack (folders + registers + templates)
- Baseline BOQ version + assumptions log
- Package strategy list + tender calendar

Registers / Formats used: REG-01 to REG-06 | FMT-01, FMT-02

Escalations:

- If drawings/BOQ scope is unclear -> raise RFI to SSE/PM-S and inform PM-HO same day.
- If any team bypasses controls (verbal WO / work started without VO) -> escalate to PM-S -> PM-HO within 24 hrs.

Notes / Do not skip:

- No baseline = no control. Create registers first, then start tendering.

QS SOP-02: Quantity Take-off + BOQ Preparation (Tender/Execution BOQ)

Objective: Produce an accurate BOQ that can be tendered, measured, and audited (minimal disputes).

Trigger / Frequency: Whenever a package is planned for tender OR when IFC drawings are frozen for execution.

Inputs:

- Latest drawings (GA/structural/MEP) with revision numbers
- Specifications and scope split (package boundaries)
- Standard measurement rules (IS/CPWD/industry norms as adopted)
- Site constraints notes from PM-S/SSE (access, staging, phasing)

Step-by-step:

- Create BOQ item list aligned to package scope (include exclusions explicitly).
- Do quantity take-off with drawing reference tags (sheet no., grid, level).
- Add wastage/overbreak where applicable (document assumptions).
- Cross-check high-value quantities with SSE/PM-S (RCC, steel, masonry, plaster, flooring).
- Prepare BOQ summary (item wise qty + unit) and pricing sheet (rate/amount).
- Issue BOQ for tender with version number; lock changes through VO/change control only.

Outputs / Evidence:

- BOQ (measurable + version controlled)
- Take-off sheets with drawing references
- Assumptions / exclusions list

Registers / Formats used: REG-01 BOQ Master | FMT-01 BOQ Template

Escalations:

- Major drawing mismatch or missing detail -> RFI to design/consultant; do not guess.
- If BOQ revision impacts budget materially -> PM-HO + ACC-H informed with delta note.

Notes / Do not skip:

- Always mention 'measurement basis' (centre line / net area / built-up etc.) in BOQ notes.

QS SOP-03: Rate Analysis + Schedule of Rates (SOR) Setup

Objective: Build defensible benchmark rates for tender evaluation, variations, and negotiation.

Trigger / Frequency: At start of tendering and updated quarterly or when market shifts.

Inputs:

- Latest market quotes (min 3) for key materials/labour
- Standard productivity norms and wastage norms (internal/industry)
- Previous project rate database (if available)
- GST/tax assumptions and lead/lift assumptions

Step-by-step:

- [] Create SOR head wise (RCC, masonry, plaster, flooring, waterproofing, MEP etc.).
- [] Build rate analysis with components: material + labour + equipment + overhead + wastage + lead/lift.
- [] Document assumptions (lead distance, floor height, pump/lift, scaffolding, curing).
- [] Share benchmark with PM-HO/PM-S for review; freeze as 'SOR v1'.
- [] Use SOR to flag abnormally low/high tender rates; record justification for selection.

Outputs / Evidence:

- SOR (version controlled) + rate analysis sheets
- Benchmark note for key packages

Registers / Formats used: REG-18 Price Movement Tracker | FMT-02 Cost Plan | FMT-04 CS Template

Escalations:

- If tender rate is abnormal (> +/-15% from SOR) -> highlight to PM-HO for decision.
- If commodity price spikes -> issue rate update note and revise SOR version.

Notes / Do not skip:

- Keep a clear audit trail for every benchmark update (date, sources, assumptions).

QS SOP-04: Tendering (RFQ) + Comparative Statement (CS) Preparation

Objective: Run a clean tender process and produce a decision-ready comparative statement.

Trigger / Frequency: For every subcontract/service package and major supply contract.

Inputs:

- Approved BOQ + scope + specifications
- Tender vendor list (from PM-HO/PM-S/PUR-M)
- Commercial terms template (payment, retention, BG, timeline, penalty)
- Site timeline inputs from APM/PM-S

Step-by-step:

- [] Issue RFQ to minimum 3 eligible vendors with BOQ + specs + drawings + submission deadline.
- [] Clarify queries formally; issue addendum if required (keep version control).
- [] Open quotes, tabulate rates, and build CS (item-wise + total).
- [] Normalize: check inclusions/exclusions, taxes, lead/lift, wastage, price validity.
- [] Highlight risks: abnormal rates, missing items, unrealistic timelines, conditional quotes.
- [] Submit CS with recommendation and negotiation plan to PM-S/PM-HO.

Outputs / Evidence:

- Comparative Statement (CS) with recommendation
- Clarification log + addendum record

Registers / Formats used: REG-02 Tender Log | REG-03 CS Register | FMT-03 RFQ | FMT-04 CS

Escalations:

- If fewer than 3 quotes -> record reason and get PM-HO approval for exception.
- If vendor tries to influence decision (non-ethical) -> inform PM-HO immediately.

Notes / Do not skip:

- CS must clearly show payment terms, retention/BG, timeline, and exclusions - not only price.

QS SOP-05: Negotiation Minutes + Award Recommendation Note

Objective: Convert CS into an auditable award decision with negotiated terms and clear scope.

Trigger / Frequency: After CS review and before issuing any Work Order (WO).

Inputs:

- CS + benchmark/SOR note
- Negotiation agenda (rates, timeline, terms, quality, manpower)
- Authority matrix for award approvals
- Draft WO format and annexure list

Step-by-step:

- [] Conduct negotiation meeting (with PM-S/PM-HO as required).
- [] Record minutes: final rates, discounts, timeline, mobilization date, payment terms, retention/BG.
- [] Confirm scope inclusions/exclusions and responsibility matrix (materials by whom, scaffolding, power, water).
- [] Prepare Award Recommendation Note with final value and key risks/mitigations.
- [] Obtain written approvals as per authority matrix before WO release.

Outputs / Evidence:

- Negotiation Minutes signed/acknowledged
- Award Recommendation Note + approval evidence

Registers / Formats used: REG-03 CS Register | REG-04 Contract Register | FMT-05 Minutes | FMT-06 Award Note

Escalations:

- If vendor refuses key clauses (safety, quality, penalty) -> escalate to PM-HO for decision.
- If final value crosses approval threshold -> route to OWN (via PM-HO/ACC-H).

Notes / Do not skip:

- No verbal award. No site start without written WO/terms.

QS SOP-06: Work Order / Subcontract Agreement Drafting & Release

Objective: Issue a watertight WO/contract that prevents disputes and protects Swara.

Trigger / Frequency: For every subcontractor/service provider before mobilization.

Inputs:

- Approved award note + final BOQ/rates
- Standard WO clauses + project-specific special conditions
- Insurance/safety requirements and site rules
- Payment schedule milestones from PM-S/ACC-H

Step-by-step:

- [] Draft WO with annexures: scope, BOQ, drawings list, specs, timeline, payment terms, retention/BG, penalty, escalation matrix.
- [] Include measurement rules, VO/change clause, quality/IR hold points, and documentation requirements.
- [] Route for internal review: PM-S -> PM-HO + ACC-H (as applicable) -> OWN approval if required.
- [] Issue WO with unique WO number; get vendor acceptance/signature.
- [] Upload WO to ERP/project folder; share mobilization checklist to site.

Outputs / Evidence:

- Signed WO/Agreement + annexures
- Mobilization checklist (documents, safety, manpower plan)

Registers / Formats used: REG-04 Contract Register | FMT-07 WO Template

Escalations:

- If work has started without WO -> stop payment processing and escalate to PM-S/PM-HO same day.
- If vendor submits altered clause -> legal/commercial review before acceptance.

Notes / Do not skip:

- WO must clearly state 'no extra unless VO approved' and retention/DLP conditions.

QS SOP-07: Measurement Book (MB) + Joint Measurement Procedure

Objective: Measure work correctly and transparently to avoid billing disputes and leakage.

Trigger / Frequency: Weekly/fortnightly measurement cycle and before every RA/final bill.

Inputs:

- Approved drawings/specs + WO/BOQ
- IR/quality clearance (no cover-up without IR)
- Measuring tools + level/laser as needed
- Site progress information from SSE/SE

Step-by-step:

- Plan joint measurement date with contractor + SSE/SE; inform PM-S if critical.
- Measure work with reference to BOQ item and drawing; record location/grid/level.
- Capture photo evidence for concealed items and major quantities.
- Get joint signatures on measurement sheets/MB pages (contractor + Swara).
- Update MB index register and file scans in project folder within 24 hours.

Outputs / Evidence:

- Signed measurement sheets/MB pages
- Photo log for measured items

Registers / Formats used: REG-06 MB Index | REG-07 Joint Measurement Log | FMT-08 Measurement Sheet

Escalations:

- If contractor refuses joint measurement/signature -> PM-S same day; hold billing.
- If measurement differs materially from site claim -> document variance and inform PM-HO.

Notes / Do not skip:

- No IR clearance = no measurement for concealed work. Enforce strictly.

QS SOP-08: RA Bill Preparation, Certification & Submission Workflow

Objective: Prepare accurate RA bills with complete documents so payments do not get stuck.

Trigger / Frequency: As per contract billing cycle (usually monthly) and as per site progress.

Inputs:

- Signed MB/measurement sheets
- WO/BOQ + approved rates + VO (if any)
- IR/quality clearance summary
- Statutory docs (GST invoice, challans if required)

Step-by-step:

- [] Prepare RA abstract: previous qty, current qty, cumulative qty, deductions, retention.
- [] Attach measurement sheets, IR clearance, and VO approvals (if applicable).
- [] Cross-check arithmetical accuracy and rate correctness (SOR/WO rates).
- [] Get PM-S certification on RA pack (as per authority matrix).
- [] Submit RA pack to Accounts (ACC-O/ACC-H) for payment processing and track status in REG-08.

Outputs / Evidence:

- Certified RA bill pack (print + scan)
- Updated RA bill tracker with status

Registers / Formats used: REG-08 RA Bill Tracker | REG-15 Retention/BG | FMT-09 RA Checklist

Escalations:

- If payment is blocked due to missing documents -> close gaps within 48 hrs; if not possible, escalate to PM-HO.
- If contractor threatens stop-work due to payment -> ACC-O -> ACC-H -> PM-HO escalation as per matrix.

Notes / Do not skip:

- No payment for rejected work. Ensure IR/NCR closure before certification.

QS SOP-09: Material Reconciliation (Cement/Steel) - Commercial Control

Objective: Prevent leakage by reconciling theoretical vs actual consumption and triggering recovery/back-charge.

Trigger / Frequency: Monthly and at major slab/milestone closures.

Inputs:

- BOQ quantities / theoretical consumption factors
- Store issue records (STORE) + purchase GRNs
- Site progress (area, concrete quantity, steel consumption)
- Wastage norms and approved scrap policy

Step-by-step:

- [] Compute theoretical consumption for cement/steel for the measured work.
- [] Collect actual issue/consumption from STORE and cross-check with site records.
- [] Analyze variance beyond allowed wastage; identify reasons (rework, pilferage, design change).
- [] If contractor is responsible, prepare recovery note/adjustment in next RA.
- [] Report reconciliation summary to PM-S and PM-HO monthly.

Outputs / Evidence:

- Monthly reconciliation statement with variance and actions
- Recovery/back-charge notes where applicable

Registers / Formats used: REG-11 Cement Recon | REG-12 Steel Recon | FMT-13 Reconciliation

Escalations:

- Variance beyond tolerance -> PM-S same day; repeat variance -> PM-HO within 48 hrs.
- Suspicion of theft/pilferage -> PM-S + Security + Store + PM-HO immediate.

Notes / Do not skip:

- Reconciliation is not optional. It is the fastest leakage detector.

QS SOP-10: Variation Identification + VO Approval Workflow (Non-BOQ Items)

Objective: Ensure all extra scope is approved in writing before execution to avoid disputes and losses.

Trigger / Frequency: Whenever drawing/site condition changes or extra item arises.

Inputs:

- RFI/drawing revision/consultant instruction
- Site measurement basis and photos
- SOR/benchmark rates and vendor quotation
- Budget impact and schedule impact

Step-by-step:

- [] Record variation request in REG-09 with reference (drawing/RFI/site instruction).
- [] Prepare variation note: description, reason, qty basis, rate basis, amount, time impact.
- [] Get PM-S initiation and route for review (PM-HO + APM + ACC-H) and approval (OWN) as per matrix.
- [] Issue written VO / approved rate note to contractor; only then allow execution.
- [] Update VO register and link VO number in next RA bill.

Outputs / Evidence:

- Approved VO / rate approval note with evidence
- Updated VO register and budget delta log

Registers / Formats used: REG-09 VO Register | REG-10 Change Log | FMT-10 VO Request | FMT-11 VO Approval

Escalations:

- Work started without approved VO -> stop certification; escalate to PM-S -> PM-HO within 24 hrs.
- VO delaying critical path -> PM-HO same day; decision required.

Notes / Do not skip:

- Authority rule: if approval is not in writing, treat as NOT approved.

QS SOP-11: Monthly Cost Report (Budget vs Actual) + Forecast (EAC)

Objective: Give management early warning on cost drift and cash needs.

Trigger / Frequency: Monthly (fixed date) and whenever major VO/contract is awarded.

Inputs:

- Awarded WO values + committed costs (open POs/WOs)
- Measured value (RA bills) + paid value from Accounts
- Pending VOs/claims and forecast quantities
- Cashflow plan from finance/APM

Step-by-step:

- [] Update committed cost register package-wise (awarded + pending awards).
- [] Update actuals: certified RA values and payments (with ACC-O/ACC-H).
- [] Update forecast to complete (EAC) including pending VOs/claims and risk provisions.
- [] Prepare top 10 risks list (cost + time) with action owners.
- [] Present cost report to PM-HO/OWN (as required) and file in 06_Budget & Finance.

Outputs / Evidence:

- Monthly cost report (Budget vs Actual vs Forecast)
- Risk/action tracker (commercial)

Registers / Formats used: REG-13 Cost Report | REG-20 Approval Tracker | FMT-12 Cost Report

Escalations:

- Cost drift beyond tolerance (e.g., >2% package) -> PM-HO within 48 hrs with mitigation plan.
- If cashflow risk due to claims/payment blockage -> ACC-H + PM-HO within 24 hrs.

Notes / Do not skip:

- Cost report must show BOTH commitments and actuals. Do not report only paid values.

QS SOP-12: Subcontractor Final Bill + Contract Close-out (Retention/DLP Hold)

Objective: Close contracts cleanly with no future surprise claims.

Trigger / Frequency: At package completion and before handing over final payment.

Inputs:

- Final measurements + all approved VOs
- NCR/IR closure records and completion certificate (if applicable)
- Material reconciliation and recoveries
- Retention/BG terms and DLP period

Step-by-step:

- Conduct final joint measurement and prepare final abstract (include all deductions/recoveries).
- Ensure all VOs/extra items are approved and linked; close pending claims with written settlement.
- Prepare final bill settlement statement and get PM-S certification.
- Update retention register with release plan; obtain BGs if contract requires.
- Collect contractor NOC and close WO status in REG-16.

Outputs / Evidence:

- Final bill settlement pack + NOC
- Updated retention/BG tracker and closure register

Registers / Formats used: REG-15 Retention/BG | REG-16 Final Bill Closure | FMT-15 Final Settlement | FMT-17 NOC

Escalations:

- If contractor refuses to sign final settlement/NOC -> PM-HO/Legal within 72 hrs.
- If quality issues unresolved -> PM-S blocks final certification until closure.

Notes / Do not skip:

- Never release retention without DLP conditions and documented completion.

QS SOP-13: Claims, Disputes & Back-Charge Management

Objective: Handle contractor claims with evidence and protect Swara from inflated/false claims.

Trigger / Frequency: Whenever a contractor submits a claim, notice, or delay allegation.

Inputs:

- Contract clauses and WO
- Progress records, hindrance register, site photos, correspondence
- VO status, drawings/RFIs, meeting minutes
- Cost impact analysis

Step-by-step:

- [] Log claim in REG-14 with date, amount, and clause reference.
- [] Collect evidence: letters/emails/WhatsApp screenshots, photos, minutes, site logs.
- [] Analyze claim validity (time, cost, responsibility) with PM-S/APM.
- [] Prepare response note with acceptance/rejection and proposed settlement/back-charge.
- [] If dispute escalates, coordinate with Legal Officer for notice replies and strategy.

Outputs / Evidence:

- Claim evaluation note + response trail
- Approved recovery/back-charge deductions (if applicable)

Registers / Formats used: REG-14 Claims Log | REG-20 Approvals | FMT-16 Back-charge Notice

Escalations:

- Legal notice risk -> PM-HO + Legal Officer same day.
- Stop-work threat -> ACC-H + PM-HO within 24 hrs.

Notes / Do not skip:

- No oral commitments. Every claim discussion must have minutes or email confirmation.

QS SOP-14: Audit-Ready Commercial File Maintenance (Package-wise)

Objective: Keep every package audit-ready: fast retrieval, zero missing documents, zero payment without trail.

Trigger / Frequency: Continuous; weekly check and mandatory before month-end.

Inputs:

- WO/contract, CS, negotiation minutes, approvals
- MB/RA bills/VOs/reconciliation
- Vendor invoices and statutory docs
- Payment status from Accounts

Step-by-step:

- Maintain package folder with standard file naming (WO-xx, VO-xx, RA-xx).
- Ensure each RA has: measurement, IR clearance, VO approvals, invoice, deductions sheet.
- Close gaps within 48 hrs; keep a 'missing docs list' for ACC-H/PM-HO visibility.
- Run monthly internal audit sample (2 packages) and record findings/actions.
- Archive completed packages in close-out folder with index.

Outputs / Evidence:

- Complete package file index
- Audit findings closure log

Registers / Formats used: REG-20 Approval Tracker | REG-16 Closure | FMT-09 RA Checklist

Escalations:

- If missing document delays payment >7 days -> PM-HO visibility mandatory.
- Repeated documentation lapses -> include in KPI review.

Notes / Do not skip:

- If it's not filed, it is considered not done.

QS SOP-15: Commercial Support to Cashflow & Payment Prioritization

Objective: Help Accounts/PM decide payment priorities based on site criticality and contractual obligations.

Trigger / Frequency: Weekly cashflow review and whenever vendor threatens stoppage.

Inputs:

- RA bill tracker + payment ageing
- Site critical path activities and material dependencies
- Contract payment terms and penalty/interest clauses
- Cash position inputs from ACC-H

Step-by-step:

- [] Classify pending bills: critical to progress / statutory risk / routine.
- [] Verify documentation completeness before recommending payment (avoid rejections).
- [] Prepare payment priority list with impact if delayed (time/cost).
- [] Attend weekly cashflow call with PM-HO + ACC-H; update actions.
- [] Track commitments vs payments to avoid double-commitment to vendors.

Outputs / Evidence:

- Weekly payment priority note (commercial view)
- Reduced stop-work threats due to clarity

Registers / Formats used: REG-08 RA Tracker | REG-13 Cost Report

Escalations:

- Critical payment blockage -> ACC-O -> ACC-H same day; PM-HO within 24 hrs.

Notes / Do not skip:

- QS should not approve payments; QS provides technical/commercial completeness input.

QS SOP-16: Project Close-out: Final Accounts + Open Liability Closure

Objective: Close commercial accounts and ensure no open liabilities remain after handover.

Trigger / Frequency: During completion/handover (Phase 10) and before final close.

Inputs:

- All WO/PO registers and closure status
- Final measurements and settlements
- Retention/BG tracker with release plan
- As-built quantity summary (if required)

Step-by-step:

- [] List all active packages and confirm close-out status (completed, final billed, NOC received).
- [] Identify open liabilities (pending VO, pending claims, retention) and create closure plan.
- [] Prepare final project commercial summary: awarded vs final, savings/overrun reasons.
- [] Support ACC-H in closing vendor ledgers and obtaining final confirmations.
- [] Archive commercial records and handover DLP contact list/retention plan.

Outputs / Evidence:

- Commercial close-out report + open liability list
- Archived package files with index

Registers / Formats used: REG-16 Final Bill Closure | REG-15 Retention/BG | FMT-12 Cost Report

Escalations:

- If any package remains open beyond 30 days of completion -> PM-HO decision required.

Notes / Do not skip:

- Close-out is a phase gate. Do not let it drift - it becomes expensive later.

QS SOP-17: DLP Cost Tracking + Retention Release Recommendation

Objective: Control DLP costs and release retention only after documented closure.

Trigger / Frequency: During DLP (Phase 11) and at each retention release milestone.

Inputs:

- DLP complaint log and rectification records
- Retention/BG tracker and contract clauses
- Cost of rectification works and recoveries
- Completion certificates and handover docs

Step-by-step:

- [] Track DLP works cost package-wise; identify recurring defect patterns.
- [] Verify contractor has completed DLP obligations and obtained closure sign-off.
- [] Recommend retention release as per contract only after evidence.
- [] If Swara executed DLP work due to contractor default, prepare recovery/back-charge.
- [] Update retention register and file evidence for audit.

Outputs / Evidence:

- Retention release recommendation note
- DLP cost tracker and recovery notes

Registers / Formats used: REG-15 Retention/BG | REG-19 DLP Cost Tracker | FMT-14 Retention Release

Escalations:

- Repeated defects/unresponsive contractor -> PM-HO + Legal within 7 days.

Notes / Do not skip:

- Retention is your protection. Release only when closure is real, not verbal.

QS SOP-18: Value Engineering Support (Cost vs Function) - Controlled

Objective: Reduce cost without compromising safety, approvals, and long-term maintenance.

Trigger / Frequency: During design finalization (Phase 5) and when cost drift is detected.

Inputs:

- Design options/specifications
- Cost report and high cost drivers list
- Quality/maintenance considerations
- Approval constraints (RERA/spec/brand promises)

Step-by-step:

- [] Identify top 10 cost drivers and propose alternatives with savings estimate.
- [] Validate alternatives with architect/consultants and PM-HO (do not change specs informally).
- [] Confirm impact on approvals, timeline, and maintenance.
- [] Document VE decision with approvals and update BOQ/SOR versions.
- [] Track savings in cost report and file VE log.

Outputs / Evidence:

- VE proposal note + approved decision
- Updated BOQ/SOR versions with trail

Registers / Formats used: REG-01 BOQ Master | REG-13 Cost Report | FMT-02 Cost Plan

Escalations:

- If VE changes affect promised specs/sales commitments -> PM-HO + Sales/CRM approval required.

Notes / Do not skip:

- VE without documentation becomes a dispute. Always record decision and version change.

4. Policies (In-depth, One-by-One) - Commercial / QS

These policies are enforceable rules. They protect Swara from leakage, disputes and audit risk. Any exception must be approved in writing by PM-HO/OWN as per authority limits.

POL-01 - Document & Version Control (BOQ / SOR / CS / WO)

Policy statement: All commercial documents must be version controlled and retrievable. If the revision is unclear, treat the document as invalid for billing/approval.

Rules / enforcement:

- Every BOQ/SOR/CS/WO must carry: version no., date, prepared by, reviewed by, approved by.
- Only the latest approved version is 'active'. Archive older versions with 'superseded' label.
- Any change affecting value/time must be logged in REG-10 Change Log and communicated to PM-HO.
- File naming must follow standard convention (WO-xx, VO-xx, RA-xx, CS-xx).

Evidence / registers: REG-01, REG-03, REG-04, REG-20

POL-02 - Measurement Discipline (No Measurement = No Pay)

Policy statement: Payments are allowed only against measured and certified work as per contract measurement rules and joint signatures.

Rules / enforcement:

- No payment without signed measurement sheet/MB and RA checklist.
- Concealed work requires IR/quality clearance before measurement.
- Measurements must reference location/grid/level and BOQ item.
- Any dispute must be recorded in writing and escalated the same day.

Evidence / registers: REG-06 to REG-08 | FMT-08, FMT-09

POL-03 - Variation Order (VO) Before Execution

Policy statement: No extra/non-BOQ work may start without a written VO/rate approval, except emergency safety actions documented within 24 hours.

Rules / enforcement:

- All variations must be logged in REG-09 before work starts.
- VO must state: reason, qty basis, rate basis, amount, time impact, approvals.
- Emergency work: PM-S written instruction + VO regularization within 24 hrs.
- Unapproved extras are not eligible for payment.

Evidence / registers: REG-09, REG-10 | FMT-10, FMT-11

POL-04 - Rate Analysis & Benchmark Use

Policy statement: SOR/benchmark rates are the reference for negotiations and variations; deviations require written justification.

Rules / enforcement:

- Maintain SOR versions; update only with documented market evidence.
- Abnormal tender rates (> +/-15% vs benchmark) must be flagged in CS.
- Variation rates must follow SOR or supported quotation + analysis.
- Rate contracts must mention validity and escalation mechanism.

Evidence / registers: REG-18 | FMT-04 | SOR file

POL-05 - Retention, BG and DLP Hold

Policy statement: Retention/BG is the company's protection. Release only after documented completion and DLP closure as per contract.

Rules / enforcement:

- Track retention and BG expiry in REG-15; alert 30 days before expiry/release.
- Final bill settlement must include retention schedule and DLP obligations.
- No retention release without completion certificate and DLP closure evidence.
- Recover costs for contractor-default rectification before releasing retention.

Evidence / registers: REG-15, REG-16, REG-19 | FMT-14, FMT-15

POL-06 - Payment Certification Pack - Completeness

Policy statement: Every RA/final bill must be supported by a complete payment pack to avoid audit issues and delays.

Rules / enforcement:

- Pack must include: WO, approved VO (if any), measurement, IR clearance, invoice, deductions/retention sheet.
- Certification must follow authority matrix (PM-S certification mandatory for site packages).
- If a document is missing, mark bill as 'HOLD' and record reason in tracker.
- Scan and file within 24 hours of certification.

Evidence / registers: REG-08, REG-20 | FMT-09

POL-07 - Reconciliation & Recoveries

Policy statement: Material and quantity reconciliation is mandatory. Variance beyond tolerance must trigger recovery or corrective action.

Rules / enforcement:

- Cement/steel reconciliation is done monthly and at milestones.
- Wastage tolerance must be predefined; anything beyond requires PM-HO decision.
- Recoveries must be documented and adjusted in next RA/final bill.
- Repeated variance is treated as risk and escalated.

Evidence / registers: REG-11, REG-12 | FMT-13

POL-08 - Tendering Ethics & Confidentiality

Policy statement: Tendering is confidential and must be fair; leakage or conflict of interest damages the company.

Rules / enforcement:

- Minimum 3 quotes or approved exception.
- No sharing of competitor rates; no gifts/commission acceptance.
- Maintain tender trail: RFQ, quotes, clarifications, CS, approvals.
- Any unethical approach must be reported to PM-HO immediately.

Evidence / registers: REG-02, REG-03 | RFQ/CS files

POL-09 - Budget & Commitment Control

Policy statement: No commitment (WO/PO) should be issued without checking budget availability and approval limits.

Rules / enforcement:

- Before award, check package budget head and remaining balance.
- Record commitments immediately in cost report register.
- Large deviations require mitigation plan and PM-HO/OWN visibility.
- Do not split orders to bypass approval limits.

Evidence / registers: REG-13, REG-20 | Cost reports

POL-10 - Claims Handling - No Oral Settlements

Policy statement: All claims/disputes must be handled with evidence and written settlements only.

Rules / enforcement:

- Log every claim/notice in REG-14 within 24 hrs.
- All meetings must have minutes; all commitments must be in email/letter.
- Settlement requires approval as per authority matrix.
- Back-charge/recovery notice must reference contract clauses.

Evidence / registers: REG-14 | FMT-16

POL-11 - Final Account Closure - Zero Open Liabilities

Policy statement: Project close-out requires closure of all packages and identification of remaining liabilities/retention.

Rules / enforcement:

- No package is 'closed' without final measurement, NOC, and ledger confirmation (with Accounts).
- All pending VOs/claims must be resolved or provisioned with written note.
- Archive package file index at close-out.
- Retention release plan must be owned and tracked.

Evidence / registers: REG-16, REG-15 | Close-out report

POL-12 - Authority & Escalation Compliance (Commercial)

Policy statement: Follow Swara Authority & Escalation Matrix strictly. If approval is not in writing (email/ERP/WhatsApp screenshot attached), treat it as NOT approved.

Rules / enforcement:

- VO approvals and subcontract awards must follow matrix routes; no bypass.
- Any risk of stop-work, claim escalation, or budget drift must be escalated early (48-72 hrs rule).
- Use standard escalation message format and store evidence in escalation folder.

Evidence / registers: Authority matrix + REG-20

5. Registers (One-by-One) - printable templates

Print these registers for the commercial/QS file (or maintain in ERP/Excel) and keep them updated. Minimum templates are provided below; add rows as needed.

REG-01 - BOQ Master Register

Purpose: Single source of truth for BOQ items, quantities, revisions, and measurement basis.

BOQ Ver.	Date	Package	Item/Description	Unit	Qty	Drawing Ref.	Basis/Notes	Prepared/Checked

REG-02 - Tender / RFQ Log Register

Purpose: Track RFQs issued, vendors invited, submission dates, and status.

RFQ No.	Package	Vendors Invited	RFQ Date	Quote Due	Tech Clar.	CS No.	Status	Remarks

REG-03 - Comparative Statement (CS) Register

Purpose: Track CS versions, recommendation, approvals and award status.

CS No.	Package	Vendor (L1)	CS Ver.	Value	Reviewed By	Approved By	Award Date	Remarks

CS No.	Package	Vendor (L1)	CS Ver.	Value	Reviewed By	Approved By	Award Date	Remarks

REG-04 - Work Order / Contract Register

Purpose: Track all awarded subcontracts with values, terms, and closure status.

WO No.	Vendor	Package	WO Date	Value	Retention %	BG/Ins.	Start	End/Closure

REG-05 - Rate Contract / SOR Register

Purpose: Track approved rates, validity and revision history.

Ref No.	Category	Item	Unit	Rate	Basis (SOR/Quote)	Valid From	Valid To	Approved By

REG-06 - Measurement Book (MB) Index Register

Purpose: Index of measurement books/sheets issued and filed for each contractor/package.

MB No.	Package/Vendor	Period From	Period To	Signed (Y/N)	Scan Filed	Ref Folder	Checked By

MB No.	Package/Vendor	Period From	Period To	Signed (Y/N)	Scan Filed	Ref Folder	Checked By

REG-07 - Joint Measurement Sheet Log

Purpose: Calendar log of joint measurements and disputed items (if any).

Date	Package/Vendor	Location (Grid/Level)	Measured By	Vendor Rep.	Dispute (Y/N)	Remarks

REG-08 - RA Bill Tracker

Purpose: Track RA bill lifecycle from submission to certification and payment.

Vendor	Bill No.	Period	Submitted	Certified By	Cert Date	Amt (Rs)	Paid Date	Status/Remarks

REG-09 - Variation Order (VO) Register

Purpose: Track all variations (non-BOQ) with approval and billing status.

VO No.	Date	Package	Description/Reason	Amount (Rs)	Initiated By	Approved By	Status	Linked RA

REG-10 - Change / Drawing Revision Impact Log

Purpose: Log drawing changes and their impact on quantities, cost, and time.

Ref	Date	Drawing Rev.	Change Summary	Cost Impact	Time Impact	Action Owner	Status

REG-11 - Cement Reconciliation Register

Purpose: Monthly theoretical vs actual cement consumption and recovery actions.

Month	Work Qty Basis	Theoretical (bags)	Actual Issue	Variance	Tolerance	Action/Recovery	Approved By

REG-12 - Steel Reconciliation Register

Purpose: Monthly theoretical vs actual steel consumption and scrap/recovery control.

Month	Work Qty Basis	Theoretical (kg)	Actual Issue	Variance	Scrap Returned	Action/Recovery	Approved By

REG-13 - Monthly Cost Report Register (Budget vs Actual vs Forecast)

Purpose: Track commitments, actuals, forecast to complete (EAC) and variance reasons.

Month	Budget (Rs)	Committed	Certified	Paid	Forecast EAC	Variance	Top Reasons

REG-14 - Claims / Dispute Log

Purpose: Track contractor claims, notices, evaluation status and settlements.

Date	Vendor	Claim Ref.	Amount	Clause Ref.	Status	Owner	Remarks

Subject:	RFQ - [Project] - [Package] - Due [Date]
Attachments:	BOQ v__ Drawings list Specs Commercial terms Site visit schedule
Submission Requirements:	Sealed quote / email PDF; validity __ days; GST breakup; exclusions list
Contact for Queries:	QS: ____ PM-S: ____ (queries only in writing)
Important Note:	No oral clarifications; addendum will be issued if required.

FMT-04 - Comparative Statement (CS) Template (Decision Ready)

Purpose: Standard CS with normalization, inclusions/exclusions and recommendation.

Package / RFQ No.:	_____
CS No. & Version:	CS-__ v__ Date __
Vendors Compared:	V1 / V2 / V3 (min 3)
Commercial Summary:	L1 value Rs __ Payment terms __ Timeline __ Retention/BG __
Normalization Notes:	Taxes, lead/lift, exclusions, validity, scope gaps
Recommendation:	Award to __ at Rs __ subject to clauses/conditions
Prepared By / Checked By / Approved By:	QS / PM-S / PM-HO / OWN (as applicable)

FMT-05 - Negotiation Minutes Template

Purpose: Record negotiated rates, terms and action items with evidence.

Meeting Date / Location:	_____
Attendees (Swara / Vendor):	_____
Final Agreed Value / Discount:	Rs __ Discount __
Key Terms Agreed:	Timeline, payment, retention/BG, safety, quality
Scope Inclusions / Exclusions:	_____
Action Items & Dates:	1) __ 2) __
Sign-off:	Swara (PM-S/PM-HO) ____ Vendor ____

FMT-06 - Award Recommendation Note Template

Purpose: Internal note summarizing award decision for approvals.

Package:	_____
Selected Vendor:	_____
Final Value (Rs):	_____
Benchmark/SOR Reference:	_____
Key Risks & Mitigation:	_____
Approvals Required As Per Matrix:	PM-S / PM-HO / ACC-H / OWN
Approved By (Sign/Date):	_____

Purpose: Standard VO initiation note with qty/rate basis and justification.

VO Request No. / Date:	_____
Triggered By (Drawing/RFI/Site):	_____
Description of Change:	_____
Qty Basis + Evidence:	_____
Rate Basis (SOR/Quote):	_____
Estimated Amount & Time Impact:	Rs ____ Days ____
Initiated By (PM-S) / Prepared By (QS):	_____

FMT-11 - Variation Order (VO) Approval Note Template

Purpose: Formal VO approval record to be shared with contractor and filed.

VO No. / Version:	_____
Approved Scope & Qty:	_____
Approved Rate & Amount (Rs):	_____
Approvals (as per matrix):	PM-HO / ACC-H review OWN approval
Instruction to Execute:	Work may start only after this approval
Issued To Vendor On:	_____

FMT-12 - Monthly Cost Report Template (Executive Summary)

Purpose: One-page summary for PM-HO/OWN: status, risks, forecast and actions.

Month / Project:	_____
Budget vs Forecast EAC:	Budget Rs ____ Forecast Rs ____ Variance ____%
Top 5 Variance Drivers:	1) ____ 2) ____ 3) ____ 4) ____ 5) ____
Top 5 Commercial Risks:	1) ____ 2) ____ 3) ____ 4) ____ 5) ____
Pending Approvals/Claims:	_____
Cashflow Concern Items:	_____

FMT-13 - Cement/Steel Reconciliation Template

Purpose: Standard reconciliation sheet with variance analysis and actions.

Month	Measured Work Qty	Theoretical	Actual Issue	Variance	Tolerance	Action/Recovery

Reason / Clause Reference:	_____
Computation Basis:	_____
Adjustment Plan:	Deduct from next RA / retention
Issued By / Date:	PM-S / QS ____

FMT-17 - Contractor NOC / Final Closure Format

Purpose: Contractor declaration of no further claims after settlement.

Vendor Name / WO No.:	_____
Declaration:	We confirm receipt of final payment and have no further claims/dues.
Outstanding Items (if any):	Nil / ____
Signed By (Vendor):	Name, sign, stamp, date
Accepted By (Swara):	PM-S / QS sign, date

FMT-18 - Escalation Message Format (Commercial)

Purpose: Standard message format for escalation to maintain audit trail.

Subject:	[Project] [Package] [Issue] - Action required by [date/time]
What happened (facts):	_____
Impact (time/cost/safety):	_____
What I need from you:	Approve / Decide / Attend call / Issue instruction
Attachments/Evidence:	Photos, MB extract, VO note, email trail
Escalation Route:	PM-S -] PM-HO -] ACC-H/OWN (as applicable)

Appendix A - Escalation triggers (Commercial/QS)

Escalate early to prevent claims and stoppages. Use FMT-18 for escalation messages and attach evidence.

- Work started without WO/approved VO.
- Contractor refuses joint measurement or refuses to sign measurement sheet.
- Payment blocked due to documentation gaps for more than 7 days.
- Budget drift detected (forecast EAC exceeds approved budget tolerance).
- Cement/steel reconciliation variance beyond tolerance or theft suspicion.
- Legal notice / claim notice received from contractor.
- BG expiry within 30 days without renewal or retention release decision pending.

Standard escalation route (typical)

- Site measurement/billing issue -> PM-S (same day) -> PM-HO (within 24 hrs).
- Payment execution issue -> ACC-O -> ACC-H (same day) -> PM-HO (within 24 hrs).
- Variation approval delay -> PM-S -> PM-HO + ACC-H -> OWN (as per matrix).
- Claims/legal -> PM-HO + Legal Officer (same day).

Appendix B - 30-60-90 day onboarding plan (QS)

Use this plan for joining and stabilizing the QS function on a new project or across multiple projects.

Timeline	Focus	Deliverables	Measure of success
Day 1-30	Understand project scope, set up registers, baseline BOQ/SOR, and establish measurement/billing cycle.	Commercial control pack + baseline BOQ/SOR + tender calendar + RA workflow agreed.	Registers running; no missing docs; first CS/WO prepared cleanly.
Day 31-60	Run tenders/awards for priority packages; start monthly cost report; enforce VO discipline.	CS/WO for key packages + VO register live + cost report v1.	Zero work started without WO/VO; RA bills certified without delays.
Day 61-90	Stabilize reconciliation and close first set of final bills/milestones; create audit-ready package files.	Reconciliation reports + recovery actions + package audit files + risk dashboard.	Variance under control; audit sample passes; management sees early warnings.