

Detention: storage charges for delayed container collection

Detention refers to the charge levied by shipping lines or container lessors when import containers are not returned to the carrier promptly by the consignee after the free collection period has expired. The term plays a central role in ocean freight and multimodal transport and hits importers and shippers directly in their cost budget. For buyers and supply chain managers, detention is a typical component of delivery and logistics costs that can largely be avoided through careful process control, clear contractual provisions and reliable scheduling data.

Key facts

- Detention is the storage charge for the late return of containers to the shipping line or its depot.
- Detention is opposed by demurrage, which is incurred when the container is delayed at the port terminal.
- Typical free time in practice ranges from two to seven calendar days, depending on the port and contract.
- For imports, the consignee generally bears the risk of detention costs unless alternative delivery terms have been agreed.
- Delivery terms (Incoterms), freight forwarding partners and data quality in goods receipt largely determine who pays detention.
- Detention can be measurably reduced through transparency, forward planning and clear responsibilities in the warehouse process.

Definition: Detention

Detention is a contractual penalty or flat-rate charge for the use of a container beyond the agreed free time period after it has been handed over to the consignee for collection or unloading. It ends with the physical return of the empty container to the designated depot.

Distinction from demurrage

Demurrage is incurred when a container remains at the port terminal because it is not collected from the terminal within the agreed deadline. Detention generally only begins once the container has left the terminal and relates to the period during which the container is at the consignee's premises but is not unloaded and returned in good time. The two terms are frequently confused in everyday usage; however, a clear distinction is important for cost accountability and negotiations with shipping lines.

Legal and contractual basis

The amount and deadlines for detention are governed by the shipping line's terms and conditions of carriage, the bill of lading or separate framework agreements with the carrier. Whether the consignee or the shipper bears the costs depends heavily on the agreed delivery terms. As the provisions vary depending on the contract and legal jurisdiction, specific cases should be legally examined individually.

before a final assessment is made.

Typical amounts and periods

In practice, free time for import containers typically ranges from two to seven days; in heavily frequented ports or for container types in high demand, free time may also be shorter. The charge typically increases on a staggered daily basis and can rise considerably over time. In the event of long delays, further costs are incurred, such as storage fees or transport surcharges.

Methods and approach: avoiding detention

Detention is not an unavoidable circumstance but is generally the result of unclear responsibilities or inadequate scheduling data in the unloading and return process. A structured approach reduces the costs sustainably.

Clarify delivery terms and carrier contracts

In procurement, it should be clearly defined for each import route from which Incoterm the consignee assumes the risk of detention and which free time applies. Framework agreements with shipping lines or freight forwarders should include, in addition to deadlines, rules for exceptional situations such as port closures, strikes or capacity bottlenecks. Negotiating leverage arises from volume: with bundled quantities across multiple locations, more generous free time or flat-rate terms can often be achieved.

Standardise processes at goods receipt

At goods receipt, it is decided whether a container is unloaded within the free time and reported back as empty equipment. This requires fixed escalation routes in the event of missed deadlines, clear assignment of containers to purchase orders and reliable scheduling. A continuous coordination process between the freight forwarder, warehouse management and dispatch planning prevents containers from remaining unopened because, for example, customs documents or warehouse spaces are missing.

Create transparency through data analysis in procurement

Anyone wishing to reduce detention in a targeted manner needs reliable data: container numbers, collection dates, unloading dates and return dates should be recorded in a structured manner. Systematic data analysis in procurement shows which locations, carriers or product groups are particularly frequently affected. Combined with supply chain mapping, it becomes possible to identify whether bottlenecks arise at the port, at the consignee or in the distribution chain. Adequate data quality is a prerequisite; a regular data quality report shows where master data or process documentation has gaps.

Key KPIs for controlling detention

Detention costs can only be controlled if they are made measurable and allocated to the right organisational units. Several key figures have proven effective for this purpose.

Detention costs per container or per TEU

This key figure compares detention expenditure across routes, carriers and periods. It shows whether rising costs are due to operational problems at the location or to changed carrier terms. In practice, it is usually evaluated monthly and reconciled with the applicable free time model.

Rate of on-time returns

The proportion of containers returned within the free time period is a direct process indicator. Values below approximately 90 per cent indicate structural bottlenecks at goods receipt in practice, such as insufficient warehouse capacity, missing documents or unclear responsibilities. The target is typically a rate significantly above 95 per cent.

Average dwell time at the location

The average time between container collection and empty return is the earliest measurable indicator. It enables forecasts before costs arise and is easier to control operationally than the pure cost total. When locations or target groups are compared, it frequently becomes apparent that it is not the transport route but the internal unloading speed that is the decisive lever.

Risks and controls relating to detention

Detention causes not only direct costs but also knock-on problems: unplanned liquidity strain, disputes with carriers and, in extreme cases, delays that feed into the production process. Controls must therefore be applied at several points.

Cost risk and allocation problems

In practice, detention charges are frequently invoiced on a flat-rate basis and are difficult to verify without clean container tracking. Without a comparison of the container list, waybill and goods receipt data, it remains unclear whether the invoicing is correct. Responsibilities between procurement, logistics and the warehouse should be regulated in writing so that charges do not pass through unchecked.

Operational risks in the supply chain

Long container dwell times at the consignee can be a symptom of deeper problems, such as a supplier capacity risk for preliminary products or disruptions in production planning. In crisis management teams, detention is therefore often regarded as an early indicator: if dwell times rise, there is often a bottleneck at the site or in the supply chain. The risk also increases in the short term during a supplier changeover or the introduction of new routes, because processes are not yet stable.

Contractual controls and audit

Detention terms, free time and obligations to provide evidence should be firmly anchored in carrier and freight forwarding contracts. A regular audit of logistics service providers, supplemented by a structured supplier audit score, shows whether agreed processes are actually being followed. Evidence is decisive for claims: anyone who systematically documents unloading and return data can successfully reclaim unjustified charges.

Current developments: detention in a digital and regulated environment

In recent years, detention has come more into the focus of regulatory authorities and digital process solutions. This presents buyers with both new requirements and new levers.

Transparency through digital freight data

Digital freight documents, tracking platforms and structured status reports make container movements

considerably more transparent today than a few years ago. With a clean integration into e-procurement in procurement or a transport management system, collection and return dates can be recorded automatically. This reduces manual effort and creates the data basis needed for negotiations with carriers and internal cost allocation.

Regulatory pressure on shipping lines

In several trading jurisdictions, supervisory authorities have in recent years taken a critical view of the transparency of detention and demurrage charges and have called for greater obligations on carriers to provide evidence. From a buyer's perspective, this means: unjustified charges can today be successfully contested more frequently. However, the specific legal frameworks differ from market to market; an examination of each individual case remains necessary.

Detention as part of strategic supplier management

As part of supplier segmentation, detention performance can be used as a quality criterion for logistics service providers and carriers. Anyone wishing to qualify as a preferred supplier for transport services should also demonstrably excel in free time, invoicing transparency and response times to delays. This turns detention from a pure cost item into a selection criterion in the supplier portfolio.

Typical metrics

On-time container return rate: > 95%

Proportion of containers returned within the free time

Detention costs per container: trend-stable, close to zero

to be evaluated monthly per location and carrier

Average container dwell time: < free time

earliest measurable indicator before costs arise

Practical example

A medium-sized mechanical engineering company imported components via a North German seaport and, within just a few months, had accumulated detention charges that exceeded the level of the freight costs themselves. The analysis showed that a large proportion of the containers were standing at the site because customs documents were submitted late and warehouse capacity was tight at month-end.

- Introduction of a binding collection and unloading deadline per container with escalation after 48 hours
- Bundling of freight volumes to renegotiate free time with two carriers
- Establishment of structured container tracking and a monthly data quality report for import processes
- Inclusion of detention performance in the audit of logistics service providers

Conclusion

At first glance, detention is a detail problem of ocean freight, but in aggregate it is a relevant cost and control lever for all companies with import volumes. The decisive levers lie not solely in charge negotiations but in clearly regulated delivery terms, reliable scheduling data and a structured process at goods receipt. Those who make detention visible through key figures can detect deteriorations early and

argue their case in discussions with carriers and service providers. Moreover, the indicator provides valuable clues to deeper bottlenecks in the supply chain. For buyers, it is therefore worthwhile taking a systematic look at this topic as an integral part of transport and supplier management.

Frequently asked questions

What is the difference between detention and demurrage?

Demurrage is incurred when a container remains at the port terminal for too long before being collected. Detention relates to the period during which the container is at the consignee's premises but is not unloaded and returned empty within the agreed time limit. Both charges are normally invoiced separately by shipping lines.

Who pays detention costs on an import shipment?

As a general rule, the consignee bears the risk if the container is not returned in good time after handover. Alternative arrangements can be made through the agreed delivery terms and carrier contracts. The specific contractual situation should be examined on a case-by-case basis.

How long is a container free of charge before detention is incurred?

In practice, free time periods typically range from two to seven days, depending on the port, container type and contractual agreement. Where container shortages are acute or ports are heavily frequented, free time may also be shorter. The specific deadlines are set out in the carrier's terms and conditions of carriage.

Can detention charges be reclaimed?

Yes, if the invoicing is incorrect or the carrier fails to meet its obligations to provide evidence. What is decisive is complete documentation of collection, unloading and return dates. Without systematic container tracking, a successful claim is difficult to achieve in practice.

How can a company reduce detention costs?

The key levers are clear delivery terms, reliable unloading processes at goods receipt and structured container tracking. Framework agreements with bundled volumes often enable more favourable free time. Continuous data analysis reveals which routes or locations are particularly affected.