Incoterms CFR: Clearly separating cost and risk in sea freight

Incoterms CFR (Cost and Freight) is one of eleven delivery terms of the International Chamber of Commerce (ICC) and governs who bears transport costs and risk in international purchases by sea. The seller pays the freight to the named port of destination, but the risk already transfers to the buyer upon loading the goods onto the vessel at the port of departure. For buyers, CFR is therefore a term that creates a clear separation between cost responsibility and risk bearing and, in practice, requires careful protection through transport insurance.

As of October 2026 · amplifa-marketplace.ai/en/glossary/incoterms-cfr

Key facts at a glance

01 CFR belongs to the ICC Incoterms family and applies exclusively to sea and inland waterway transport.

02 In a CFR purchase, the seller bears the freight costs to the named port of destination, but not the transport risk from the moment of loading.

03 Risk transfers as soon as the goods have been placed on board the vessel at the port of departure.

04 The buyer bears import clearance as well as costs at the port of destination.

05 CFR is structurally equivalent to CPT but is limited to sea freight.

06 Incoterms must always be specified with a year of the current ICC edition, usually Incoterms 2020.

Definition: Incoterms CFR

CFR stands for Cost and Freight and denotes a delivery term in which the seller covers the costs of the main transport to the named port of destination. However, the transfer of risk already takes place at the port of departure, once the goods are on board the vessel. This difference between the cost point and the risk point is the central characteristic of the C-terms.

Classification within the Incoterms family

The eleven Incoterms of the 2020 edition are divided into two groups: rules for any mode of transport (EXW, FCA, CPT, CIP, DAP, DPU, DDP) and rules for sea and inland waterway transport (FAS, FOB, CFR, CIF). CFR is one of the C-terms, under which the seller contractually organises and pays for the main transport. Crucially, the C-terms are not arrival terms: despite paying the freight to the port of destination, the seller owes only a proper dispatch, not the arrival of the goods.

- C-terms: seller pays the main transport, risk transfers early (CFR, CIF, CPT, CIP).
- E-, F- and D-terms differ significantly in the transfer of risk and the cost items.

Cost and risk allocation in detail

The seller typically bears export packaging, loading at their own plant or terminal, export clearance as well as the sea freight to the named port of destination. From loading on board, the risk lies with the buyer, even while the freight is still in transit. The buyer organises and pays for the transport insurance at their own expense, as well as import clearance, port charges, unloading at the port of destination and the onward transport.

- Cost point seller: freight to the port of destination.
- Risk point seller: loading on board at the port of departure.
- Insurance: no obligation for the seller, recommendation for the buyer.

Methods and approach: applying CFR correctly in procurement

For CFR to work in the procurement process, the purchase contract, transport planning and documentation must be coordinated. Buyers should not view the term in isolation, but in the context of supplier evaluation, transport insurance and customs clearance.

Correct application of the term in the purchase contract

The term is always formulated as "CFR <named port of destination> Incoterms 2020", for example "CFR Hamburg Incoterms 2020". A mere reference to "CFR" without place and version creates unnecessary interpretation risks. In addition, buyers should stipulate in the contract who provides which documents, who takes out the insurance and how shipping notifications are to be made.

- Always state the named port and the ICC edition.
- Fix documentation obligations (bill of lading, invoice, packing list) contractually.
- Agree notification obligations of the seller regarding readiness for shipment.

Securing insurance and transport risk

Because under CFR the risk transfers to the buyer upon loading without the seller insuring, the buyer should take out transport insurance covering the period from loading to the plant. In practice, framework insurance policies with customary levels of cover are suitable, whose premiums are frequently in the low per-mille range of the goods value. Without insurance, the buyer bears the full loss

in the event of maritime accidents, theft or damage.

- Review a framework insurance policy for all CFR deliveries.
- Align the scope of cover with the goods risks (moisture, impact, temperature).
- Link the start of insurance to the transfer of risk.

Integration into procurement processes

CFR deliveries can be easily integrated into standardised procurement processes, for example when the ordering policy and the three-way match cover the goods receipt. When importing from low-cost countries, CFR is often a compromise: the seller organises the freight using their contacts and terms, while the buyer retains control over customs, insurance and inland transport. Anyone building long-term, high-volume relationships should examine whether taking over the freight by the buyer under FOB or FCA is more economical.

- Standardise delivery terms in tenders and framework agreements.
- Compare freight and customs costs in a total calculation (landed cost).
- Use supply market intelligence for freight rates and port capacities.

Important KPIs and economic considerations for CFR

Whether CFR makes sense for a supply relationship is revealed by metrics that link costs, schedule reliability and risk bearing. Buyers should regularly evaluate these figures as part of supplier risk management and supplier evaluation.

Logistics and process metrics

Key performance indicators are the supplier's delivery performance and the time-to-dock, i.e. the actual lead time from loading to arrival at the port of destination. High variances lead to inventory buffers and increase the backorder rate in production. The transport cost share per unit should also be continuously compared with alternative terms such as FOB.

- Delivery performance: CFR deliveries on time and in full.
- Backorder rate: shortages arising from late import deliveries.
- Landed cost per unit: works costs including freight, customs, insurance.

Service level and inventory effects

Because the risk transfers to the buyer upon loading, every disruption on the sea leg directly affects the service level and the consumption forecast. Companies with a high share of overseas materials therefore typically work with safety stocks of several weeks of demand for CFR goods. The inventory value flows into tied-up capital and should be weighed against the savings of sea freight.

- Define safety stock per CFR supply source.
- Offset capital tied up in the warehouse against transport cost savings.
- Regularly reconcile the consumption forecast with actual transit data.

Risks and controls for Incoterms CFR

The biggest structural disadvantage of CFR lies in the constellation in which the seller books the freight but the buyer bears the transport risk. Without targeted controls, this results in considerable potential for loss.

Typical risks of the CFR term

The seller typically selects the carrier or freight forwarder according to their own criteria, in particular cost. For the buyer, transit quality is therefore only controllable to a limited extent, even though they bear the risk. In addition, discrepancies may arise between the bill of lading and the actual loading date, which complicates documentation for customs and insurance.

- Risk-cost discrepancy: cost responsibility with the seller, risk bearing with the buyer.
- No entitlement to the fastest route or a specific shipping connection.
- Documentation risks with the bill of lading and loading date.

Controls and preventive measures

Effective controls address the contract, the process and the document review. The risk mitigation plan should include the failure of an important sea route or delay due to port congestion as a scenario. Supplier risk management for critical CFR suppliers supplements this view with supplier failures, quality fluctuations and workaround options.

- Supplier visit and audit to review the loading processes.
- Risk mitigation plan with alternative routes and substitute suppliers.
- Regular reconciliation of bill of lading, commercial invoice and freight documents in the three-way match.

Legal classification

The Incoterms are not laws but ICC standard rules which only take effect if the parties agree them in the contract. Details such as transfer of ownership, warranty claims or rights of withdrawal are deliberately not governed by the Incoterms; here the chosen governing law applies. For cross-border CFR purchases with preference agreements, the EUR.1 preference certificate is also relevant for customs-privileged imports. The specific design should be legally reviewed on a case-by-case basis.

- Incoterms govern neither ownership nor warranty.
- Agree the applicable contract law separately.
- Check the EUR.1 preference certificate for preference-eligible countries of origin.

Current developments: CFR in the changing supply chains

Sea transport, customs clearance and the procurement organisation are constantly changing. For CFR purchases, this has consequences for terms, processes and sustainability requirements.

Digital processes in import logistics

The digital supply chain is increasingly reaching sea freight as well: track and trace at container or consignment level, electronic bills of lading and automated customs declarations reduce manual effort. E-procurement systems increasingly integrate freight costs into order and invoice verification. For CFR purchases, this means that transit data is available earlier and planning on the basis of the master production schedule (MPS) can be more precise.

- Integrate track and trace for CFR consignments into the procurement system.
- Electronic documents accelerate customs and insurance processes.
- Linking to the MPS and the consumption forecast improves schedule planning.

Sustainability and emissions accounting

Companies with emission reporting obligations require knowledge of the chosen shipping route and mode of transport for CFR goods, even if the seller books the freight. Information on fuel and emission intensity is not yet consistently available in practice; contractual supplementary agreements help. The recycled content quota for packaging from overseas is also increasingly becoming part of procurement requirements.

- Collect and evaluate emissions data per supply source.
- Anchor packaging and recycled content requirements contractually.
- Observe change management when switching transport routes.

Freight market and terms strategy

Sea freight rates are subject to marked fluctuations due to capacity bottlenecks, route failures and demand peaks. Buyers who fix CFR terms over longer framework contracts bear the risk of freight fluctuations being priced into the supplier's sales price. Regular market monitoring and a scoring model for supplier comparison including logistics costs help to keep terms up to date.

- Regularly observe freight indices and factor them into calculations.
- Agree price adjustment clauses for freight changes in the framework agreement.
- Examine economies of scale by bundling volumes across several CFR suppliers.

Typical metrics

Metric	Typical value
Delivery Performance (CFR deliveries)	> 95% *Proportion of import deliveries on time and in full; typical guideline value depending on industry.*
Backorder rate	< 2% *Shortages resulting from delayed CFR deliveries; lower values indicate stable transit times.*

Insurance premium (transport)	typically 0.1–0.5% of the goods value *Typical guideline value for marine framework insurance policies, depending on route and type of goods.*
Transit time variance (time-to-dock)	< ± 3–5 days *Low variance reduces safety stock and tied-up capital.*

Practical example

A medium-sized mechanical engineering company sourced castings from Asia on CFR terms to the port of destination Hamburg. After repeated delays and a transport damage claim without sufficient cover, the company restructured the procurement of this item on a structured basis.

- Conclusion of a framework transport insurance policy with cover commencing upon loading at the port of departure.
- Supplementing the risk mitigation plan with alternative routes and a qualified second supplier.
- Agreeing detailed notification and documentation obligations in the framework agreement, checked in the three-way match.
- Comparative calculation of CFR versus FOB with own freight procurement to determine the optimal landed cost.

Conclusion

Incoterms CFR is a well-established term for sea transports in which the seller pays the freight to the port of destination, but the transport risk already transfers to the buyer upon loading. It is precisely this difference that makes CFR demanding for buyers: without their own transport insurance and without control over freight selection, a relevant risk gap remains uncovered. In practice, CFR pays off above all when the seller has better freight terms and the buyer controls the insurance and import handling themselves. For high-volume or critical supply relationships, it should be regularly examined whether FOB or FCA is the better alternative. Anyone who consistently versioning terms, documents them and integrates them into metrics such as landed cost and delivery performance minimises interpretation risks and keeps the supply chain under control.

Frequently asked questions

? What does Incoterms CFR mean?

CFR stands for Cost and Freight and is an ICC delivery term for sea and inland waterway transport. The seller bears the freight costs to the named port of destination, but the risk already transfers upon loading the goods on board at the port of departure. The buyer arranges insurance, import clearance and onward transport at their own expense.

? Who is obliged to insure under CFR?

Under CFR, neither party is contractually obliged to insure. However, since the risk lies with the buyer from the moment of loading on board, the buyer alone should take out transport insurance. In practice, this is implemented via framework insurance policies with customary market cover.

? What is the difference between CFR and CIF?

Both terms provide that the seller pays the sea freight to the port of destination. The difference lies in the insurance: under CIF, the seller is obliged to take out transport insurance for the buyer, under CFR not. The transfer of risk is identical under both terms and occurs on board at the port of departure.

? When does risk transfer under CFR?

Risk transfers when the goods have been placed on board the vessel at the named port of departure. From then on, the buyer bears all risks of the sea transport, even though they do not pay the freight themselves. This applies regardless of when the goods physically arrive at the port of destination.

? Is CFR possible for air freight or truck transport?

No, CFR is expressly limited to sea and inland waterway transport. For containers, which are often transported multimodally, CPT or CIP is frequently recommended in practice, as these terms cover all modes of transport. For mixed transport chains with pre- and on-carriage, the fit between the term and the actual transport route should be reviewed.

? When is CFR sensible for buyers?

CFR is suitable when the seller has better freight terms and established forwarding contacts, but the buyer wants to retain control over insurance, customs and inland transport. For long-term, high-volume relationships from low-cost countries, switching to FOB may also pay off in order to procure the freight themselves. The decision should be made on the basis of a landed cost analysis.

Find the right suppliers on Amplifa

Verified industrial suppliers in Germany, Austria and Switzerland. Describe your requirement and receive comparable offers.

amplifa-marketplace.ai