

SFG NEXUS - Actionable Business Rules Summary

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Company: SFG Aluminium (UK) Ltd

Critical Business Rules for Immediate Implementation

1. Purchase Order Approval Thresholds ⚠ HIGH PRIORITY

Rule Definition

Purchase orders require different approval levels based on value:

- **Under £100:** Single approval (Operations), can auto-approve
- **£100 - £500:** Two approvals required (Operations + Finance)
- **Over £500:** Finance team mandatory approval (2 approvals)

Implementation Requirements

- **SharePoint:** Create "Purchase Order Approvals" list with calculated approval routing
- **Planner:** Task assigned based on order value threshold
- **Automation:** Auto-send email to supplier after full approval
- **MS Teams:** Notification at each approval milestone

Validation Points

- Order value calculated automatically
 - `requiresTwoApprovals` flag set based on value
 - `canAutoApprove` = true only if value < £100
 - Email sent only after `approved = true`
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2. Enquiry Response SLA ⚠ HIGH PRIORITY

Rule Definition

All enquiries must be acknowledged and responded to within strict timeframes:

- **Initial Response:** 2 hours (business hours)
- **Full Assessment:** 24 hours (business hours)
- **Quote Delivery:** 7 days (business days)
- **Follow-up:** 3 days after quote sent

Implementation Requirements

- **SharePoint:** "Enquiries" list with calculated SLA columns
- **Power Automate:** Automatic reminders when SLA approaching
- **Planner:** Bucket = "Sales Pipeline", Due date auto-calculated
- **Escalation:** Notify Sales Manager if 24-hour response missed

Monitoring

- Daily SLA compliance dashboard
- Red/amber/green status indicators
- Automated escalation emails

3. Drawing Approval Workflow ⚠ HIGH PRIORITY

Rule Definition

7-stage sequential approval process:

1. **Customer Upload** (7 days SLA)
2. **Customer Approval** (3 days SLA)
3. **Technical Review** (2 days SLA) - Tier2 Team
4. **Production Review** (1 day SLA) - Tier3 Team
5. **Cutting List Verification** (1 day SLA)
6. **Glass Sizes Verification** (1 day SLA)
7. **Final Approval** (1 day SLA)

Total SLA: 16 days

Implementation Requirements

- **SharePoint**: "Drawing Approvals" list with status workflow
- **Planner**: Separate task for each approval stage
- **Power Automate**: Auto-progress to next stage on approval
- **Version Control**: Track all drawing revisions
- **Rejection Handling**: Return to previous stage, maintain version history

Escalation Rules

- If any stage exceeds SLA by 50% → Notify Project Manager
- If Customer Approval > 7 days → Send reminder email
- If Technical Review > 2 days → Escalate to Technical Manager

4. Quote to Job Conversion Timeline ⚠ MEDIUM PRIORITY

Rule Definition

When quote status changes to "WON":

- Job automatically created with inherited quote details
- Customer PO expected within **14 days**
- Escalate to Sales Manager if PO not received within **21 days**
- Drawing approval workflow initiated automatically

Implementation Requirements

- **SharePoint**: Status change trigger in "Quotes" list
- **Power Automate**: Auto-create job record in "Jobs" list
- **Planner**: Task created in "Active Jobs" bucket
- **Due Date**: Set to +14 days from quote WON date

- **Reminder:** At day 14 and escalation at day 21

Workflow Steps

1. Verify quote approval status = APPROVED
2. Create job record (auto-generate job number)
3. Set job status = "AWAITING_PO"
4. Create Planner task for PO follow-up
5. On PO received: Update `poReceivedDate` , initiate drawing workflow

5. Survey Costing Calculation ⚠ MEDIUM PRIORITY

Rule Definition

Survey costs calculated based on distance from Manchester base (M12 5PG):

- **Formula:** `max(distance_miles × £1.00, £50.00)`
- **Exception:** FREE for Manchester area (M-prefix postcodes) if quote value < £2,000
- **Unknown Postcodes:** Default to 50 miles / £50

Implementation Requirements

- **SharePoint:** Calculated column in "Quotes" list
- **Power Automate:** Call distance calculation API
- **Display:** Show breakdown in quote form
- **Override:** Allow manual override with justification

Calculation Variables

- `cost_per_mile = £1.00`
- `minimum_charge = £50.00`
- `free_threshold_value = £2,000`
- `base_postcode = "M12 5PG"`

6. Role-Based Access Control (RBAC) - Financial Fields ⚠ HIGH PRIORITY

Rule Definition

Financial fields visible only to Tier1 (Executive/Operations) and Tier2 (Finance/Estimating):

Restricted Fields:

- Quote: `value` , `revisedPrice` , `markup` , `markupAmount` , `netValue` , `grossValue` , `baseValue`
- Job: `value`
- Supplier Order: `orderValue` , `totalAmount` , `subtotal`

Tier3 (Sales/Production/Delivery) can see:

- Quote: `quoteNumber` , `customerName` , `projectName` , `status` , `quoteDate`
- Job: `jobNumber` , `client` , `description` , `status` , `drawingStatus`
- Supplier Order: `orderNumber` , `supplier` , `status` , `orderDate`

Implementation Requirements

- **SharePoint:** Column-level permissions on all financial fields
- **Power Apps:** Conditional visibility based on user security tier

- **Reports:** Separate views for each tier
- **Audit:** Log all financial field access attempts

Priority Implementation Order

Phase 1: Immediate (Week 1)

1. **Purchase Order Approval Thresholds** - Critical for operations
2. **RBAC Setup** - Protect financial data immediately
3. **Enquiry Response SLA** - Customer-facing priority

Phase 2: Short-term (Week 2-3)

1. **Drawing Approval Workflow** - Complex but essential
2. **Quote to Job Conversion** - Business continuity

Phase 3: Medium-term (Week 4-6)

1. **Survey Costing Calculation** - Automation efficiency
 2. **MS Teams Integration** - Notification system
 3. **Automated Email Templates** - Customer/supplier communication
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SharePoint List Configuration Summary

Required Lists

1. **Enquiries** - With SLA calculations and status workflow
2. **Quotes** - With approval status, financial fields (restricted), revision tracking
3. **Jobs** - With workflow status tracking, PO received date
4. **Purchase Orders** - With approval routing, value thresholds
5. **Drawing Approvals** - With 7-stage workflow, version control
6. **Customers** - With credit status, validation tracking
7. **Suppliers** - With performance ratings, contact details

Key Calculated Columns

- **SLA Status** (Red/Amber/Green based on time elapsed)
 - **Approval Required** (based on value thresholds)
 - **Days Since Creation** (for aging reports)
 - **Next Action** (based on current status)
 - **Assigned To** (based on role and value thresholds)
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Microsoft Planner Configuration

Recommended Buckets

1. **Sales Pipeline** - New enquiries and quotes
2. **Pending Approvals** - Quotes, jobs, POs awaiting approval

3. **Customer Actions** - Items waiting for customer input
4. **Technical Review** - Drawing and specification reviews
5. **Production Planning** - Materials analysis, fabrication scheduling
6. **Procurement** - Purchase order creation and management
7. **Fabrication** - Active fabrication work
8. **Installation Planning** - Scheduling and resource allocation
9. **Completed** - Archive for closed tasks

Automation Rules

- Auto-create task when new enquiry/quote/job/PO created
- Auto-assign based on value threshold and role
- Auto-calculate due dates based on SLA
- Auto-move to next bucket on status change
- Auto-complete when parent record status = "COMPLETE"

Power Automate Flows Required

Critical Flows (Must Have)

1. **New Enquiry** → **Create Planner Task** (Due: +2 hours)
2. **Quote Won** → **Create Job + Planner Task** (Due: +14 days for PO)
3. **PO Created** → **Route for Approval** (Based on value threshold)
4. **PO Approved** → **Send Email to Supplier** (Auto-send)
5. **Drawing Stage Change** → **Notify Next Approver** (Sequential workflow)
6. **SLA Approaching** → **Send Reminder** (Daily check)
7. **SLA Exceeded** → **Escalate to Manager** (Real-time)

Supporting Flows (Should Have)

1. **Customer PO Received** → **Update Job, Start Drawing Workflow**
2. **Drawing Approved** → **Create Materials Analysis Task**
3. **Materials Analysis Complete** → **Create PO Task**
4. **Fabrication Complete** → **Create Installation Task**
5. **Quote Revision** → **Update Quote Number, Reset Approval**

MS Teams Notifications

Notification Triggers

- Quote approval required (Sales channel)
- Job created from won quote (Operations channel)
- Purchase order approval (Finance channel)
- Drawing approval stage change (Technical channel)
- Customer PO received (All channels)
- Critical SLA deadline approaching (Management channel)
- High-value order requires approval (Finance + Management channels)

Notification Format

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**Title:** Quote Approval Required
**Message:** Quote Q2025-0123 for Customer ABC Ltd requires approval.
**Value:** £12,500 (requires 2 approvals)
**Assigned To:** Sales Manager, Finance Manager
**Due:** Tomorrow 4:00 PM
**Action:** [Approve] [Reject] [View Details]

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Key Performance Indicators (KPIs)

Operational KPIs

- Enquiry response time (Target: < 2 hours)
- Quote delivery time (Target: < 7 days)
- Quote-to-job conversion rate (Target: > 30%)
- PO approval cycle time (Target: < 24 hours)
- Drawing approval cycle time (Target: < 16 days)

Financial KPIs

- Average quote value
- Average job value
- Quote win rate
- On-time PO delivery rate
- Average markup by quote type

Quality KPIs

- Drawing revision count (Target: < 2 per job)
- Customer approval first-time-through rate
- Quality check pass rate
- Installation completion on-time rate

Exception Handling Rules

Manchester Free Survey Exception

- **Condition:** Postcode starts with 'M' AND quote value < £2,000
- **Action:** Set `surveyIsFree = true` , `surveyTravelCost = £0`
- **Display:** Show "Free Survey - Manchester Local Project" on quote

Small Order Auto-Approve

- **Condition:** Order value < £100
- **Action:** Set `canAutoApprove = true` , require single approval only
- **Override:** Allow Operations staff to override approval

Self-Approval for Simple Quotes

- **Condition:** `value < £5,000 AND projectComplexity = 'SIMPLE'`
 - **Action:** Set `canSelfApprove = true` , skip approval workflow
 - **Audit:** Log all self-approved quotes for review
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Data Validation Rules

Quote Validation

- Quote number must be unique and follow format `Q{year}-{sequence}`
- Value must be `> 0`
- Customer name required
- If `requiresSurvey = true` , must have survey date or “Pending” status
- If status = “WON”, must have `poReceivedDate` within 14 days

Job Validation

- Job number must be unique and follow format `J{year}-{sequence}`
- Must link to approved quote (if converted from quote)
- `poReceivedDate` required before fabrication can start
- All drawing approval stages must complete before materials analysis

Purchase Order Validation

- Order number must be unique and follow format `PO{year}-{sequence}`
 - Order value must be `> 0`
 - Supplier must be active
 - If `orderValue >= £100` , must have `requiresTwoApprovals = true`
 - Cannot send to supplier unless `approved = true`
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Audit and Compliance

Required Audit Trails

- All approval actions (who, when, decision, notes)
- All financial field access (Tier3 must not see values)
- All self-approved quotes (for management review)
- All PO value overrides (if different from calculated value)
- All SLA breaches (with reason codes)

Compliance Checks

- Daily SLA compliance report
 - Weekly approval authority compliance check
 - Monthly quote win rate by estimator
 - Quarterly customer credit status review
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Questions Requiring Clarification

High Priority

1. **Quote Markup Percentages:** What is the target margin for each quote type?
2. **CEO Approval Threshold:** At what value does CEO approval become mandatory?
3. **Quality Check Criteria:** What are the specific pass/fail criteria for each fabrication stage?

Medium Priority

1. **Regional Survey Pricing:** Are there different pricing models beyond Manchester exception?
2. **Late Payment Handling:** What are the interest calculations and enforcement procedures?
3. **Warranty Assessment:** What triggers warranty risk assessment in quotes?

Low Priority

1. **Drawing Revision Limits:** Is there a maximum number of revisions before escalation?
 2. **Supplier Performance:** How are supplier ratings calculated and updated?
 3. **Installation Staffing:** What is the formula for determining staff requirements?
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Next Steps

1. **Review and Validate** this summary with SFG stakeholders
 2. **Clarify Unknowns** listed above
 3. **Create SharePoint Lists** with proper columns and permissions
 4. **Build Power Automate Flows** starting with critical flows
 5. **Configure Planner** with buckets and automation
 6. **Set Up MS Teams** channels and notification webhooks
 7. **Test End-to-End** with sample data
 8. **Train Users** on new processes and systems
 9. **Go Live** with phased rollout
 10. **Monitor KPIs** and adjust rules as needed
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Next Review: After stakeholder validation