WHITE PAPER

The 65 percent limit

Why the Critical Raw Materials Act Is Fundamentally Changes Procurement and Electronics Manufacturing

Dirk Kaussen · EMS Strategy Group · August 14, 2026

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Introduction

The **Critical Raw Materials Act (CRMA)** has become an integral part of the discussion about the future of European industry. Hardly a conference, sustainability report, or strategic presentation can do without referring to the new regulation. But therein lies a risk: simply knowing the term can easily create the impression that its actual implications are already understood.

However, the reality in business often looks quite different.

When procurement or engineering departments are specifically asked about the origin of critical raw materials or the upstream supply chains of individual components, reliable answers are often unavailable. The reason is simple: this information has traditionally not been part of bills of materials, supplier contracts, or standard qualification processes.

This is precisely where the Critical Raw Materials Act comes into play. It requires significantly greater transparency regarding the origin, processing, and concentration risks of strategic raw materials. As a result, the role of procurement is fundamentally changing. Simply selecting a qualified supplier will often no longer be sufficient. The crucial factor will be whether supply chains can be traced and documented all the way back to the raw material processing stage.

This white paper outlines the key requirements of the CRMA, highlights the gap between regulatory expectations and current operational practice, and explains why establishing documented alternative supplier structures is becoming a strategic necessity for many electronics manufacturers.

The focus is less on the regulation itself than on its practical implications for procurement, supply chain management, and printed circuit board (PCB) and electronics manufacturing.

What the CRMA Specifically Requires

The Critical Raw Materials Act (CRMA), officially Regulation (EU) 2024/1252, entered into force on 23 May 2024 and applies directly in all Member States of the European Union. Unlike a directive, the regulation did not require transposition into national law and therefore has direct legal effect.

The regulation defines four strategic targets that the European Union aims to achieve by 2030:

Domestic extraction	At least **10%** of the EU's annual demand for strategic raw materials is to be supplied through domestic mining.
Processing	At least **40%** of the EU's annual demand is to be covered by processing within the European Union.
Recycling	At least **25%** of the EU's annual demand is to come from European recycling.
Diversification	No more than **65%** of the EU's annual demand for any strategic raw material may originate from a single third country at any relevant stage of processing.

Strategic raw materials include gallium, germanium, silicon, copper, and several rare earth elements—precisely those materials used in microcontrollers, power semiconductors, substrates, and passive electronic components.

Behind these targets lies a clear industrial policy objective: the European Union aims to gradually reduce its dependence on individual third countries for strategic raw materials while strengthening the long-term security of supply for key industries.

This initiative was driven, among other things, by export restrictions on gallium, germanium, and various rare earth elements, which have clearly demonstrated in recent years how heavily Europe depends on a limited number of countries for many technologies of the future.

Particular attention has been given to the 65% threshold. Its purpose is to ensure that the European Union does not become more than 65% dependent on a single third country for any strategic raw material at a relevant processing stage. At first glance, this objective appears both reasonable and well suited to strengthening security of supply.

However, a closer look reveals an important distinction.

The 65% threshold refers to the European Union's total annual demand—not to the sourcing structure of individual companies. As a result, overall EU statistics may suggest a well-diversified supply base, while individual manufacturers remain highly dependent on a single country of origin or even a single refinery.

This is precisely where the greatest gap emerges between regulatory requirements and operational reality.

For procurement managers, simply having multiple suppliers under contract will no longer be sufficient. The crucial question is whether these suppliers are supported by independent supply chains with different processing stages. Understanding the difference between achieving EU-wide diversification targets and building genuinely resilient supply chains is one of the central themes of this white paper.

The Point at Which Theory Becomes Practice

For two years, the Critical Raw Materials Act (CRMA) remained primarily a political signal for many companies, with little immediate impact on day-to-day business. That is now changing.

By 24 November 2026, all EU Member States must have established effective, proportionate, and dissuasive penalties for violations of the regulation. From that point onwards, non-compliance will no longer be an abstract risk but may result in concrete national sanctions.

In addition, another important requirement comes into effect. Large companies with more than 500 employees that manufacture certain strategic technologies within the European Union will be required to conduct a risk assessment of their supply chains for strategic raw materials every two years.

For many electronics manufacturers and their suppliers, this means documenting, for the first time, the actual origin of critical raw materials and the processing stages they have undergone before becoming finished components.

The Black Box in Your Bill of Materials

If you ask a procurement department today about the origin of a microcontroller wafer, a ceramic substrate, or a connector, the answer usually ends with the supplier's name. It rarely extends to the refinery and almost never to the country where the underlying raw material was mined or processed.

This is not a shortcoming of individual procurement organisations. For decades, bills of materials, supplier contracts, and qualification processes have been designed around criteria such as price, quality, technology, and delivery capability—not around the complete traceability of strategic raw materials.

This is precisely what the CRMA changes.

As customer requirements, supplier audits, and certification processes become more comprehensive, companies will increasingly be expected to demonstrate transparency beyond their direct suppliers, often extending to second- and third-tier suppliers.

Anyone who believes these requirements can be met simply by referring to a certified supplier underestimates the actual dependencies within the supply chain. A European supplier may source all of its raw materials from the same refinery as a competitor in another region.

As a result, future supply chain assessments will depend not only on the contractual supplier but also on the actual origin of the raw materials used and the processing stages they have undergone before becoming finished components.

Why the 65 Percent Threshold Is Particularly Challenging for the Electronics Industry

The 65 percent threshold initially appears to be a moderate target. However, a closer look at the current market distribution of several raw materials that are essential for electronics manufacturing shows just how ambitious this objective really is.

- Gallium, indispensable for semiconductors, LEDs, and high-frequency components – China's share of global production is around 94 percent.
- Germanium, important for fibre-optic technology and infrared sensors – China's share is around 83 percent.
- Rare earth processing, essential for permanent magnets and numerous electronic components – China accounts for more than 90 percent of global refining capacity, according to the International Energy Agency (IEA).

These figures illustrate why diversification at the contractual level alone contributes only marginally to reducing supply chain risk.

The CRMA's 65 percent threshold refers to the European Union's total annual demand, not to the purchasing volumes of individual companies. Achieving the European target therefore requires diversification across a wide range of genuinely independent supply chains.

Two suppliers that source their raw materials from the same refinery do not increase this diversification—even if they are legally independent contractual partners. What matters is not simply the number of suppliers, but the actual independence of the upstream supply chains. True diversification takes place at the raw material processing and refining stages, not when contracts are signed.

China or India – Growing Pressure Without a Direct Legal Obligation

The CRMA does not impose a sourcing limit on individual companies. The 65 percent threshold is a target for the European Union as a whole, measured against its total annual demand for each strategic raw material. As a result, an individual company could continue sourcing all of its requirements from a single country without directly violating the CRMA. There is no direct legal obligation for companies to diversify.

This is precisely where an important distinction is often overlooked in public discussions. The 65 percent threshold is calculated at the level of the European Union, not at the level of individual companies. A simple example illustrates the difference.

Company A sources 65 percent of a strategic raw material from China and 35 percent from India. Company B sources the same raw material in the opposite proportions. From the European Union's perspective, this results in a balanced overall distribution. For Company A, however, the individual risk remains virtually unchanged. If China were to impose an export ban, the company would still be significantly affected despite the EU's diversified overall sourcing structure.

This does not make the 65 percent threshold meaningless. It does, however, demonstrate that the European indicator alone is not a reliable benchmark for an individual company's procurement decisions. The actual concentration risk and transparency regarding upstream processing stages remain the decisive factors.

The need for action on the part of individual companies therefore arises less from the 65 percent threshold itself than from three developments.

First, large manufacturers of strategic technologies with more than 500 employees must conduct a risk assessment of their supply chains for strategic raw materials every two years. Companies showing a concentration of 90 or even 100 percent in a single country will increasingly be expected to provide a plausible explanation for this dependency, particularly once the national enforcement measures take effect in November 2026.

Second, China has introduced export restrictions on gallium, germanium, and several rare earth elements. These measures are independent of the CRMA but clearly demonstrate that a heavy dependence on a single country of origin represents not only a regulatory concern but also a genuine supply risk.

Third, customers and end users are increasingly demanding reliable proof of origin because they themselves are subject to CRMA reporting requirements and are passing these requirements on to suppliers throughout their supply chains.

For numerous electronic materials, substrates, and passive components, India is emerging as one of the most important alternative sourcing locations within global supply chains. Through the second phase of the Production-Linked Incentive (PLI) Scheme and the India Semiconductor Mission (ISM), the Indian government has strategically expanded capacities in substrates, semiconductor packaging, and component manufacturing.

India's share of global electronics manufacturing increased from around 1.3 percent in 2012 to approximately 4 percent in 2025 and, according to government plans, is expected to continue growing through 2030.

For EMS buyers, this does not mean replacing Chinese partners. Rather, it means establishing reliable and verifiably documented secondary sources in parallel. Building such structures is less a regional relocation strategy than a response to increasing transparency requirements, evolving regulatory expectations, and the objective of sustainably reducing concentration risk.

What EMS Partners and PCB Suppliers Can Offer

Most OEMs lack the internal resources and the necessary market transparency to establish and maintain reliable documentation of material origins down to the refinery level. This is precisely where experienced EMS providers and PCB suppliers can make a significant contribution.

If an EMS partner has well-established supplier networks across multiple regions, material and substrate sourcing can be structured to create genuinely independent and documented secondary sources—not merely additional contractual partners relying on the same upstream supply chains. Nearshoring strategies within Europe or the targeted development of complementary supplier networks, for example in India, can further improve transparency while facilitating audits and certification processes.

What matters most is not the number of suppliers, but the quality, independence, and traceability of the underlying supply chains. Companies that establish these structures at an early stage not only prepare themselves for increasing regulatory requirements but also strengthen their resilience against geopolitical risks, export restrictions, and supply disruptions. As a result, building documented secondary sources is increasingly becoming a strategic investment in the long-term stability of their own value chains.

Conclusion

The Critical Raw Materials Act marks a fundamental shift in the way strategic raw materials are managed. What was long regarded primarily as an industrial policy initiative is now evolving, with approaching regulatory deadlines, into a practical challenge for procurement, supply chain management, and product development.

For companies in the electronics industry, it will no longer be sufficient to assess supply chains solely at the level of their direct contractual partners. As requirements for transparency, documentation, and risk assessment continue to increase, greater attention must be paid to the origin, processing, and actual independence of strategic raw materials.

The key question in the future will no longer be simply *who* supplies a component, but increasingly *where* the critical raw materials originate and through which processing stages they pass before entering the company's supply chain.

The CRMA's 65 percent threshold sends an important industrial policy signal. However, it does not replace a company-specific assessment of actual concentration risk. Multiple suppliers do not automatically create resilient supply chains if their raw materials originate from the same refineries or the same countries of origin. True diversification begins where supply chains are genuinely independent of one another.

Companies that have already established transparency regarding their critical raw materials, establish qualified secondary sources, and systematically document their supply chains are not only strengthening their regulatory position. They are also improving security of supply, increasing their strategic flexibility, and laying the foundation for more resilient supply chains in an increasingly complex geopolitical environment.

The real value of the Critical Raw Materials Act therefore lies not only in new reporting obligations or strategic targets, but in encouraging companies to make their supply chains more transparent, resilient, and robust over the long term.

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About the Author

Dirk Kaussen is Founder and Managing Director of EMS Strategy Group. With around 40 years of experience in the electronics industry — including founding and managing his own electronics manufacturing company in Germany — he brings deep expertise in manufacturing processes, EMS partner selection, supply chain stability, relocation projects, and risk management. His approach combines practical solutions with a direct connection to industrial reality.

About the EMS Strategy Group

EMS Strategy Group supports industrial enterprises in the strategic and operational advancement of their electronics manufacturing. Our core expertise lies in the strategic relocation of manufacturing volumes, the selection of qualified EMS partners, the establishment of new production capacities, and the expansion of existing manufacturing structures.

Furthermore, we design resilient supply chain frameworks, conduct comprehensive risk assessments, and guide dual-sourcing strategies, with operational support through to a successful series production ramp-up.

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