

Conflict Minerals: conflict minerals in the procurement and compliance process

Conflict minerals are minerals and metals whose extraction and trade in conflict-affected or high-risk areas can finance human rights abuses and violence. For industrial companies, this creates far-reaching obligations in the supply chain, particularly for tin, tantalum, tungsten and gold. This glossary article explains the definition, legal framework, review processes and KPIs relating to conflict minerals as well as practical approaches for procurement and supply chain management.

Key facts

- Conflict minerals typically comprise tin, tantalum, tungsten and gold (3TG) from conflict-affected and high-risk areas.
- The key legal bases in practice are the US Dodd-Frank Act provision and the EU Conflict Minerals Regulation.
- Suppliers are usually queried using the CMRT reporting template of the Responsible Minerals Initiative.
- The due diligence obligations are based on the OECD Guidance for responsible supply chains.
- Direct obligations apply to metal-processing companies and importers in the EU; further processors are frequently affected indirectly.
- Compliance data are master data and audit-relevant documents in supplier management.

Definition: conflict minerals

Conflict minerals are raw materials whose proceeds can finance conflicts or which may be associated with serious human rights abuses. The term originates from US legislation and has established itself internationally as a collective term for problematic minerals.

The four core minerals (3TG)

Primarily meant are tin (cassiterite), tantalum (tantalite), tungsten (wolframite) and gold, collectively referred to as 3TG. These metals are found in almost every electronic product: solder, capacitors, carbide tools, contacts and coatings. As they are supplied via multi-stage refining and trading chains, the origin is rarely traceable without systematic research. A typical component manufacturer sources several hundred upstream products that may contain 3TG – irrespective of whether procurement has actively selected for this.

Distinction: conflict areas and high-risk areas

Strictly speaking, conflict minerals in the narrower sense refers to materials from the Democratic Republic of the Congo and neighbouring countries. The EU regulation broadens the view to global high-risk areas where mining may be accompanied by violence, forced labour or child labour. For procurement, this means: the geographical review must not be limited to Central Africa but must be carried out on the basis of current risk assessments. Other raw materials such as cobalt or mica are

increasingly assessed according to similar standards but do not legally fall under the classic conflict minerals definition.

Relevance for B2B purchasers

Many purchasers underestimate that conflict minerals also occur in mechanical components: carbide inserts, coatings, solder or gold plating on contacts. In tenders and supplier audits, the question of 3TG is therefore increasingly a standard element of supplier evaluation and procurement policy. Suppliers who themselves deliver to automotive, aerospace or medical customers typically receive the requirement passed on via specifications and framework agreements and must cascade it down their own supply chain.

Legal framework and obligations: Dodd-Frank, EU Regulation and supply chain laws

Several regulatory frameworks overlap in practice. Anyone exporting, importing or reporting as a listed company must distinguish which obligations apply in each case. Detailed review should be accompanied by legal advice.

US Dodd-Frank Act, Section 1502

Section 1502 obliges US-listed companies to report annually on whether 3TG originates from the DRC region. German or Austrian mid-sized companies are frequently affected indirectly because their customers request such reports and pass the proof obligation on contractually. In practice, this is mapped through contractual assurances and audit rights in the framework agreement. Purchasers should check whether their own customers expect similar clauses and request the corresponding evidence accordingly.

EU Conflict Minerals Regulation

The EU Regulation (No. 2017/821) has bound importers of 3TG in relevant quantities to due diligence obligations based on the OECD Guidance since 2021. It applies to importers bringing metals and minerals into the EU – not directly to downstream further processors. However, the latter benefit through a recognition system: suppliers with conformant due diligence can be listed as reliable sources. The threshold quantities per mineral are defined in the regulation; in individual cases, it must be checked whether a company is captured as an importer or merely carries out further processing.

Supply chain laws and ESG reporting

Germany introduced the Supply Chain Due Diligence Act as a binding basis; at EU level, the supply chain directive package (CSDDD) points towards harmonised due diligence obligations, complemented by sustainability reporting. Human rights risks in raw material extraction are among the typical priorities of these regulatory frameworks. For procurement, this creates double documentation pressure: conflict-minerals-specific reports plus general ESG requirements. Those who combine processes and data management from the outset avoid duplicate work in supplier enquiries and audit management.

Methods and approach: due diligence in procurement

The OECD Guidance defines a five-step framework that has proven itself in practice as a working guide for procurement organisations. It can be interlinked with existing supplier selection and document review

processes.

Supplier survey with CMRT and EMRT

The de facto standard for enquiries is the Conflict Minerals Reporting Template (CMRT) of the Responsible Minerals Initiative; for mica, there is the Extended Minerals Reporting Template (EMRT). Suppliers declare in it which smelters and mines their 3TG originates from and affirm the origin. Important: the CMRT is a self-declaration without independent verification. Purchasers should therefore check completeness, currency and plausibility – for example, whether submitted declarations match the scope of the enquiry and whether reactivation dates are up to date.

Smelter assessment and the Conformant list

The real lever of scrutiny lies at smelter and refiner level, as this is where the raw materials are mixed. The Responsible Minerals Initiative maintains a conformant list of audited smelters (Conformant Smelters). In practice, this means: the facilities named in the CMRTs are checked against this list. Where entries are missing or facilities are not conformant, a redressal plan is typically demanded from the supplier – a documented commitment to replace non-conformant sources within a defined period.

Integration into procurement processes

So that conflict minerals data do not exist as an isolated compliance silo, integration into existing workflows is recommended: inclusion as a requirement in tender documents, checking the CMRT during supplier onboarding, and linking to the contract repository so that expired declarations count as documented evidence that is monitored in sync with the contract lifecycle. When qualifying new suppliers for critical material groups, the 3TG question can be combined with the conventional risk review, for example together with AEO status or quality audits. This creates no additional standalone enquiries but a consolidated query with clear escalation paths in the event of no response.

Key KPIs: measurability of conflict minerals compliance

Conflict minerals management can be steered via key figures like any procurement process. Common measures are response rates, degrees of conformity and cycle times.

Supplier response rate and report currency

The CMRT response rate indicates the proportion of relevant suppliers who have submitted a valid declaration. Leading organisations achieve rates above 95 per cent in practice; below 80 per cent is generally considered in need of improvement. In addition, the proportion of reports less than twelve months old counts – outdated declarations provide no information on the current supply status. Both key figures can be fed directly from document management if CMRTs are stored with version control like certificates.

Smelter conformity and redressal rate

The degree of conformity describes the proportion of reported smelters that are on the Conformant list or under review. Typical target values are above 85 to 90 per cent, depending on the material group. The redressal rate measures how many open cases were actually closed within the agreed period. It is the decisive indicator of whether enquiries trigger genuine follow-up processes or merely produce paperwork.

Process metrics and cycle times

Cycle times also prove useful as a supplementary metric: how long does it take from the initial dispatch of the enquiry to a valid response? Values of several weeks to months are common in practice; clear deadlines in the enquiry process reduce this duration. Those who use deviation workflows can manage rejected or incomplete CMRTs as a defined deviation case – analogous to known review procedures such as the quantity deviation workflow – thereby making processing standards and escalation levels visible.

Risks and controls: where conflict minerals affect procurement

Risks range from reputational and legal obligations to operational disruption when conformant sources of supply are lacking at short notice. Controls must be close to the process and documentable.

Compliance and reputational risks

Incorrect or missing declarations can lead to regulatory objections, contractual liability cases and reputational damage – particularly in consumer markets with a sensitive public. In addition, informal sanctions threaten: customers remove suppliers from source lists if reports remain faulty. Purchasers should therefore check names and dates on CMRTs, match company names against the actual supplier and query contradictory statements rather than silently accepting them.

Supply chain and availability risks

Those who have to exclude non-conformant smelters potentially lose sources of supply – a genuine supply risk for materials with few refiners. Smelters dropping out require an adjustment to the sourcing strategy; here it is worth coordinating with demand planning to plan pipeline stock and transition periods realistically before material blocks take effect. Blocked stock management also becomes relevant when parts with open conformity issues may temporarily not be installed.

Control instruments and documentation

Effective controls combine stipulation and verification: contractual assurances with evidence and audit obligations, standardised storage of CMRTs, annual reactivation and risk-based deepening where irregularities arise. For objections, a structured problem-solving process – such as the 8D report – has proven effective in systematically clarifying the causes of incomplete declarations and preventing recurrence. For audits and customer enquiries, a documented chain of declaration, review, result and action suffices; it is often more valuable than perfectly worded policy texts.

Current developments: regulatory dynamics and broadening of the term

Regulatory pressure is growing and the focus is shifting from four minerals towards broader raw material due diligence obligations. Purchasers should actively follow these developments.

Extension to further raw materials

Cobalt, mica, graphite and rare earths are increasingly coming into the focus of due diligence obligations because of their importance for battery and electronic products. The EMRT approach points the direction: reporting templates and customer enquiries today often cover more than the classic 3TG. Procurement organisations are well advised to design their enquiries so that additional raw materials

can be added without a new system landscape.

Digitalisation and traceability

Traceability initiatives and digital origin tracking down to mine level are gaining in importance but remain laborious. In practice, smelter-based review continues to dominate as a pragmatic compromise between effort and meaningfulness. Automated workflows – for example for reminding about outstanding declarations, similar to a structured dunning run – noticeably reduce manual effort and measurably improve data quality.

Link with sustainability and procurement strategy

Conflict minerals are increasingly seen as part of a comprehensive raw materials strategy rather than an isolated compliance task. Companies that integrate responsibility standards into supplier segmentation and qualification criteria achieve higher response rates with less follow-up effort. The link to an overarching procurement strategy – including targets for responsible sourcing – turns a mandatory exercise into a strategic topic area with measurable impact.

Typical metrics

CMRT response rate: > 95 %

Proportion of relevant suppliers with a valid declaration; below 80 % is generally considered in need of improvement in practice

Report currency: > 90 % less than 12 months old

Older CMRTs provide no information on the current status

Smelter conformity: > 85–90 %

Proportion of reported smelters on the Conformant list or under review

Redressal closure rate: > 90 % on time

Measures whether open cases are closed within the agreed period

Practical example

A mid-sized manufacturer of control systems supplies assemblies to automotive and industrial customers. In response to a customer enquiry on 3TG compliance, it becomes apparent: only around half of the relevant suppliers have submitted a valid CMRT, several reports are more than two years old, and individual smelters are not on the Conformant list. The company then builds a structured process and firmly embeds conflict minerals in its supplier management.

- The CMRT enquiry becomes part of supplier qualification and annual reactivation; reminders run automatically with defined deadlines.
- All reports are stored centrally with version control; expiry dates trigger active follow-up requests.
- Non-conformant smelters are checked against the Conformant list; suppliers receive redressal plans with deadlines.
- Contractual assurances and audit rights are systematically incorporated into new contracts and renewals.

Conclusion

Conflict minerals are not a niche topic of electronics procurement but a regulated component of supply

chain risk management. Procurement organisations that integrate enquiry, review and follow-up into existing processes meet customer and regulatory requirements without significant additional effort. Three levers are decisive: complete supplier enquiries using standardised templates, systematic smelter assessment and documented redressal processes. Key figures on response rate, currency and conformity make the level of maturity measurable. Those who take account early of regulatory dynamics and the extension to further raw materials avoid duplicate reorganisations and secure both supply capability and reputation.

Frequently asked questions

What are conflict minerals in simple terms?

Conflict minerals are minerals and metals – typically tin, tantalum, tungsten and gold (3TG) – whose extraction or trade in conflict-affected or high-risk areas can finance violence and human rights abuses. Companies are required to check whether these substances are contained in their products and where they originate. The basis includes, among others, the OECD Guidance as well as US and EU legislation.

Which laws govern conflict minerals?

In the USA, Section 1502 of the Dodd-Frank Act governs the reporting obligation of listed companies. In the EU, the Conflict Minerals Regulation (EU) 2017/821 applies with due diligence obligations for importers. In addition, national supply chain laws and sustainability reporting apply, which require due diligence along the entire supply chain. In individual cases, the legal application should be reviewed professionally.

What is the CMRT?

The Conflict Minerals Reporting Template (CMRT) is a standardised questionnaire issued by the Responsible Minerals Initiative, with which suppliers declare which smelters and mines feed their 3TG supply. It is a self-declaration without independent verification and is updated annually. Purchasers use it to query and document compliance uniformly along the supply chain.

Which companies are affected by the EU Conflict Minerals Regulation?

Directly covered are importers of tin, tantalum, tungsten and gold into the EU in certain minimum quantities. Downstream companies such as further processors or traders are not directly subject to the due diligence obligations but benefit from reliable suppliers. In practice, requirements are frequently passed on contractually along the supply chain, so that mid-sized companies also have to respond to customer requests.

How do you demonstrate conflict minerals compliance?

Typical measures include valid CMRT declarations from suppliers, checking the smelters named against the RMI Conformant list, and contractual assurances with audit rights. Where irregularities arise, redressal plans and their closure are documented. For audits and customer enquiries, a fully documented chain of declaration, review, result and action is sufficient.

Do conflict minerals obligations also apply to machinery manufacturers without electronics?

Yes, often indirectly. Even mechanical components can contain 3TG, for example in carbide tools, coatings, solder joints or gold plating. Moreover, automotive and industrial customers pass their compliance requirements on to suppliers contractually. A targeted material group analysis shows where

relevant substances occur in your own parts catalogue.