

Optimising delivery schedule releases: steering release processes efficiently

Optimising delivery schedule releases means designing the planning and triggering of part deliveries on the basis of framework agreements and release schedules in such a way that inventory, delivery capability and process costs remain in balance. For procurement professionals, the release process is the central control element between requirements planning and supplier steering. Optimised releases reduce expensive short-notice changes, minimum quantity deviations and logistics costs. At the same time, they secure the supply of production even amid demand fluctuations.

Key facts

- Delivery schedule releases control quantities and dates of framework agreement deliveries without triggering a new purchase order for each release.
- Typical optimisation levers are release granularity, firm time windows, quantity tolerance bands (firm/flex) and transport consolidation.
- In practice, consolidated releases frequently save logistics costs in the low single-digit percentage range of transport costs.
- Lack of release discipline leads to surcharges and buffer mark-ups from suppliers as well as instability in the supply chain.
- KPIs such as release adherence, on-time delivery and inventory coverage make release quality measurable.
- Electronic formats (EDI, portals) and supply chain visibility form the foundation for reliable releases.

Definition: optimising delivery schedule releases

Delivery schedule releases refer to the regular triggering of deliveries on the basis of a framework supply agreement or call-off contract, usually via a release schedule with firm and flexible portions. Optimising in this context means aligning timing, quantities, transport consolidation and communication so that supplier and buyer can plan economically.

Distinction from the classic purchase order

Unlike a single purchase order, the release only reflects the planning framework; what is legally binding is typically the framework agreement. It is important to have a clear regulation of which release details are binding and by when changes are possible. Unclear interfaces lead in practice to disputes that escalate via the complaints management process or cancellation negotiations. Buyers should therefore anchor the release logic explicitly in the contract, similar to the contract term or Incoterms DPU and other delivery clauses.

- Framework agreement defines prices, terms and delivery logic
- Release defines specific quantity, date and mode of transport

- Firm/flex windows govern changeability

Release types in practice

Weekly or monthly releases are common, teleservice or just-in-sequence models for high volumes, and consignment-like releases with stockholding at the supplier. The choice of release type depends on the value, variant diversity and logistical relevance of the parts. Supplier segmentation provides the foundation here, as A-parts require different release granularity than C-parts. For standard parts with high volume, daily release data sets have proven successful, while contract manufacturing positions tend to be planned monthly with long firm lead times.

Methods and approach for optimising delivery schedule releases

Optimisation follows a structured sequence: analyse the current process, agree the release logic, build system support and continuously fine-tune.

Define release logic and firm/flex bands

First, firm lead times, firming windows and quantity tolerances are defined per article or part family. In practice, firm windows of around two to four weeks are common, in which quantities can no longer be changed, followed by more flexible bands with tolerances of frequently plus/minus 10 to 30 per cent. It is important to align with the supplier's capacity planning: flexibility that the supplier must hold available costs money and should be compensated in the price or via separate flexibility clauses.

- Define firm lead times per part class
- Agree tolerance bands with the supplier
- Assess flexibility economically

Quantity and transport consolidation

Releases should be coupled with logistical optimisation levers: consolidated loads, defined transport cycles, full utilisation of lorries or containers and alignment with Incoterms DPU and comparable delivery clauses. A network analysis of transport routes frequently reveals considerable consolidation potential when several plants or suppliers in one region are supplied. In practice, a fixed, weekly transport grid to which the releases are aligned has proven successful, rather than uncoordinated individual releases.

Automation and data quality

Releases should be generated system-supported from the demand of the ERP or PPS system. A clean procurement ETL process ensures that requirements data, open release quantities and dates are exchanged consistently between systems and supplier portals. Manual intervention is reserved for exceptions. Data quality is decisive: faulty master data, duplicate releases or unclear item assignments are the most common causes of release turbulence.

Key KPIs for delivery schedule releases

Releases can only be steered if their effect is measurable. The following metrics have established themselves as the core set.

Release adherence and change rate

Release adherence measures how often actually released quantities and dates correspond to the

released plan. A high change rate after firming strains the supplier relationship and frequently leads to price concessions or surcharges. In practice, release adherence of over 95 per cent is considered desirable. Both metrics should be evaluated per supplier and discussed regularly as part of supplier evaluation.

On-time delivery and inventory coverage

On-time delivery shows whether the supplier serves the release reliably; typical target values are above 98 per cent for serial parts. Inventory coverage in the supplier and receiving warehouse indicates whether release quantities are over- or under-dimensioned. If both metrics rise simultaneously, the firm/flex bands are probably set incorrectly. The on-time payment rate also belongs in the overall picture, as reliable payment increases the supplier's willingness to be flexible.

Process costs and parts per release

Transaction metrics such as the number of releases per month, average quantities per release or the effort per release transaction show whether the granularity is right. Overly fine-grained releases create handling effort without added value. Here, approaches from idea evaluation can also help: systematically evaluating and implementing improvement suggestions from the team.

Risks and controls in the release process

Unclear release rules create economic and legal risks on both sides. Controls and clear agreements minimise these dangers.

Economic risks: cancellations, minimum quantities, price increases

Short-notice release changes and cancellations can trigger additional costs at the supplier, for example for material already procured or holding stock. Framework agreements should therefore contain provisions on cancellation deadlines, minimum off-takes and compensation payments. In the event of continued breach of contract – for example repeated release breaches – suppliers retain termination for cause as a last resort. Conversely, buyers must cover default risk and non-delivery risk with a risk mitigation plan.

Process risks: duplicate releases and data breaks

In SAP and portal environments, parallel releases easily arise via different channels, for example when a purchase order is placed in addition to the framework release. Double deliveries, shortfalls and inventory discrepancies are the consequences. Effective controls are reconciliation of open release quantities with goods receipts, a clear channel protocol (only one binding communication route) and regular reconciliations with the supplier, ideally with traceability of materials down to batch level.

Legal and documentary aspects

Releases are documents with evidentiary function, for example in the event of delivery delays or in complaints management. Customs and commercial documents such as the commercial invoice or the bill of lading must also be consistent with the release data for international releases. For certain products, the long-term supplier's declaration is part of the delivery documentation. Since individual questions of burden of proof and binding effect must be assessed differently depending on the contract, the wording should be reviewed legally.

Current developments in delivery schedule releases

Digitalisation, transparency requirements and supply chain dynamics are changing the release process significantly.

EDI, portals and supply chain visibility

Instead of paper-based or email releases, more and more companies are using EDI formats (such as EDIFACT DELINS or ANSI X12 830) or supplier portals. Supply chain visibility – i.e. real-time transparency on demand, stock and transport status – allows more dynamic releases with simultaneously lower buffer requirements. Small and medium-sized suppliers are frequently integrated via portals, as setting up EDI interfaces would be disproportionately expensive for them.

Sustainability and regulatory requirements in releases

Sustainability requirements also affect the release process: consolidated transports reduce emissions, and packaging requirements such as obligations under packaging legislation must be taken into account for reusable and single-use systems. Supply chain due diligence obligations increase the pressure for gap-free documentation along the supply relationship. Releases thus also become an instrument of evidence for transport-saving and compliance-compliant processes.

Resilience instead of pure cost reduction

Experience of recent years shows that pure just-in-time optimisation is fragile. More and more procurement organisations combine lean releases with buffer strategies, dual sourcing structures and backward-planned award schedules for new parts. Lessons learned from crisis situations are regularly incorporated into the firm/flex rule sets. Tool procurement with tool deposits and the associated build-up of second sources also changes the release logic in the long term.

Typical metrics

Release adherence: > 95%

Proportion of quantities/dates adhered to against the released plan

On-time delivery (OTD): > 98%

Delivery date and quantity reliability of the supplier against the release

Inventory coverage: 5–15 days

typical target range for serial parts with stable releases

Release change rate: < 5%

Proportion of release items changed after firming

Transport utilisation potential: up to 10%

common saving potential through consolidation of releases

Practical example

A medium-sized mechanical engineering company previously supplied its assembly lines via uncoordinated daily releases to more than 80 suppliers. This resulted in high freight costs, frequent short-notice requests and considerable coordination effort in procurement. Following a restructuring, the release process was converted within three months.

- Introduction of a fixed weekly release grid with firm/flex bands (firm two weeks, flex plus/minus 20

per cent)

- Transport consolidation via a network analysis: consolidated loads instead of individual releases, alignment of Incoterms with the freight forwarders
- EDI connection of the ten most important suppliers, portal integration of the rest, a clean procurement ETL process for requirements data
- Monthly KPI review covering release adherence, on-time delivery and inventory coverage per supplier

Conclusion

Optimising delivery schedule releases is one of the most cost-effective measures in operational procurement because it works without new procurement: it reduces inventory, transport costs and process effort while simultaneously stabilising delivery capability. The prerequisites are clear firm/flex rule sets, clean master data and binding communication channels. Measurable KPIs and regular supplier meetings maintain release discipline. Digitalisation via EDI and portals scales the optimisation across the entire supplier base. Those who systematically improve releases create the foundation for resilient and economical supplier relationships.

Frequently asked questions

What is a delivery schedule release?

A delivery schedule release is the binding or semi-binding triggering of a partial delivery based on a framework or call-off contract. It contains quantity, date and transport details without a separate purchase order being created. The legal binding effect arises from the contract and the agreed release logic.

How does a release schedule with firm and flexible portions work?

The schedule shows requirements over several weeks or months with increasing firmness: near-term weeks are fixed, further-out weeks are flexible with tolerance bands. Typical fixed windows are two to four weeks and flexibilities of plus/minus 10 to 30 per cent. The exact values are agreed with the supplier by part class.

How can delivery schedule releases be made more efficient?

Key levers are the consolidation of releases and transports, clear firm/flex bands, clean master data and automated release generation from the ERP system. In addition, a fixed transport grid, portal or EDI integration and regular KPI reviews with suppliers help. It is important to hold flexibility only where it is economically justified.

What happens if a delivery schedule release is cancelled?

The consequences depend on the framework agreement: cancellation deadlines and compensation payments for material already procured or parts manufactured specifically are common. Short-notice cancellations strain the supplier relationship and can trigger additional costs. In the long term, cancellation rules, minimum off-takes and compensation clauses should be fixed contractually.

What is the difference between a release and a purchase order?

The purchase order is the classic, fully binding order document for a defined quantity and date. The release controls deliveries from an already concluded framework agreement and is typically quantity-

and date-related, not price-relevant. In many systems, releases are nevertheless managed as items with a reference to the contract.