

When and how to change your CNC machining supplier: **A Buyers Guide**

A clear, practical resource for procurement professionals who need **stable and reliable CNC machining supply** with minimal risk.



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Changing a CNC machining supplier is a **high impact decision**. It affects production schedules, stock levels, quality performance, compliance, customer satisfaction and internal workload.

This guide is for professional buyers and procurement teams who work with CNC machined components in regulated or quality critical environments.

It will help you:

- Decide if your current CNC machining supplier is still the right fit.
- Build a structured longlist and shortlist of alternative suppliers.
- Evaluate suppliers using clear, practical criteria.
- Plan and manage a controlled transition to a new supplier.

The focus is on stability, risk reduction and predictability. You can adapt the ideas to your own internal processes and approval routes as needed.

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Section 1:

When to review your CNC machining supplier

Not every problem justifies a supplier change. However, some patterns are clear signs that you should at least review your position.

This section sets out common triggers that procurement professionals encounter in day to day work.



1. When you are receiving inconsistent quality

Quality problems rarely happen in isolation. They appear as data trends and feedback from production, assembly, and service teams.

Typical warning signs include:

- Repeated non-conformances on the same part numbers or families of parts.
- Tolerances that are technically within drawing limits but sit at the extreme of the band.
- Inconsistent surface finish or cosmetic defects that vary from batch to batch.
- Issues that only become visible at assembly, such as misalignment or difficult fit.
- Missing, incomplete or unclear inspection records when you request evidence.

You may also see hidden costs:

- Extra time spent at goods in or in your own inspection department.
- Rework or adjustment carried out internally to keep lines running.
- Increased scrap, either at your site or at your customer.

If these patterns continue after corrective action, the supplier may not have the systems or capability to give you the stability you need.

2. When your supplier is not meeting **delivery schedules**

On time, in full delivery is a core part of supplier performance. When this fails, it often creates a chain reaction across your business.

Common indicators include:

- OTIF dropping below target for several consecutive months.
- Frequent short notice reschedules that force you to change your own plans.
- A growing number of urgent purchase orders to recover slippage.
- Extended lead times that are blamed on “capacity issues” without a clear plan.



You may also notice:

- Planning and production teams spending more time chasing updates.
- Buffer stock increasing to protect against late deliveries.
- Customer lead times slipping, which affects your reputation and revenue.

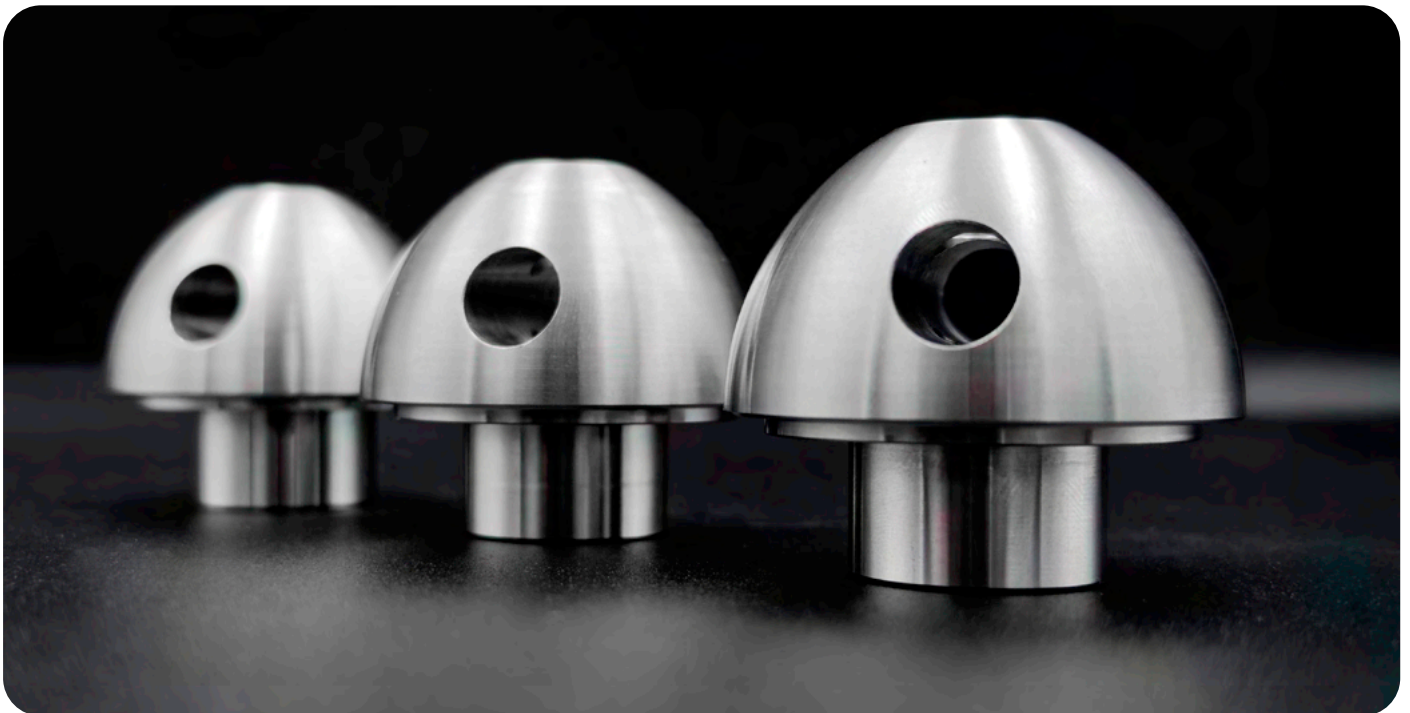
If your demand has grown over time, your existing supplier might simply not have the capacity or planning discipline to scale with you.

3. When your parts have **outgrown** your current supplier

Your products develop. New markets, new regulations and new features increase technical demands. If your suppliers do not develop at the same pace, capability gaps appear.

For example:

- Parts that require multi axis machining, complex workholding or tight geometric tolerances.
- New materials such as hardened steels, nickel alloys or specialised engineering plastics.
- Higher cosmetic expectations where parts are visible in the final product.
- A move from low volume, high variety work to more stable, repeatable series production.



When these patterns repeat, it is a strong sign that your requirements have moved on and you may have outgrown your current supplier.

4. When your supplier has become **expensive**

Sometimes the trigger for review is commercial rather than technical, although the two are often linked.

Typical triggers include:

- **Price increases** with limited or unclear explanation.
- Quotes that move well above market rates for similar work.
- Contract renewal dates that require a formal tender or benchmarking exercise.
- Internal strategies to consolidate the supply base or move to fewer, more capable suppliers.

You could be under pressure to:

- Reduce total cost of ownership rather than just unit price.
- Improve payment terms, rebates or other commercial conditions.
- Align suppliers with new group level policies or frameworks.

A commercial review is a chance to check both **cost and value**, and to confirm if your current supplier is still competitive.

5. When you need a supplier with specific certifications

Compliance gaps can create serious risk for buyers.

Compliance is central in sectors such as aerospace, medical and defence. Gaps here can create serious risk.



You may need to act if:

- ISO 9001 certification is missing, limited in scope or not maintained.
- The supplier cannot provide material certificates, batch records or inspection data to the level you require.
- Audit findings reveal weaknesses in document control, calibration or process control.
- The supplier is unable or unwilling to align with specific customer or sector standards.

It is sometimes acceptable to work with suppliers who do not hold every sector specific certification, as long as they can demonstrate equivalent controls and you are comfortable with the risk. However, absence of basic quality systems is a strong reason to look elsewhere.

6. When your current supplier has **strategic risk indicators**

Some risks are less visible but can still affect continuity of supply. Challenging trading conditions leave suppliers vulnerable to closure or other strategic risks, which leave your supply chain vulnerable.

Examples include:

- Frequent changes in ownership or corporate structure.
- Movement of key people, such as senior engineers or quality managers.
- Signs of financial pressure, such as requests for early payment or reduced investment.
- A customer portfolio that is heavily dependent on one or two large accounts.
- A site that appears full, with little physical space or equipment for growth.



If several of these apply at once, it is wise to consider alternatives before you are forced into a reactive change.

In summary...

How to know it's **time to act**

You do not need a perfect supplier.

You do need a supplier who is consistent, stable and aligned with your requirements.

It's time to review your CNC machining supplier when you see:

- Repeated quality or delivery problems that do not improve.
- Clear capability gaps on important or strategic parts.
- Compliance concerns that are hard to close.
- Commercial terms or strategic risks that no longer feel sustainable.

At that point, it is sensible to explore the market, even if you choose to retain your current supplier for part of your work.



Section 2:

How to source a new CNC machining supplier

Once you decide to review the market, you need a clear and repeatable way to find new suppliers. This helps you avoid gaps and keeps internal stakeholders aligned.

This section will showcase how to find and pre-qualify potential new suppliers for your business needs.



1. Build a longlist using diverse sources

Start wide. Use several sources rather than relying on just one channel.

Useful starting points:

- **Internal approved supplier lists**

Check if other sites or divisions already use CNC machining suppliers who perform well. Learn from existing performance and audit reports.

- **Events, plant visits and local contacts**

Plant tours, open days and word of mouth in your local manufacturing community can be useful sources of information.

- **Referrals from trusted suppliers and partners**

Ask current suppliers in related areas who they rate for CNC machining. This can reveal high quality companies that do not advertise heavily.

- **Targeted web search**

Use specific search terms based on material, process or sector. Review not only homepages but also case studies, quality pages and capability descriptions.

- **Industry associations and regional networks**

Trade associations, local manufacturing groups and cluster organisations often maintain lists of members and recommended companies.

At this stage, you are collecting names and basic information. Aim for a manageable longlist rather than an exhaustive database.

2. Validate their **real world reputation**

Once you have a longlist, begin to test whether these suppliers perform well in practice.

You can:

- Review published case studies and look for concrete outcomes, such as reduced lead times, improved yield or successful support for regulated sectors.
- Check for testimonials that include names and roles, not anonymous quotes.
- Ask new suppliers for references, and if possible speak to those customers.
- Look for evidence of long term relationships, not just short projects.
- Review the nature of content shared on professional platforms. Focus on technical insight and customer examples, not only marketing claims.

Some smaller suppliers may not invest heavily in marketing or online content, yet still deliver strong performance. Treat digital presence as one piece of evidence, not a filter that excludes everyone else.



3. Filter by operational fit

From your longlist, move to a shorter list of suppliers who are likely to fit your operational needs. This avoids wasting time on suppliers who cannot support your type of work.

Questions to guide your filter:

Part mix and complexity

Does the new supplier routinely machine parts similar to yours in terms of geometry, tolerance, and cosmetic expectations?

Volume profile

Are they set up for repeat batches, project work or very high volume? Does this match your actual and forecast demand?

Material range

Do they have experience with the metals and plastics you use most often, including any that are difficult to machine?

Supply models

Can they support the way you intend to buy, such as scheduled orders, call offs or Kanban replenishment?

Systems and data

Can they provide the documents, reports and certificates you need, in formats that integrate with your own systems?

Location and logistics

Is their site location practical for visits, audits and transport, taking into account lead times and carriage costs?

Suppliers who pass these filters form your shortlist for RFQs, site visits and detailed evaluation.

Section 3:

What to evaluate in a CNC machining supplier

With a shortlist in place, you can carry out a structured evaluation.

This section sets out key areas to examine and suggests the type of evidence you can request.



1. Quality systems and traceability

A strong quality system gives you confidence that every batch will meet specification and that any issue can be traced, contained and resolved quickly.

You are assessing more than certificates. You are checking whether quality is embedded in daily practice and supported by clear, reliable evidence.

Quality Audit Checklist

Area	Questions to ask	What 'good' looks like
Certification	How is your QMS structured and audited?	Current ISO certificates, recent audit reports, defined scope of approval.
Inspection Capability	How do you measure critical features?	Access to inspection plans, calibrated equipment lists, example inspection reports.
Inspection Strategy	How do you determine sampling and inspection frequency?	Documented rationale for inspection levels, stable processes supported by data.
Traceability	How do you maintain traceability from raw material to finished part?	Unique batch records, material certification, route cards or digital tracking.
Non-conformance	How do you investigate and prevent recurrence?	Logged NCRs with root cause analysis, corrective and preventative action evidence.
Ship to stock readiness	How do you demonstrate consistent, stable processes?	Repeat inspection data, capability studies, documented process control.

2. Engineering **capability** and process **control**

You need confidence that the supplier can turn drawings into stable, repeatable production. Strong engineering control is about clear methods, proven processes and the ability to prevent variation over the full life of a part.

How a capable supplier controls your process

- 1 New product introduction**
How they move from enquiry to a proven first batch.
- 2 Process documentation**
Set up sheets, tooling lists and instructions that any operator can follow.
- 3 Change control**
Clear approval and recording of process changes so old methods are not reused.
- 4 Material behaviour**
Awareness of how your chosen materials behave in production and how they manage risk.
- 5 Tooling and equipment strategy**
Planned, consistent tooling choices that support repeatability.

Your goal is to confirm that engineering discipline protects consistency, not individual expertise alone.

3. Delivery **performance** and capacity planning

You need a supplier who can deliver when promised and stay reliable if your demand changes.

A capable supplier plans work in a clear, structured way so every job has a defined path through the workshop and commitments match real capacity.

Lead times come from data, not optimism, and are reviewed often so you are not caught out later in the process.

When demand shifts or issues occur, they adjust the plan quickly and have contingencies that keep your priority parts moving.



Consistent delivery comes from controlled planning, not chance.

4. Commercial stability and partnership potential

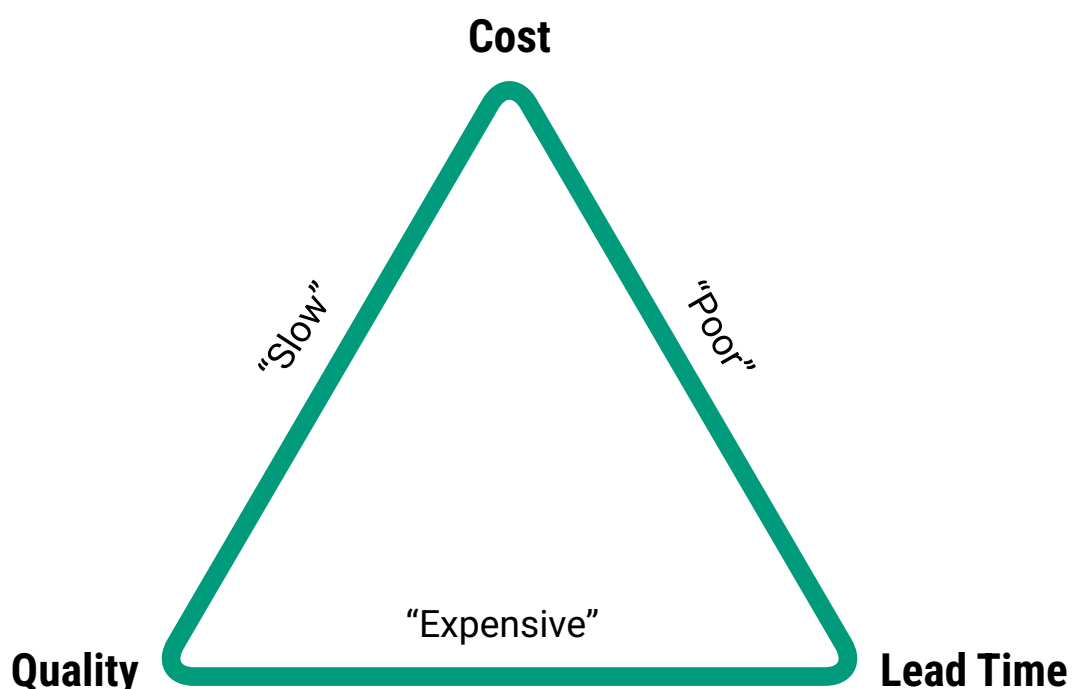
A stable partner reduces risk and supports long term continuity.

Understanding the long term fit:

Cost, quality, and lead time sit in constant tension. No supplier can optimise all three, so understanding where compromises are made is essential when assessing long-term fit.

Look for transparency. A commercially stable supplier is clear about pricing structure, lead times, and capacity limits, rather than promising everything upfront.

Over time, the strongest partnerships are built on predictability. Knowing which trade-offs are acceptable to you, and seeing how a supplier manages them in practice, is key to long-term continuity.



Section 4:

Best practice when switching to a new supplier

Selecting a supplier is only the first step. The way you introduce them has a major impact on outcomes.

This section outlines practical steps that reduce risk and support a smooth change.



1. Manage **risk** during the switch

Sometimes things can get lost in translation during the switch from old supplier to new.

We recommend creating a simple, documented transition plan. Agree it with both the new supplier and your internal stakeholders to mitigate risk within the business.

A good **transition plan** should include:

Scope and phasing

Define which part numbers will move first and which will stay with the existing supplier during the early stages. A phased transfer keeps risk contained and makes validation easier.

Pilot batches and approvals

Agree the requirements for first article inspections, sample sizes and any special checks. Set clear acceptance criteria so everyone knows when parts are ready for routine production.

Data, documentation and stock position

Confirm that drawings, models and specifications are current and aligned between teams. Review finished goods and WIP so you can adjust open orders and maintain continuity of supply throughout the change.

Risk controls and contingency

Identify the main risks that could impact the switch and agree how you will respond if they occur. Keep the plan practical so it supports quick, informed decision making.

2. Setting the relationship up for success

The first shipments from a new supplier set the tone for how the partnership will operate. This early period is where expectations become established, processes settle and any gaps in understanding surface quickly.

A few structured actions help both sides stabilise performance and build confidence.

Actions that help include:

1

Share realistic forecasts

Even if your demand varies, share the best information you have. Suppliers can plan capacity more effectively if they see likely ranges and scenarios.

2

Align KPIs early

Agree which metrics matter most to you and how they will be measured. Common examples are OTIF, PPM, response time to queries and number of concessions.

3

Define communication routes

Confirm named contacts for purchasing, planning, engineering and quality on both sides. Share contact details and preferred communication methods.

4

Hold structured early reviews

Plan regular review calls or meetings in the first few months. Keep them short and focused. Review performance, open actions and any upcoming changes in demand.

5

Capture lessons learned

If issues arise, record what happened and what was done to fix them. This helps both parties improve and prevents repeat problems.

3. What **good** looks like from both sides of the partnership

Successful supplier relationships are built on shared responsibility.

As the saying goes, it takes two to tango. Both sides need to work towards a flow of information and product that benefits both sides.

When both sides work in this way, the relationship is more productive and less stressful for everyone involved.

From the supplier:	From the buyers:
Parts that meet specification, consistently.	Clear, stable drawings and technical information.
Delivery performance that matches agreed targets.	Early notice of changes in demand or specification.
Honest, timely communication about risks and issues.	Prompt feedback on performance and quality concerns.
Structured responses to non-conformances and improvement ideas.	Fair treatment on commercial matters and payment.

Section 5:

Where Penta Precision fits in

The earlier sections of this guide set out a neutral framework for reviewing, selecting and transitioning CNC machining suppliers.

If you are applying that framework and want to compare potential suppliers, Penta Precision is one example of a UK-based manufacturer that aligns with the criteria outlined.

Our role is not to replace your evaluation process, but to fit within it.



A **partner** aligned to cross-functional needs

Penta Precision is a UK-based CNC machining partner structured around three uniques: **experts** with passion, **exceptional** quality, every time; and building **effortless** partnerships.

These uniques and our Penta Proven Process shape how work is quoted, planned, manufactured and supported once parts are in production. They are the way we aim to deliver predictable outcomes, not one-off results.

Supplier decisions rarely affect one function in isolation. While procurement may act as gatekeeper, the impact of a supplier is felt across quality, operations, engineering and leadership.

How Penta supports different teams

For procurement:

- Predictable delivery and realistic lead times
- Clear documentation, traceability, and audit readiness
- Transparent communication when risks or changes arise

For quality teams:

- ISO 9001-certified systems and controlled inspection processes
- Documented traceability from material to finished part
- Structured non-conformance and corrective action handling

For operations and planning:

- Stable production processes that support repeatability
- Clear order progression and defined escalation routes
- Capacity planning aligned to realistic demand profiles

For engineering and technical stakeholders

- Early engagement on drawings, tolerances and manufacturability
- Controlled change management once parts are in production
- Experience with complex, tolerance-critical components

Assessment, reassurance, and next steps

If you are reviewing suppliers, we encourage you to apply the [same framework and checklist](#) at the end of this guide when assessing Penta Precision.

That includes:

- Quality systems and traceability
- Engineering and process control
- Delivery performance and capacity planning
- Commercial stability and long-term fit

Our objective is to meet those criteria consistently, not to redefine them.

Designed for controlled transitions

Where a change is appropriate, we support [phased, documented introductions](#), including:

- Pilot batches and first-article approval
- Clear agreement on inspection and documentation requirements
- Early alignment between procurement, quality and operations

This approach is intended to reduce risk during transition and protect continuity of supply.

If appropriate, the next step:

If you decide to explore whether Penta Precision is a suitable fit within your supply base, the next step is simply to share your requirements.

From there, we can:

- Confirm capability and fit against your needs
- Provide evidence aligned to your evaluation criteria
- Agree whether a trial, pilot or phased introduction makes sense

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Experts with Passion

Exceptional Quality, Every Time

Building Effortless Partnerships



CNC SUPPLIER REVIEW & TRANSITION CHECKLIST

Purpose

This checklist supports structured, defensible decision-making when reviewing or transitioning CNC machining suppliers. It is intended for procurement-led environments where continuity of supply, compliance and risk control are critical.

This document can be applied to **any** CNC machining supplier.

A. Trigger & Justification

Confirm why a supplier review is appropriate.

- ☐ Repeated quality non-conformances
- ☐ Declining or unstable OTIF
- ☐ Increased internal workload
- ☐ Capability gaps (part, volume or material)
- ☐ Compliance gaps (certification, traceability, documentation)
- ☐ Commercial misalignment
- ☐ Strategic or financial risk indicators
- ☐ Mandatory tender or governance requirement
- ☐ Supply continuity risk flagged internally

Outcome:

- ☐ Review justified
 - ☐ Monitor only
-

B. Market Sourcing & Longlist Control

Demonstrate structured sourcing and due diligence.

- ☐ Approved supplier lists and internal data reviewed
 - ☐ Cross-site or cross-division references considered
 - ☐ Trusted supplier referrals used
 - ☐ Industry bodies or regional networks used
 - ☐ Targeted web search completed
 - ☐ Visits, open days or direct recommendations considered
 - ☐ Longlist documented
 - ☐ Inclusion / exclusion rationale recorded
-

C. Shortlisting & Operational Fit

Filter suppliers before RFQs, audits or site visits.

For each shortlisted supplier:

- ☐ Relevant part geometry and tolerance experience
- ☐ Volume profile fit (prototype, batch, repeat)
- ☐ Purchasing model compatibility (call-off, scheduled, Kanban)
- ☐ Practical location for audits and logistics
- ☐ Required materials and finishes supported
- ☐ Documentation formats supported

Outcome:

- ☐ Progress to evaluation
 - ☐ Remove from shortlist (reason recorded)
-

D. Supplier Evaluation – Evidence Review

Objective, evidence-based assessment.

Quality & Traceability

- ☐ Certification in scope (e.g. ISO 9001)
- ☐ Inspection capability appropriate to risk
- ☐ Inspection and sampling approach defined
- ☐ Material and batch traceability
- ☐ Non-conformance and corrective action process

Engineering & Process Control

- ☐ NPI / first-article process defined
- ☐ Work instructions and process controls
- ☐ Change control in place
- ☐ Material behaviour and machining risk understood
- ☐ Tooling and fixturing approach defined

Delivery & Capacity

- ☐ Capacity-based lead times
- ☐ Planning discipline evident
- ☐ Demand change contingencies agreed
- ☐ Communication and escalation routes defined

Commercial & Strategic Fit

- ☐ Transparent pricing structure
 - ☐ Cost / lead time / quality trade-offs understood
 - ☐ Financial and organisational stability
 - ☐ Partnership approach aligned
-

E. Transition Risk & Change Control

Demonstrate controlled onboarding and continuity protection.

- ☐ Scope and phasing defined
- ☐ Pilot batches and approval criteria agreed
- ☐ Drawing and revision alignment confirmed
- ☐ Stock, WIP and open orders managed
- ☐ Key risks and contingencies identified
- ☐ Roles and escalation paths defined

Approval status:

- ☐ Internal approval
 - ☐ Supplier approval
 - ☐ Quality / operations approval (if required)
-

F. Early-Stage Relationship Governance

Stabilise performance and reduce escalation risk.

- ☐ Named contacts across functions
 - ☐ KPIs agreed (e.g. OTIF, PPM)
 - ☐ Review cadence defined
 - ☐ Forecast and demand visibility agreed
 - ☐ Issue escalation and change routes confirmed
 - ☐ Improvement and lessons-learned loop in place
-

G. Procurement Sign-Off & Record

Protect accountability and institutional memory.

- ☐ Decision rationale recorded
- ☐ Evidence pack retained
- ☐ Risks and mitigations agreed
- ☐ Stakeholders aligned
- ☐ Review date set

Decision:

- ☐ Retain supplier
- ☐ Add secondary supplier
- ☐ Transition supplier

This checklist is intended as a reusable procurement control document and can be applied across suppliers, programmes and audit cycles.