Steel, sensors, and speed: powering Europe's deterrence

Published 6 October 2025

Samuel Rines
Macro Strategist, Model Portfolios

Aneeka Gupta
Director, Macroeconomic Research

Key Takeaways

- Europe's defence build-up is underpinned by multi-year EU, NATO, and national pledges, creating durable visibility in spending across 2025–2030.
- Rheinmetall, HENSOLDT, and RENK anchor Europe's industrial readiness, addressing ammunition, sensors, and mobility bottlenecks.

Europe's rearmament isn't just about ordering more kit - it's about fixing the bottlenecks that make a credible deterrent possible: ammunition at scale, sensors that see first and systems that keep fleets moving. Three German champions, Rheinmetall, HENSOLDT and RENK, sit at the core of that effort. Together they're rebuilding depth (stocks), sharpening edge (effects) and hardening resilience (uptime and supply chains) across NATO's front line.

Rheinmetall: Europe's arsenal at scale

On 27 August 2025, Rheinmetall opened Europe's largest ammunition factory at Unterlüß. The €500 million site is slated to ramp to around 350,000 155mm shells annually by 2027. Rheinmetall projects around 700,000 shells per year across its network - a cornerstone contribution toward the European Union's (EU) goal of 2 million shells a year. To de-risk propellant and shell supply and shorten logistics tails, Rheinmetall is also localising production across the continent with more than €1 billion in joint venture plans in Bulgaria to produce gunpowder and 155mm shells, as well as a new plant in Romania. These moves spread risk and build sovereign capacity where it's needed most.

What fills those production lines matters too. Beyond shells, Rheinmetall fields a broad effects mix: the Assegai family (High Explosives, smoke/obscurant, illumination/IR illumination, Extended Range options) and Bundeswehr-standard DM121/DM125/SMArt rounds[1] - providing the right product for the mission while keeping logistics interoperable across NATO weaponry.

There is also short-range air defence that's affordable to sustain. Deterrence fails if you can't keep the airspace around depots, columns and cities clean of drones and cruise missiles. Rheinmetall's Skynex and Skyranger 30 systems restore high-volume, low-cost gun-based air defence. Skynex's programmable

35mm AHEAD rounds create a lethal cloud that's far cheaper per shot than missiles - key for sustained operations. A six-figure cartridge order (low triple-digit € millions) in 2024 underlined Europe's demand signal and deliveries of Boxer-mounted Skyranger 30 began with Germany's verification vehicle in early 2025, with series vehicles to follow.

Ukraine's experience has reinforced the concept: cannon-based systems (Gepard's lineage and Skynex's modernised architecture) have proven invaluable in the drone fight and for close-in cruise-missile defence. That real combat feedback loop is driving European buys now.

Rheinmetall is critical for resilience: Mass shell output (and diversified powder supply) closes Europe's most acute readiness gap; gun-based Short-Range Air Defense (SHORAD) restores sustainable air-defence depth for the "everything drone" era; and a varied artillery portfolio ensures effects without bespoke logistics.

Deterrence hinges on what you can detect, track and classify, from low-observable drones to salvos at sea.

HENSOLDT: The eyes and ears of resilience

HENSOLDT's TRML-4D, the beating heart of the IRIS-T SLM air-defence battery, has been fielded at pace for Ukraine and continues to see new orders across Europe[2]. Digital architecture gives fast updates and high-fidelity tracks on tough, low-altitude targets, which is what modern defence needs. At sea, the TRS-4D family equips German Navy surface combatants and will outfit new frigates, with program scope recently expanded. Commonality across land and sea radars simplifies training, spares, and upgrades - classic resilience multipliers.

Air superiority is getting a sensor refresh too. In February 2025, HENSOLDT secured a ~€350 million extension to advance the Eurofighter European Common Radar System, Mark 1 (ECRS Mk1) AESA radar for Germany and Spain, adding capability and laying the path to further evolutions later in the decade. To complement active radars, HENSOLDT's Twinvis passive radar is moving toward certification with Germany's air traffic service (DFS), a dual-use step that signals maturity and opens doors for homeland defence applications. Meanwhile, the SPEXER 2000 3D MkIII ground radar continues to scale production for the drone threat.

HENSOLDT's Kalaetron Attack family brings software-defined, jamming (escort, stand-off, stand-in variants) with multi-target capability, exactly the kind of adaptable Electronic Warfare (EW) Europe needs against learning adversaries.

HENSOLDT is the eyes of resilience: A sensor stack that spans ground-air-sea with common architectures, a credible Counter Unmanned Aircraft Systems (C-UAS) radar line for the saturating drone threat and software-defined EW that updates at the speed of tactics.

RENK: Powering mobility and maritime depth

You can't deter if your fleets can't move or stay up. RENK is Europe's leading supplier of tracked-vehicle transmissions and quiet naval gearboxes, providing the test systems and field services that keep both

ready. RENK's HSWL 354 transmission underpins the Leopard 2 family across 18 countries - Europe's de facto tank. For modern Infantry Fighting Vehicles (IFVs), the HSWL 256 powers Germany's Puma and the UK's Ajax family, translating horsepower into reliable mobility in contested terrain.

On the maritime side, Damen Naval has contracted RENK to supply gearboxes for the Dutch/Belgian Anti-Submarine Warfare frigates, optimised for quiet propulsion. First sets arrive for installation from October 2025, with the first frigate delivery slated for 2028. This is a key anti-sub capability for the North Sea and Greenland–Iceland–UK (GIUK) gap.

Beyond hardware, RENK's RTS test benches (vehicle, drivetrain, hub-loading and mobile diagnostic rigs) allow armies to do reproducible, Original Equipment Manufacturers (OEM)-spec testing away from the proving grounds, cutting downtime and catching failures before they cascade. Lifecycle services (spares, field repair, overhaul) translate directly into higher availability of Europe's tank and IFV fleets. RENK is also positioned in Europe's next-gen heavy armour work via the Main Armoured Tank of Europe (MARTE) initiative, leveraging the Leopard/HSWL experience to accelerate a scalable main battle tank architecture.

Running on RENK creates commonality. Common transmissions and gearboxes simplify spares; test systems and field service raise availability; and quiet propulsion strengthens Europe's Anti-Submarine Warfare (ASW) posture.

The strategic through-line: capacity, commonality, cost

- **Capacity:** Unterlüß and the new regional ammunition JVs are Europe's most concrete answers to the "shell hunger" problem; HENSOLDT's radar lines and RENK's test/service infrastructure similarly scale what matters.
- **Commonality:** TRML-4D/TRS-4D families, Leopard-based transmissions and standardised EW/radar modules keep training, spares, and upgrades manageable across allies.
- **Cost:** Sustained deterrence needs affordable shots and support. Programmable 35mm for Skynex/Skyranger offers low cost per effect; and Rheinmetall's CEO has argued scale should reduce platform costs as Europe moves to serial production.

The procurement horizon reflects that logic: Berlin is preparing large multi-year orders: Eurofighters, thousands of Boxers, more IRIS-T and SkyRanger. With delivery stretching over a decade, the sustained demand gives industry confidence to keep investing in capacity.

Europe's deterrence surge isn't theoretical anymore, It is bending steel, filling depots, wiring sensors and turning wrenches. Rheinmetall, HENSOLDT and RENK are the practical centre of that shift.

Conclusion

Europe's rearmament is no longer theoretical; it is translating into factories, stockpiles, and procurement pipelines that underpin NATO's credibility. For investors, this creates a rare opportunity: predictable capital flows, structural demand across munitions, sensors, and mobility, and industrial champions positioned for growth.

[1] Please note – **DM121/DM125** – German Bundeswehr standard 155mm shells widely used in NATO. **SMArt**: is a sensor fused round that hunts and hits armoured vehicles from above.
[2] TRML-4D — Telefunken Radar Mobil Luftraumüberwachung ("Telefunken mobile airspace-surveillance radar"); "4D" means it measures range, azimuth, elevation and radial velocity (Doppler). It's HENSOLDT's AESA air-surveillance/target-acquisition radar used with IRIS-T SLM batteries.

Important Risks Related to this Article

IMPORTANT INFORMATION

Marketing communications issued in the European Economic Area ("EEA"): This document has been issued and approved by WisdomTree Ireland Limited, which is authorised and regulated by the Central Bank of Ireland. **Marketing communications issued in jurisdictions outside of the EEA:** This document has been issued and approved by WisdomTree UK Limited, which is authorised and regulated by the United Kingdom Financial Conduct Authority. WisdomTree Ireland Limited and WisdomTree UK Limited are each referred to as "WisdomTree" (as applicable). Our Conflicts of Interest Policy and Inventory are available on request. This marketing communication has been prepared for professional investors, but the WisdomTree products set out in this document may be available in some jurisdictions to any investors, subject to applicable laws and regulations. As the product may not be authorised or its oering may be restricted in your jurisdiction, it is the responsibility of every person or entity to satisfy themselves as to the full observance of the laws and regulations of the relevant jurisdiction. Prior to any application investors are advised to take all necessary legal, regulatory, tax and investment advice on the suitability and consequences of an investment in the products. Past performance is not a reliable indicator of future performance. Any historical performance included in this document may be based on back testing. Back testing is the process of evaluating an investment strategy by applying it to historical data to simulate what the performance of such strategy would have been. Back tested performance is purely hypothetical and is provided in this document solely for informational purposes. Back tested data does not represent actual performance and should not be interpreted as an indication of actual or future performance. The value of any investment may be aected by exchange rate movements. Any decision to invest should be based on the information contained in the appropriate prospectus and aer seeking independent investment, tax and legal advice. These products may not be available in your market or suitable for you. The content of this document does not constitute investment advice nor an oer for sale nor a solicitation of an oer to buy any product or make any investment. An investment in exchange-traded products ("ETPs") is dependent on the performance of the underlying index, less costs, but it is not expected to match that performance precisely. ETPs involve numerous risks including among others, general market risks relating to the relevant underlying index, credit risks on the provider of index swaps utilised in the ETP, exchange rate risks, interest rate risks, inflationary risks, liquidity risks and legal and regulatory risks. The information contained in this document is not, and under no circumstances is to be construed as, an advertisement or any other step in furtherance of a public oering of shares in the United States or any province or territory thereof, where none of the issuers or their products are authorised or registered for distribution and where no prospectus of any of the issuers has been filed with any securities commission or regulatory authority. No document or information in this document should be taken, transmitted or distributed (directly or indirectly) into the United States. None of the issuers, nor any securities issued by them, have been or will be registered under the United States Securities Act of 1933 or the Investment Company Act of 1940 or qualified under any applicable state securities statutes. This document may contain independent market commentary prepared by WisdomTree based on publicly available information. Although WisdomTree endeavours to ensure the accuracy of the content in this document, WisdomTree does not warrant or

guarantee its accuracy or correctness. Any third party data providers used to source the information in this document make no warranties or representation of any kind relating to such data. Where WisdomTree has expressed its own opinions related to product or market activity, these views may change. Neither WisdomTree, nor any ailiate, nor any of their respective oicers, directors, partners, or employees accepts any liability whatsoever for any direct or consequential loss arising from any use of this document or its contents. This document may contain forward looking statements including statements regarding our belief or current expectations with regards to the performance of certain assets classes and/or sectors. Forward looking statements are subject to certain risks, uncertainties and assumptions. There can be no assurance that such statements will be accurate and actual results could dier materially from those anticipated in such statements. WisdomTree strongly recommends that you do not place undue reliance on these forward-looking statements. WisdomTree Issuer ICAV The products discussed in this document are issued by WisdomTree Issuer ICAV (“WT Issuer”). WT Issuer is an umbrella investment company with variable capital having segregated liability between its funds organised under the laws of Ireland as an Irish Collective Asset-management Vehicle and authorised by the Central Bank of Ireland (“CBI”). WT Issuer is organised as an Undertaking for Collective Investment in Transferable Securities (“UCITS”) under the laws of Ireland and shall issue a separate class of shares ("Shares”) representing each fund.

The Fund is described in a Key Information Document (KID) or Key Investor Information Document (KIID) for UK investors, and the prospectus of WT Issuer (“WT Prospectus”). A copy of the WT Prospectus and the KID / KIID is available, for EEA/UK only, in English at www.wisdomtree.eu. Where required under national rules, the KID will also be available in the local language of the relevant EEA Member State. Investors should read the WT Prospectus before investing and should refer to the section of the WT Prospectus entitled »Risk Factors¼ for further details of risks associated with an investment in the Shares. The summary of investor rights associated with an investment in the fund is available in English on WisdomTree Europe¼s website. WisdomTree Management Limited may decide to terminate the arrangements made for the marketing of its collective investment undertakings. In such circumstances, shareholders in the aected EEA Member State will be notified of this decision and will be provided with the opportunity to redeem their shareholding in the fund free of any charges or deductions for at least 30 working days from the date of such notification. Notice to Investors in Switzerland – Qualified Investors This document constitutes an advertisement of the financial product(s) mentioned herein. The prospectus and the key investor information documents (KIID) are available from WisdomTree¼s website https://www.wisdomtree.eu/en-ch/resource-library/prospectus-and-regulatory-reports Some of the sub-funds referred to in this document may not have been registered with the Swiss Financial Market Supervisory Authority (“FINMA”). In Switzerland, such sub-funds that have not been registered with FINMA shall be distributed exclusively to qualified investors, as defined in the Swiss Federal Act on Collective Investment Schemes or its implementing ordinance (each, as amended from time to time). The representative and paying agent of the sub-funds in Switzerland is Société Générale Paris, Zurich Branch, Talacker 50, PO Box 5070, 8021 Zurich, Switzerland. The prospectus, the key investor information documents (KIID), the articles of association and the annual and semi-annual reports of the sub-funds are available free of charge from the representative and paying agent. As regards distribution in Switzerland, the place of jurisdiction and performance is at the registered seat of the representative and paying agent. For Investors in France:

The information in this document is intended exclusively for professional investors (as defined under the MiFID) investing for their own account and this material may not in any way be distributed to the public. The distribution of the Prospectus and the oering, sale and delivery of Shares in other jurisdictions may be restricted by law. WT Issuer is a UCITS governed by Irish legislation, and approved by the Financial Regulatory as UCITS compliant with European regulations although may not have to comply with the same rules as those applicable to a similar product approved in France. The Fund has been registered for marketing in France by the Financial Markets Authority (Autorité des Marchés Financiers) and may be distributed to investors in France. Copies of all documents (i.e. the Prospectus, the Key Investor Information Document, any supplements or addenda thereto, the latest annual reports and the memorandum of incorporation and articles of association) are available in France, free of charge at the French centralizing agent, Societe Generale at 29, Boulevard Haussmann, 75009, Paris, France. Any subscription for Shares of the Fund will be made on the basis of the terms of the prospectus and any supplements or addenda thereto. **For Investors in Malta:** This document does not constitute or form part of any oer or invitation to the public to subscribe for or purchase shares in the Fund and shall not be construed as such and no person other than the person to whom this document has been addressed or delivered shall be eligible to subscribe for or purchase shares in the Fund. Shares in the Fund will not in any event be marketed to the public in Malta without the prior authorisation of the Maltese Financial Services Authority. **For Investors in Monaco:** This communication is only intended for duly registered banks and/or licensed portfolio management companies in Monaco. This communication must not be sent to the public in Monaco.