

Dual-Source Management: Strategic supplier management with at least two sources of supply

Dual-source management refers to the strategic and operational control of procurement positions with at least two qualified suppliers per item or product group. The aim is to limit failure risks, maintain price pressure through competition and secure the ability to supply even in the event of supply chain disruptions. The term sits in the tension between security of supply and the economies of scale that single sourcing can offer.

Key facts

- Dual sourcing means that for critical items at least two suppliers are qualified, approved and actively supplying.
- In practice, the typical volume split is between 70/30 and 50/50, depending on criticality and capacities.
- Dual sourcing reduces failure risks but requires higher ordering costs, qualification effort and coordination.
- Key KPIs are the ability to supply, supplier shares (share of wallet), backorder rate and the number of qualified second sources.
- The approach is frequently used for A and B items as well as for singleton items with a high risk of failure.
- A prerequisite is a clean part and master data basis, for example with a clear delineation in the specification per source.

Definition: dual-source management

Dual-source management is the systematic control of sourcing strategies with exactly two suppliers per position or item. It covers qualification, volume allocation, ongoing performance monitoring and risk management for both sources. It must be distinguished from multi sourcing (more than two sources) and from single sourcing (only one source).

Distinction from single and multi sourcing

With single sourcing, a company bundles its volume with one supplier, which maximises discounts and economies of scale but creates a high level of dependency. Dual sourcing deliberately keeps two sources active, typically with unequal shares, in order to combine cost benefits with risk diversification. Multi sourcing distributes volume across many providers and is more suitable for standard goods with low criticality; the administrative effort increases disproportionately.

Passive second source versus active dual supply

In practice, a distinction is made between a merely qualified second source and a second source that is

actually being supplied. A passive source without ongoing volumes frequently loses process knowledge and manufacturing proximity, meaning it can ramp up more slowly in an emergency. Many procurement departments therefore require a minimum annual share, typically 20 to 30 per cent, for the second source.

Methods and approach in dual-source management

Effective dual-source management follows a structured process: risk analysis, source selection, qualification, volume allocation and ongoing control. It should be closely interlinked with the procurement objectives and the long-term category vision of the respective product group.

Criticality and risk analysis

The starting point is the assessment of each item or product group by financial and supply risk. Criteria include, among others, substitutability, lead times, monopolies and dependencies at lower tiers of the supply chain. The results feed into the supply plan and determine for which positions dual sourcing is worthwhile and where single sourcing remains acceptable.

Qualification and volume allocation

The second source undergoes the same qualification as the primary source: sample approval, process audit, verification of process capability (Cpk/Process Capability) and release in the specification. The volume is then defined, frequently as a baseline split with adjustment mechanisms based on performance. A supplier scorecard covering delivery dates, quality data and response times controls the annual reallocation objectively.

Integration into sourcing strategies

Dual sourcing combines well with global sourcing when a local source is maintained for rapid supply and an international source for cost advantages. Nearshoring approaches also practically always lead to a dual structure: one site close to the plant, one site for base volumes. The decision is ideally documented in writing in the sourcing strategy per category.

Key KPIs in dual-source management

Without robust metrics, dual sourcing remains a paper construct. Measurement should take place at item level, not only at product group level, and be integrated into existing reporting cycles.

Supply and performance metrics

Core metrics are on-time delivery per source, the backorder rate and the average replenishment time in the event of disruption. In addition, the rate of qualified second sources per item class shows how far the strategy has been implemented. These metrics should be reported per source and per item category in order to detect shifts in the supplier portfolio at an early stage.

Cost and process metrics

Dual sourcing incurs additional costs: duplicate qualification, smaller batch sizes and higher ordering costs due to more transactions. These costs should be weighed against the avoided value at risk from supply failure. Finance metrics such as Days Payable Outstanding (DPO) per source also help to keep the impact on supplier financial risk and the working capital situation of both partners in view.

Risks and controls in dual-source management

Two sources do not automatically halve the risk, as both may depend on the same region, the same upstream suppliers or the same technology. Controls must therefore go beyond the mere number of suppliers.

False security through correlated risks

A common mistake is choosing two suppliers with identical location, raw material or machine dependencies. The risk analysis should therefore examine geographical spread, alternative materials and different manufacturing routes. Evidence requirements such as a bank guarantee for pre-products or advance payments can also supplement the cover for critical positions.

Checking compliance and sustainability

Both sources must be integrated into compliance processes to the same extent, for example via a whistleblowing system and evidence obligations regarding labour and environmental standards. Assessment approaches such as an EcoVadis rating facilitate comparison but do not replace the company's own review in individual cases. Especially with dual supply, there is otherwise a risk that the weaker source undermines quality or compliance standards.

Process discipline in operational procurement

Without clear guided-buying rules and system controls, specialist departments quickly revert to ordering from the familiar supplier; maverick buying undermines the dual-source strategy. Procurement systems should therefore specify the permitted sources per item and make deviations visible. Forecast data with good forecast accuracy helps both suppliers to maintain capacities for their volume shares.

Current developments and digital dual-source management

Supply chain disruptions in recent years have firmly established dual sourcing in many procurement principles. At the same time, tools are digitising its implementation: master data and risk databases, EDI connections for both sources and automated scorecards significantly reduce the additional effort.

Digitalisation and sustainability

Digital procurement platforms make it possible to address both suppliers through the same processes and to create transparency over volumes and performance. Sustainability aspects are gaining in importance; for example, a dual source with different material pathways can be established for the sustainable product group packaging. Transport data such as the air waybill (AWB) is also increasingly flowing into the assessment of supply robustness.

Resilience and geopolitics

Resilience has become an independent procurement objective alongside cost and quality. Geopolitical risks, export controls and energy price fluctuations increase the value of regional second sources. Many companies deliberately develop second sources at new locations as part of supplier development workshops, rather than searching for them only in a crisis.

Typical metrics

On-time delivery per source: > 95 %

usual benchmark for qualified A-suppliers, to be reported separately per source

Minimum volume share of second source: 20–30 %

secures process knowledge and ramp-up speed of the second source

Backorder rate: < 2 %

a low rate indicates functioning dual-source cover

Covered singleton items: > 80 %

share of critical items with a qualified second source

Practical example

A medium-sized mechanical engineering company sourced a critical steel sheet component entirely from a single European supplier. Following a multi-week production downtime risk analysis, a second source in the same region was qualified – but this proved to be of limited effectiveness, as both depended on the same steel mill. The company subsequently qualified a second source with an independent raw material base and switched the supply over.

- Criticality analysis across all singleton items with a focus on upstream supply chains
- Qualification of the second source with an identical specification, process audit and Cpk evidence
- Volume split of 70/30 with annual reallocation via the supplier scorecard
- Connection of both sources via EDI and fixed ordering-cost control through consolidated release cycles

Conclusion

Dual-source management is a key instrument for securing both security of supply and competitive pressure in procurement. It requires, however, more than two suppliers in the system: structured risk analysis, sound qualification, fair volume management and continuous KPI monitoring. The additional costs from duplicate processes and smaller batches must be weighed against the avoided failure risk. Those who consistently interlink dual sourcing with the category vision, the supply plan and digital processes achieve significantly higher supply chain resilience. For critical A and B items, the approach is frequently standard in DACH-region industry.

Frequently asked questions

What does dual-source management mean in procurement?

Dual-source management refers to the systematic control of procurement with at least two actively supplying suppliers per item or product group. The aim is to reduce failure risks and maintain price competition between the sources. It covers qualification, volume allocation and ongoing performance monitoring of both suppliers.

What is the difference between dual sourcing and multi sourcing?

Dual sourcing works with exactly two suppliers, multi sourcing with three or more. Dual sourcing is generally suitable for critical items where two sources provide sufficient cover at a reasonable level of effort. Multi sourcing is more suitable for standard goods, but involves higher administrative effort and smaller volumes per source.

How do you allocate volume between two suppliers?

In practice, splits of 70/30 to 50/50 are common. The allocation should be based on objective criteria such as on-time delivery, quality and price, often controlled via a supplier scorecard. A minimum share for the second source secures its process knowledge and responsiveness in the event of disruption.

What does dual sourcing cost a company?

Additional costs arise from duplicate qualification, smaller batch sizes, higher ordering costs and coordination effort. These are offset by reduced failure risks and better price pressure. Whether dual sourcing pays off depends on the criticality of the item and the financial damage caused by a supply failure.

When is single sourcing better than dual sourcing?

Single sourcing is often better for items with very high economies of scale, a close development partnership, or where only one qualified supplier exists. In that case, alternative measures such as safety stocks, contractual penalties or material substitution should mitigate the risk. A deliberate single-source decision with a risk buffer is better than unreflective dual sourcing.