

Multiple Sourcing: Deliberately Diversifying the Supplier Portfolio

Multiple sourcing describes a procurement strategy in which a company deliberately uses several suppliers in parallel for a good or service. The aim is to reduce dependence on individual providers and to maintain supply security even in the event of failures, shortages or price changes. The approach stands in tension with single and dual sourcing and requires well-thought-out supplier management to ensure that the benefits of diversification are not undermined by increased administrative effort.

Key facts

- Multiple sourcing means the parallel use of several suppliers for identical or interchangeable parts and services.
- The main advantages are supply security, negotiating power and flexibility during capacity peaks.
- Typical disadvantages are the higher effort required for qualification, quality assurance and supplier management.
- In practice, the effort of managing a supplier is often significantly higher than that of a mere additional order, which is why the number of parallel sources should be limited.
- The strategy is particularly suitable for A, B and partly C parts with high criticality for production.
- Rule of thumb from practice: two to five active suppliers per commodity group are often a good compromise.

Definition: Multiple Sourcing

Multiple sourcing is a procurement strategy in which at least three suppliers are managed simultaneously as active sources for the same product or service. In contrast to single sourcing, the buyer actively distributes the volume across several providers, often according to defined shares or lot sizes.

Distinction from Single and Dual Sourcing

With single sourcing, the entire volume is concentrated on one provider, which enables economies of scale and close cooperation but carries a high supply risk. Dual sourcing as an intermediate form distributes the volume across two sources and already reduces the risk considerably. Multiple sourcing goes beyond this and prioritises robustness over maximum volume discounts; in practice, the optimal compromise is often three to five suppliers per item or commodity group.

Positioning within the Sourcing Strategy

The choice of strategy typically follows a risk analysis along the dimensions of supply capability, price volatility and technology criticality. For items with high supply relevance and interchangeable specifications, much speaks in favour of multiple sourcing. For strongly customised components with unique characteristics, however, it is often only feasible to a limited extent, for example in zero-series

procurement or with long qualification cycles.

Methods and Approach for Supplier Selection

Building a multiple-sourcing portfolio follows a structured process: requirements definition, market exploration, qualification, order allocation and ongoing control. A sound data basis on commodity groups and spend is a prerequisite for every robust decision.

Market Analysis and Tender

The starting point is a structured spend analysis based on a consistent spend taxonomy, so that comparable commodity groups can be considered together. The buyer then identifies potential providers via supplier portals, trade fairs or research and invites them to submit quotations through a Request for Quote (RFQ). A uniform enquiry specification is important so that the quotations are genuinely comparable and are not distorted by differing scopes of service.

Qualification and Approval of New Sources

Suitable providers are systematically examined – from capacity and certifications to references and financial stability, with supplementary data sources such as a DUNS number being used for identification and credit assessment. Approved suppliers are placed on the Approved Vendor List (AVL) and go through defined phases within Supplier Lifecycle Management (SLM), from registration to active supply. Only after a successful sample part or pilot lot should a supplier receive regular production volume.

Volume Allocation and Allocation Model

The allocation of volume often follows pragmatic rules: a fixed ratio (for example 60/25/15), a rotation logic based on lot sizes, or a dynamic scoring based on quality, delivery reliability and price. It is sensible to secure a minimum volume for each supplier so that it remains economically viable and can ramp up at short notice if required. Otherwise this resilience comes at a price: in an emergency, a supplier will not step in for whom it has not built up an order book in parallel.

Key KPIs for Controlling Multiple Sourcing

Without reliable key metrics, multiple sourcing degenerates into a mere organisational exercise. Control is typically exercised via supplier and process metrics that are evaluated regularly and addressed in supplier meetings.

Supplier Metrics

Key metrics are on-time delivery (OTIF), the goods receipt rate without complaints and the rate of accepted quality deviations. In addition, data quality KPIs indicate whether master data, prices and supplier information are up to date and consistently maintained – an often underestimated prerequisite for being able to steer multiple sources comparably at all. For consolidating data from different systems, a central data lake has proven effective in practice as a storage and analysis basis.

Process and Cost Metrics

Also relevant are the number of active suppliers per commodity group, the share of volume per source and the cost of supplier management. A functional cost analysis can show here which administrative costs actually arise from additional sources. The lead time from enquiry to purchase order and the rate

of automated ordering processes via EDI also indicate whether the multi-source structure is being operated efficiently.

Risk and Sustainability Metrics

The degree of diversification – i.e. the share of the largest supplier in the total volume of a commodity group – shows how resilient the structure actually is. Sustainability aspects are increasingly being included: the carbon price and reported emission figures, for example on the supplier's Scope 1 emissions, are anchored in supplier evaluations. This makes diversification controllable not only in terms of risk but also in climate policy terms.

Risks and Controls in Multiple Sourcing

Several suppliers also mean several sources of error and more interfaces. The typical pitfalls can be mastered with clear controls and documented processes.

Quality Variance between the Sources

Different suppliers produce with different machine fleets, process and inspection cultures, which leads to variances in quality and delivery reliability. Remedies include uniform drawing and inspection specifications, a goods receipt inspection plan per supplier and a clear escalation culture. For recurring deviations, the 8D report has proven its worth as a structured complaint management process, the effectiveness of which is factored into supplier evaluations.

Supply Chain and Logistics Risks

Multiple sources increase complexity in logistics: different lead times, Incoterms such as FAS or DDP and different loading concepts make material planning more difficult. Cross docking and consolidated delivery schedules via the Advanced Shipping Notice (ASN) processing help bring transparency to the material flow. For international sources, export handling is added, whose deadlines and documentation requirements must be factored into the planning lead time.

Organisational Controls

A risk matrix per critical commodity group makes visible where the portfolio is too thin or too fragmented; it shows failure probabilities and impacts on production at a glance. Regular supplier evaluations, audits and contractual agreements on capacity reserves secure the implementation of the strategy. Clear governance is important: who may activate new suppliers, who reviews AVL discipline, who decides on volume reallocations?

Current Developments: Resilience, Data and Sustainability

Multiple sourcing is experiencing a renaissance due to supply chain crises, trade conflicts and decarbonisation requirements. At the same time, the focus is shifting from pure price comparisons towards resilient, transparent and data-driven supply structures.

Resilience as a Management Task

Since the disruptions of recent years, many companies have been assessing supplier risks more systematically and deliberately building up second and third sources, even if these are initially more expensive. Building a reserve source is increasingly understood as insurance whose premium can pay for itself in the form of lower failure costs. In individual cases, discussion also centres on which shares of

a dual or multiple structure should be contractually guaranteed.

Digitalisation and Data Basis

Digital procurement platforms and marketplaces lower the barrier to identifying and comparing additional sources: catalogue-based parts procurement and structured enquiries significantly accelerate market exploration. The prerequisite remains high data quality – without well-maintained item master data and classification, a patchwork of inconsistencies quickly emerges. Forecast management also helps to reliably communicate capacity requirements to multiple suppliers.

Financial and Sustainability Aspects

With several suppliers, the number of open items also rises, as does interest in flexible financing solutions such as factoring, which supports supplier liquidity and thus supply security. At the same time, customers and regulations increasingly demand evidence along the supply chain, for example on emissions and working conditions. Multiple sources also mean more reporting effort here – an aspect that should be factored into the strategy decision.

Typical metrics

On-time delivery (OTIF): > 95%

Common target value per supplier; falling below it risks volume reallocation

Goods receipt rate without complaints: > 98%

Measures quality variance between the sources

Active suppliers per critical commodity group: 2–5

Practical benchmark; more sources increase the management effort disproportionately

Volume share of the largest supplier: < 70%

Degree of diversification as a resilience indicator

Share of automated ordering processes (EDI): > 80%

Reduces the multi-source administrative effort

Practical example

A mid-sized mechanical engineering company had previously sourced a critical steel casting from a single foundry supplier. After a delivery delay of six weeks and the resulting production stoppage, the procurement team re-analysed the commodity group and built up a multiple-sourcing portfolio.

- Two additional foundries were identified through a structured Request for Quote (RFQ) and, after sample-part approval, added to the Approved Vendor List (AVL).
- The volume was allocated in a 60/25/15 ratio to secure economically viable minimum quantities for each supplier.
- A goods receipt inspection plan per supplier and a standardised 8D report for deviations harmonised the quality levels.
- An annually updated risk matrix shows supply risks and volume shares per source and governs reallocation.

Conclusion

Multiple sourcing is a proven instrument for increasing supply security and negotiating power, but it

comes with noticeable administrative and qualification effort. Success depends less on the number of suppliers than on a sound data basis, clear governance and consistent supplier evaluation. In practice, it has proven effective to deliberately limit the number of parallel sources per commodity group and to secure a minimum volume for each provider. Companies that professionalise their risk matrix, KPI control and qualification processes benefit significantly more from diversification than they bear in costs. Multiple sourcing should therefore be understood as a steered strategy, not as a mere accumulation of supply sources.

Frequently asked questions

What does multiple sourcing mean in procurement?

Multiple sourcing means that a company uses several suppliers in parallel as active sources for a product or service. The procurement volume is deliberately distributed across several providers. The objectives are greater supply security, a stronger negotiating position and flexibility when capacity fluctuates.

What is the difference between single, dual and multiple sourcing?

With single sourcing, a single supplier delivers the entire volume; with dual sourcing, two suppliers share the business. Multiple sourcing deploys three or more parallel sources. The more sources, the higher the supply reliability – but also the effort required for qualification, quality assurance and supplier management.

What are the advantages and disadvantages of multiple sourcing?

The advantages are lower supply risk, a stronger negotiating position through comparability, and flexibility during demand peaks. The disadvantages are higher administrative effort, quality variances between sources and diminishing economies of scale per supplier. In practice, the optimal compromise is often two to five active suppliers per commodity group.

For which items is multiple sourcing suitable?

Particularly suitable are standardisable parts with several qualifiable suppliers and high production criticality, such as purchased parts, standard components and services. Less suitable are strongly customised components with long approval cycles or patent-related restrictions. A risk analysis per commodity group provides clarity on the appropriate strategy.

How many suppliers should one use in multiple sourcing?

As a rule of thumb from practice, two to five active suppliers per commodity group have proven effective. What matters is that each source is allocated a minimum volume so that it remains economically viable and can ramp up capacity in an emergency. More sources do not automatically mean more security, but often merely more administrative effort.

How do you find additional suppliers for multiple sourcing?

Typical approaches are structured market searches via supplier portals and B2B marketplaces, trade fairs, industry directories and existing networks. This is followed by systematic qualification covering capacity, quality and financial checks. Approved vendors are recorded on the Approved Vendor List (AVL) and initially receive pilot or test volumes.