

Export Control: Compliance in International Technology Trade

Export control refers to the entirety of the legal provisions by which states monitor the export of goods, technology and services across borders. For technical buyers and manufacturing companies, it is a central compliance area that directly influences supply chains, supplier selection and contract terms. Violations can lead to severe penalties, trade restrictions and reputational damage. A structured understanding of export control is therefore part of the core competence of every strategic buyer.

Key facts

- Export control regulates the export of goods, software and technology on the basis of national and international legal frameworks.
- Central elements are list checks (control lists), recipient and end-use checks as well as sanctions list screening.
- In Germany, BAFA is the competent export authority; EU regulations apply union-wide.
- Procurement is also affected: incoming inspections, supply chains and re-exports are likewise subject to control obligations.
- Compliance processes can be measured using KPIs such as screening rate, inspection rate and lead time.
- Deficient export control can lead to fines, criminal consequences and supply failures.

Definition: Export Control

Export control comprises all state regulations that restrict or make licence-dependent the export, transfer, transit and, in some cases, intra-EU movement of goods, software and technology. Its aim is to control the proliferation of arms, dual-use goods and strategically sensitive technologies and to enforce sanctions regimes.

Legal Sources and Institutions

In practice, several regulatory levels interact: the EU Dual-Use Regulation, national foreign trade regulations and international regimes such as the Wassenaar Arrangement lists. In Germany, the Federal Office for Economic Affairs and Export Control (BAFA) is the central licensing authority, supplemented by customs authorities for physical controls. Buyers should always check the current legal position, as lists and sanctions change frequently and the information given here is of a general nature.

Dual-Use Goods

Dual-use goods are goods, software and technology that can be used for civilian purposes but also have military or proliferation-sensitive applications. Typical examples from day-to-day procurement include high-performance materials, certain electronic components, encryption technology and specialised production equipment. Classification is based on technical parameters in the control lists – a

check that should often already be carried out when drafting the specification for new components.

Distinction from Customs and Trade Compliance

Export control must not be equated with customs clearance: while customs governs the collection of duties, export control pursues security and foreign policy objectives. Trade compliance covers both fields as well as further topics such as rules of origin. For procurement, this means that a transaction that is unremarkable under customs law may nevertheless be subject to export control obligations.

Methods and Approach in Export Control

Effective export control follows a standardised review process extending from the first quotation to the physical export. In procurement, the approach resembles a risk-based screening process such as those used in supplier segmentation or supplier onboarding: layer by layer, it is examined whether a transaction is permissible at all and which licences are required.

Control List and Technology Checks

The starting point is checking whether an item is listed on an export control list (e.g. the EU Annex). This requires detailed technical knowledge – material data sheets, specifications and performance values must be available in full. In unclear cases, it is advisable to involve export control officers or external consultants before making an award decision.

Recipient, End-Use and Sanctions Screening

In addition to the goods, the business partner is screened: listing on sanctions lists (e.g. UN, EU or national lists), involvement in prohibited end uses, and risk indicators such as unusual supply chains or civilian cover for military use. In practice, screenings are integrated into automated workflow rules (P2P) and ERP processes and are repeated for every new transaction as well as periodically.

Licences and Documentation

Where a licence is required, the exporting company applies for it from the competent authority; lead times vary considerably from case to case and should be factored into delivery scheduling as a buffer. All check steps must be documented in an audit-proof manner. This documentation obligation resembles the logic of an incoming goods and quality inspection: without a documented check, authorities will deem the process not to have been carried out properly.

Key Export Control KPIs

Export control, like any compliance process, can be steered using measurable KPIs. These figures help to allocate resources in a targeted manner and to make weak points in the process visible. In procurement, they can also form the basis for setting service level targets towards internal stakeholders.

Process KPIs

Typical KPIs are the screening rate (proportion of business partners screened), the false positive rate in automated screenings, the duration of licensing procedures and the proportion of licence applications submitted on time. High false positive rates burden the team and extend time-to-contract; fine-tuning screening parameters often brings rapid improvements here.

Supply Chain and Quality Metrics

On the supplier side, suitable metrics include the proportion of export-control-relevant suppliers with valid supplier approval, the currency of compliance declarations in supplier onboarding and the number of incidents (compliance incident rate). These figures can be discussed well in quarterly business reviews (QBRs) with strategic suppliers in order to make improvements measurable.

Metrics in Supply Chain Transparency

In the context of supply chain mapping, the proportion of suppliers whose upstream suppliers are export-control-relevant can be documented. In practice, this visibility is often the bottleneck: many companies know their suppliers well, but hardly their sub-suppliers. Building such transparency is a lengthy process, but indispensable for sanction risks along the supply chain.

Risks and Controls in Procurement

For buyers, export control creates concrete risks: supply failures due to missing licences, contractual penalties, fines and personal liability of employees. Structurally, these risks resemble transport risk or currency risk in procurement – they are real, but manageable with clear controls.

Procurement-Side Risks

Three scenarios in particular are critical: the purchase of dual-use components without sufficient documentation, sourcing from countries with questionable end uses, and the case where own deliveries reach embargoed destinations as re-exports by the customer. For this reason, export control criteria should also be defined as a hard exclusion criterion in supplier approval.

Contractual Controls

Contracts should contain end-use and re-export clauses, audit rights and information obligations in the event of legislative changes. In tenders, reference to export-control-relevant requirements must be included in the specification so that offers are comparable and no award guidelines or internal governance are violated. Have every wording reviewed legally on a case-by-case basis – the information given here is of a general nature.

Organisational Controls

A multi-level control model has proven its worth: the four-eyes principle for critical transactions, periodic training for procurement and sales, a reporting system for compliance incidents and regular internal audits. A supplier ESG improvement plan can be readily transferred methodologically to export control deficiencies: clear targets, timelines and evidence instead of blanket exclusions.

Current Developments and Outlook

Export control is undergoing a marked transformation: geopolitical tensions, sanctions regimes against several states and the growing focus on strategic technologies are increasing complexity. At the same time, pressure is growing on companies to have oversight of the entire supply chain – not just their own exports.

Supply Chain and Sanctions Enforcement

Sanctions are increasingly aimed not only at direct exports but also at diversion transactions and intermediaries. Buyers and sales must therefore jointly carry out supply chain mapping and check via

which routes critical components actually flow. A supply base optimisation focused only on price and capacity falls short here.

Digitalisation and Automation

Automated screening tools, ERP integration and interfaces to customs and licensing processes significantly reduce manual effort. More recent developments use data analytics to detect unusual patterns in transaction chains. What remains important: software supports but does not replace expert assessment by trained personnel.

Strategic Procurement Strategy

Export control risks are increasingly being integrated into procurement strategy: dual sourcing for critical goods, shifting suppliers to lower-risk regions and building safety stocks for licence-required components. Such measures increase supply security and should be made visible in the total cost tree as compliance and risk costs.

Typical metrics

Screening coverage: 100%

Proportion of business partners with documented sanctions list screening

False positive rate: typically 5–15%

A low rate relieves the team; in practice highly dependent on parameters

Licensing lead time: highly case-dependent

Determined by the control list and the authority; plan as a buffer

Compliance incident rate: target of 0

Number of reported incidents per year; the trend matters more than the absolute value

Approval rate for critical suppliers: > 95%

Proportion of export-control-relevant suppliers with valid supplier approval

Practical example

A mid-sized mechanical engineering company manufactures precision components for customers in various world regions. When introducing a new cutting tool system, procurement discovered that two key components might be listed in the EU Dual-Use lists. The company then systematically expanded its processes.

- Introduction of a mandatory checkpoint in the specification that records export-control-relevant technical parameters for all new parts.
- Automated sanctions list screening of all suppliers during supplier onboarding plus quarterly re-screening.
- Agreement of end-use and re-export clauses in standard contracts as well as audit rights for critical suppliers.
- Inclusion of export control KPIs in quarterly business reviews with strategic suppliers and internal training of the procurement team.

Conclusion

For manufacturing companies, export control is not purely a sales issue but affects the entire value

creation process – from the specification through supplier selection to export. Buyers who systematically embed review processes, contract clauses and KPIs reduce not only legal risks but also the risk of supply failures. What matters is a risk-based approach that keeps effort and exposure in balance. The legal position changes dynamically; always examine concrete cases with expert advice and on an individual basis. Those who regard compliance as part of a robust procurement strategy also gain a competitive advantage with critical customers.

Frequently asked questions

What falls under export control?

Export control covers exports of goods, software and technology listed on control lists – in particular arms items and dual-use goods. The transfer of technical know-how, for example via drawings or training, may also require a licence. In addition, recipients, end users and intermediaries are subject to sanctions and end-use checks.

Which authority is responsible for export control in Germany?

In Germany, the Federal Office for Economic Affairs and Export Control (BAFA) is the central licensing authority for exports. Customs authorities also play a role in physical controls, and other bodies are involved in specific regulatory areas. The key legal bases are primarily the EU Dual-Use Regulation and the German Foreign Trade and Payments Regulation.

What are dual-use goods?

Dual-use goods are goods, software and technology that can be used for both civilian and military or proliferation-sensitive purposes. Examples from industry include certain materials, electronic components, encryption technology and specialised production machinery. Classification is based on technical parameters in the EU control lists and international regimes.

What penalties apply for violations of export control?

Violations can lead to substantial fines, criminal prosecution, the loss of export licences and considerable reputational damage. In addition, supply failures may occur if authorities block transactions or business partners appear on sanctions lists. The level of sanctions varies depending on the legal jurisdiction and the individual case – in the B2B sector, fines are typically in the six- to seven-figure range or above.

How does export control affect procurement?

Procurement must ensure that purchased goods are correctly classified, that suppliers are sanctions-free and that contracts contain appropriate end-use and re-export clauses. Export control criteria should be included in supplier approval and in the specification for tenders. Moreover, licensing lead times can extend delivery dates and should be factored into scheduling.

What is an end-use certificate?

An end-use certificate is a declaration by the recipient confirming where and for what purpose a good will be used and that no unauthorised re-exports will take place. Authorities frequently require it for sensitive goods as a basis for licensing. Buyers should critically review its authenticity and plausibility, as forged certificates are a typical circumvention pattern.