

Jani Perälä – Head of Supply Chain, Milrem Robotics





Leading supply chain operations at **Milrem Robotics**, a European defence robotics company. Focused on procurement, logistics, and supplier collaboration in a highly regulated, mission-critical environment.

Career Highlights:

- Nearly 25 years total experience in supply chain and procurement management
- Procurement leadership roles at Patria and Millog
- International assignments in the UAE and Poland, managing supply chain activities in defence sector programs
- Wide-ranging industry experience also in automotive, renewable energy, marine, machinery and wood processing sectors
- Background as a consultant and interim executive, driving procurement transformation and supply chain development in both corporate and project settings

Approach:

- Practical and cooperative. Focused on building resilient supply chains, improving efficiency, and delivering sustainable value in complex environments.
- "Frost is just the opposite of warmth."
 (A reminder that challenges are a matter of perspective.)

INTRODUCTION



Milrem Robotics at a glance

- Established in 2013, Milrem Robotics is the world-leading robotics and autonomous systems developer and system integrator.
- Milrem Robotics' systems are part of robotics programs or in service worldwide, reducing future customers' integration and operational testing risk and costs.
- The company is leading the combat robotics industry with a broad range of solutions to meet customers' goals that go well beyond the hardware by offering capability development, experimentation and local industry integration, providing the customer with the least risk and greatest value.
- Milrem Robotics' autonomous technology solutions extend the warfighter's capabilities and serve as a force multiplier on the ground while keeping troops at a safe standoff distance.
- Milrem Robotics is headquartered in Tallinn, Estonia, employing close to 400 people.

Representative products & services



Strategic shareholders





THEMIS UNMANNED GROUND VEHICLE



Combat

- » Increases firepower of light forces
- » Increases standoff distance from danger areas
- » Precise engagement and minimization of collateral damage
- » Deployed in NATO eFP mission in Lithuania



Cargo

- » A full modular solution for any mission
- » Reduces physical load of the troops
- » CASEVAC capabilities and autonomous resupply of frontline troops
- » Deployed in Ukraine



CIED

- » Remote IED and UXO handling
- » 4m manipulating arm with sensors
- » Blade for stability and obstacle handling
- » Deployed in Ukraine



Observe

- » Enhanced situational awareness
- » Multi-sensor confirmation of threats
- » Indirect fire and guided munitions targeting capability
- » Low noise, heat or radio signal footprint/emission



THeMIS Product Family



Combat - 30mm RWS



CIED / EOD



Combat - Armor PROPRIETARY



Combat - AT



Observe

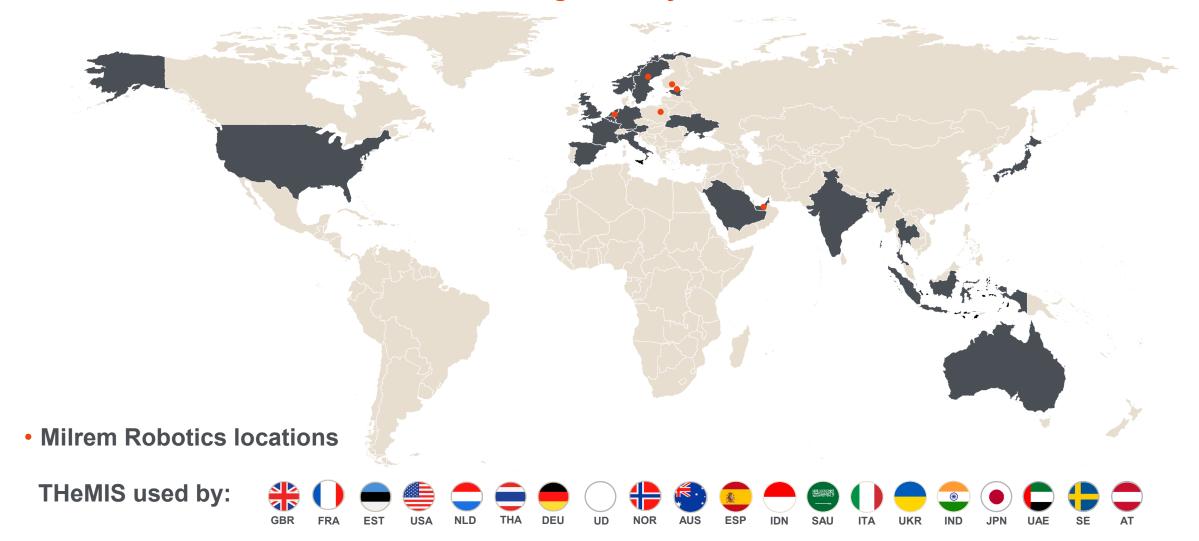


Observe with UAV

GEOGRAPHICAL COVERAGE



THeMIS UGV is the most sold unmanned ground system in its size class around the world



WHY KNOWING YOUR CRITICAL PARTNER MATTER - REAL LESSONS



Q Real-world examples:

Unexpected bankruptcy of key supplier

→ 8-month delivery gap, new supplier ramp-up required

Partner's majority owner under tax fraud investigation

→ Cooperation terminated due to compliance and reputational risks

Japanese manufacturer banned use in defence sector

→ Critical component redesign; major technical & scheduling impact

Critical production phase outsourced to single aging expert – affecting to 13m€ sales revenue

→ No redundancy, severe continuity risk discovered too late

Overpromising supplier in R&D project

→ Promised delivery in 12 weeks turned into 21 months and legal dispute

Export control restrictions blocked shipments

→ E.g. Germany denied export licenses to Arab countries, jeopardizing deliveries

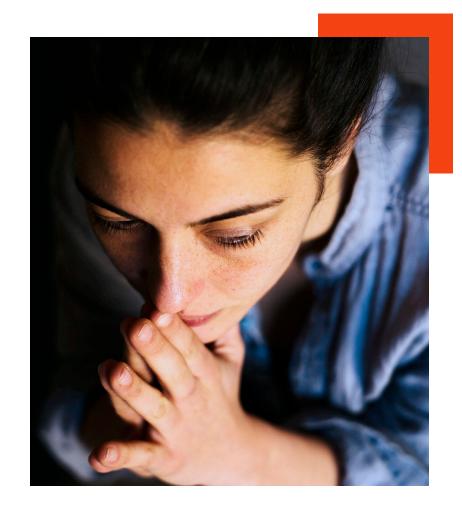
Overreliance on verbal promises without proper contracts

→ Supplier's terms prevailed — heavily biased, exposing buyer to risk

€300,000 order was placed with a supplier — significant payment in advance.

→ The supplier's annual revenue was only €11,000.

Most of these risks were visible — if only someone had looked closer.



KEY QUESTIONS TO ASK YOURSELF ABOUT SUPPLIERS / PARTNERS



- Are there identified critical suppliers (halting your business) in the supply chain?
- Are there any dominant suppliers in use?
- How many different items are procured from a particular supplier?
- How are risks related to critical suppliers being mitigated?
- How are supplier classifications or audits conducted, monitored, and maintained?
- Are all suppliers treated the same way, or is there a tiered approach with heavier and lighter processes?
- How far upstream in the supply chain has risk or impact been analyzed?
- Are there specific requirements for suppliers (e.g. customer-specific requirements, specifications)?
- In case of outsourced operations, is the know-how retained internally?
 - (e.g. drawings, expertise, specialized tools)
- Are critical parts or bottleneck items identified?
 - If yes → Are there safety stocks or contingency plans in place?
- What contract terms apply in procurement?
- Are contractual sanctions or penalties utilized in case of complaints or claims?



THE SIMPLEST TOOL YOU'RE PROBABLY NOT USING ENOUGH



Kraljic Matrix – a timeless method to classify suppliers based on:

- Supply Risk (availability, complexity, alternatives)
- Business Impact (criticality to operations, cost, performance)

Supplier			
PROFIT IMPACT	%	Leverage	Strategic
		High Impact, Low Risk	High Impact, High Risk
		Provides goods or services readily available in the market, with multiple alternative sources.	Critical to business operations (single source supplier), requiring strong collaboration
		Non-Critical	Bottleneck
		Low Impact, Low Risk	Low Impact, High Risk
		Provide goods or services that have a low financial impact and low supply risk (standard, widely available, and easily replaceable products)	Provides critical goods or services with limited alternative sources.
	%		
SUPPLY RISK			

Where to focus? → These can break your supply chain — or make it resilient.

Strategic Suppliers / Partners

- · Identify single points of failure
- Develop joint continuity and crisis plans
- · Invest in long-term cooperation and visibility
- Map 2nd/3rd tier risks (e.g. sub-suppliers)
- Secure critical technologies contractually (IP, availability)

Bottleneck Suppliers

- Pre-qualify backups or second sources
- · Increase safety stocks or develop internal fallback options
- Conduct risk workshops with suppliers
- Redesign products to reduce dependency if needed
- Monitor early warning signals (financial, political, etc.)

BASIC SUPPLIER SELECTION CRITERIA



What We Require:

1. Technical Compliance & Quality

- Meets specs, ISO 9001 or equivalent
- Aligned with Milrem's performance needs

2. Total Cost of Ownership (TCO)

- Beyond price: includes logistics, warranty, lifecycle costs

3. Delivery Reliability & Capacity

- Proven lead times, scalable production
- Location matters (risk & cost)

4. Financial Strength & Flexibility

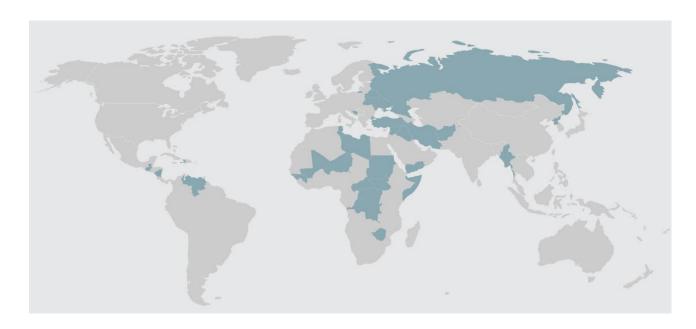
- Stable finances, EBIT & turnover check
- Transparent cost structure, payment terms

5. Legal, Compliance & Security

- Not based in restricted or sanctioned countries →
- EU/NATO preferred, no export critical exposure, no China connection
- Cybersecurity & Anti-Money Laundering (AML) screening required
- Full Ultimate Beneficial Ownership (UBO) disclosure

6. Sustainability and Social Responsibility

- Compliance with environmental regulation and disposal of hazardous waste
- Fair labor practices, including worker safety, fair working hours and ethical treatment of employees
- Suppliers should select their subcontractors with align values



https://www.sanctionsmap.eu/#/main

SUPPLIER / PARTNER EVALUATION AND MONITORING PROCESS



1. Initial Inquiry & First Evaluation

New suppliers contacts: A Supplier Questionnaire is sent to gather key information.

Pre-evaluation: Initial review of the questionnaire responses to assess suitability based on compliance, capabilities, and alignment with business needs.

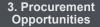


2. Evaluation

Due Diligence: Review supplier performance, reputation, and financial stability through external screening tools and financial risk indicators.

Assess responses against key criteria such as compliance, capabilities, and sustainability.

Face-to-Face Interaction: For key suppliers, conduct site visits, audits or meetings to assess operations and strengthen relationships.



Inquiry sent when a business need aligns with a supplier's profile.

If the offer is accepted, the supplier proceeds to the procurement process.

If not, they remain in the evaluation pool for future opportunities.

4. Ongoing Supplier Monitoring

Strategic Suppliers: Evaluated face-to-face

regularly (site visits, meetings) for performance, compliance, and relationship.

All Suppliers: Periodically reviewed using external screening tools and financial risk indicators to ensure stability and compliance..

5. Continuous Performance Monitoring

Suppliers are continuously monitored to ensure they meet contractual obligations, delivery schedules, quality standards, and ethical expectations.

Attention is paid to both clear performance indicators and weak signals—such as communication delays, quality deviations, or organizational instability—that may indicate emerging risks.









SUMMARY: WHY KNOWING YOUR SUPPLIERS IS BUSINESS-CRITICAL



Suppliers / partners are not just external stakeholders — **they are an extension of your business**. Their performance, reliability, and alignment with your values and requirements directly impact your operations, costs, quality, and reputation.

- Knowing your suppliers means understanding their background, capabilities, risks, and the ecosystem they operate in.
- Failure by a critical supplier can cause production stoppages, missed customer deliveries, contract penalties, reputational damage or in worst cases, collapse of your business.
- There are numerous real-world examples where supplier risks were a major contributor to a company's financial distress or bankruptcy.
- In our experience, problems are too often identified only when it's already "on fire" when the disruption is happening, not before.
- Proactive, structured supplier assessment and monitoring process enables early detection of weak signals and minimizes business risk.
- Segmented and well-managed supplier base is a source of resilience and competitive advantage.

"Many times just three minutes Googling is already enough"

"There are no unreliable suppliers—only bad buyers."



THANK YOU

FOR HELPING US TO ENABLE MORE MEANINGFUL LIVES!