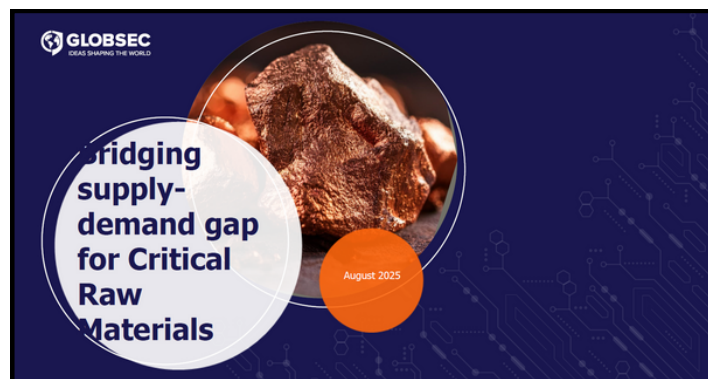


CRITICAL RAW MATERIALS

FROM SCARCITY TO SECURITY: THE FUTURE OF CRITICAL MATERIALS IN DEFENCE



Defence Experts Warn of Rising Dependence on China for Critical Raw Materials

A high-level session on Critical Raw Materials (CRMs), Supply Chains, and Defence has underlined the urgent need for Europe and the UK to reduce reliance on China for essential resources powering defence systems and green technologies. The briefing, which kicked off a series of discussions on supply, demand, and circular economy solutions, centred on the role of batteries, magnets, and related technologies in both industrial and military applications.

Dependence on China Raises Security Risks

Petr Pudil from Globsec warned that Western nations remain heavily dependent on China for mining and refining CRMs, exposing vulnerabilities across defence and industry. He called for faster approval of new projects, investment in cleaner processing, and stronger public-private collaboration. Alternatives such as sodium-ion batteries were flagged as promising, but China is also moving rapidly into this field. Petr stressed that NATO and defence strategies must better integrate CRM challenges.

UK Facing Rising Demand and Recycling Gaps

Dr Evi Petravlatzi from the British Geological Survey highlighted sharp increases in UK demand, particularly from electric vehicles and wind turbines. She noted that recycling and end-of-life recovery remain limited, while domestic refining capacity is underdeveloped. Significant data gaps persist, making it difficult to model future supply and demand accurately. She urged innovation in circular economy approaches, including extending product lifespans and building up domestic recycling infrastructure.

Balancing Cost, Security, and Sustainability

Discussions centred on the tension between relying on cheaper Chinese supply chains and developing more sustainable Western alternatives. Participants broadly agreed that security concerns could justify higher costs. While international partnerships will be crucial, defence-specific demand is relatively small compared to wider industry needs, pointing to the necessity of cross-sector solutions.

Looking Ahead

The session concluded with agreement to sustain momentum through upcoming discussions focused on technology and supply chain gaps. Participants will also explore the potential for consortia to pursue funding bids and track developments in the UK's CRM strategy, mining prospects, and recycling progress.

Join the conversation. Shape the future. Spread the word.

Join us for the Snack Series—a rapid-fire set of expert-led sessions that dive into the most urgent challenges and strategic opportunities across the UK's critical materials ecosystem.

From policy to platforms, e-waste to innovation funding, this series brings together voices across government, industry, and academia to shape a more circular, resilient, and sovereign defence future.

Subscribe to the series to receive invites and materials here:

<https://www.teamdefence.info/event/critical-raw-materials-for-defence-online-snack-series-session-3/>