

Delivery call-off adherence: measuring and managing schedule and quantity adherence of call-off orders

Delivery call-off adherence denotes the extent to which suppliers actually comply with the quantities and dates of call-off orders placed under a framework agreement. It is a key metric for the reliability of long-term supply relationships and has a direct impact on inventory, production planning and delivery service. For buyers in mechanical engineering, the electronics industry and series production, it is one of the most important indicators of a supplier's performance capability.

Key facts

- Delivery call-off adherence measures the match between the quantity and date actually delivered and the quantity called off in the call-off.
- In practice, values of typically over 95 to 98 per cent are regarded as the target level for series suppliers.
- The metric is usually calculated as the ratio of call-off items delivered on time and in full to all call-off items within a period.
- Causes of deviations often lie in capacity bottlenecks, missing upstream products, unclear call-off processes or reporting problems in the supplier portal.
- Effective control instruments include supply agreements, escalation levels, safety periods within the call-off horizon and joint capacity planning.
- The metric complements delivery capability, inventory position and schedule adherence to form an overall picture of supplier performance.

Definition: delivery call-off adherence

Delivery call-off adherence (in German: Lieferabruf-Treue; also known as schedule adherence) describes how precisely a supplier fulfils the quantities, dates and, where applicable, batches or packaging requirements specified in a delivery call-off. It answers the question of whether what was promised and ordered in the call-off is also delivered accordingly.

Distinction from mere delivery reliability

General delivery reliability often considers only compliance with the delivery date of an order. Delivery call-off adherence goes further: it relates to the call-off process under the framework agreement, i.e. to progress quantities, consolidated collection schedules and ongoing call-offs without individual purchase orders. Here, a delivery may well arrive on time but contain an incorrect quantity or variant – this too reduces call-off adherence.

Legal and contractual context

Call-offs are usually not standalone contracts but the exercise of a right of purchase under the

framework agreement. The supplier's obligation of adherence therefore arises from the terms of the framework agreement, from warranted characteristics or from separate supply agreements. Individual legal questions – for instance regarding damages in the event of a call-off breach or rights of withdrawal – must always be examined on a case-by-case basis, as the parties' standard terms vary considerably.

Measurement methods and recording procedure

Without a clean data basis, the metric is worthless. In practice, a standardised recording and evaluation procedure based on data from the inventory management system and the supplier portal has proven its worth.

Calculation logic

Adherence is frequently determined per call-off item: an item is deemed adherent if the delivered quantity is within a tolerance (typically 100 per cent or an agreed over-/under-delivery window) and the date is within a tolerance window (commonly zero to one working day). Alternatively, a quantity-weighted evaluation is used by setting the delivered quantity in relation to the called-off quantity. The choice of method should be documented in a binding manner so that values remain comparable across suppliers and periods.

Data sources and automation

The basis is the called-off requirement from the ERP system, the order acknowledgement (AB release), the goods receipt with quantity- and date-accurate posting and, where applicable, ASN data (Advanced Shipping Notice). The more automated this data flow, the less open to debate the metric becomes. Manual maintenance in the supplier portal, by contrast, regularly leads to reporting-induced apparent deviations that distort the result.

Agreeing tolerance windows

Tolerances must be defined before evaluation: permissible over- or under-delivery, permissible date shifts, the treatment of partial deliveries and of consolidated call-offs with multiple items. Without a tolerance regime, measured adherence falls merely due to small, non-critical deviations – which obscures the actual pattern of disruption.

Importance for operational planning and inventories

High call-off adherence permits low safety stocks and stable production sequences. Low adherence, by contrast, creates planning uncertainty that is paid for along the entire supply chain with buffer stocks and additional work.

Impact on inventory and warehousing

Unreliable call-off fulfilment is usually compensated for internally with increased safety stocks – capital tie-up, storage space and impairment risks rise, particularly for parts with a short technical service life. For long-runners and critical components, it is therefore worthwhile to take a separate view by material group hierarchy in order to manage risks in a targeted manner rather than buffering across the board.

Interaction with call-off quality

Call-off adherence measures only one side: the buyer too can be call-off-adherent in breach, for example through short-notice quantity changes far outside the agreed bandwidth window. A fair

assessment therefore compares both directions – how reliably the supplier delivers with a focus on call-off adherence and how stable the buyer's own call-offs are. Only in this way do robust discussions at supplier level emerge.

Relationship with delivery capability

Delivery call-off adherence and delivery capability (service level) are related but not identical: the former assesses compliance with call-offs as promised, the latter the ability to deliver ad hoc required quantities. A supplier may be adherent for planned call-offs but offer little flexibility for short-notice changes in demand – both belong in the overall assessment.

Key KPIs relating to delivery call-off adherence

Call-off adherence is most effective when combined with complementary metrics and control mechanisms. Depending on the context, several metrics have proven helpful.

KPI granularity

Beyond the overall value, a breakdown by plant, material group, supplier and part number is worthwhile. Typical patterns emerge in practice: consolidated call-offs with many items deviate more often than individual call-offs, and tightly tolerated mechanical parts are more frequently affected than standard catalogue goods. This granularity enables targeted root cause analysis instead of general complaints.

Trend and root cause KPIs

Complementary metrics that have proven useful are: the proportion of late items versus quantity-deviating items, the average date deviation in days, the proportion of unplanned expedited deliveries and the number of open escalations. It is important that trends are considered not only month by month but over twelve months, in order to distinguish seasonal effects from genuine systemic problems.

Linkage with supplier evaluation

In many companies, call-off adherence flows into supplier evaluation with weightings of typically 10 to 25 per cent. Together with quality metrics and delivery capability, it forms the operational basis for expansion stages, development measures or sanctions – such as the threat of switching to other sources of supply.

Risks, causes and effective controls

Low call-off adherence almost always has several causes at once. Those who only look for fault with the supplier frequently overlook their own process errors.

Typical cause patterns

Frequent causes include: insufficient capacity reservation at the supplier, shortages of upstream products, quality problems with scrap, overloaded logistics partners, but also unclear call-off media (e-mail instead of portal), contradictory call-off versions or short-notice quantity changes by the buyer. A structured risk register for critical suppliers helps to systematically document and monitor known bottleneck sources.

Contractual control instruments

The framework agreement should stipulate quantity bandwidths for call-offs, assurances of delivery call-off compliance, escalation levels and, where necessary, contractual penalties. In addition, measurement and reporting obligations have proven effective, for instance monthly adherence reports from the supplier with cause coding. Legally, sanctions such as contractual penalties or recourse to replacement procurement costs must be formulated carefully and examined for validity on a case-by-case basis.

Operational early warning

Effective controls start before the due date: regular AB release reconciliation, automatic alerts when a confirmation is missing, cascaded escalation a few days before the delivery date and a defined airbag concept for critical parts. In addition, joint capacity notification spanning several months has proven its worth, particularly with heavily utilised suppliers.

Supplier development instead of mere sanctioning

Persistently low values require root cause work on both sides: joint process reviews, agreement of fixed data formats, where appropriate a supplier co-innovation initiative for process improvements or inclusion in a supplier day for performance feedback. If the trend fails to improve despite support, a gradual reallocation of volume usually follows.

Current developments and digital implementation

The call-off process is digitising rapidly: portals, EDI standards and AI-supported forecasts are changing how call-off adherence is measured and achieved.

Portals, EDI and automated evaluation

Call-offs today are frequently transmitted via supplier portals or EDI messages (such as ORDRSP/DELFOR formats) and automatically reconciled with goods receipt data. Dashboards show adherence values in real time, including cause codes and open escalations. This reduces disputes over data versions and shifts the discussion from data determination to root cause elimination.

Forecast-based call-off management

Consumption-based and AI-supported demand forecasts produce more stable call-offs and avoid abrupt jumps that throw suppliers off rhythm. Transparency towards the supplier remains important: changes within the call-off horizon should be communicated within defined windows so that their capacity planning works. A well-maintained catalogue management system for standard material also relieves the call-off process, because it reduces repeat orders by drawing on existing master data.

Sustainability and resilience context

Call-off adherence is also gaining importance in the context of resilient and sustainable supply chains: short, reliable routes reduce emergency transports and thus Scope 2 emissions as well as freight emissions at transport level. Increasingly, buyers also verify reliability in the context of sustainability requirements such as Science Based Targets, because unreliable supply chains cannot be compensated for where tight CO2 targets apply.

Typical metrics

Delivery call-off adherence (item adherence): > 97 %

Target level for series suppliers in practice

Quantity adherence: > 98 %

delivered quantity within the tolerance window relative to the called-off requirement

Average date deviation: < 1 day

absolute value, late and early considered together

Proportion of unconfirmed call-offs: < 2 %

early warning indicator for process problems in the call-off data flow

Proportion of emergency expedited deliveries: < 1 %

usually rises first when call-off adherence declines

Practical example

A medium-sized mechanical engineering company with a series production share of around 60 per cent repeatedly found missing parts in assembly, even though formal delivery reliability according to reports was above 90 per cent. A detailed analysis revealed: numerous call-offs were sent by e-mail and never confirmed, partial deliveries were posted as complete, and the most important turned parts supplier only reported capacity bottlenecks after the missed date. The procurement function initiated a structured correction.

- Migration of all series call-offs to a supplier portal with automatic AB release reconciliation and confirmation obligation
- Agreement of clear tolerance windows (quantity, date) in the framework agreement with the supplier, including escalation levels
- Monthly adherence evaluation by part number with cause coding instead of blanket supplier statistics
- Establishment of a risk register for critical purchased parts with defined alternative sources of supply

Conclusion

Delivery call-off adherence is more than a statistical figure: it shows whether collaboration under the framework agreement works reliably or whether planning uncertainty along the supply chain is paid for in inventories and emergency measures. Clean data, agreed tolerance windows and an evaluation that makes root causes visible rather than merely counting symptoms are decisive. Equally important is the buyer's self-reflection, because unstable call-offs by the buyer also worsen the values. Those who measure the metric consistently, anchor it contractually and combine it with supplier development achieve sustainably stable values in the region of 97 per cent and more in practice.

Frequently asked questions

What exactly does delivery call-off adherence mean?

Delivery call-off adherence measures how precisely a supplier complies with the quantities and dates agreed in a call-off order. It is typically calculated as the proportion of call-off items fulfilled on time and in full relative to all call-off items within a period. Tolerance windows for quantity and date must be clearly defined in advance.

How is delivery call-off adherence calculated?

The usual formula is: adherent call-off items divided by all assessable call-off items, multiplied by 100. Alternatively, it is calculated weighted by quantity, i.e. delivered quantity divided by called-off quantity. In practice, values of typically over 95 to 98 per cent are considered a good level for series suppliers.

From what level is delivery call-off adherence critical?

It usually becomes critical below roughly 90 to 95 per cent, depending on the criticality of the material and safety stocks. More important than the absolute value is the trend and the distribution of root causes: frequent date shifts on tightly scheduled parts disrupt manufacturing more than occasional quantity deviations with buffer.

What causes low delivery call-off adherence?

Common causes are capacity bottlenecks at the supplier, shortcomings in upstream products, quality problems, logistics disruptions or unclear call-off processes with unconfirmed call-offs. The buyer can also be the cause, for example through short-notice quantity changes outside the agreed bandwidths. Root cause analysis should therefore always involve both sides.

How can delivery call-off adherence be improved?

Effective measures include automated call-off processes via portals or EDI, binding confirmation obligations, clear tolerance and escalation rules in the framework agreement, and joint capacity planning spanning several months. In addition, safety periods within the call-off horizon and regular supplier meetings with cause coding help. Short-term stopgaps such as expedited deliveries should be documented and reduced.

Is delivery call-off adherence the same as delivery reliability?

No, the terms are often used synonymously but are not identical. Delivery reliability often assesses only compliance with delivery dates for individual orders. Delivery call-off adherence relates specifically to call-off processes under framework agreements and includes quantity adherence – a punctual but incomplete partial delivery reduces call-off adherence.