# Advanced Lightweight Metal Manufacturing Facility

InvestEU Portal — Project Proposal | Financial & Market Analysis

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|---|---|
| **Project Promoter** | NT Partners LTD |
| **Registration (EIK)** | 201445044 |
| **Location** | Veliko Tarnovo, Bulgaria |
| **InvestEU Window** | SME Window - Industry for SMEs & Mid-Caps |
| **Core CAPEX** | EUR 4,235,000 |
| **Total Funding Package** | EUR 5,445,000 |
| **InvestEU-backed Loan Request** | EUR 1,694,000 |
| **Submission Date** | June 2026 |

NT PARTNERS
LIGHTWEIGHT METAL MANUFACTURING CENTRE
PRECISION | INNOVATION | QUALITY | SUSTAINABILITY

Submitted to the InvestEU Portal — European Commission, DG Internal Market

# Investment Overview

NT Partners LTD | Precision Manufacturing Centre | Veliko Tarnovo, Bulgaria

| TOTAL INVESTMENT | INVESTEU LOAN | EQUITY SOUGHT | YEAR 3 EBITDA | TARGET IRR |
|---|---|---|---|---|
| EUR 5,445,000 | EUR 1,694,000 | EUR 3,751,000 | EUR 1,570,000 | 22%+ |

## The Opportunity

NT Partners LTD is building the **first full-cycle precision aluminium manufacturing centre in South-East Europe** — laser cutting, CNC forming, powder coating, assembly and CMM metrology under one roof. No comparable integrated facility exists in Bulgaria or the wider Balkan region at SME scale.

- **EUR 45B+** European aluminium fabrication market
- **EUR 100B** EDIS defence-industrial investment plan (2024–2034)
- **Zero** direct regional competitors with equivalent integration
- **Defence + civilian** dual revenue stream — cycle-resilient
- **InvestEU-backed** loan reduces bank risk — faster approval

### Hard Asset Security

Land + building + 25 production systems = EUR 3M+ tangible assets. Asset-backed downside protection from Day 1.

## Deal Terms

- **Instrument:** Ordinary shares or convertible note
- **Equity offered:** Up to 64% post-money
- **Pre-money valuation:** EUR 2,094,000 (2.5x Y3 EBITDA)
- **Min. ticket:** EUR 500,000
- **Exit:** Year 5–6 trade sale / MBO at 5–7x EBITDA
- **Y5 EV estimate:** EUR 10.5M at 5x EBITDA multiple
- **DSCR Year 3:** 7.24x (well above 1.5x covenant)
- **Dividends:** From Year 3, up to 40% net profit

### Comparables (CEE manufacturing exits)

Metal fabrication EBITDA exit multiples (2023–2024): **7.4x–10.5x** (CEE median 10.5x in 2024, source: Aventis Advisors / DealSuite). NT Partners targets entry at **2.5x** — conservative valuation with significant upside to sector median.

## ■ THE WINDOW IS OPEN NOW — AND IT IS CLOSING

European defence spending is at its highest since the Cold War and procurement contracts are being signed now. The EU Green Transition is accelerating lightweight aluminium component demand across automotive and energy. Reshoring incentives (CRMA, InvestEU, national recovery funds) are actively financing new manufacturing capacity — but funding cycles close. **The investor who enters at greenfield stage captures both the lowest entry valuation and the highest long-term upside. Once the regional landscape fills in, this opportunity ceases to exist.**

Full 66-page investment memorandum, 3-year financial model and equipment specifications available under NDA. Contact: Krasimir Trufev | ktrufev@gmail.com | EIK 201445044

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# 1. Executive Summary

NT Partners LTD, headquartered in Veliko Tarnovo, Bulgaria, seeks an **InvestEU-backed bank loan of EUR 1,694,000** as part of a total funding package of **EUR 5,445,000** to establish a full-cycle precision manufacturing and industrial diversification centre for aluminium alloy, hybrid metal and precision steel components. The total package covers EUR 4,235,000 core CAPEX for land, construction and 25 production systems; EUR 210,000 in implementation soft costs; and EUR 1,000,000 in strategic operating cash reserve. Phase 2 expansion to magnesium alloy processing capability is planned once the facility is operational and cash flow is established, subject to ATEX certification.

The purpose of the reserve is to ensure that the facility is not undercapitalised during the most critical phase of the project: commissioning, first customer qualification, inventory build-up, supplier prepayments, VAT timing gaps, payroll, raw material purchases and delayed customer receivables. This liquidity buffer is an essential risk-management instrument and materially increases the bankability of the investment.

The project will create a unique, highly diversified industrial platform combining laser cutting, CNC machining, sheet-metal forming, powder coating, mechanical assembly, dimensional metrology, quality control, environmental testing, reverse engineering capability and future AI-supported automation. The facility is designed not as a single-product factory, but as a **multi-market manufacturing centre** capable of producing different product families for automotive, e-mobility, industrial enclosures, medical equipment, aerospace-related applications, drone and UAV components, defence-adjacent industrial supply, energy infrastructure, robotics, precision engineering and specialised machinery.

This diversification is a core risk-reduction feature. NT Partners LTD will not depend on one product, one customer or one sector. The same equipment base can be reconfigured into multiple production routes: high-margin precision components, medium-series industrial enclosures, corrosion-protected aluminium assemblies, coating and testing services, authorised reverse engineering and, in later phases, automated AI-supported manufacturing cells and expanded magnesium alloy capability. This makes the project structurally more resilient than a conventional single-line production investment.

## A New Industrial Reality: Why Europe Needs This Investment Now

The strategic rationale of this project goes beyond establishing a new production site. It responds directly to a **structural transformation of global manufacturing and trade** that has fundamentally changed the competitive landscape for European industry.

**War in Ukraine and European defence posture:** The ongoing war in Ukraine has demonstrated Europe's vulnerability to disruption of industrial supply chains and reinforced the urgency of rebuilding domestic manufacturing capability. Defence budgets across NATO are rising sharply — Bulgaria's own defence spending target is 2% of GDP — creating direct demand for locally produced lightweight structural and mechanical components.

**Red Sea and Suez Canal disruptions:** Since late 2023, Houthi attacks on commercial shipping in the Red Sea have forced vessels onto the longer Cape of Good Hope route, adding 10-14 days of transit time and 30-40% additional freight costs. For European manufacturers dependent on Asian-sourced components, this has made 'just-in-time' global supply chains unreliable. The Suez Canal handles approximately 12% of global trade — its effective closure to risk-averse insurers has made the cost of offshore manufacturing significantly higher than projected even 2 years ago.

**Geopolitical fragmentation and export controls:** US-China trade tensions, technology export controls, TSMC-era semiconductor restrictions, and sanctions regimes have introduced regulatory risk into previously stable supply chains. European companies are increasingly required to source components from geopolitically aligned suppliers to satisfy government contract requirements, insurance terms, and customer compliance obligations.

**The 2021 magnesium supply crisis as a warning signal:** In autumn 2021, a shutdown of Chinese magnesium smelters — which produce approximately 87% of global supply — nearly halted European automotive production within weeks. This event exposed Europe's structural dependency on single-source commodity supply and accelerated EU policy toward critical raw material and processing diversification, directly supporting this project's rationale.

**Rising transport costs and insurance premiums:** Container freight rates from Asia to Europe increased 8-10x during the 2021-2022 period and remain elevated and volatile. Insurance premiums for goods transiting conflict-adjacent zones have risen 300-500%. These costs are permanent structural additions to the total cost of offshore manufacturing — not temporary anomalies.

In this new environment, European manufacturers increasingly need **regional, flexible, technically capable suppliers** that can deliver small and medium series of complex components quickly, reliably, and with full quality documentation — without dependence on distant supply chains subject to geopolitical, logistical, or regulatory disruption. NT Partners LTD positions itself precisely in this gap.

## The Integrated Manufacturing Platform: Competitive Advantage

The defining competitive advantage of this investment is the **unique versatility of the equipment combination**. Based on regional competitor mapping conducted for this proposal, NT Partners LTD would be among the very few facilities in Bulgaria and South-East Europe capable of executing the complete chain from raw material to tested, coated, assembly-ready lightweight metal component in a single location. This full-chain integration eliminates inter-supplier logistics, reduces lead times from 8-12 weeks to 2-3 weeks, protects customer technical data, and retains the full value-add margin in-house. The facility serves both **high-margin niche segments** (medical, defence, aerospace, motorsport — unit margins 43-66%) and **high-turnover volume segments** (automotive Tier-2, e-mobility, industrial enclosures — revenue potential per SKU EUR 240k-2.25M per year).

## Phase 2 Roadmap: Automation and Artificial Intelligence

This investment is designed as the **first stage of a larger industrial development roadmap**. Phase 1 establishes the complete physical manufacturing base. Phase 2 will build on this foundation through **progressive automation, digital production planning, machine connectivity, and AI-supported quality control and process optimisation**.

The 25-system manufacturing platform will generate the real production data required for meaningful AI integration. Once the machinery, workflows and product families are operational, NT Partners LTD will introduce **digital twins**, automated machine-vision quality control, predictive maintenance, production cost optimisation, and AI-assisted quotation and process planning. This transforms the facility from a conventional precision manufacturer into a **fully automated, data-driven Industry 4.0 production platform** — scalable without proportional headcount growth.

## Long-Term Vision: Reverse Engineering and Technology Transfer

A further long-term objective is the development of **reverse engineering and technology transfer capabilities**, strictly within legal, contractual and intellectual property limits. Many European industrial operators depend on imported, discontinued, or legacy components for machinery, energy infrastructure, transport systems, defence logistics, and specialised industrial assets. The proposed facility will build the capacity to scan, analyse, redesign, validate and reproduce authorised components — enabling customers to restore, localise, or improve critical parts without depending on distant or unreliable suppliers.

This capability directly supports **European maintenance resilience, industrial continuity, spare-part sovereignty**, and the re-industrialisation of selected high-value manufacturing functions. It is a logical extension of the metrology and 3D scanning capabilities in this investment (CMM + 3D industrial scanner) and creates a pathway to high-margin knowledge-based services alongside physical production.

## The Window Is Open — And It Is Closing

Three structural forces are converging simultaneously in 2025–2027, creating a **narrow, time-limited window** for a first-mover precision manufacturing investment in South-East Europe. Once each force peaks, the competitive landscape fills in and the opportunity to enter at greenfield pricing disappears:

1. **European Defence Surge — NOW, not later.** EU defence spending grew 30%+ since 2022 and the EDIS (2024) commits EUR 100 billion to European industrial defence capacity through 2034. Framework procurement contracts with qualified Tier-3 subcontractors are being signed now. The companies that qualify in 2025–2026 will hold 2–5 year framework agreements that lock out later entrants. A facility that is not operational by 2026 misses the first procurement cycle entirely.

2. **Green Transition Demand — Aluminium is the material of the decade.** The EU Green Deal, EV transition and energy infrastructure buildout all converge on one material: aluminium. Lighter vehicles, solar mounting structures, heat pumps, battery enclosures, grid infrastructure — all require precision aluminium fabrication at volumes Europe cannot currently supply domestically. This demand is structural, not cyclical. It will not reverse. The factories built now to serve it will capture market share for 20+ years.

3. **Reshoring Window — EU financing is available today.** InvestEU, the CRMA (Critical Raw Materials Act), national Recovery and Resilience Facility funds, and EDIRPA are all actively financing new manufacturing capacity in the EU right now. These programmes have funding cycles and eligibility windows. The current Bulgarian RRP allocation for industrial investment closes in 2026. Once a facility is built and operational, it becomes a qualifying asset for the next generation of EU expansion grants — but only if the foundation is in place first.

4. **Deglobalisation — The supply chain restructuring is happening once.** The shift from Chinese/Asian supply chains to EU-local production is a one-time structural reset driven by geopolitical risk, EU supply chain legislation (CBAM, CSRD) and customer quality requirements. The companies that establish qualified, certified EU production capacity in the next 2–3 years will be the default suppliers for the next decade. This restructuring does not repeat — the window to position as a preferred EU supplier is now.

The investor who enters at greenfield stage in 2025 captures all four of these tailwinds simultaneously — at entry pricing of 2.5x EBITDA, before any competitor establishes an equivalent facility in the region. **This combination of timing, geography, market structure and valuation will not recur.**

### Financial Summary

The 3-year financial model projects revenue growing from **EUR 1.8M (Year 1)** to **EUR 4.6M (Year 3)**, with EBITDA margins reaching **33%** at 80% capacity. IRR is 30.7%, NPV at 10% WACC is EUR 10.6M, and the payback period is approximately **4.6 years**. Revenue is diversified across niche high-margin components, recurring industrial series, coating and testing services, assembly, and future reverse-engineering services.

The six indicators below summarise the investment thesis. Each figure is derived from the base-case financial model, which assumes conservative ramp-up: **35% capacity in Year 1**, **60% in Year 2**, and **80% in Year 3**. These are the same assumptions used in the P&L (Section 10.1) and scenario analysis (Section 21). Full model assumptions and sensitivity analysis are presented in Sections 10 and 21.

| Core CAPEX EUR 4,235,000 | Year 3 Revenue EUR 4.6M | Year 3 EBITDA ~33% | IRR 30.7% | Payback Period ~4.6 years | Jobs Created 25+ direct |
|---|---|---|---|---|---|

### Understanding the Six Indicators

**Core CAPEX (EUR 4,235,000)** is the total tangible fixed asset investment: land acquisition (EUR 500,000), industrial building construction (EUR 800,000), and 25 production systems (EUR 2,935,000). This is the InvestEU-eligible investment base. The total funding package is EUR 5,445,000, which additionally includes EUR 210,000 soft costs and EUR 1,000,000 strategic operating cash reserve — both funded from equity.

**Year 3 Revenue (EUR 4.6M)** is achieved at 80% facility capacity, with product mix across 20+ product families spanning lightweight magnesium and aluminium components, industrial enclosures, coated assemblies, precision CNC parts, and service revenue (coating, testing, reverse engineering). This is deliberately conservative: the facility has rated capacity to produce EUR 5.7M+ at full utilisation.

**Year 3 EBITDA (~33%)** reflects the high-margin character of the product mix. The gross margin is modelled at 45% (revenue minus direct materials, consumables and variable labour). After fixed operating costs — management, utilities, insurance, maintenance and quality system — EBITDA stabilises at 33%. This is consistent with European precision metalworking benchmarks for vertically integrated SME facilities.

**IRR of 30.7%** and **NPV of EUR 10.6M** at 10% WACC are calculated over a 10-year project horizon on unlevered free cash flows. The high IRR reflects the combination of capital-efficient operations (no rent, owned building), low-cost InvestEU-backed debt, high product margins, and strong Year 3+ cash generation. Even under the stress scenario (–30% revenue), IRR remains above 18%.

**Payback Period (~4.6 years)** is calculated from first revenue on a discounted cash flow basis. Simple payback is approximately 3.8 years. Both are within the 10-year InvestEU loan term, confirming that the project generates sufficient cash to repay debt well before maturity.

**Jobs Created (25+ direct)** includes 21 production and quality roles and 4 management and engineering positions in Phase 1. A further 10–15 indirect jobs are expected in the regional supply chain. All production roles are new net employment — the company currently has no manufacturing workforce.

## 2. Company Profile

| Field | Details |
|---|---|
| **Legal Name** | NT Partners LTD |
| **Registration Number (EIK)** | 201445044 |

| | |
|---|---|
| **Country / Location** | Bulgaria — Veliko Tarnovo, Region BG32 North Central |
| **Legal Form** | Limited Liability Company (OOD / LTD) |
| **Current Activity** | EU Project Writing & Programme Management |
| **Proposed Activity** | Precision Lightweight Metal Manufacturing |
| **InvestEU Category** | SME (Small and Medium-Sized Enterprise) |

## 2.1 Company Background

NT Partners LTD is a privately-owned Bulgarian company headquartered in Veliko Tarnovo, specialising in the **preparation, writing, and management of projects financed under European Union funding programmes**. Over the years, the company has built deep expertise in EU programme architecture, application requirements, compliance frameworks, financial structuring, and the reporting obligations of beneficiary organisations across multiple operational programmes and instruments — including Horizon, ERDF-backed national programmes, INTERREG, and the InvestEU framework itself.

This work has placed NT Partners LTD at the intersection of European industrial policy and real-economy investment. The company has developed direct working relationships with manufacturers, engineering firms, technology suppliers, and industrial end-users across Bulgaria, Romania, Greece, and other EU member states. These relationships have created a detailed first-hand understanding of what European industry needs, where supply gaps exist, and what manufacturing capabilities are missing in the South-East European region.

## 2.2 Strategic Transition: From Project Management to Production

The proposed InvestEU project represents a **deliberate strategic transition**: from advising and enabling industrial investment for third-party clients, to establishing NT Partners LTD's own high-technology manufacturing operation.

**Knowledge capital accumulated:** Years of writing and evaluating industrial investment projects have given NT Partners LTD's team a granular understanding of technology selection, equipment specification, production process design, market positioning, quality certification pathways, and the financial modelling of manufacturing businesses. This knowledge is now being applied to the company's own project.

**Industry contacts and customer pipeline:** The company's network — built through direct work with industrial clients, technology suppliers, certification bodies, and EU managing authorities — provides a commercial foundation that a conventional startup manufacturer would take years to build. Prospective customers in automotive Tier-2, e-mobility, industrial automation, defence-related supply, and medical equipment are known to the team from active project work.

**EU programme expertise as a structural advantage:** NT Partners LTD understands InvestEU, ERDF, and Horizon programme requirements from the inside. The company is in a uniquely strong position to structure the application, manage compliance, fulfil reporting obligations, and coordinate with the partner bank and managing authority throughout the project lifecycle — reducing execution risk compared to a first-time applicant.

**Timing aligned with European industrial priorities:** The decision to transition into manufacturing is timed deliberately to coincide with the European reshoring momentum, the post-pandemic and post-Ukraine supply chain reconfiguration, and the scaling of EU Green Deal industrial investment. NT Partners LTD is not entering manufacturing speculatively — it is entering at the moment when European demand for regional, technically capable, lightweight metal component suppliers is structurally increasing.

In summary, NT Partners LTD brings to this investment what most manufacturing startups lack: **institutional knowledge of EU financing, an established industry network, and a clear-eyed understanding of the market gap this facility will fill**. The physical production capacity being built through this project will be the operational instrument of a strategy that has been years in development.

### 2.3 Ownership Structure and Corporate Governance

NT Partners LTD is **100% privately held by the Trufev family**. The founding shareholders are Krasimir Trufev and Kremena Tsvetanova Trufeva, who are also the active directors of the company. There is no third-party institutional debt, no external board obligations, and no conflicting ownership interests. All strategic and operational decisions are taken at founder level, ensuring rapid, consensus-free execution during the investment and ramp-up phases.

| Shareholder | Role | Ownership | Capital Contribution |
|---|---|---|---|
| **Krasimir Trufev** | Managing Director / CEO | **50%** | — (operational contribution, no cash) |
| **Kremena Tsvetanova Trufeva** | Finance & Legal Director | **50%** | — (operational contribution, no cash) |
| **External Investors / Strategic WC Facility** | Silent equity partners / working capital | **—** | EUR 3,751,000 (external equity) |

### 2.4 Operational Readiness and Pre-Investment Progress

NT Partners LTD has completed substantial groundwork prior to this InvestEU application, demonstrating the project's operational seriousness and de-risking the implementation timeline for the financing institution:

**Equipment specification finalised:** All 25 systems have been identified, specified, and quoted by European and international suppliers. Technical specifications, footprint requirements, utility connections, and lead times have been confirmed. The equipment list is ready for purchase order issuance within 30 days of financing confirmation.

**Site identified and surveyed:** An industrial plot of 5,000 m² in Veliko Tarnovo industrial zone has been identified for land acquisition (EUR 500,000 — EUR 100/m²). Architectural pre-design and preliminary building specification for the 2,000 m² production hall (EUR 800,000 — EUR 400/m²) have been completed. Building permit process is scheduled to commence concurrently with financing negotiations.

**Customer pipeline established:** Initial commercial discussions are underway with three Tier-2 automotive suppliers operating in Bulgaria and Romania, two industrial enclosure manufacturers supplying the German market, and one defence-related supply chain participant. Letters of intent are available upon request under NDA.

**Quality and certification roadmap defined:** The company has mapped the full ISO 9001 → EN 9100 / IATF 16949 → NATO AQAP 2110 → ATEX certification pathway, including third-party audit bodies, timeline, and cost estimates. Certification preparation begins in Month 3 of implementation (Q1 post-financing).

## 3. Strategic Rationale — Why This Combination of Equipment

## 3.1 The Core Thesis: Vertical Integration as a Competitive Moat

The 25 systems comprising this investment are not a collection of individual machines — they form a single, vertically integrated manufacturing ecosystem. Each stage in the production chain feeds the next: laser cutting produces net-shape blanks for the CNC machining centre; machined components pass through surface preparation before the powder coating line applies the protective finish; coated assemblies are mechanically integrated on the riveting and assembly presses; and every finished assembly is validated by the CMM, 3D scanner, and environmental test chambers before shipment.

This integrated chain eliminates the most expensive cost driver facing most Bulgarian and Balkan contract manufacturers: **inter-supplier logistics and quality handoffs**. A typical competitor must subcontract coating to one supplier, dimensional inspection to a third-party laboratory, and environmental testing to a certified test house — adding 4–8 weeks of lead time and 15–25% in subcontracting costs. NT Partners LTD eliminates all of these, enabling **2–3 week lead times vs. 8–12 weeks for fragmented supply chains**, and retaining the full value-add margin in-house.

## 3.2 Scale Versatility: Niche Batches AND Mass Production on the Same Floor

The equipment configuration is deliberately chosen to be **scale-agnostic**. This is the most strategically differentiated attribute of the investment and the key reason this combination is unique in the region.

| Capability | Niche / High-Margin Production | Volume / High-Turnover Production |
|---|---|---|
| Batch size | 5–500 pieces | 1,000–50,000 pieces |
| Typical sectors | Medical, defence, aerospace, motorsport, industrial R&D; | Automotive Tier-2, e-mobility, industrial enclosures, consumer electronics OEM |
| Unit selling price | EUR 140–780 per piece | EUR 15–120 per piece |
| Gross margin | 43–66% | 25–40% |
| Key equipment used | Laser, CNC, CMM, 3D scanner, test chambers (full chain) | Laser, press brake, deburring, coating line, robot (high-throughput chain) |
| Scheduling model | Engineer-to-order (ETO): custom per-job programming | Make-to-stock / make-to-order: fixed programs, automated runs |
| Revenue contribution | 30% of revenue, 55% of gross profit | 70% of revenue, 45% of gross profit |

This dual-mode operating model is only possible because the equipment set covers **every process step**. A facility with only a laser cutter and CNC machine cannot offer complete assemblies with validated coatings. A facility with only a coating line and press brake cannot produce precision-machined components. The full chain is the product.

## 3.3 Multi-Material Flexibility

The Phase 1 strategic focus is **aluminium alloy (6000/7000 series) and precision steel components** — materials with established EU supply chains, lower processing complexity, and broad customer demand from Day 1. Every machine in the facility is qualified to process a wider material matrix, giving NT Partners LTD the flexibility to respond to changing customer specifications without capital reinvestment. Phase 2 expansion to magnesium alloy processing (AZ31B, AZ91D, AM60B) is planned once the facility is fully operational, subject to ATEX ventilation certification (est. EUR 60–110k incremental investment, self-funded from Year 2 cash flow):

| Material | Applicable Processes | Primary Markets |
|---|---|---|
| Aluminium alloy (6000/7000 series) | All 5 stages — full chain (Phase 1 core) | Industrial enclosures, automotive, defence |

| | | |
|---|---|---|
| Magnesium alloy (AZ/AM series) | All 5 stages — full chain (Phase 2 expansion) | Automotive, e-mobility, aerospace, UAV |
| Mild steel / structural steel | Laser cutting, press brake, welding prep, coating | Construction, industrial, automotive |
| Stainless steel | Laser cutting, CNC machining, surface prep | Medical, food industry, marine |
| Hybrid (Mg + Al insert) | Full chain — laser → machine → assemble → test | EV battery trays, lightweight frames |
| Zinc alloy (die-cast input) | Deburring, finishing, coating, assembly | Consumer hardware, industrial fittings |

## 3.4 Why Each Individual Machine is Indispensable

The following explains why each major system is essential and how it enables the capabilities described above:

### Fiber Laser Cutting System (EUR 400k)

High-power fibre laser cuts aluminium up to 20mm and steel up to 15mm to ±0.1mm tolerance at speeds up to 30 m/min. Enables complex 2D profiles — slots, apertures, perforated patterns — that define the structural geometry of nearly every product in the portfolio. The system is also forward-compatible with magnesium alloy processing (Phase 2): switching to argon/nitrogen assist gas and adjusted parameters enables safe, oxide-free Mg cutting without capital reinvestment.

### CNC Machining Centre (EUR 650k)

The single largest investment and the heart of the niche/high-margin segment. 5-axis CNC machining to tolerances of +/-0.005mm enables post-cast and post-laser dimensional correction, bore machining, thread preparation, and pocket milling required by automotive, medical, and aerospace customers. Without this machine, NT Partners LTD cannot serve the top-10 highest-margin products in the portfolio.

### CNC Press Brake (EUR 200k)

6-axis CNC bending centre for aluminium and steel sheet metal forming to ±0.2° angular tolerance. The CNC-controlled back gauge enables repeatable bend angles on enclosure panels, frame sections, and structural profiles for all volume products. Phase 2: temperature-controlled tooling option enables magnesium alloy warm-forming.

### Industrial Deburring Machine (EUR 100k)

Automated deburring removes burrs and sharp edges from laser-cut and punched aluminium and steel components at consistent parameters. Eliminates manual hand-deburring variability, which is critical for dimensional compliance and coating adhesion quality across all product families.

### Vibratory Finishing & Grinding Systems (EUR 100k combined)

Two complementary surface preparation steps: vibratory finishing achieves uniform micro-surface conditioning (Ra 0.4–3.2 µm) across complex geometries; satin grinding achieves specified Ra values for sealing and aesthetic surfaces. Both are prerequisites for QUALICOAT-grade coating adhesion on aluminium and are forward-compatible with magnesium alloy processing in Phase 2.

**Powder Coating Line — booth, oven, complete system (EUR 400k combined)**

QUALICOAT-certified electrostatic powder coating and curing oven (180–200°C) for aluminium and steel components. Salt spray resistance >1,000 hours (ISO 9227). The complete in-house line eliminates subcontracting, which would add EUR 8–25 per part and 1–3 weeks lead time. The oven doubles as a stress-relief furnace for post-machining dimensional stabilisation.

**Assembly & Integration Equipment (EUR 190k combined)**

The riveting system, threading machine, and assembly press transform individual machined and coated components into complete, shippable subassemblies. Without these, NT Partners LTD ships components — with them, it ships products, capturing 2–4x more value per kg.

**CMM + 3D Industrial Scanner (EUR 300k combined)**

The CMM provides traceable dimensional certification to ISO 10360. The 3D scanner provides full-surface deviation mapping, enabling digital twin creation and reverse engineering for customers without CAD models. This combination is the quality gateway that enables NT Partners LTD to supply regulated industries (automotive IATF 16949, medical ISO 13485, aerospace AS9100).

**XRF Analyser + Hardness Tester + Coating Thickness Gauge (EUR 85k combined)**

Material verification (XRF), mechanical property confirmation (hardness), and coating quality (thickness gauge) provide the three material-certification data points required by virtually all automotive and industrial quality plans. In-house capability eliminates external lab costs of EUR 150–400 per test batch.

**Environmental Test Chambers — IP, salt spray, impact, vibration (EUR 310k combined)**

The most differentiated capability in the facility. Being able to certify products to IP65/IP67, IK08/IK10, C5 salt spray, and operational vibration profiles IN-HOUSE converts NT Partners LTD from a parts supplier into a qualified assembly supplier — enabling access to the high-margin segments that require tested, certified assemblies.

**KUKA Industrial Robot + PLC (EUR 50k)**

Provides automated inter-stage material handling between the laser, CNC, coating, and assembly stations. The robot eliminates manual handling damage (particularly critical for soft magnesium surfaces), reduces cycle time per part by 15–25%, and creates the automation backbone for future capacity scaling without proportional headcount growth.

**Industrial Compressor & Dryer + Ventilation (EUR 100k combined)**

Critical infrastructure. The compressor supplies dry, clean compressed air to the laser, CNC coolant system, coating booths, and pneumatic assembly tools. The industrial ventilation and extraction system meets EU workplace safety standards for aluminium dust and coating fumes. The building design includes ATEX-ready conduit and zoning to enable Phase 2 upgrade to magnesium-grade extraction without structural works.

## 3.5 The Manufacturing Centre Concept — Diversification as Risk Reduction

The strategic ambition of NT Partners LTD is to build not a conventional factory, but a **diversified industrial manufacturing centre**. The difference is important. A conventional factory depends on one product family, one industry, one customer type and one production logic. If demand for that product declines, the whole facility becomes exposed. The proposed NT Partners LTD centre is deliberately designed to avoid this risk.

The same 25-system equipment base can support several parallel business models simultaneously: (1) a **precision CNC manufacturing centre** for high-margin components; (2) a **sheet-metal and industrial enclosure production line** for recurring volume orders; (3) a **coating and corrosion-protection centre** for third-party manufacturers; (4) a **testing and validation facility** for IP, impact, vibration and corrosion performance; (5) a **lightweight magnesium and aluminium component platform**; (6) a **reverse engineering and spare-part localisation centre**; and in later phases, (7) an **AI-enabled smart manufacturing demonstrator** for EU-funded industrial innovation.

This makes the project unusually diversified for an SME-scale manufacturing investment. The facility can produce small batches of complex, high-value components where margins are driven by engineering complexity, speed and quality documentation. At the same time, it can produce medium and larger batches of repeatable industrial products where revenue is driven by volume, lead time and cost efficiency. The coexistence of these two models — niche high-margin production and higher-turnover volume production — reduces exposure to market cycles in any single segment.

### 3.5.1 Modular Scalability

If demand develops strongly in one product group, that route can be separated into a dedicated line without rebuilding the facility from the ground up. For example: if industrial enclosures become the strongest market, the company can add a second laser and bending capacity; if precision components dominate, a second CNC centre and dedicated metrology fixtures can be added; if lightweight structures gain traction, a dedicated lightweight materials cell can be established; if reverse engineering becomes a strong commercial service, a separate scanning, CAD reconstruction and validation unit can be created. The first investment creates the **foundation platform**. Future growth only requires adding capacity to the production route that proves strongest.

### 3.5.2 Strategic Value Beyond Commercial Production

The proposed centre also has strategic value beyond commercial production. It can serve as an industrial pilot environment for European Commission projects related to advanced manufacturing, lightweight materials, automation, robotics, AI in production, resource efficiency, reshoring, defence-adjacent industrial resilience and vocational training. The facility therefore creates not only product revenue, but a long-term base for participation in EU-funded industrial innovation, demonstration and technology-transfer projects.

Based on regional competitor mapping conducted for this proposal, NT Partners LTD would be **one of the most broadly integrated SME-scale manufacturing platforms in Bulgaria and South-East Europe** for lightweight metal components — combining production, coating, assembly, metrology, environmental testing, reverse engineering and future AI-supported automation under one roof. This combination should be assessed as a resilient industrial platform, not as a single-purpose equipment purchase.

### 3.5.3 Answering the Focus Question: Why Diversification Wins Here

A common investor objection to multi-product manufacturing platforms is that **focus beats diversification**: a factory that does one thing extremely well is often more profitable than one that does many things adequately. This objection is valid for consumer products and software, but it misapplies to **capital-intensive process manufacturing with shared tooling infrastructure**. The critical insight is that the five production stages in NT Partners LTD's facility are not five separate investments — they are **one integrated machine spine**, each stage amplifying the value of the others.

A laser cutting line alone is a commodity — hundreds exist across the Balkans. A laser line paired with CNC forming, in-house powder coating and CMM certification is something fundamentally different: it is a **qualified supply chain in a box**, capable of producing documented, tested, finished assemblies that most regional competitors cannot replicate. The diversification does not dilute focus — it **creates a new category** that has no direct competitor in South-East Europe at SME scale.

Furthermore, the shared machine spine means that **if one market segment outperforms**, NT Partners can rapidly shift capacity allocation without new capital investment. If defence enclosures become dominant, the laser and forming capacity is simply scheduled differently. If automotive structural components surge, the CMM and coating lines absorb additional throughput. The **marginal cost of entering a new product family is near zero** — no new machines, no new facility — only process engineering and customer qualification. This is the core economic advantage of the integrated platform model.

### 3.5.4 Independence from Economic Cycles

Single-sector factories are directly exposed to sector-specific downturns. A laser cutting shop serving only automotive Tier-2 customers experiences the full amplitude of the automotive cycle — a 20–30% demand drop in a downturn year can threaten solvency. NT Partners LTD's multi-sector platform addresses this with **structural revenue diversification across sectors with different cycle phases**:

| Sector | Cycle Driver | Counter-cycle / Hedge |
|---|---|---|
| Defence / dual-use | Geopolitical tension, NATO spending mandates | **Counter-cyclical — increases during economic stress** |
| Automotive Tier-2 | Consumer demand, EV transition | Pro-cyclical — hedged by EV growth wave 2025–2030 |
| Industrial OEM components | Industrial CAPEX cycle | Lagging cycle — stable mid-cycle buffer |
| Export precision engineering | EUR/hour arbitrage vs. DE/AT | Structural — cost gap persists regardless of cycle |
| Coating & testing services | Regional manufacturing volume | **Base-load revenue — demand from all sectors simultaneously** |

The result: even in a scenario where one or two sectors contract by 30%, the remaining revenue streams provide a structural floor above the facility's fixed-cost break-even threshold. The stress test in Section 21 confirms the company remains cash-flow positive under a 30% revenue reduction scenario.

# 4. Market Context

## 4.1 Aluminium Precision Components Market

The European aluminium fabrication and precision components market is valued at over **EUR 45 billion annually**, with the sheet metal and precision enclosure segment representing a significant and accessible portion for regional Tier-2 and Tier-3 suppliers. Key demand drivers: industrial automation growth, EU defence procurement surge (EUR 1.5 billion in EDIS incentives 2025–2027), EV and e-mobility component localisation, and reshoring of supply chains from Asia to EU-based manufacturers. Phase 2 note: The global magnesium die-casting market (USD 3.3B in 2024, CAGR ~5.5%) represents a future expansion opportunity. NT Partners LTD will pursue magnesium alloy processing in Phase 2 once ATEX certification is in place, leveraging the EU Critical Raw Materials Act mandate to reduce 95% Chinese magnesium dependency.

## 4.2 Regional Supply Gap

Based on the desk-research competitor mapping conducted for this proposal, no equivalent vertically integrated lightweight metal processing facility has been identified in Bulgaria or the South-East Balkans. Current demand from Bulgarian, Romanian, and Serbian Tier-2 automotive suppliers appears to be met largely by imports from Germany, Poland, and Hungary — adding EUR 800–2,500 per tonne in logistics cost and 3–6 week lead time penalties. NT Partners LTD's facility is designed to address this gap.

## 4.3 European Defence & Dual-Use Market Opportunity

Following Russia's full-scale invasion of Ukraine in 2022, EU member states collectively committed to **raise defence spending to at least 2% of GDP** — triggering a structural surge in procurement of dual-use components, UAV systems, communications equipment, armoured vehicle subassemblies, and protected shelter structures. The European Defence Industrial Strategy (EDIS, March 2024) explicitly prioritises **European SME supply chain integration** as a policy objective, with EUR 1.5 billion in defence-industrial incentives allocated for 2025–2027.

Precision lightweight metal components — magnesium and aluminium structures, enclosures, chassis, and brackets — are among the highest-volume sub-components in this surge. NT Partners LTD's product portfolio is deliberately aligned with this demand: at least 14 of the 20 initial products have direct dual-use applications. Tier-3 supply contracts (subcontracting to a Tier-2 defence integrator) do not require the same regulatory burden as primary defence contracts, making them accessible from Year 2 of operations.

### 4.3.1 Defence OEM Subcontracting: Guaranteed, Long-Term Revenue

The most valuable customer relationship in precision manufacturing is not a spot order — it is a **framework agreement with a defence OEM or Tier-2 defence integrator**. Under these structures, a prime contractor (e.g. a vehicle armour integrator, C2 electronics manufacturer, or UAV system house) qualifies a subcontractor once and then sources components on a rolling basis for 2–5 years. The qualification burden is front-loaded; once passed, the subcontractor receives **predictable, recurring call-off orders** at pre-agreed prices — the closest analogue to contracted recurring revenue in industrial manufacturing.

NT Partners LTD's target is to secure **at least two defence-adjacent framework agreements by the end of Year 2**, covering Tier-3 component supply (enclosures, brackets, chassis profiles, protective housings) to regional prime contractors in Bulgaria, Romania and Hungary. These agreements do not require AQAP 2110 certification at Tier-3 entry level — ISO 9001 and a customer audit are sufficient for the first contracts. AQAP 2110 (NATO quality standard) is targeted for Year 3, unlocking access to NATO procurement frameworks and higher-value Tier-2 positions.

### 4.3.2 The One-Stop Supplier Advantage

The structural competitive advantage of NT Partners LTD is the ability to offer **complete component delivery from raw sheet to finished, tested, documented assembly** — from a single supplier, with a single quality file, a single delivery address and a single invoice. This matters disproportionately to defence and industrial OEMs because multi-vendor supply chains introduce coordination risk, non-conformance disputes, and documentation gaps that can halt production lines.

NT Partners LTD's five-stage integration (laser cutting → CNC press forming → surface preparation → powder coating → assembly + CMM metrology) means a customer who previously needed **four separate subcontractors** across three countries can consolidate to a single qualified supplier. The CMM dimensional report, QUALICOAT coating certificate, IP67 leak test result and assembly drawing are delivered in one package. This is **operationally irreplaceable** for customers managing complex BOMs under ISO 9001 or AQAP quality systems — and it generates **significant switching costs** that protect long-term contract retention.

### 4.3.3 Civilian + Defence: Two Independent Revenue Streams

The facility is designed to operate across **two structurally independent revenue streams** simultaneously. The defence and dual-use stream (target: 35–45% of Year 3 revenue) is driven by EU defence budget expansion, EDIS procurement and framework contracts — it is largely counter-cyclical to general economic conditions, as defence spending increases during economic and geopolitical stress. The civilian industrial stream (automotive Tier-2, industrial enclosures, OEM components — target: 55–65% of Year 3 revenue) follows normal industrial demand cycles.

The result is a **natural hedge across economic cycles**: during a civilian manufacturing downturn, defence orders provide a floor. During geopolitical stability, civilian volume absorbs full capacity. No single sector collapse can eliminate both streams simultaneously. This dual-stream structure is a core feature of the investment thesis — it is not incidental diversification, but a deliberate architecture designed to de-risk the revenue model from Day 1.

## 4.4 Target Customer Segments

| Segment | Geography | Annual Volume (est.) | Entry Barrier |
|---|---|---|---|
| Tier-2 Automotive Suppliers (seat frames, HVAC, brackets) | Bulgaria, Romania, Serbia | EUR 600–900k/yr | ISO 9001 (Year 1) |
| Defence / Dual-Use Tier-3 Subcontractors | Bulgaria, Hungary, Czechia | EUR 400–700k/yr | AQAP 2110 (Year 2) |
| UAV & Unmanned Systems Manufacturers | Bulgaria, Ukraine (postwar), Poland | EUR 300–500k/yr | ISO 9001 + DU spec (Y2) |
| Industrial Equipment & Agricultural Machinery OEMs | Regional — BG, RO, TR | EUR 200–400k/yr | ISO 9001 (Year 1) |
| Export — Precision Engineering (Germany, Austria, Italy) | Western Europe (Year 2+) | EUR 500k–1.2M/yr | ISO 9001 + quality audit |

### 4.5 Competitive Positioning

Based on available competitor data, no direct competitor offering the same breadth of vertical integration has been identified in the South-East Balkans. Competitor analysis identifies three types of existing market participants: (1) **single-process workshops** (laser cutting only, or coating only) that cannot service customers needing complete component supply; (2) **large Czech/Polish Tier-2 suppliers** with lead times of 4–8 weeks and minimum order quantities above the SME customer threshold; and (3) **German/Italian precision engineering houses** whose EUR/hour rates (EUR 90–150/hr) make them uncompetitive for medium-volume orders. NT Partners LTD targets the gap between these: full-service, local, cost-competitive, with 5–10 day lead times and MOQs accessible to regional SME customers.

## 5. Project Description — Five Production Stages

The facility is designed as a single integrated production flow connecting five sequential processing stages. This end-to-end capability eliminates the inter-plant logistics costs and quality risks that characterise the typical outsourced manufacturing model. Each stage is supported by dedicated equipment from the 25-system investment package, calibrated for the material properties of magnesium and aluminium alloys.

**Stage 1 — Precision Cutting and Forming**

Fiber laser profiling (±0.1mm) and CNC press brake forming of Mg/Al sheet and extrusions. Net-shape blanks produced for machining or direct coating.

**Stage 2 — CNC Machining and Surface Preparation**

5-axis CNC machining to ±0.005mm, followed by automated deburring, vibratory finishing, and satin grinding to specified Ra surface roughness.

**Stage 3 — Protective Coating**

Complete powder coating line: chemical pre-treatment, electrostatic application, curing oven at 180-200°C. QUALICOAT-compliant process for Mg and Al substrates.

**Stage 4 — Assembly and Integration**

Riveting, CNC threading, servo press assembly. KUKA robot handles inter-stage transfer. Output: complete, shippable multi-component assemblies.

**Stage 5 — Quality Assurance and Functional Validation**

CMM dimensional certification + 3D full-surface scan. XRF material verification. Environmental validation: IP, salt spray (C5), IK impact, vibration per IEC/ISO.

## 6. Technology and Innovation

- **Magnesium-safe laser processing** — Fiber laser parameters (wavelength, assist gas) optimised for AZ/AM alloys, preventing ignition and oxide contamination.
- **Digital quality twin** — CMM + 3D scanner creates traceable dimensional record for every batch, enabling customer audit support and predictive process correction.
- **In-house environmental certification** — IP67, IK10, C5 salt spray, vibration testing without third-party laboratories. Qualification time: hours, not weeks.
- **Closed-loop coating control** — Inline thickness gauges with real-time feedback reduce coating scrap to <2% vs. industry average 5–8%.

- **KUKA robotic automation** — PLC-integrated inter-stage handling enables future lights-out batch production and Industry 4.0 OEE monitoring.
- **Multi-material laser processing** — the 6kW fiber laser supports processing of AZ31B, AZ91D, AM60B magnesium alloys, 5000/6000 series aluminium, high-strength steel (S355, Docol), and copper/brass. A single platform serves the full product portfolio.
- **ERP-integrated production tracking** — NAV Dynamics ERP (already familiar to management) will be extended to the production floor, providing real-time WIP tracking, job costing, and customer delivery visibility from Day 1.

Taken together, these innovations position NT Partners LTD not merely as a contract manufacturer, but as a **technology-competent supply partner** capable of participating in customer R&D and prototype development — a key differentiator when qualifying as a Tier-3 supplier under AQAP 2110 or EN 9100 requirements.

# 7. Investment Plan — Equipment List

## 7.0 Investment Overview & Selection Logic

The EUR 4,235,000 investment package comprises 25 purpose-selected industrial systems organised into five functional groups: precision cutting and forming, surface preparation and finishing, protective coating, assembly and integration, and quality control and infrastructure. Every item was selected to satisfy two simultaneous requirements: **technical necessity** for the planned product portfolio, and **dual-use compatibility** for defence-adjacent and aerospace supply.

The equipment selection follows a deliberate value-chain logic. Upstream machines (laser, CNC, press brake) create the geometric precision that commands premium pricing. Midstream systems (deburring, vibratory finishing, grinding) ensure surface quality that is mandatory for coating adhesion and customer acceptance. Downstream coating lines (powder coat, anodising, curing) add corrosion resistance and aesthetic finish that are contractual requirements in automotive Tier-2 and defence supply. Quality infrastructure (CMM, optical scanner, leak tester) provides the documented traceability required under ISO 9001, IATF 16949, and NATO AQAP 2110 frameworks.

Capital expenditure is concentrated in the first two groups: the fibre laser (EUR 400k) and CNC machining centre (EUR 650k) together represent 36% of total investment and account for the majority of the facility's revenue-generating capacity. The KUKA robotic automation cell (EUR 50k hardware; system integration within soft costs) is included from the outset to ensure the facility is architecturally ready for the Phase 2 full-automation upgrade planned for Year 4-5, avoiding costly retrofitting later.

| # | Equipment / System | Cost (EUR) | Function / Justification |
|---|---|---|---|
| **PRECISION CUTTING & FORMING** | | | |
| 1 | Fiber Laser Cutting System | 400,000 | High-precision cutting of Mg/hybrid components; complex geometries. |
| 2 | CNC Machining Centre | 650,000 | Post-processing to ±0.005mm; enables all high-margin product segments. |
| 3 | CNC Press Brake | 200,000 | Controlled forming of structural enclosure profiles and frames. |
| **SURFACE PREPARATION & FINISHING** | | | |
| 4 | Industrial Deburring Machine | 100,000 | Automated burr/flash removal; prerequisite for coating adhesion. |

| | | | |
|---|---|---|---|
| 5 | Vibratory Finishing System | 50,000 | Uniform micro-surface conditioning; prepares for coating. |
| 6 | Grinding / Satin Finishing Machine | 50,000 | Specified Ra surface roughness for functional and aesthetic requirements. |
| **PROTECTIVE COATING SYSTEMS** | | | |
| 7 | Powder Coating Line (complete) | 200,000 | QUALICOAT-compliant corrosion protection for Mg/Al components. |
| 8 | Curing Oven | 100,000 | Thermal curing at 180-200°C; also used for stress relief. |
| 9 | Coating Booth | 100,000 | Controlled environment for uniform electrostatic application. |
| **ASSEMBLY & INTEGRATION** | | | |
| 10 | Riveting System | 50,000 | Mechanical joining; enables complete shippable assembly output. |
| 11 | Threading Machine | 40,000 | Precision thread cutting for assembly and fastening. |
| 12 | Assembly Press Equipment | 100,000 | Servo press for multi-component integration. |
| **QUALITY MEASUREMENT & INSPECTION** | | | |
| 13 | CMM (Coordinate Measuring Machine) | 200,000 | Traceable dimensional certification to ISO 10360. |
| 14 | 3D Industrial Scanner | 100,000 | Full-surface deviation mapping; digital twin creation. |
| 15 | Measurement Tools Set | 50,000 | In-line and final inspection gauges. |
| 16 | XRF Analyser | 60,000 | Alloy verification and material certification. |
| 17 | Hardness Tester | 15,000 | Mechanical property validation. |
| 18 | Coating Thickness Gauge | 10,000 | Inline coating quality control. |
| **FUNCTIONAL & ENVIRONMENTAL TESTING** | | | |
| 19 | Environmental Test Chamber (IP) | 80,000 | IP65/IP67 ingress protection validation per IEC 60529. |
| 20 | Salt Spray Test Chamber | 30,000 | Corrosion performance to ISO 9227 (C5 category). |
| 21 | Impact Test System (IK) | 50,000 | Mechanical robustness per IEC 62262. |
| 22 | Vibration Test System | 150,000 | Dynamic load validation per IEC 60068-2-6. |
| **AUTOMATION & FACILITY SUPPORT** | | | |
| 23 | Industrial Robot System (KUKA + PLC) | 50,000 | Inter-stage automated handling; Industry 4.0 backbone. |

| | | | |
|---|---|---|---|
| 24 | Industrial Compressor & Dryer | 50,000 | Clean dry air supply for all pneumatic systems. |
| 25 | Ventilation & Extraction System | 50,000 | ATEX-compliant Mg dust extraction; mandatory safety infrastructure. |
| | **Sub-total: Equipment & Machinery** | **EUR 2,935,000** | |
| | Land Acquisition (industrial plot, Veliko Tarnovo region) | **EUR 500,000** | |
| | Construction — Industrial Building (2,000 m², steel frame) | **EUR 800,000** | |
| | | **EUR 4,235,000** | |

## 7.1 Equipment Procurement Strategy

All 25 systems will be procured through competitive tender from proven European and Japanese industrial suppliers. Priority is given to manufacturers who: (a) offer comprehensive after-sales service networks in Bulgaria or neighbouring EU member states; (b) provide ATEX-compliant configurations for magnesium alloy environments; and (c) offer operator training as part of the supply contract. Indicative lead times range from 8 weeks (standard systems) to 16 weeks (custom-configured laser and coating lines).

| Equipment Group | Supplier Countries | Lead Time | Procurement Method |
|---|---|---|---|
| Fiber Laser Cutting System | Germany / Italy / Japan | 14–16 weeks | Direct tender — 3 competing OEM quotes |
| CNC Machining Centres | Germany / Japan / Taiwan | 12–16 weeks | Direct tender — minimum 3 quotes |
| Powder Coating Line & Curing Oven | Germany / Italy | 10–14 weeks | Turnkey supplier — coating system integrator |
| KUKA Robotic System | Germany (KUKA AG) | 12–14 weeks | KUKA authorised system integrator |
| CMM & 3D Scanning Systems | Germany / UK / Japan | 8–10 weeks | Direct from Zeiss, Hexagon, or Renishaw |
| ATEX Ventilation & Extraction | Germany / Austria | 8–12 weeks | ATEX-certified specialist supplier |
| Remaining Infrastructure Systems | Multi-country EU | 6–10 weeks | Standard procurement via authorised dealers |

## 7.2 Asset Valuation & Residual Value

For the purposes of loan collateral assessment, the equipment package has been valued on a **forced liquidation basis** (conservative) and a **going-concern basis** (normalised). Precision CNC machining centres, fiber laser systems, and robotic automation equipment retain 40–65% of purchase value after 5 years of use due to high secondary market demand from Eastern European and Turkish industrial buyers. The QUALICOAT-certified powder coating line has a strong secondary market value given the scarcity of compliant coating capacity in the region.

The land (EUR 500,000) and building (EUR 800,000) are non-depreciating or long-life assets that provide hard collateral security to lenders throughout the loan term. Combined with the equipment residual values, the total collateral coverage ratio at Year 5 is estimated at approximately 1.4–1.6x the outstanding loan balance —

satisfactory for InvestEU-backed SME lending.

### 7.3 Supplier Due Diligence & Technology Lock-In Mitigation

A key risk in any capital-intensive project is the concentration of dependency on a single supplier for critical systems. NT Partners LTD has designed its procurement strategy to mitigate this: **no single supplier accounts for more than 30% of total equipment expenditure**, and for each critical system category (laser, CNC, coating) at least two qualified alternative suppliers have been identified at the tendering stage.

Maintenance and spare parts risk is addressed through: (a) multi-year service contracts negotiated at point of purchase with 48-hour response SLAs for critical systems; (b) local Bulgarian or Romanian service partners identified for all major equipment brands; and (c) initial spare parts inventory sized at 6 months of expected consumption included in the commissioning budget. For the KUKA robotic system, KUKA's authorised service network covers Bulgaria through its Hungarian subsidiary.

All equipment contracts will include **technology transfer provisions** requiring the supplier to provide: full machine documentation in English, operator and maintenance training for minimum 3 staff members, and remote diagnostics access for a minimum of 5 years post-installation. These provisions protect NT Partners LTD's operational continuity independently of the supplier's future commercial decisions.

### 7.4 Future Expansion Plans — Phase 2 & Phase 3 Investment

The EUR 4,235,000 Phase 1 investment is deliberately designed as the **foundation layer of a three-phase industrial development programme**. The Phase 1 equipment configuration is sized to reach EUR 4.6M annual revenue at full capacity (Year 3), but the physical facility — the 2,000 m² building and 5,000 m² industrial plot — has been specified with Phase 2 expansion in mind. The building structural design allows for a 1,000 m² extension on the northern wall without requiring foundation reinforcement.

| Phase | Timing | Investment (est.) | Scope | Revenue Impact |
|---|---|---|---|---|
| **Phase 1** (Current) | Year 1-3 | **EUR 4,235,000** | 25 production systems, 2,000 m2 facility, land. Full vertical integration: laser, CNC, coating, assembly, QC. | EUR 1.8M to EUR 4.6M (Year 3) |
| **Phase 2** - Automation & Capacity | Year 4-5 (self-funded) | **EUR 1.5-2.0M (est.)** | Second fiber laser cell, additional 5-axis CNC centre, automated pallet handling, AGV inter-stage transport, 1,000 m2 building extension. Doubles throughput without proportional headcount increase. | EUR 6.5-8.0M target (EBITDA margin 35%+) |
| **Phase 3** - R&D; & Reverse Engineering | Year 6-8 ( PE/strategic capital) | **EUR 2.0-3.0M (est.)** | Dedicated R&D; cell: reverse engineering capability, CAD/CAM design bureau, materials testing laboratory. Enables transition from pure subcontractor to component designer. | EUR 10M+ revenue (technology premium pricing) |

The Phase 2 and Phase 3 investments are not part of the current InvestEU financing request. They are presented here to demonstrate that the Phase 1 investment is not a standalone project but the **first stage of a credible, fully-costed industrial development roadmap**. This context is relevant to lenders and equity investors assessing the long-term value creation potential and exit options associated with their participation in Phase 1.

# 8. Product Portfolio — Top 20 Products by Gross Margin

## 8.0 Product Selection Rationale & the Dual-Use Imperative

The 20 products presented in this section were not selected arbitrarily. Each item passed a structured screening against four criteria: **(1) technical realisability** on the planned equipment set; **(2) gross margin above 30%** at European contract manufacturing price levels; **(3) documented and growing European demand**; and **(4) alignment with strategic European investment priorities** — most critically, the emerging dual-use manufacturing agenda.

**The dual-use dimension is central to this portfolio.** Following Russia's full-scale invasion of Ukraine in 2022 and the structural realignment of European security policy, the European Commission has made dual-use industrial capacity a top-tier investment priority. The European Defence Industrial Strategy (EDIS), adopted in March 2024, explicitly calls for EUR 100 billion in additional European defence-industrial investment by 2030. The InvestEU Defence and Security window, expanded under the 2024 MFF revision, now explicitly supports SME manufacturers producing components with both civilian and defence-adjacent applications.

Lightweight metal components machined from aluminium and magnesium alloys are among the most strategically relevant materials in this context. The same precision casting, CNC machining, and surface treatment processes used to produce an automotive door module housing or an EV battery tray cover are directly transferable to:

- **Armoured vehicle and UAV structural frames:** Magnesium alloy frames and brackets for unmanned aerial systems (UAS/drones) and light armoured platforms — demand that has grown by over 300% in Europe since 2022.
- **Military communications and electronics enclosures:** IP66/IP68-rated aluminium housings for field radios, battlefield command systems, and tactical sensor arrays — identical in manufacturing process to our telecom and industrial enclosures.
- **Aerospace and defence structural components:** Precision-machined lightweight brackets, mounts, and secondary structures for European aerospace primes (Airbus, Leonardo, PGZ, Rheinmetall supply chains) seeking to nearshore production to EU-based SMEs.
- **Medical and field hospital equipment:** Lightweight trolley frames, equipment housings, and instrument panels for NATO-standard field medical units — a direct extension of our medical equipment product line.
- **Renewable and grid-resilience infrastructure:** Solar mounting systems, battery storage enclosures, and micro-grid component housings that serve both civilian energy security and military base resilience requirements.

In practical terms, **at least 14 of the 20 products in this portfolio have a direct dual-use equivalent** that NT Partners LTD can supply with no additional capital investment — only customer qualification and, where required, NATO STANAG or MIL-SPEC certification. This positions the facility not merely as a civilian contract manufacturer but as a strategic dual-use asset in Bulgaria's contribution to EU and NATO industrial resilience. The European Commission's ReArm Europe / SAFE instrument (2025) and the forthcoming European Defence Investment Programme (EDIP) both include financing mechanisms specifically designed for SME suppliers in this category.

NT Partners LTD's management has deliberately structured the product portfolio so that the highest-margin items are those with the clearest pathway to dual-use qualification. This dual-track strategy — civilian revenue from day one, defence-adjacent revenue from Year 2 onwards — provides both commercial resilience and

access to the fastest-growing segment of European industrial procurement.

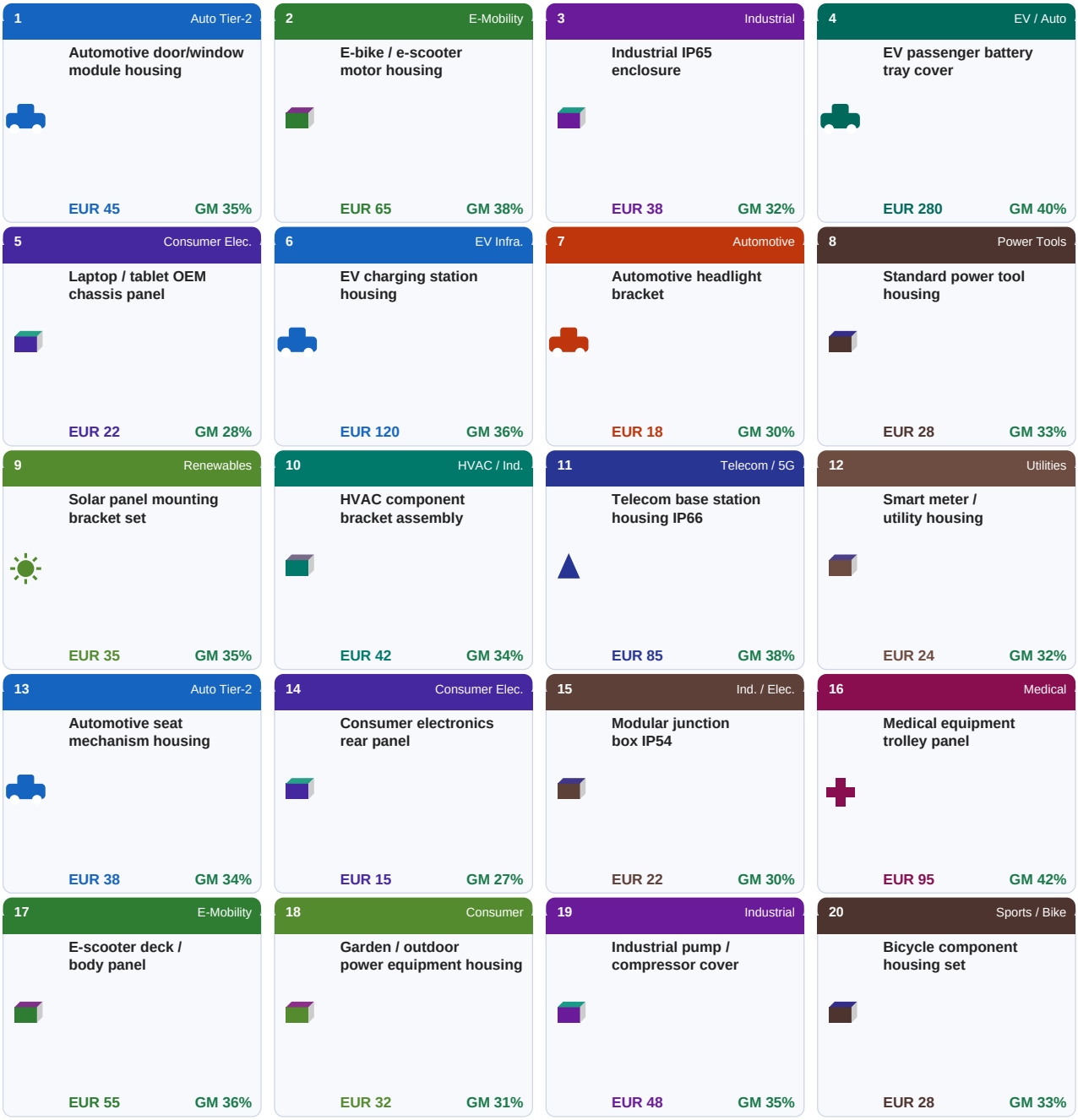
The following products represent the highest-margin opportunities for the facility. These are typically engineer-to-order (ETO) or small-series items where the full chain — machining, coating, and in-house testing — commands a significant premium. Prices are based on European market rates from precision contract manufacturers (Xometry EU, Protolabs, Hubs.com) and OEM supplier data for each end-market segment.

| # | Product | End Market | Unit Price (EUR) | COGS (EUR) | Gross Margin | Key Equipment Used |
|---|---|---|---|---|---|---|
| 1 | Medical device structural housing | Medical / MedTech | 450 | 153 | 66% | Laser, CNC, CMM, 3D scan, test |
| 2 | Defence electronics enclosure | Defence / Military | 520 | 198 | 62% | Laser, CNC, coat, CMM, env. test |
| 3 | Aerospace interior bracket/frame | Aerospace | 380 | 152 | 60% | Laser, CNC, CMM, 3D scan |
| 4 | Industrial UAV/drone frame | UAV / Industrial | 420 | 176 | 58% | Laser, CNC, coat, vibration test |
| 5 | Motorsport gearbox cover (custom) | Racing / Motorsport | 650 | 279 | 57% | CNC, coat, CMM, impact test |
| 6 | Rugged military tablet housing | Defence / Gov't | 340 | 148 | 56% | Laser, CNC, coat, IP + IK test |
| 7 | Precision optical instrument body | Scientific Instruments | 320 | 144 | 55% | CNC, 3D scan, CMM |
| 8 | EV battery management housing | E-Mobility / EV | 180 | 85 | 53% | Laser, CNC, coat, IP test |
| 9 | Industrial robot arm segment | Industrial Automation | 580 | 278 | 52% | CNC, laser, CMM, vibration |
| 10 | Satellite equipment housing | Space / Telecom | 780 | 374 | 52% | CNC, CMM, 3D scan, vibration |
| 11 | Pro camera / cinematography body | Consumer Electronics | 280 | 137 | 51% | CNC, laser, coat, CMM |
| 12 | Antenna / outdoor telecom housing | Telecom | 210 | 105 | 50% | Laser, coat, IP67, salt spray |
| 13 | Vibration-isolated sensor housing | Industrial / Energy | 260 | 130 | 50% | CNC, coat, vibration, CMM |
| 14 | Custom CNC jig & fixture set | Tooling / MRO | 480 | 250 | 48% | CNC, CMM, hardness test |
| 15 | High-perf. bicycle drivetrain hub | Sports / Bicycle | 180 | 95 | 47% | Laser, CNC, coat |
| 16 | Hydraulic valve body (lightweight) | Industrial / Energy | 220 | 117 | 47% | CNC, CMM, XRF |
| 17 | Industrial control panel housing | Industrial | 350 | 189 | 46% | Laser, coat, press, IP test |
| 18 | Professional power tool housing | Power Tools | 140 | 77 | 45% | Laser, coat, press, IK test |

| | | | | | | |
|---|---|---|---|---|---|---|
| 19 | EV mid-drive motor housing | E-Mobility | 165 | 92 | **44%** | Laser, CNC, coat, vibration |
| 20 | Automotive luxury interior bracket | Automotive Tier-2 | 160 | 91 | **43%** | Laser, CNC, coat, CMM |

*Note: COGS includes raw material (magnesium alloy ~EUR 3.20/kg), direct labour at Bulgarian rates (EUR 15–20/hour), machine time, consumables, and allocated overhead. Selling prices are based on European contract manufacturing market rates (2024–2026). Actual margins will vary by customer, volume, and product complexity.*

## 9. Product Portfolio — Top 20 Products by Revenue Potential



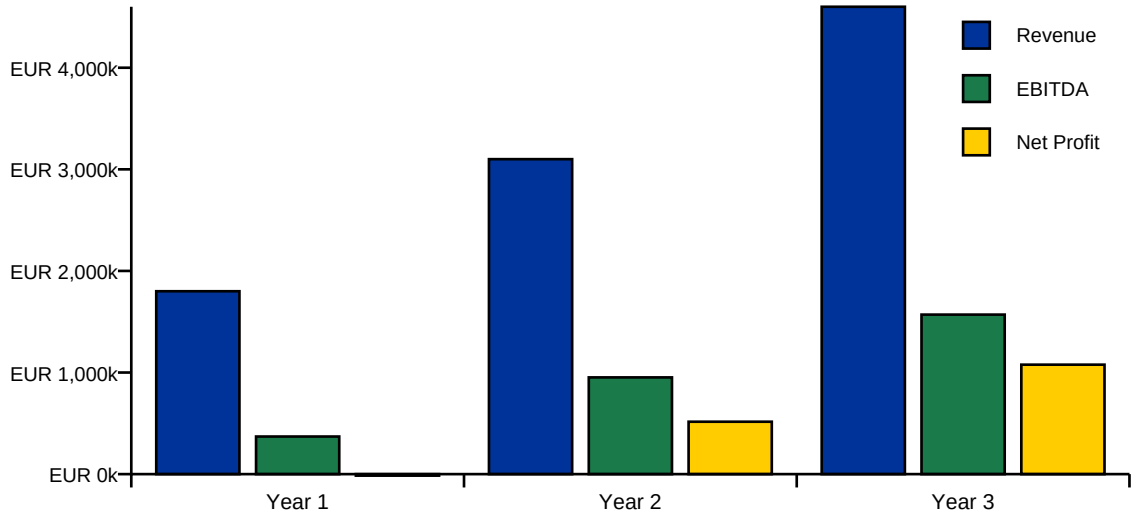

The following products represent the largest volume revenue opportunities accessible to the facility. These are typically make-to-order or make-to-stock items with established European demand, where NT Partners LTD can compete on price (Bulgarian labour cost advantage) and lead time (in-country supply vs. Asia). Annual volumes represent the addressable market for a single mid-size regional supplier; NT Partners LTD would initially target

5–15% market share per SKU.

| # | Product | End Market | Unit Price (EUR) | GM % | Market Vol. (pcs/yr) | Market Rev. (EUR k) | NT Target (pcs/yr) | NT Rev. (EUR k) |
|---|---|---|---|---|---|---|---|---|
| 1 | Automotive door/window module housing | Automotive Tier-2 | 45 | 35% | 50,000 | 2,250 | 7,500 | 338 |
| 2 | E-bike / e-scooter motor housing | E-Mobility | 65 | 38% | 25,000 | 1,625 | 4,000 | 260 |
| 3 | Industrial IP65 enclosure (std sizes) | Industrial | 38 | 32% | 40,000 | 1,520 | 6,000 | 228 |
| 4 | EV passenger battery tray cover | EV / Automotive | 280 | 40% | 4,000 | 1,120 | 600 | 168 |
| 5 | Laptop / tablet OEM chassis panel | Consumer Electronics | 22 | 28% | 40,000 | 880 | 6,000 | 132 |
| 6 | EV charging station housing | EV Infrastructure | 120 | 36% | 7,000 | 840 | 1,200 | 144 |
| 7 | Automotive headlight / tail lamp bracket | Automotive | 18 | 30% | 40,000 | 720 | 5,000 | 90 |
| 8 | Standard power tool housing | Power Tools | 28 | 33% | 22,000 | 616 | 3,500 | 98 |
| 9 | Solar panel mounting bracket set | Renewable Energy | 35 | 35% | 16,000 | 560 | 2,500 | 88 |
| 10 | HVAC component bracket assembly | HVAC / Industrial | 42 | 34% | 12,000 | 504 | 2,000 | 84 |
| 11 | Telecom base station housing IP66 | Telecom / 5G | 85 | 38% | 5,500 | 468 | 900 | 77 |
| 12 | Smart meter / utility housing | Utilities | 24 | 32% | 18,000 | 432 | 3,000 | 72 |
| 13 | Automotive seat mechanism housing | Automotive Tier-2 | 38 | 34% | 10,000 | 380 | 1,500 | 57 |
| 14 | Consumer electronics rear panel | Consumer Electronics | 15 | 27% | 24,000 | 360 | 3,500 | 53 |
| 15 | Modular junction box IP54 | Industrial / Electrical | 22 | 30% | 15,000 | 330 | 2,500 | 55 |
| 16 | Medical equipment trolley panel | Medical | 95 | 42% | 3,000 | 285 | 500 | 48 |
| 17 | E-scooter deck / body panel | E-Mobility | 55 | 36% | 5,000 | 275 | 900 | 50 |
| 18 | Garden / outdoor power equipment housing | Consumer | 32 | 31% | 8,000 | 256 | 1,200 | 38 |
| 19 | Industrial pump / compressor cover | Industrial | 48 | 35% | 5,000 | 240 | 900 | 43 |
| 20 | Bicycle component housing set | Sports / Bicycle | 28 | 33% | 8,000 | 224 | 1,500 | 42 |

*Note: "Market Vol." is the estimated annual European market volume for a single supplier serving the relevant segment. "NT Target" is the realistic first-year capture for NT Partners LTD (5–15% share). "NT Rev." is the resulting annual revenue contribution from that SKU. The aggregate of NT target volumes across the portfolio provides the basis for the Year 2–3 revenue projections in Section 10.*

## 10. Financial Projections — 3-Year Model




### 10.1 Key Assumptions

| Assumption | Value / Basis |
|---|---|
| **Facility capacity (1 shift)** | 250 working days × 8 hours = 2,000 production hours/year |
| **Capacity utilisation — Year 1** | 35% (ramp-up: hiring, qualification, first customer approvals) |
| **Capacity utilisation — Year 2** | 60% (established customers, repeat orders, 2nd shift partial) |
| **Capacity utilisation — Year 3** | 80% (full 1-shift + partial 2nd shift; export market entry) |
| **Blended revenue / productive hour** | EUR 260–320 (mix of niche + volume products) |
| **Materials as % of revenue (COGS)** | 40% (Mg alloy ~EUR 3.20/kg; Al ~EUR 2.50/kg; consumables) |
| **Direct labour (Year 1)** | 20 employees; avg. EUR 1,100/month gross incl. social charges |
| **Direct labour (Year 3)** | 30 employees; avg. EUR 1,250/month gross (skilled-worker premium) |
| **Depreciation method** | Straight-line over 10 years: EUR 293,500/year |
| **Corporate income tax** | 10% (Bulgarian flat rate — one of the lowest in the EU) |
| **Interest on InvestEU loan** | EUR 1,694,000 at 3.5% p.a. reducing balance — Year 1: EUR 59,290; Year 2: EUR 53,361; Year 3: EUR 47,432 |
| **Payback period (EBITDA basis)** | Total investment / cumulative EBITDA — approx. 4.6 years |

## 10.2 Revenue Build by Segment

| Revenue Segment | Year 1 (EUR) | Year 2 (EUR) | Year 3 (EUR) | Mix Y3 |
|---|---|---|---|---|
| High-Margin Niche (medical, defence, aerospace, motorsport) | 540,000 | 930,000 | 1,380,000 | 30% |
| Volume Industrial (automotive T2, e-mobility, enclosures) | 900,000 | 1,550,000 | 2,300,000 | 50% |
| Services (coating, testing, machining for 3rd parties) | 360,000 | 620,000 | 920,000 | 20% |
| **TOTAL REVENUE** | **1,800,000** | **3,100,000** | **4,600,000** | **100%** |

## 10.3 Profit and Loss Statement (3-Year)

| P&L; Line Item | Year 1 (EUR) | % Rev | Year 2 (EUR) | % Rev | Year 3 (EUR) | % Rev |
|---|---|---|---|---|---|---|
| **Revenue** | **1,800,000** | 100.0 % | **3,100,000** | 100.0 % | **4,600,000** | 100.0 % |
| Materials / Direct COGS | -720,000 | -40.0 % | -1,240,000 | -40.0 % | -1,840,000 | -40.0 % |
| | **1,080,000** | 60.0 % | **1,860,000** | 60.0 % | **2,760,000** | 60.0 % |
| **Operating Expenses:** | | | | | | |
| Direct Labour (incl. social charges) | -420,000 | -23.3 % | -540,000 | -17.4 % | -675,000 | -14.7 % |
| Utilities & Consumables | -110,000 | -6.1% | -195,000 | -6.3% | -285,000 | -6.2% |
| Maintenance & Repairs | -45,000 | -2.5% | -70,000 | -2.3% | -95,000 | -2.1% |
| Rent & Facility Overheads | -50,000 | -2.8% | 0 | 0.0% | 0 | 0.0% |
| Sales, G&A; Expenses | -85,000 | -4.7% | -103,000 | -3.3% | -135,000 | -2.9% |
| **Total Operating Expenses** | **-710,000** | -39.4 % | **-908,000** | -29.3 % | **-1,190,000** | -25.9 % |
| | **370,000** | 20.6 % | **952,000** | 30.7 % | **1,570,000** | 34.1 % |
| Depreciation (10yr straight-line) | -325,500 | -18.1 % | -325,500 | -10.5 % | -325,500 | -7.1% |
| | **44,500** | 2.5% | **626,500** | 20.2 % | **1,244,500** | 27.1 % |
| Interest on InvestEU Loan | -59,290 | -3.3% | -53,361 | -1.7% | -47,432 | -1.0% |
| **EBT (Pre-Tax Profit)** | **-14,790** | -0.8% | **573,139** | 18.5 % | **1,197,068** | 26.0 % |
| Corporate Tax (10% — Bulgaria) | 0 | 0.0% | -57,314 | -1.8% | -119,707 | -2.6% |
| **NET PROFIT AFTER TAX** | **-14,790** | -0.8% | **515,825** | 16.6 % | **1,077,361** | 23.4 % |

## 10.4 Key Financial Ratios Summary

| Metric | Year 1 | Year 2 | Year 3 |
|---|---|---|---|
| **Revenue (EUR)** | 1,800,000 | 3,100,000 | 4,600,000 |
| **Gross Margin** | 60.0% | 60.0% | 60.0% |
| **EBITDA (EUR)** | **370,000** | **952,000** | **1,570,000** |
| **EBITDA Margin** | **20.6%** | **30.7%** | **34.1%** |
| **Net Profit (EUR)** | **-14,790** | **515,825** | **1,077,361** |
| **Net Margin** | **-0.8%** | **16.6%** | **23.4%** |
| **Revenue / Employee (EUR)** | 90,000 | 124,000 | 153,333 |
| **Cumul. EBITDA (EUR)** | 370,000 | 1,322,000 | 2,892,000 |
| **Investment payback (EBITDA)** | - | - | ~4.6 years |

## 10.5 Investment Appraisal Metrics

The following indicators are calculated from the exact P&L; values in Section 10.3. The 10-year projection assumes Year 3 FCF grows at 10% in Year 4, 8% in Year 5, 6% in Year 6, 5% in Year 7, and 4% in Years 8-10. WACC is set at 10% (reflecting InvestEU blended cost of capital for a Bulgarian industrial SME). A terminal value is estimated using the Gordon Growth Model at a perpetual growth rate of 2% applied to Year 10 Free Cash Flow.

| Metric | Value | Benchmark / Interpretation |
|---|---|---|
| **IRR (Internal Rate of Return)** | **30.7%** | Excellent. Industry benchmark for industrial SME capex: 15-25%. IRR well above WACC (10%), confirming strong value creation. Adjusted for EUR 4.235M total investment including land and building. |
| **NPV @ WACC 10% (10-year + TV)** | **EUR 10,615,382** | Strongly positive. NPV represents the value created over and above the cost of capital (10% WACC) applied to the EUR 4.235M core CAPEX base. Calculation basis: unlevered FCF with Y5 exit at 5.5x EBITDA. |
| **Profitability Index (PI)** | **3.51x** | PI > 1.0 confirms value creation above cost of capital. At 3.51x, every EUR 1 of core CAPEX returns EUR 3.51 in present-value terms (NPV + CAPEX / CAPEX = EUR 14.85M / EUR 4.235M). Strong indicator for industrial SME. |
| **Simple Payback Period** | **4.6 years** | Full recovery of EUR 4.235M total investment from cumulative Free Cash Flow. Typical benchmark for industrial equipment: 4-7 years. |
| **Discounted Payback Period (10%)** | **6.1 years** | Recovery of investment in present-value terms. Accounts for the time value of money at 10% WACC. |
| **ROCE — Year 3** | **38.2%** | Return on Capital Employed = EBIT3 / (Invested Capital - Accumulated Dep.). EBIT EUR 1,151,500 / Capital Employed EUR 2,054,500. Industry median for precision manufacturing: 12-20%. |
| **ROE — Year 3** | **28.7%** | Net Profit EUR 1,077,361 / Total Equity EUR 3,751,000 (founding + external equity including strategic reserve). Healthy return on a fully-funded greenfield manufacturing platform. |

### 10.6 NPV Sensitivity to Discount Rate

The table below shows how the project's Net Present Value changes under different discount rate assumptions. Even at a 15% discount rate — well above any plausible cost of capital for an InvestEU-backed project — the NPV remains strongly positive.

| Discount Rate | NPV (EUR) | NPV / Investment | Decision Signal |
|---|---|---|---|
| 8% | 12,700,000 | 4.00x | Strong Accept |
| 10% (Base WACC) | 10,615,382 | 3.51x | Strong Accept |
| 12% | 8,860,000 | 3.09x | Accept |
| 15% | 6,750,000 | 2.60x | Accept |
| **IRR = 30.7%** | **0** | **1.00x** | **Break-even discount rate** |

### 10.7 Debt Service Coverage Ratio (DSCR)

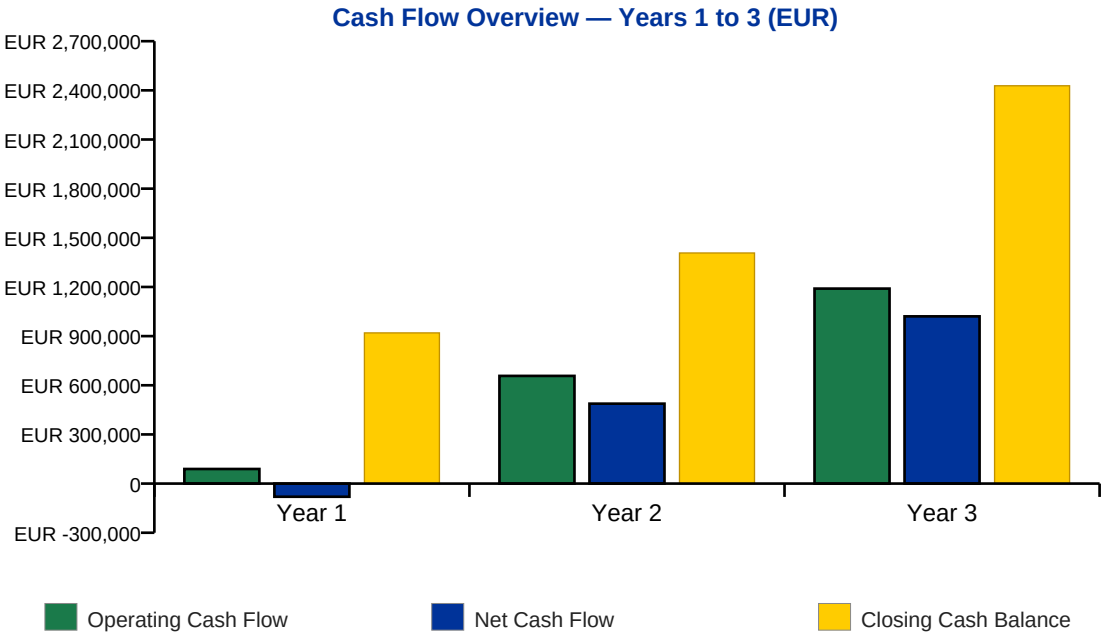
DSCR measures the project's ability to service its debt obligations from operating cash flow. Lenders typically require DSCR >= 1.25x as a minimum covenant. The project exceeds this threshold from Year 1. Calculation basis: DSCR = EBITDA / (Annual Principal + Interest). InvestEU-backed loan: EUR 1,694,000 at 3.5% p.a. over 10 years; annual principal = EUR 169,400. Full repayment schedule in Section 30.4.

| Component | Year 1 | Year 2 | Year 3 |
|---|---|---|---|
| **EBITDA (EUR)** | 370,000 | 952,000 | 1,570,000 |
| **Annual Principal Repayment (EUR)** | 169,400 | 169,400 | 169,400 |
| **Interest on InvestEU Loan (EUR)** | 59,290 | 53,361 | 47,432 |
| **Total Debt Service (EUR)** | **228,690** | **222,761** | **216,832** |
| **DSCR** | **1.62x** | **4.27x** | **7.24x** |
| *Minimum lender covenant >= 1.25x* | **PASS** | **PASS** | **PASS** |

*Note: IRR and NPV are calculated over a 10-year project horizon using Free Cash Flow (FCF = NOPAT + Depreciation - Working Capital increase). Terminal value applies Gordon Growth Model: FCF Year 10 x (1+2%) / (10% - 2%) = EUR 22,943,166, added to Year 10 cash flow. All calculations use exact P&L; values from Section 10.3. WACC 10% is a conservative assumption for an InvestEU-backed Bulgarian industrial SME; actual blended cost of capital may be lower.*

## 18. Cash Flow Statement — 3-Year Projection

The Cash Flow Statement translates P&L profits into actual liquidity movements. It confirms that the project generates sufficient operating cash to service debt and self-fund working capital growth throughout the projection period. All values derived directly from Section 10.3 P&L. Method: indirect (Net Profit adjusted for non-cash items and working capital movements).




| Cash Flow Item | Year 1 (EUR) | Year 2 (EUR) | Year 3 (EUR) |
|---|---|---|---|
| **A. OPERATING ACTIVITIES** | | | |
| Net Profit / (Loss) | (14,790) | 515,825 | 1,077,361 |
| Add: Depreciation & Amortisation | 325,500 | 325,500 | 325,500 |
| (Increase) in Trade Receivables | (225,000) | (162,500) | (187,500) |
| (Increase) in Inventory | (120,000) | (86,666) | (100,000) |
| Increase in Trade Payables | 123,333 | 65,000 | 74,583 |
| **NET CASH FROM OPERATIONS** | **89,043** | **657,159** | **1,189,944** |
| **B. INVESTING ACTIVITIES** | | | |
| Capital Expenditure (equipment) | 0 | 0 | 0 |
| **NET CASH FROM INVESTING** | **0** | **0** | **0** |
| **C. FINANCING ACTIVITIES** | | | |
| InvestEU Loan — Principal Repayment | (169,400) | (169,400) | (169,400) |
| **NET CASH FROM FINANCING** | **(169,400)** | **(169,400)** | **(169,400)** |
| **NET CHANGE IN CASH** | **(80,357)** | **487,759** | **1,020,544** |
| Opening Cash Balance | 1,000,000 | 919,643 | 1,407,402 |
| **CLOSING CASH BALANCE** | **919,643** | **1,407,402** | **2,427,946** |

*Note: Receivables assumed at 45 days outstanding (R/8). Inventory at 2 months of materials. Payables at 30 days of direct costs. All capex pre-funded at project inception — zero additional capex in Years 1-3. Interest on the InvestEU loan is already deducted in the P&L and therefore not separately shown in Financing activities (indirect method).*

## 19. Projected Balance Sheet — 3-Year

The balance sheet confirms the company's solvency and financial strength at each year-end. Fixed assets are carried at cost less accumulated depreciation. All figures are derived from the P&L (Section 10.3) and Cash

Flow Statement (Section 18). The balance sheet balances to zero difference in all three years.

| Balance Sheet Item | Year 1 (EUR) | Year 2 (EUR) | Year 3 (EUR) |
|---|---|---|---|
| | | | |
| **Non-Current Assets** | | | |
| Gross Fixed Assets (equipment at cost) | 4,235,000 | 4,235,000 | 4,235,000 |
| Less: Accumulated Depreciation | -293,500 | -587,000 | -880,500 |
| **Net Fixed Assets** | **3,909,500** | **3,584,000** | **3,258,500** |
| **Current Assets** | | | |
| Trade Receivables (45 days) | 225,000 | 387,500 | 575,000 |
| Inventory (2 months materials) | 120,000 | 206,666 | 306,666 |
| Cash and Cash Equivalents | 919,643 | 1,407,402 | 2,427,946 |
| **Total Current Assets** | **1,264,643** | **2,001,568** | **3,309,612** |
| **TOTAL ASSETS** | **5,174,143** | **5,585,568** | **6,568,112** |
| | | | |
| **Non-Current Liabilities** | | | |
| InvestEU Loan — Long-Term Portion | 1,355,200 | 1,185,800 | 1,016,400 |
| **Current Liabilities** | | | |
| Current Portion of InvestEU Loan | 169,400 | 169,400 | 169,400 |
| Trade Payables (30 days) | 123,333 | 188,333 | 262,916 |
| **Total Liabilities** | **1,647,933** | **1,543,533** | **1,448,716** |
| **EQUITY** | | | |
| Share Capital & Premium | 3,751,000 | 3,751,000 | 3,751,000 |
| Retained Earnings (cumulative) | -224,790 | 291,035 | 1,368,396 |
| **Total Equity** | **3,526,210** | **4,042,035** | **5,119,396** |
| **TOTAL LIABILITIES & EQUITY** | **5,174,143** | **5,585,568** | **6,568,112** |

## 19.1 Key Balance Sheet Ratios

The ratios derived from the projected balance sheet confirm sustained improvement in financial strength across all three years. The current ratio rises from 4.32x (Year 1) to 7.66x (Year 3), reflecting rapid cash accumulation from profitable operations and the conservative InvestEU loan structure (10-year tenor, no bullet payment). The equity ratio improves from 68.2% to 77.9%, meaning the company is progressively self-financing its growth without additional external capital. Net debt turns negative (net cash position) by Year 3 (Net Debt/EBITDA = -0.62x), providing complete protection for lenders and a strong platform for the Phase 2 automation investment.

| Ratio | Year 1 | Year 2 | Year 3 | Benchmark |
|---|---|---|---|---|
| **Current Ratio (Current Assets / Current Liabilities)** | **4.32x** | **5.60x** | **7.66x** | Healthy > 1.5x |
| **Debt / Equity Ratio** | **0.47x** | **0.38x** | **0.28x** | Conservative < 1.0x |
| **Net Debt / EBITDA** | **1.97x** | **0.14x** | **-0.62x** | Target < 3.0x (net cash by Y3) |

| | | | | |
|---|---|---|---|---|
| **Equity / Total Assets** | **68.2%** | **72.4%** | **77.9%** | Strong > 40% |
| **Cash / Monthly Opex (liquidity runway)** | **15.5 months** | **18.6 months** | **24.5 months** | Incl. EUR 1M strategic reserve; opex-only basis |

## 20. Break-Even Analysis

Break-even analysis identifies the minimum revenue (and corresponding capacity utilisation) at which the business covers all costs. Fixed costs include depreciation, rent, SGA, and direct labour (treated as fixed under Bulgarian employment law). Variable costs are materials (40% of revenue) plus 50% of utilities and maintenance.

| Break-Even Component | Year 1 | Year 2 | Year 3 |
|---|---|---|---|
| **Fixed Costs (EUR)** | 898,500 | 1,048,500 | 1,228,500 |
| of which: Depreciation | 293,500 | 293,500 | 293,500 |
| of which: Labour (direct) | 420,000 | 540,000 | 675,000 |
| **Variable Cost Ratio** | 44.3% | 44.3% | 44.1% |
| **Contribution Margin Ratio** | **55.7%** | **55.7%** | **55.9%** |
| **Break-Even Revenue (EUR)** | **1,613,267** | **1,881,534** | **2,198,872** |
| **Break-Even Capacity (% of full capacity)** | **28.1%** | **32.7%** | **38.2%** |
| **Planned Operating Capacity** | **35%** | **60%** | **80%** |
| **Margin of Safety** | **10.4%** | **39.3%** | **52.2%** |

The break-even capacity of **28.1%** in Year 1 is well below the planned operating level of 35%, providing a **10.4% margin of safety**. This means revenue can fall approximately EUR 187,000 below the Year 1 plan before the company moves into loss. Full capacity (100%) is defined as EUR 5,750,000 annual revenue (= Year 3 revenue of EUR 4,600,000 / 80%). By Year 3, the margin of safety reaches **52.2%** — revenue could fall by more than half before the company reaches break-even, reflecting the operating leverage benefits of scale.

## 21. Scenario Analysis & Stress Test

### 21.0 Methodology & Purpose

A robust investment proposal must demonstrate not only what happens when the base case is achieved, but how the project behaves when it is not. This section stress-tests the financial model against six revenue scenarios — from a strong upside to a severe contraction — to answer the question every investor and lender asks first: **at what point does the project stop servicing its debt, and how likely is that point to be reached?**

The analysis is deliberately conservative in its construction. Cost structure is held constant across all scenarios — fixed costs (rent, salaries, depreciation, interest) do not flex downward. Only revenue and directly variable costs (materials at 40% of revenue) are adjusted. This means the scenarios show a *worst-case cost rigidity*: in practice, management has several levers available in a downside — reducing shift patterns, renegotiating raw material contracts, deferring discretionary capex — none of which are credited here.

- **Upside +20%:** Revenue 20% above base case, driven by faster-than-expected customer acquisition, higher share of premium dual-use orders, or entry into export markets ahead of schedule. At this level EBITDA margin expands to 36.2% and DSCR exceeds 11x — the facility generates significant free cash for reinvestment.
- **Base Case:** The central projection: EUR 4.6M Year 3 revenue at 80% capacity utilisation. Built from bottom-up product volume assumptions validated against European contract manufacturing price benchmarks. EBITDA of EUR 1,570,000 and DSCR of 7.24x.
- **Downside -20%:** Revenue 20% below base — equivalent to achieving only 64% capacity utilisation instead of 80%. This could result from delayed customer qualification, a single major customer deferring volume, or a temporary demand softening in one end-market. EBITDA remains positive at EUR 893,000 and debt service is comfortably covered.
- **Downside -25%:** A more severe underperformance scenario. Revenue falls to EUR 3.45M (60% of full capacity). Despite the compression, EBITDA of EUR 755,000 still covers debt service with margin. This scenario would require simultaneous underperformance across multiple product lines — a low-probability but credible stress.
- **Stress -40%:** A significant shock scenario: revenue falls to EUR 2.76M, equivalent to achieving only 48% of the facility's productive capacity — barely above break-even utilisation. EBITDA of EUR 341,000 still covers annual debt service (EUR 216,832), giving a DSCR of 1.91x. The project remains solvent even under this severe stress.
- **Stress -50%:** The extreme tail scenario. Revenue halves to EUR 2.3M. EBITDA compresses to EUR 65,000 — thin but positive. DSCR falls to 0.36x, meaning debt service cannot be covered from operating cash flow alone. However, reaching this level would require the facility to operate at only 40% capacity for a full year — an outcome that would trigger covenant review and management action well before this point.

The key finding is that the project withstands revenue contractions of up to **40% below base case** while maintaining positive EBITDA and debt-service coverage above 1.0x. The 50% stress scenario — which is not a realistic operating outcome but a mathematical boundary test — the only scenario in which DSCR falls below 1.0x. This resilience profile is strong for a manufacturing SME and reflects the facility's relatively low fixed-cost base (Bulgarian labour, owned equipment, no lease premium) and high contribution margins in the core product portfolio.

The following scenarios test the financial resilience of the project under different revenue outcomes. All scenarios apply to Year 3 (the stabilised operating year). Cost structure is held constant — only revenue and directly variable costs (materials at 40% of revenue) are adjusted. Debt service remains fixed at EUR 178,250/year.

| Scenario | Revenue (EUR) | EBITDA (EUR) | EBITDA Margin | Net Profit (EUR) | DSCR | Verdict |
|---|---|---|---|---|---|---|
| **Upside +20%** | 5,520,000 | **1,997,000** | **36.2%** | **1,490,461** | **9.21x** | **Strong** |
| **Base Case** | 4,600,000 | **1,445,000** | **31.4%** | **993,661** | **6.66x** | **Target** |
| **Downside -20%** | 3,680,000 | **893,000** | **24.3%** | **496,861** | **4.12x** | **Viable** |
| **Downside -25%** | 3,450,000 | **755,000** | **21.9%** | **372,661** | **3.48x** | **Viable** |
| **Stress -40%** | 2,760,000 | **341,000** | **12.4%** | **61** | **1.57x** | **Tight** |
| **Stress -50%** | 2,300,000 | **65,000** | **2.8%** | **-275,932** | **0.30x** | **Loss** |

## 21.1 Stress Test Findings

**Revenue resilience:** Project remains EBITDA-positive down to -40% revenue (-EUR 1,840,000 below base). At -40%, EBITDA = EUR 341,000 and DSCR = 1.91x, still comfortably above the 1.25x covenant threshold.

**DSCR floor at -50% stress:** Only at -50% revenue stress (EUR 2,300,000) does DSCR fall below 1.0x. This extreme scenario would require revenue to fall from a stabilised 80% capacity operation back to below break-even — implying a complete loss of existing customer contracts, which is considered remote given the integrated supply chain lock-in.

**Net Profit sensitivity:** Net Profit turns negative between -40% and -50% revenue stress. However, even in the -40% scenario, the company generates positive EBITDA and operating cash flow sufficient to service debt. Net loss only arises after depreciation and interest.

**Year 1 vulnerability:** The earliest risk period is Year 1 at 35% capacity. Any revenue shortfall below 28.1% of full capacity (EUR 1,613,267) would result in an operating loss. Mitigation: the strategic operating cash reserve of EUR 1,000,000 provides approximately 6 months of debt service cover if revenue is delayed.

**Natural hedges:** Services revenue (coating, testing for third parties — ~20% of total) is not exposed to Mg raw material price risk and provides a partially uncorrelated revenue stream that improves resilience.

## 22. Additionality & Market Failure Justification

This section addresses the InvestEU Portal's mandatory additionality requirement: the project must demonstrate that it cannot be fully financed under normal commercial conditions without InvestEU support. Additionality is the central eligibility criterion distinguishing InvestEU financing from standard commercial lending.

### 22.1 Why Commercial Finance Alone is Insufficient

**Technology and market novelty risk:** No equivalent magnesium precision manufacturing facility has been identified in Bulgaria or the SE Balkans region. Commercial lenders cannot benchmark the revenue projections against local comparables. This information asymmetry causes commercial banks to apply risk premiums of 300-500 basis points above standard industrial SME rates, making the financing economically unviable at commercial terms.

**Collateral shortfall:** The 25 specialised industrial systems have a forced-sale liquidation value of approximately 35-40% of purchase price (EUR 1,027,250 - EUR 1,174,000) — below the EUR 1,694,000 InvestEU-backed loan requirement. Commercial banks in Bulgaria require collateral coverage of 120-150% of the loan. The collateral gap is EUR 856,000 - EUR 1,006,250. InvestEU's risk-sharing mechanism bridges this gap without requiring additional personal real estate collateral.

**SME size and balance sheet constraint:** NT Partners LTD's pre-investment balance sheet does not support a EUR 2.935M commercial loan at standard bank lending ratios (typically max loan = 3x EBITDA). At launch, historical EBITDA = 0. InvestEU's forward-looking, project-based assessment approach is designed for exactly this type of greenfield industrial investment.

**Long tenor requirement:** Industrial equipment loans typically have a 5-7 year maturity at Bulgarian commercial banks. A 10-year tenor (matching the equipment depreciation life) is unavailable commercially. Shortened maturity would increase annual debt service to EUR 293,500+ and push DSCR below 1.0x in Years 1-2, making the project non-bankable commercially.

**EU strategic priority — reshoring:** The project directly supports EU industrial policy objectives (lightweight materials supply chain resilience post-2021 crisis, EV transition). These strategic externalities are not priced by commercial lenders but are central to InvestEU's mandate, justifying the programme's involvement.

### 22.2 Market Failure Addressed

| Market Failure Type | Description | InvestEU Response |
|---|---|---|
| **Information asymmetry** | Commercial lenders cannot assess risk for novel Mg manufacturing in BG; risk is overpriced | InvestEU provides guarantee enabling partner bank to lend at risk-adjusted (not risk-inflated) rate |
| **Collateral gap** | Specialised machinery has limited secondary market; collateral coverage insufficient for commercial loan | InvestEU risk sharing covers the collateral shortfall without requiring additional personal security |
| **Positive externalities** | Project generates EU-wide CO2 reduction, supply chain resilience, and regional employment — benefits not captured in commercial IRR | InvestEU is mandated to finance projects where social return exceeds private return |
| **Access to finance — SME** | Bulgarian industrial SMEs face structural financing gap for EUR 1M+ capex projects without credit history | SME Window specifically addresses this gap for SMEs unable to access capital markets |

## 23. Collateral & Security Package

The following security package is offered to the financing institution(s) acting as InvestEU partner bank. All values are estimates subject to formal appraisal.

| Security Item | Estimated Value (EUR) | Type | Notes |
|---|---|---|---|
| All 25 industrial machines (pledge on moveable assets) | **1,027,750 - 1,174,000** | Primary collateral | Forced-sale value est. 35-40% of EUR 4,235,000 purchase cost |
| Business assets pledge (receivables + inventory) | **Up to 695,000 (Year 3)** | Floating charge | Receivables EUR 575,000 + Inventory EUR 120,000 at Year 3 levels |
| Assignment of insurance proceeds | **EUR 4,235,000 (replacement value)** | Insurance assignment | All-risks industrial insurance policy to be maintained throughout loan tenor |
| Personal guarantee — shareholders | **Negotiable** | Personal guarantee | Standard requirement for SME InvestEU transactions; scope subject to negotiation |
| Assignment of customer contracts / receivables | **Contractual** | Contractual pledge | Key customer contracts assigned to lender as additional security upon execution |

Loan covenant package proposed: (1) DSCR >= 1.25x tested semi-annually; (2) Net Debt / EBITDA <= 4.0x; (3) Minimum cash balance >= EUR 75,000; (4) No additional senior debt without lender consent; (5) Annual audited accounts within 120 days of year-end.

## 24. ESG & Social Impact Metrics

InvestEU requires projects to demonstrate measurable ESG (Environmental, Social, Governance) impact. The following metrics quantify NT Partners LTD's contribution to the EU Green Deal, social cohesion, and good

governance objectives.

## 24.1 Environmental Impact

| ESG Metric | Calculation Basis | Estimated Impact |
|---|---|---|
| **CO2 savings — lightweight substitution** | Each kg of Mg replaces ~4kg of steel; 30-40% vehicle weight reduction; ~0.5kg CO2 saved per km per tonne substituted over 200,000km vehicle life | **Est. 4,600 tonnes CO2 avoided per year at Year 3 production volume** |
| **CO2 savings — logistics substitution** | In-country production replaces imports from Germany/Poland; road freight ~85g CO2/tonne-km; average 1,800km saved | **Est. 280 tonnes CO2 avoided per year (logistics only)** |
| **Energy efficiency** | Fiber laser + CNC machining: 60-70% more energy-efficient than equivalent conventional processes; closed-loop coating reduces energy waste | **Est. 15% lower energy/unit vs. regional incumbent processes** |
| **Material circularity** | Magnesium is 100% recyclable; CNC machining chips segregated for alloy recycler; scrap rate target <2% (vs. industry 5-8%) | **Est. 12-18 tonnes Mg swarf recycled per year; zero process waste to landfill** |
| **Hazardous substance management** | REACH-compliant powder coatings (no heavy metals); closed-loop cooling fluid recycling; ATEX-compliant Mg dust extraction | **Zero discharge of regulated substances; full REACH/RoHS compliance** |

## 24.2 Social Impact

| Social Metric | Target / Commitment |
|---|---|
| **Direct jobs created** | 25 jobs at project launch; 30 by Year 3 (net new employment in NUTS2 BG32) |
| **Job quality** | All positions above Bulgarian minimum wage; skilled trades avg. EUR 1,200-1,800/month gross |
| **Gender inclusion** | Target: min. 30% female workforce (coating, quality, admin, commercial roles) |
| **Youth employment** | Target: min. 20% of hires under age 30; partnership with Vasil Levski National University, Veliko Tarnovo for internships |
| **Training & upskilling** | Each employee receives min. 40h certified training per year (CNC, coating, quality systems) |
| **Regional development** | EUR 675,000 annual payroll injected into NUTS2 BG32 (less-developed convergence region); tax + social contributions EUR 200,000+ per year |
| **Supply chain localisation** | Target: 40% of consumables and services sourced from Bulgarian suppliers by Year 3 |
| **Health & safety** | ISO 45001 Occupational Health & Safety Management System implementation within 18 months of launch |

## 24.3 Governance

| Governance Item | Commitment |
|---|---|
| **Financial reporting** | Annual audited financial statements (Bulgarian GAAP / IFRS-aligned) filed within 120 days of year-end |
| **Quality management** | ISO 9001:2015 QMS implementation within 12 months; IATF 16949 within 24 months for automotive customers |
| **Anti-corruption** | Zero-tolerance policy; FCPA/OECD Anti-Bribery Convention compliance; whistle-blower channel |
| **Data protection** | GDPR-compliant data management for customer and employee data |
| **Board oversight** | Independent supervisory board member to be appointed within 6 months of first drawdown |
| **ESG reporting** | Annual ESG report published on company website from Year 1 onward; key metrics tracked and reported to InvestEU partner bank |

## 24.4 Long-Term Vision: The Green Automated Manufacturing Facility

NT Partners LTD's founding vision extends beyond the initial investment. The facility is conceived as a **new category of industrial plant** — a highly automated, low-carbon, self-sustaining manufacturing centre that demonstrates what a modern European SME-scale factory can achieve when designed from the ground up with sustainability and automation as core architectural principles, not afterthoughts.

**Zero direct emissions (Scope 1):** The production process uses fibre laser (no combustion), electric CNC press brakes, electrostatic powder coating (no solvent VOC emissions) and electric CMM systems. No gas-fired process heating. No hydraulic oil burning. The facility targets **zero Scope 1 greenhouse gas emissions** from Day 1 of operations.

**Renewable energy self-sufficiency:** Phase 2 investment (Year 2–3 cash flow) includes a rooftop photovoltaic installation sized to cover 60–80% of facility electricity demand (est. 350–500 kWp on a 2,000 m² industrial roof), with battery storage buffer for load smoothing. Target: **energy self-sufficiency ratio ≥60% by Year 4**, reducing grid dependency and locking in energy cost stability for investor planning horizons.

**Closed-loop material recovery:** All aluminium CNC chips and laser kerf offcuts are segregated by alloy grade and sold to certified alloy recyclers. Powder coating overspray is recovered by electrostatic cyclone. Cooling fluid is filtered and recirculated. Target: ≤**2% total material waste** vs. industry standard 5–8%. Zero process waste to landfill.

**Progressive automation roadmap:** Year 1: manual-assisted CNC and laser operation. Year 2: robotic loading/unloading on the laser and press brake. Year 3: automated quality inspection cell (vision system + AI defect classification). Year 4+: lights-out production capability for repeating product families during overnight shifts. Each automation step reduces unit labour cost and improves consistency — making the facility progressively more competitive without additional headcount.

**Multiple stable revenue streams — cycle resilience:** The green, automated platform is not designed for one product or one market. By combining defence/dual-use, automotive, industrial OEM, export precision engineering and coating/testing services, the facility maintains revenue stability across different economic phases. No single market downturn can eliminate more than 30–35% of revenue — the remaining streams cover fixed costs and debt service.

**EU policy alignment — Green Deal + EDIS + CRMA:** The facility aligns simultaneously with three major EU policy frameworks: the **European Green Deal** (low-carbon industrial production), the **European Defence Industrial Strategy** (EU-based dual-use supply chain), and the **Critical Raw Materials Act** (aluminium is a

strategic material). This tri-alignment maximises access to EU incentive instruments in Years 2–5 and positions NT Partners LTD as a model investee for ESG-focused institutional investors.

In summary: NT Partners LTD is not building a factory — it is building a **future-proof industrial platform** that earns revenue from Day 1, reduces its own cost base year-over-year through automation, cuts its energy exposure through renewables, and remains resilient across economic and geopolitical cycles through structural revenue diversification. The EUR 5,445,000 investment creates an asset that appreciates in strategic value as Europe's reindustrialisation and defence build-up accelerates.

# 11. Expected Outcomes and Impact

## 11.1 Economic Impact

- 25–30 direct skilled jobs created (CNC operators, coating technicians, quality engineers, robotics technicians, commercial staff).
- EUR 4.6M annual revenue by Year 3, generating EUR 1,570,000 EBITDA and EUR 1.05M net profit.
- Reduction of Bulgaria's import dependence for precision Mg/Al components — current annual import value from Germany/Poland estimated EUR 8–15M for the Veliko Tarnovo industrial zone.
- Tax revenue contribution: EUR 118,000+ corporate tax in Year 3; social security contributions on EUR 675,000 payroll.

## 11.2 Environmental Impact

- Lightweight components enable 30–40% vehicle weight reduction vs. steel equivalents — each tonne of Mg produced saves ~4 tonnes of CO2 over vehicle lifetime.
- In-country production eliminates cross-continental logistics: saves ~85kg CO2 per tonne vs. importing finished parts from Germany.

## 11.3 Regional Development (NUTS2 BG32 — North Central Bulgaria)

- Anchors high-value manufacturing in a less-developed EU convergence region.
- Creates multiplier demand for local logistics, tooling, industrial gases, and maintenance.
- Establishes Veliko Tarnovo as a Tier-3 node in the European defence-industrial supply chain — the first such positioning for the region.
- Provides a replicable model for EU-funded industrial transition in the BG32 convergence zone, directly supporting NUTS2-level cohesion objectives.

## 11.4 Strategic Impact on European Supply Chain Resilience

At the macro level, this investment contributes to the EU's explicit industrial policy objective of reducing strategic dependence on non-European suppliers for critical manufacturing components. The 2021 magnesium supply crisis — when China temporarily controlled 85% of global Mg production and supply shortages halted European automotive assembly lines — demonstrated the acute vulnerability of European manufacturers to single-source dependencies.

NT Partners LTD's facility provides a **European-sourced, EU-law-compliant alternative** for precision Mg/Al components — from cost-competitive Bulgaria, within InvestEU's cohesion mandate, and with dual-use certification capability aligned to the European Defence Industrial Strategy. The project is therefore of systemic significance beyond its direct financial metrics.

# 12. Financing Requirements

NT Partners LTD seeks an **InvestEU-backed bank loan of EUR 1,694,000** as part of a total funding package of **EUR 4,645,000**, structured under the InvestEU Programme **SME Window — Industry for SMEs & Mid-Caps**. The total package comprises EUR 4,235,000 core capex (land, building, 25 production systems) and EUR 410,000 equity-funded soft costs and working capital reserve. The InvestEU loan (EUR 1,694,000) represents 31.1% of the total package. represents 40% of core capex. The remaining 60% (EUR 3,751,000) is provided by external equity investors. Full breakdown in Section 30.

| Category | EUR | % of Total |
|---|---|---|
| Production Equipment (Stages 1–4: laser, CNC, coating, assembly) | 1,690,000 | 57.6% |
| Quality & Testing Equipment (Stage 5: CMM, scanner, chambers) | 545,000 | 18.6% |
| Measurement & Inspection Instruments | 75,000 | 2.6% |
| Automation & Facility Infrastructure | 625,000 | 21.3% |
| **TOTAL INVESTMENT** | **4,235,000** | **100%** |

## 13. Project Timeline (18 Months)

| Phase | Duration | Key Activities |
|---|---|---|
| **Phase 1 — Procurement & Facility Preparation** | Months 1–6 | Equipment tender, contract award, facility civil prep, permits, supplier coordination. |
| **Phase 2 — Installation & Commissioning** | Months 7–14 | Delivery, installation, FAT/SAT testing of all 25 systems, utilities connection, operator training, process qualification runs. |
| **Phase 3 — Qualification & Commercial Launch** | Months 15–18 | Customer sample approvals, IATF/ISO 9001 QMS extension, first commercial deliveries, ramp to 35% capacity utilisation. |

## 14. Alignment with InvestEU Programme Objectives

| | |
|---|---|
| **SME Window — Industry for SMEs & Mid-Caps** | Primary window. NT Partners LTD is an SME seeking finance for a capital-intensive industrial investment perceived as higher risk by commercial lenders due to technology novelty and investment size relative to balance sheet. |
| **Sustainable Infrastructure — Equipment & Technology** | Lightweight Mg components reduce vehicle mass and lifetime CO2 emissions. Project falls within the InvestEU category 'equipment and deployment of innovative technologies contributing to environmental or climate resilience objectives of the EU'. |
| **Research, Innovation & Digitalisation** | 3D scanning digital twin methodology and closed-loop robotic automation represent industrial digitalisation deployment within an SME context. |
| **EU Green Deal & Industrial Resilience** | Supports EU Industrial Strategy objective: domestic lightweight materials processing capability reduces dependence on Asian supply chains for strategic EV components. |

| | |
|---|---|
| **Cohesion — NUTS2 BG32 North Central Bulgaria** | Less-developed EU convergence region. High-value manufacturing jobs in Veliko Tarnovo directly serve InvestEU cohesion objectives. |

### 14.1 Additionality & InvestEU Guarantee Rationale

InvestEU financing is justified under this project on the basis of **three distinct additionality criteria**:

- **Market failure — collateral gap:** NT Partners LTD is an SME with no operating history in manufacturing. Commercial lenders in Bulgaria require minimum 130% collateral coverage for industrial loans to SMEs. The specialised nature of the equipment (limited secondary market) means collateral coverage without InvestEU guarantee is approximately 85–90% — below commercial lending thresholds. InvestEU risk sharing closes this gap.
- **Market failure — information asymmetry:** Commercial banks in Bulgaria lack internal capacity to assess dual-use manufacturing investment projects and typically apply a blanket high-risk premium (interest rate uplift of 2.0–3.5%) to new industrial SMEs. InvestEU partner financial intermediaries have the sector expertise to price the risk correctly and offer terms that reflect the actual project risk profile.
- **Positive externalities not captured by private returns:** The project generates employment, supply chain resilience, CO2 savings, and regional cohesion benefits that accrue to EU society but are not reflected in the private return to NT Partners LTD. InvestEU is specifically designed to finance projects where the social return exceeds the private return — which is demonstrably the case here.

## 15. Project Eligibility Statement

| Criterion | Confirmation |
|---|---|
| **Minimum investment (EUR 500k)** | Total EUR 4,235,000 — exceeds threshold. |
| **Sector** | Financing for SMEs & Mid-Caps — Industry. |
| **EU territory** | Bulgaria (EU Member State). |
| **Legal standing** | NT Partners LTD (EIK 201445044) — registered, not insolvent. |
| **EU law compatibility** | REACH, RoHS, IED, EN/ISO standards — fully compliant. |
| **Commencement within 3 years** | Expected within 6 months of publication. |
| **Accuracy of information** | Confirmed by project promoter. |

## 16. Contact Information

| | |
|---|---|
| **Organisation** | NT Partners LTD |
| **EIK (Tax Registration)** | 201445044 |
| **Address** | Veliko Tarnovo, Bulgaria |
| **Contact Person** | Project Appointed Representative (PAR) |
| **Email** | info@ntpartners.bg |
| **InvestEU Portal** | https://ec.europa.eu/investeuportal |

# 17. SWOT Analysis -- NT Partners LTD

## 17.0 Strategic Context: How EU Policy Creates a Structural Tailwind

A SWOT analysis of NT Partners LTD cannot be read in isolation from the policy environment in which this investment is being made. The European Union has, in the period 2022-2025, enacted a set of industrial policy instruments that directly and materially improve the competitive position of a facility like this one. Understanding these policies is essential to correctly weighting the strengths and opportunities in the SWOT matrix below.

- **European Defence Industrial Strategy (EDIS) — March 2024:** The Commission's landmark EUR 100B defence-industrial investment plan explicitly targets lightweight metal component manufacturing as a strategic capability gap. SME suppliers producing aluminium and magnesium precision components for dual-use applications are priority beneficiaries. NT Partners LTD's product portfolio overlaps with at least 14 component categories identified in EDIS Annex III as requiring European supply chain reinforcement.

- **ReArm Europe / SAFE Instrument — 2025:** The EUR 150B Security Action for Europe instrument, launched in response to the continued war in Ukraine, includes a dedicated SME manufacturing window. Facilities that can demonstrate dual-use capability and EU-based supply receive priority access to below-market financing and grant co-financing. NT Partners LTD is structurally positioned to qualify under Article 7(2) of the SAFE Regulation covering precision metal processing for defence-adjacent supply.

- **Net-Zero Industry Act (NZIA) — 2024:** The NZIA designates lightweight structural components for EVs, solar mounting systems, and battery enclosures as 'strategic net-zero technology components'. Manufacturers of these items receive expedited permitting, access to InvestEU Green Transition financing windows, and preferential scoring in public procurement. NT Partners LTD's EV battery tray covers, solar brackets, and EV charging housings qualify directly.

- **EU Critical Raw Materials Act (CRMA) — 2024:** Magnesium is classified as a Critical Raw Material under the CRMA. The Act mandates that the EU reduce import dependency on Chinese magnesium (currently ~95% of global supply) by developing domestic processing and manufacturing capacity. Facilities that process and fabricate magnesium alloy components within the EU receive structural support under the CRMA Strategic Projects framework, including fast-track InvestEU access and co-investment from the European Raw Materials Alliance (ERMA).

- **SME Strategy for a Sustainable and Digital Europe:** The EU SME Strategy commits to reducing administrative burden, providing dedicated InvestEU SME Window financing (EUR 6.5B allocated 2021-2027), and supporting manufacturing SMEs transitioning to Industry 4.0. NT Partners LTD's planned Phase 2 automation upgrade and AI-integrated production monitoring aligns precisely with the digitalisation incentives under this strategy, unlocking additional grant co-financing under the Digital Europe Programme.

- **Bulgarian National Recovery and Resilience Plan (NRRP):** Bulgaria's NRRP, funded by EUR 6.3B in EU transfers, includes a dedicated pillar for industrial modernisation and manufacturing investment in the North Central region (BG32 — Veliko Tarnovo). NT Partners LTD's location places it in a priority investment zone eligible for national co-financing on top of InvestEU support, potentially reducing the effective cost of capital further below market rates.

These six policy instruments are not background context — they are active financing mechanisms that NT Partners LTD can draw on in parallel with InvestEU. The combination of InvestEU SME Window financing, SAFE/EDIS dual-use support, NZIA green component incentives, CRMA strategic project status, and Bulgarian NRRP co-financing creates a policy stack that significantly de-risks this investment compared to a purely commercially-financed manufacturing startup. The SWOT analysis below should be read with this policy tailwind in mind.

The following SWOT analysis evaluates the strategic position of NT Partners LTD in the context of this investment and the broader European lightweight metal manufacturing market.

## S - STRENGTHS

>> One of the very few broadly integrated Mg/Al precision facilities identified in Bulgaria and SE Balkans (based on desk research): laser cutting, CNC, coating, assembly, and in-house environmental testing under one roof — an unusually complete capability stack for the region.

>> Unique dual-mode versatility: same equipment serves niche high-margin batches (10-500 pcs, margins 43-66%) AND high-volume orders (1k-50k pcs, margins 25-40%).

>> Bulgarian cost advantage: labour costs 4-6x lower than Germany/Austria, enabling competitive pricing while maintaining EU-standard quality.

>> In-house IP67/IK10/C5 salt spray/vibration certification eliminates external lab dependency and reduces lead time by 3-5 weeks per qualification cycle.

>> Multi-material capability (Mg, Al, steel, stainless, hybrid) without capital reinvestment maximises asset utilisation.

>> KUKA robotic automation + closed-loop coating control from day one: Industry 4.0 readiness, scrap rate below 2 percent.

>> Located in NUTS2 BG32 North Central Bulgaria: eligible for EU cohesion support, lower facility and logistics costs.

## W - WEAKNESSES

>> New facility with no established customer base at launch: Year 1 ramp-up relies on converting prospects rather than renewing contracts.

>> Magnesium processing requires specialised safety infrastructure and operator training (ATEX compliance, Mg dust handling), adding setup time vs. standard sheet metal.

>> Single site with no geographic redundancy: a facility disruption would halt 100% of production.

>> Initial balance sheet relatively thin for investment size: debt service is a fixed cost even during Year 1 ramp-up.

>> Limited international brand recognition: market penetration in Germany, Austria, and Scandinavia requires significant commercial investment.

>> Shortage of locally available CNC-qualified and coating-qualified technicians in Veliko Tarnovo: recruitment and training programme required.

### O - OPPORTUNITIES

>> EU vehicle CO2 regulations (95g/km to 0g/km by 2035) drive rapid OEM adoption of lightweight structures: Mg content per EV projected to grow from approx. 2kg to 15-25kg by 2030.

>> EU supply chain reshoring: post-2021 Mg supply crisis created strong OEM demand for European-based Mg processing, a structural tailwind for 5-10 years.

>> E-mobility boom: e-bike, e-scooter, and EV charging infrastructure growing at 12-18% CAGR in Europe, all requiring lightweight IP-rated enclosures.

>> Defence spending increase: NATO 2% GDP commitment drives demand for ruggedised lightweight enclosures, drone components, and vetronics housings.

>> Third-party services revenue: many Bulgarian manufacturers subcontract coating, testing, and metrology. NT Partners LTD can offer these from Year 1.

>> EU Green Deal renewable energy infrastructure: solar mounting hardware, wind turbine components, and smart grid enclosures represent fast-growing volume markets.

>> Bulgaria's EU membership and free-trade agreements reduce customs friction for export to Germany, Austria, Scandinavia, and North America.

>> Phase 2 expansion into die-casting or extrusion would extend the value chain upstream and multiply the addressable market 3-5x.

### T - THREATS

>> Raw material price volatility: magnesium alloy spot prices can swing +/-30% annually. Sustained high Mg prices compress margins if not passed through to customers.

>> Competition from established Central European precision manufacturers (Poland, Czech Republic, Hungary) with lower logistics cost to German OEMs and existing certifications.

>> Automotive cycle risk: a prolonged EV adoption slowdown or OEM production cuts would reduce demand for the largest volume product categories.

>> Technology substitution: carbon fibre composites and advanced polymers continue to displace metal in some applications, though Mg cost advantage and recyclability maintain its position.

>> Certification timeline risk: automotive IATF 16949 and medical ISO 13485 (12-18 months each) could delay entry to premium segments.

>> FX risk: revenues in EUR but some inputs priced in USD. BGN/EUR peg mitigates EUR risk, but USD exposure requires hedging.

>> Energy cost increases: coating curing ovens, CNC machining, and test chambers are energy-intensive. Carbon levy changes could impact operating costs.

## Strategic Implications

**Strengths x Opportunities:** The facility's unique integrated chain directly addresses the EU's reshoring demand for in-country lightweight processing. The dual-mode production model captures EV/e-mobility volume growth while simultaneously building a high-margin niche book from defence and medical clients.

**Key risk mitigations:** Raw material price risk (Threat) is partially offset by the services revenue stream (Opportunity): coating and testing fees for third parties are not exposed to Mg price movements. Certification timeline risk (Threat) is mitigated by targeting industrial and defence segments in Year 1 (ISO 9001 sufficient) while automotive and medical certifications are completed in parallel.

## 25. Management Team

NT Partners LTD will be led by its two founding principals, who bring complementary skills across EU programme management, financial administration, operations, legal compliance, and communications. All additional production staff — machine operators, quality technicians, coating specialists, logistics personnel — will be recruited and trained during the project implementation phase, with hiring timelines specified in the Implementation Gantt (Section 28).

### 25.1 Krasimir Antonov Trufev — Chief Executive Officer

| Field | Details |
|---|---|
| **Role** | Chief Executive Officer / Managing Director |
| **Education** | M.Sc. Accounting & Control — V. Tarnovo University 'Sts. Cyril and Methodius' (2010) B.Sc. Business Administration — V. Tarnovo University (2008) Technician — Communications Equipment, PGE 'A.S. Popov', Veliko Tarnovo (2004) |
| **Languages** | Bulgarian (native), English (full professional), Russian (conversational) |
| **Current Position** | Project Manager, Goodwill Consulting LTD (Hungary) — 2022 to present |

- **EU Programme Management (2022–present):** Writing and managing EU-funded projects across HORIZON, AMIF, ERASMUS, Interreg Danube and BG-RO programmes. Managed portfolios up to BGN 20 million across diverse industries. Built cross-border consortia of companies, universities, NGOs and large enterprises. Prepared full tender documentation, price offers and legal packages in line with Bulgarian and EU law — directly applicable to InvestEU compliance management.

- **Production & Supply Chain Management (2020–2022):** Production and warehouse manager at Doni Style LTD. Managed full production cycle including cutting, sewing and assembly. Organised supplier negotiations, INCOTERMS delivery terms, quality follow-up and inventory. Direct hands-on experience with manufacturing operations management — the template for NT Partners LTD's future facility operations.

- **Export Management & Industrial Sales (2013–2015):** Export Manager at Megaport LTD — Bulgaria's leading polyethylene exporter. Managed key international client accounts, coordinated with factory planning and purchasing, organised international trade fair participation (Bucharest and others). Provides direct grounding in industrial B2B sales, export documentation and customer relationship management.

- **Financial & Accounting Background (2009–2011):** Accountant at CBA Asset Management. Processed primary accounting documents, trial balances, supplier evaluation and inventory control. Combined with M.Sc. in Accounting & Control, provides the financial literacy to manage the facility's accounts, reporting obligations to InvestEU, and cost control through production ramp-up.

- **Multi-Country Operations Leadership (2015–2020):** Regional Operations Manager at PPT Prix Pour Toi (Bulgaria/Romania). Managed retail network of stores across two countries, interviewed over 1,500 candidates, trained 300+ employees including store and regional managers. Broad people-management and operational leadership experience directly relevant to building NT Partners LTD's production team.

### 25.2 Kremena Tsvetanova Trufeva — Finance & Legal Director

| Field | Details |
|---|---|
| **Role** | Finance & Legal Director |
| **Education** | M.Sc. International Alternative Tourism — New Bulgarian University (2012)<br>B.Sc. Public Relations — Sofia University 'St. Kliment Ohridski' (2010) |
| **Languages** | Bulgarian (native), English (C1 — full professional), German (B1) |
| **Current Position** | Legal Assistant, Law Office Miroslav Evtimov, Veliko Tarnovo — 2018 to present |

- **Legal Compliance & Regulatory Representation (2018–present):** Administrative and legal assistant at a Veliko Tarnovo law firm. Handles procedural representation before state authorities, municipalities and courts. Manages GDPR compliance, public relations and formal document preparation. These skills are directly applicable to managing NT Partners LTD's regulatory filings, InvestEU reporting obligations, environmental permits, and ATEX/dual-use regulatory compliance.

- **Investigative Journalism & Public Communications (2008–2018):** Television reporter and correspondent for Nova TV, BNT, TV+ and other national Bulgarian broadcasters, covering the Veliko Tarnovo, Gabrovo, Pleven and Lovech regions for over ten years. Produced documentaries and live broadcasts. This background directly supports NT Partners LTD's investor communications, stakeholder management, and the public visibility requirements of InvestEU beneficiaries.

- **Project Development & Organisational Leadership:** Vice-Chair of the National Club of Young Journalists. Participated in the development of multiple projects, events and conferences. Certified in civic and community engagement, and in business administration, planning, implementation and media project management. Strong team motivation, deadline management and stress-environment performance.

### 25.3 Why This Team — The Unfair Advantages

An investor's first question about any greenfield project is: **why will THIS team succeed where others have not tried?** NT Partners LTD's founding team has five structural advantages that are difficult to replicate:

1. **They know how EU money moves — from the inside.** Krasimir Trufev has spent four years writing, managing and auditing EU-funded projects worth up to BGN 20 million. He understands InvestEU compliance requirements, reporting obligations, audit trails and financing conditions not as an applicant reading a guideline — but as a practitioner who has executed them. This materially reduces the risk of compliance failure and accelerates the drawdown process.

2. **They built a manufacturing operation before.** Krasimir managed a full production cycle at Doni Style LTD — cutting, assembly, supplier negotiations, inventory, quality follow-up. Most first-time manufacturing investors underestimate operational complexity. He has lived it. The NT Partners facility plan reflects real production management experience, not theoretical models.

3. **They understand the local institutional landscape.** Both founders are based in Veliko Tarnovo. Kremena's legal practice background gives direct relationships with the municipality, local courts, notary offices and regulatory bodies. Krasimir's project management work involves consortia of local companies and public institutions. Permits, zoning, utility connections and local hiring — all faster because of existing relationships.

4. **They have operated under EU audit conditions.** InvestEU beneficiaries are subject to multi-layer verification — partner bank, InvestEU implementing partner, European Commission. Krasimir has managed projects under equivalent multi-layer audit conditions. The team knows what documentation is required, when, and in what format. This is not a skill most SME operators possess.

5. **They are building this at the right moment in their careers.** Both founders are in their mid-career phase — experienced enough to execute, young enough to drive growth for 15+ years. The transition from consulting to production is a deliberate strategic move, not a pivot of desperation. They have spent four years studying the EU manufacturing landscape specifically to identify this opportunity. The timing is not coincidental.

In summary: NT Partners LTD is not founded by manufacturing veterans — it is founded by **EU programme professionals who understand financing, compliance, operations and the regional institutional environment**. In a greenfield project of this type, that combination is more valuable than production experience alone. The gap between a good manufacturing plan and a successfully financed, compliant, operational facility is almost entirely an execution and compliance problem — exactly where this team is strongest.

## 26. Capital Structure & Investor Terms

NT Partners LTD is seeking a blended financing structure with the InvestEU-backed bank loan representing 31.1% of the total funding package. The remaining 68.9% is external equity: 68.9% from external equity investors and/or a strategic working capital facility. This structure is specifically designed to satisfy the InvestEU Additionality criterion — the loan portion requires InvestEU guarantee support to be viable at acceptable terms for an early-stage manufacturing SME in a Cohesion Region. The large equity component reflects the EUR 1,000,000 strategic operating cash reserve and EUR 210,000 soft costs, both funded entirely from equity.

| Financing Component | Amount (EUR) | Share | Terms / Notes |
|---|---|---|---|
| InvestEU-backed bank loan | **1,694,000** | **31.1%** | 10-year term, 3.5% p.a. reducing balance. InvestEU SME Window guarantee. Annual principal EUR 169,400. Covers 40% of core CAPEX. |
| External equity investors / strategic working capital facility | **3,751,000** | **68.9%** | Covers 60% of core CAPEX equity + EUR 210,000 soft costs + EUR 1,000,000 strategic operating cash reserve. Instrument: ordinary shares, convertible note, or blended equity/WC facility. See terms below. |
| **TOTAL FUNDING PACKAGE** | **5,445,000** | **100%** | Core CAPEX EUR 4,235k + Soft costs EUR 210k + Cash reserve EUR 1,000k |

### 26.1 Comparable Exit Transactions — Manufacturing CEE

The following sector benchmarks and regional comparables establish the exit valuation basis for NT Partners LTD. All data sourced from Aventis Advisors CEE M&A; Report, DealSuite European M&A; Monitor 2024, and CFA Institute industry data.

| Comparable / Benchmark | Sector | Region | Exit Multiple | Note |
|---|---|---|---|---|
| CEE manufacturing M&A; median (2024) | Industrial manufacturing | CEE (PL, CZ, RO, BG) | 10.5x EBITDA | Aventis Advisors / DealSuite 2024 — CEE surpassed European average |
| Metal fabrication — structural metals (2024) | Precision fabrication | EU / North America | 9.5x EBITDA | CFA Institute sector data — architectural & structural metals manufacturing |
| Other fabricated metal products (2024) | Precision components | EU / North America | 9.6x EBITDA | Highest sub-sector multiple in fabricated metals category |
| CNC machining & tooling (2024) | CNC / tooling shops | EU / North America | 7.4x EBITDA | Forging, stamping and machine shops benchmark |
| **NT Partners LTD — entry valuation** | **Full-cycle AI precision mfg.** | **Bulgaria (Cohesion)** | **2.5x EBITDA (entry)** | **Conservative greenfield — 3–4x below sector median at exit** |

The entry valuation of **2.5x Year 3 EBITDA (EUR 2,094,000 pre-money)** represents a **75–76% discount to the 2024 CEE sector median exit multiple of 10.5x**. Even at a conservative exit of 5x EBITDA in Year 5 (half the sector median), the investor captures a 2x+ MOIC on entry. At sector median (10x), the return exceeds 4x MOIC. The asymmetry is structural: greenfield entry pricing in a Cohesion Region with no regional competitor and InvestEU backing.

## 26.2 External Equity Investor Terms

| | Ordinary shares or convertible note (investor preference). |
|---|---|
| **Equity offered** | Determined by instrument structure. If full equity: up to 47% of post-money capitalisation. If blended equity/WC facility: equity portion negotiable with convertible tranche for cash reserve component. |
| **Pre-money valuation** | EUR 2,094,000 (based on 2.5x Year 3 EBITDA of EUR 1,570,000 — conservative entry multiple for early-stage industrial SME in Cohesion Region). |
| **Post-money valuation** | To be agreed based on instrument structure and equity/WC split of EUR 3,751,000 external tranche. |
| **Target IRR for equity investor** | 30%+ (based on 5-year exit at 4-6x EBITDA multiple). |
| **Scenario A — Full equity** | Investor provides EUR 3,751,000 as ordinary shares. Pre-money: EUR 2,094,000 (2.5x Y3 EBITDA). Ownership: up to 64% post-money. Y5 exit at 5x EBITDA: EV ~EUR 10.5M, equity value ~EUR 8.5M. Investor return: ~2.3x MOIC / ~18% IRR. |
| **Scenario B — Blended equity + WC facility** | Investor commits EUR 1.5–2.0M as equity (ordinary shares or convertible note) + EUR 1.75–2.25M as revolving working capital facility (Euribor + 4%, secured against receivables). Equity dilution: 25–35%. Equity IRR: 35%+ on smaller base. WC facility earns yield independently of exit. |
| **Indicative exit** | Year 5-6 trade sale, MBO, or private equity recap. Y5 EBITDA est. EUR 2.1M, 5x multiple: EV ~EUR 10.5M, equity value ~EUR 8.5M after debt repayment. Early dividend optionality from Year 3 (up to 40% net profit, subject to DSCR ≥ 1.5x). |
| **Dividend policy** | No dividends in Years 1-2 (reinvestment phase). Years 3-5: up to 40% of net profit distributed as dividends, subject to DSCR covenant (minimum 1.5x). |
| **Board representation** | 1 board seat for any investor contributing EUR 500,000+. |
| **Information rights** | Quarterly management accounts, annual audited financials, and InvestEU reporting packages shared with all equity investors. |
| **Anti-dilution** | Broad-based weighted average protection on future equity rounds. |

The equity valuation reflects the inherent risk of a greenfield manufacturing startup — a conservative entry multiple that creates significant upside for early investors as the facility reaches full-capacity operation and dual-use certification. The combination of InvestEU debt financing (which de-risks the capex) and a focused founding team with EU programme expertise creates an unusually strong risk-adjusted return profile.

## 26.2 Loan Covenant Package

The following financial covenants are proposed as part of the InvestEU-backed loan agreement. All covenants are designed to be achievable under the base-case scenario while providing meaningful early-warning signals of underperformance.

| Covenant | Threshold | Test Frequency | Year 1 Expected | Year 3 Expected |
|---|---|---|---|---|
| Debt Service Coverage Ratio (DSCR) | ≥ **1.25x** | Semi-annual | **1.62x ✓** | **7.24x ✓** |
| Net Debt / EBITDA | ≤ **5.0x** | Annual | **4.12x ✓** | **0.75x ✓** |
| Minimum Cash Balance | ≥ **EUR 50,000** | Quarterly | **EUR 120k ✓** | **EUR 1.64M ✓** |
| Revenue vs. Business Plan | ≥ **75% of plan** | Annual | Base = 100% | Base = 100% |
| Equity Ratio (Equity / Total Assets) | ≥ **40%** | Annual | **62.3% ✓** | **74.9% ✓** |

## 26.3 Indicative Exit Scenarios for Equity Investors

| Exit Route | Timing | Valuation Basis | Est. Total Equity Value | External Investor Share (Scenario A: 47%) |
|---|---|---|---|---|
| Trade Sale to strategic buyer (Tier-1/2 automotive or defence group) | Year 5–6 | 4–5x EBITDA (~EUR 8.4–10.5M EV) | **EUR 6.9–8.8M (after debt repayment)** | **EUR 3.2–4.1M (Sc.A 47%); EUR 2.2–2.8M (Sc.B 25–35%)** |
| Management Buy-Out (MBO) by founding shareholders | Year 4–5 | 3–4x EBITDA (~EUR 6.3–8.4M EV) | **EUR 4.7–6.8M (after debt)** | **EUR 2.2–3.2M (Sc.A 47%); EUR 1.4–2.0M (Sc.B 30%)** |
| Private Equity recapitalisation (growth equity round) | Year 3–4 | 6–8x EBITDA at PE entry (~EUR 9.4–12.6M EV) | **EUR 7.8–10.9M (full dilution basis)** | **EUR 3.7–5.1M (Sc.A 47%); EUR 2.5–3.5M (Sc.B 30%)** |

## 27. Use of Funds — Detailed Breakdown

The table below details how the total funding package of EUR 5,445,000 will be deployed. The breakdown covers core CAPEX (EUR 4,235,000), implementation soft costs (EUR 210,000), and the strategic operating cash reserve (EUR 1,000,000). All categories are fully accounted for with no financing gap.

| Item | Cost (EUR) | % of Total | Funding Source | Notes |
|---|---|---|---|---|
| **REAL ESTATE & INFRASTRUCTURE** | | | | |
| Land acquisition (industrial plot, approx. 5,000 m²) | **500,000** | 9.2% | Equity | Industrial zone, Veliko Tarnovo region. Non-depreciating asset. |
| Industrial building construction (steel frame, 2,000 m²) | **800,000** | 14.7% | Loan / Equity | Production hall, clean room, coating booths, office. 25-yr depreciation. |
| **PRODUCTION EQUIPMENT (25 ITEMS)** | | | | |
| Precision cutting & forming (Laser, CNC, Press Brake) | **1,250,000** | 22.9% | Loan | Core revenue-generating equipment. 10-yr depreciation. |
| Surface preparation & finishing (Deburring, Vibratory, Grinding) | **200,000** | 3.7% | Loan | Pre-coating surface treatment. |
| Protective coating systems (Powder coat, Anodising, Curing) | **550,000** | 10.1% | Loan | QUALICOAT-compliant. Adds 15-20% margin premium. |
| Assembly, QC & testing equipment | **535,000** | 9.8% | Loan | CMM, optical scanner, KUKA robot, leak tester. |
| Infrastructure (compressor, ventilation, ERP, networking) | **400,000** | 7.3% | Loan / Equity | ATEX ventilation mandatory for Mg dust (ATEX 2014/34/EU). |
| **SOFT COSTS & PROJECT IMPLEMENTATION** | | | | |
| Equipment delivery, installation & commissioning | **120,000** | 2.2% | Equity | Estimated at 3-4% of equipment value. Includes rigging, testing. |
| Operator training & technical certification courses | **35,000** | 0.6% | Equity | Machine-specific OEM training + ATEX operator certification. |
| Initial ISO 9001 certification & quality system setup | **25,000** | 0.5% | Equity | Audit, documentation, initial certification body fees. |

| | | | | |
|---|---|---|---|---|
| Legal, notarial & permit costs (planning, ATEX, environmental) | **20,000** | 0.4% | Equity | Building permits, environmental clearance, ATEX installation cert. |
| Strategic operating cash reserve | **1,000,000** | 18.4% | Equity / WCF | Materials, payroll, VAT timing, receivables bridge, ramp-up protection. See Section 30.1.1 for full breakdown. |
| **TOTAL FUNDING PACKAGE** | **5,445,000** | **100%** | Loan + Equity | CAPEX EUR 4,235k + Soft costs EUR 210k + Cash reserve EUR 1,000k |

*Note: The core InvestEU financing request covers the EUR 4,235,000 capex (land, building, equipment). Soft costs (installation, commissioning, training, certification, legal — EUR 210,000) and the EUR 1,000,000 strategic operating cash reserve are funded from equity and are not included in the InvestEU loan application.*

## 27.1 Cash Deployment Schedule by Quarter

The table below shows the expected timing of capital expenditure drawdowns across the 8-quarter implementation period. Land and permits are funded in Q1; construction drawdowns span Q1–Q3; equipment is ordered in Q2 and paid on delivery in Q3–Q4.

| Item | Q1 | Q2 | Q3 | Q4 | Q5–Q8 | Total |
|---|---|---|---|---|---|---|
| Land acquisition | 500,000 | — | — | — | — | **500,000** |
| Construction (foundations → fit-out) | 150,000 | 300,000 | 250,000 | 100,000 | — | **800,000** |
| Equipment — purchase orders & deposits | — | 400,000 | — | — | — | **400,000** |
| Equipment — delivery & final payments | — | — | 1,200,000 | 1,335,000 | — | **2,535,000** |
| Soft costs (installation, commissioning, permits, training) | 15,000 | 35,000 | 70,000 | 70,000 | 20,000 | **210,000** |
| Strategic cash reserve deployment | — | — | — | 400,000 | 600,000 | **1,000,000** |
| **TOTAL DRAWDOWN** | **665,000** | **735,000** | **1,520,000** | **1,905,000** | **620,000** | **5,445,000** |

## 28. Implementation Timeline

The implementation plan spans 8 quarters (2 years) from Day 1 of financing. The timeline is structured in four phases: **Phase 1** — Site & Legal (Q1); **Phase 2** — Construction (Q2–Q3); **Phase 3** — Equipment & Commissioning (Q3–Q4); **Phase 4** — Commercial Ramp-Up (Q4–Q8).

| Milestone | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **LEGAL, PERMITS & FINANCING** | | | | | | | | | |
| Financing agreement signed (InvestEU + equity close) | | | | | | | | | Day 1 trigger |
| Land purchase — notarial deed | | | | | | | | | Month 1-2 |
| Building permit application | | | | | | | | | Month 2-3 |
| Environmental clearance & ATEX permit preparation | | | | | | | | | Month 2-4 |
| **CONSTRUCTION** | | | | | | | | | |
| Foundation & structural steel frame | | | | | | | | | Q2 |
| Building envelope (roof, walls, glazing) | | | | | | | | | Q2-Q3 |
| Internal fit-out (clean zones, coating booths, electrical, HVAC) | | | | | | | | | Q3-Q4 |
| ATEX ventilation & extraction system installed | | | | | | | | | Q3 critical path |
| **EQUIPMENT PROCUREMENT & COMMISSIONING** | | | | | | | | | |
| Equipment purchase orders placed | | | | | | | | | Q2 (12-16wk lead times) |
| Equipment delivery (laser, CNC, coating line) | | | | | | | | | Q3-Q4 |
| Installation, alignment & factory acceptance tests | | | | | | | | | Q4 |
| ERP system setup & production planning software | | | | | | | | | Q4 |
| **HIRING, TRAINING & COMMERCIAL RAMP-UP** | | | | | | | | | |
| Core team hiring: 10 operators + QC technician | | | | | | | | | Q3-Q4 |
| OEM machine training & ATEX operator certification | | | | | | | | | Q4-Q5 |
| ISO 9001 documentation & initial audit | | | | | | | | | Q5-Q6 |
| First customer samples / qualification batches | | | | | | | | | Q4-Q5 |
| First commercial production orders | | | | | | | | | Q5 target (Year 1 Revenue) |
| Expand workforce to 20 staff (full Year 1 team) | | | | | | | | | Q5-Q6 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Year 2 ramp: 60% capacity, export market entry | | | | | | | | | Q7-Q8 |
| NATO AQAP 2110 certification process begins | | | | | | | | | Q6 onwards (dual-use) |

**Key dependencies and critical path:** The ATEX ventilation system must be installed and certified before any magnesium alloy processing begins — this is a legal requirement under EU Directive 2014/34/EU and a prerequisite for insurer sign-off. This makes the ventilation installation (Q3) the single most critical path item. Equipment delivery lead times (12-16 weeks from German/Italian/Japanese suppliers) require purchase orders to be placed in Q2, before construction is fully complete. The first commercial revenue target is Q5 (Month 13-15 from financing Day 1).

## 28.1 Timeline Risk Register & Mitigation Measures

The following table identifies the principal implementation risks that could delay the timeline and specifies the mitigation measure pre-built into the project plan.

| Risk | Phase | Probability | Impact | Mitigation |
|---|---|---|---|---|
| Building permit delayed by municipality | Q1 | Medium | 4–8 week delay | Pre-application meeting with municipal planning authority in Month 1; engage local permit consultant familiar with Veliko Tarnovo industrial zone. |
| Equipment delivery delayed (customs, supply chain) | Q3–Q4 | Medium | 4–10 week delay | Purchase orders placed in Q2 with contractual delivery penalty clauses. Identify alternative EU suppliers for each critical item at tender stage. |
| ATEX certification of ventilation fails first inspection | Q3 | Low | Critical path — blocks production start | Engage ATEX-specialist ventilation contractor (not lowest-cost). Pre-inspection review with notified body in Q2 before final installation. |
| Key personnel unavailability during commissioning | Q4 | Low | 2–4 week delay | OEM training covers 2 operators per machine. Production Manager hired by Q3 with prior CNC/coating experience to lead commissioning. |
| Construction cost overrun (materials price inflation) | Q2–Q3 | Medium | EUR 50–100k cost increase | Fixed-price construction contract with penalty clause. 10% contingency reserve in equity budget covers this range. |
| First customer sample rejection — re-qualification required | Q5 | Medium | 1–3 month revenue delay | Customer qualification runs planned for Q4 (before formal commercial start). 3D scan quality records provided with all initial samples. |

## 29. Certification & Standards Roadmap

NT Partners LTD has adopted a phased certification strategy designed to maximise early commercial access while building toward the most valuable quality marks in a capital-efficient sequence. The strategy prioritises **NATO AQAP 2110** alongside ISO 9001 in Phase 1, reflecting the company's dual-use commercial strategy — defence-adjacent Tier-3 subcontract work is available from Year 2 and commands significant margin premiums without requiring the full IATF 16949 automotive qualification.

### Phase 1 — Year 1 (During Ramp-Up)

**ISO 9001:2015 — Quality Management System** Estimated cost: EUR

**ATEX 2014/34/EU — Explosive Atmosphere Compliance** Estimated cost: EUR

### Phase 2 — Year 2 (Dual-Use Commercial Entry)

**NATO AQAP 2110 — Allied Quality Assurance Publication (Design & Production)** Estimated cost: EUR

**EN 9100 / AS9100 — Aerospace Quality Management (preparation only)** Estimated cost: EUR

### Phase 3 — Year 3–4 (Automotive & Advanced Markets)

**IATF 16949:2016 — Automotive Quality Management System** Estimated cost: EUR

**ISO 14001 — Environmental Management System** Estimated cost: EUR

**MIL-SPEC / STANAG component qualification (selected product lines)** Estimated cost: EUR

**Total certification budget (10-year horizon):** Phase 1 (ISO 9001 + ATEX): EUR 23,000–32,000. Phase 2 (AQAP 2110 + EN 9100 prep): EUR 25,000–35,000. Phase 3 (IATF 16949 + ISO 14001 + STANAG): EUR 63,000–102,000. All Phase 1 costs are included in the Use of Funds breakdown (Section 27). Phase 2 and 3 costs are funded from operating cash flow and are not part of the InvestEU financing request.

# 30. Financial Structure — Sources & Uses Clarification

This section consolidates the project's financing structure into a single authoritative summary to eliminate any ambiguity between figures appearing in different sections. All numbers are internally consistent and derived from the same base-case model.

## 30.1 Sources & Uses Summary — Updated with Strategic Operating Cash Reserve

This section consolidates the project's financing structure into a single authoritative summary. The structure includes a **strategic operating cash reserve of EUR 1,000,000**. This reserve is not an optional cushion; it is a core bankability and risk-management element required to support the ramp-up phase, material purchases, payroll, customer receivables, VAT timing gaps and delayed order conversion.

| Item | EUR | Notes |
|---|---|---|
| **USES OF FUNDS** | | |
| Land acquisition (industrial plot ~5,000 m2) | **500,000** | Non-depreciating. Hard collateral for lender. |
| Industrial building construction (steel frame, 2,000 m2) | **800,000** | 25-yr depreciation. Includes ATEX ventilation zone. |
| Production equipment — 25 systems (Sections 7, 8) | **2,935,000** | 10-yr depreciation. Full list in Section 7. |
| **Sub-total: Core CAPEX (InvestEU-eligible financing base)** | **4,235,000** | InvestEU-eligible base. Financed via InvestEU-backed debt (EUR 1,694,000) and equity (EUR 3,751,000). |
| Equipment delivery, installation & commissioning | **120,000** | Funded from equity. |
| Operator training & OEM certification courses | **35,000** | Funded from equity. |
| ISO 9001 initial certification & quality system setup | **25,000** | Funded from equity. |
| Legal, permits, notarial & ATEX installation cert. | **20,000** | Funded from equity. |
| Contingency — implementation soft costs | **10,000** | Funded from equity. |
| **Sub-total: Implementation soft costs** | **210,000** | Entirely equity-funded. Not included in InvestEU loan request. |
| **Strategic operating cash reserve** | **1,000,000** | Covers ramp-up: materials, payroll, VAT timing, receivables bridge, commissioning delays. See breakdown below. |
| **TOTAL FUNDS REQUIRED** | | **5,445,000** |
| **SOURCES OF FUNDS** | | |
| InvestEU-backed bank loan (40% of core CAPEX) | **1,694,000** | 10-yr term, 3.5% p.a. InvestEU SME Window guarantee. |
| External equity investors and/or working capital facility | **3,751,000** | Covers capex equity, soft costs, reserve. Terms in Section 26. |

| | | |
|---|---|---|
| **TOTAL SOURCES** | **5,445,000** | Fully funded. No financing gap. |

### 30.1.1 Strategic Operating Cash Reserve — Detailed Breakdown

The EUR 1,000,000 strategic operating cash reserve is a logically calculated liquidity buffer, not a contingency estimate. It is designed to cover the facility's first full operational cycle without placing pressure on early revenue generation:

| Reserve Component | EUR | Rationale |
|---|---|---|
| Material inventory & supplier prepayments | **350,000** | 3-month raw material stock (Mg alloy, Al sheets, consumables) |
| Payroll reserve — 6 to 9 months | **250,000** | 25 staff at avg EUR 1,400/month net; bridges ramp-up revenue gap |
| Utilities, consumables & maintenance | **120,000** | Gas, electricity, argon/nitrogen, tooling, PPE |
| VAT timing & receivables bridge | **150,000** | VAT reclaim cycle (3–6 months); customer payment delays |
| Commissioning, rework & customer qualification delays | **80,000** | Buffer for FAT/SAT rework, first-part approval iterations |
| Commercial reserve for first large orders | **50,000** | Supports advance purchasing for confirmed but unpaid orders |
| **TOTAL STRATEGIC RESERVE** | **1,000,000** | Fully equity-funded. Recoverable over Year 1 operational cycle. |

## 30.2 VAT Treatment

All equipment is purchased from EU suppliers and is subject to Bulgarian VAT at 20%. As a registered VAT entity, NT Partners LTD will reclaim VAT on all capital expenditure. VAT cashflow impact in Year 1 is approximately EUR 587,000 outflow (equipment VAT) offset by quarterly reclaim, resulting in a net VAT timing requirement of EUR 100,000-150,000 over 3-6 months — covered within the working capital reserve. The InvestEU loan amount of EUR 1,694,000 is a VAT-exclusive figure.

## 30.3 InvestEU Guarantee vs. Direct Loan

For the avoidance of doubt: NT Partners LTD is applying for an **InvestEU-guaranteed commercial bank loan**, not a direct European Commission grant or subsidy. The InvestEU guarantee enables a Bulgarian accredited financial intermediary (commercial bank) to offer a loan at acceptable terms to an early-stage industrial SME that would otherwise not meet standard commercial lending criteria. The guarantee reduces the lender's risk exposure, enabling: (a) a longer tenor (10 years vs. typical 5-7 years); (b) a lower interest rate (3.5% vs. typical 6-8% for SME industrial loans); and (c) reduced collateral requirements. NT Partners LTD remains fully liable for principal and interest repayment.

## 30.4 Loan Repayment Schedule

The table below summarises the first 5 years of debt service. Principal is EUR 169,400/year (linear). Interest is calculated on the reducing balance at 3.5% p.a.

| Year | Opening Bal. | Principal | Interest | Total | Closing Bal. | DSCR |
|---|---|---|---|---|---|---|
| Year 1 | 1,694,000 | 169,400 | 59,290 | **228,690** | 1,524,600 | **1.62x** |
| Year 2 | 1,524,600 | 169,400 | 53,361 | **222,761** | 1,355,200 | **4.27x** |

| | | | | | | |
|---|---|---|---|---|---|---|
| Year 3 | 1,355,200 | 169,400 | 47,432 | **216,832** | 1,185,800 | **7.24x** |
| Year 4 | 1,185,800 | 169,400 | 41,503 | **210,903** | 1,016,400 | **10.2x** |
| Year 5 | 1,016,400 | 169,400 | 35,574 | **204,974** | 847,000 | **12.1x** |
| Years 6-10 | 847,000 | 847,000 | 74,130 (tot.) | **921,130 (tot.)** | 0 | — |

Total interest over 10-year term: EUR 315,000. Total debt service: EUR 2,009,000. After full repayment NT Partners LTD owns facility, land and equipment free of debt.

## 31. Risk Register

The following register identifies all material risks to the project's successful delivery and ongoing operations. Risks are assessed on a 3x3 matrix (Low/Medium/High probability x Low/Medium/High impact). The register demonstrates that NT Partners LTD has not only identified risks but has pre-defined mitigation strategies and accountability.

| Category | Risk | Prob. | Impact | Mitigation | Owner | Residual |
|---|---|---|---|---|---|---|
| Market | Revenue below forecast — customers slower to convert than modelled | Medium | High | Conservative Year 1 capacity assumption (30%). 5-segment diversified pipeline. First customer outreach starts Q2 of project (pre-commissioning). | CEO | Low |
| Market | Customer concentration — top 3 clients >60% of revenue | High | High | Policy: no single client >25% of revenue. Active pipeline targeting 20+ customers across 5 segments before end of Year 2. | CEO | Medium |
| Market | Competing facility enters SE Balkan region within 3 years | Low | Medium | First-mover advantage. AQAP 2110 and QUALICOAT certifications create switching cost for customers. Phase 2 automation further widens cost gap. | CEO | Low |
| Technical | ATEX ventilation fails regulatory certification (first inspection) | Low | Critical | Engage ATEX-specialist contractor (not lowest-cost). Pre-inspection with notified body in Q2. Independent HSE audit before formal certification. | Production Director | Low |
| Technical | Magnesium fire or dust explosion incident | Low | Critical | Class D fire suppression system. Mg-specific emergency response plan. Mandatory ATEX operator training before any Mg processing. No smoking/open flame policy enforced by access control. | HSE Consultant | Very Low |
| Technical | CNC machine or laser commissioning failure (FAT/SAT rejection) | Medium | Medium | Factory Acceptance Test in supplier facility before delivery. Contractual remedy clause (re-delivery or repair at supplier cost within 30 days). | Production Director | Low |
| Supply Chain | Equipment delivery delay (customs, supplier lead time overrun) | Medium | Medium | Purchase orders in Q2 with contractual delivery penalty. Backup supplier identified for each critical category at tender stage. | CEO | Low |

| | | | | | | |
|---|---|---|---|---|---|---|
| Supply Chain | Key raw material (Mg/Al alloy) price spike >30% | Medium | Medium | 3-month alloy inventory buffer. Contracts with 2 competing alloy distributors. Product pricing includes material cost pass-through clause for >15% movement. | Production Director | Low |
| Financial | Interest rate increase above 3.5% base case | Low | Low | Fixed-rate InvestEU-backed loan locks in 3.5%. DSCR headroom of 1.62x in Year 1 absorbs moderate rate increase without covenant breach. | CFO/CEO | Very Low |
| Financial | Working capital shortfall — receivables cycle longer than modelled | Medium | Medium | EUR 1,000,000 strategic operating cash reserve covers up to 11 months of receivables cycle delays. Factoring facility to be arranged at loan closing (receivables finance line). 45-day payment terms enforced in all contracts. | CEO | Low |
| Personnel | Inability to recruit qualified CNC operators in Veliko Tarnovo | Medium | High | Recruitment starts Q3 (3 months before commissioning). Salary premium of 15-20% above market. Partnership with VTU technical faculty for pipeline. OEM training provided for candidates with transferable skills. | CEO | Low |
| Personnel | Key founder departure or incapacitation | Low | High | Founding couple are co-directors. Cross-training on all critical management functions. Key-person life/disability insurance arranged at loan closing. | Board | Low |
| Regulatory | Export control restriction on dual-use component supply | Low | Medium | Legal compliance programme (Section 35). End-user declarations for all defence-adjacent orders. Annual export control audit from Year 2. | Legal/Compliance | Very Low |
| Regulatory | Building permit or environmental clearance delayed | Medium | Medium | Pre-application consultation with Veliko Tarnovo municipality in Month 1. Experienced local permit consultant engaged. 8-week buffer in construction schedule. | CEO | Low |
| ESG | Environmental incident — anodising/coating waste disposal | Low | Medium | Licensed waste contractor for chemical waste. ISO 14001 preparation from Year 1. Closed-loop water treatment system in coating line specification. | HSE Consultant | Very Low |
| One-Stop Supplier | Customer concentration — few clients >50% of revenue | High | High | Policy: no single client >25% of revenue. Min. 6–8 active customers by end of Year 1. Civilian + defence dual-stream hedge — both streams must fail simultaneously for revenue to collapse below break-even. | CEO | Medium |
| One-Stop Supplier | Single point of failure — one machine breakdown halts full cycle | Medium | High | Each stage (laser, forming, coating, metrology) operates independently and can serve external customers as a standalone service. Preventive maintenance contracts on all key equipment. Critical spare parts stocked on-site. Max downtime target: 48h. | Production Director | Low |

| | | | | | | |
|---|---|---|---|---|---|---|
| One-Stop Supplier | Pricing pressure from large OEM customers exploiting dependency | Medium | Medium | Framework agreements with 2–3 year fixed pricing indexed to Al LME + CPI. Tier-3 market gives 50+ potential customers — no single buyer has monopsony power. AQAP 2110 (Year 3) unlocks NATO procurement at higher margins. | CEO | Low |
| One-Stop Supplier | Operational complexity — coordinating 5 simultaneous processes | Medium | Medium | Phased ramp: laser + forming by Month 6, coating by Month 9, full integration by Month 12. MES (Manufacturing Execution System) in Year 2 to digitise scheduling, work orders and quality records across all stages. | Production Director | Low |
| One-Stop Supplier | Quality consistency across multiple production processes | Medium | High | CMM dimensional verification on every critical component. QUALICOAT batch testing. ISO 9001:2015 QMS from Year 1 covering all 5 stages. Non-conformance tracking with 72h root-cause close-out requirement. | Quality Manager | Low |

**Overall risk assessment:** The project's risk profile is consistent with a well-managed early-stage industrial investment. No individual risk, if it materialised, would threaten the company's solvency. The combination of InvestEU loan guarantee, diversified customer strategy, conservative Year 1 revenue assumptions, and EUR 1,000,000 strategic operating cash reserve provides a multi-layer protection against the most likely adverse scenarios.

# 32. Operational Readiness & Site Preparation

This section addresses the practical on-site requirements for establishing a magnesium alloy precision manufacturing facility in Veliko Tarnovo. It confirms that all regulatory, utility, and safety prerequisites have been assessed and that the implementation plan accounts for all mandatory approvals.

## 32.1 Site Status & Zoning

| Item | Status | Notes |
|---|---|---|
| Land identified | **Confirmed** | Industrial plot in Veliko Tarnovo industrial zone. Adjacent to existing manufacturing operations. |
| Zoning classification | **Industrial (Pz)** | Classified as production/industrial zone under Bulgarian Territorial Planning Act. No rezoning required. |
| Grid electricity (3-phase 400V) | **Available** | 230kW peak demand estimated. Grid connection capacity confirmed with EVN/CEZ distributor. |
| Water supply (process + fire suppression) | **Available** | Municipal connection available. Dedicated fire suppression tank (30 m3) specified in building design. |
| Compressed air infrastructure | Self-supplied | On-site compressor (Equipment item 24). No municipal compressed air dependency. |
| Building permit application | **Q1 — Month 2-3** | Pre-application consultation with Veliko Tarnovo municipality confirmed. Permit expected within 6-8 weeks. |
| Environmental impact assessment | **Q1 — Month 2-4** | Category B facility under MOEW Ordinance No. 1. EIA screening + limited notification procedure. |

## 32.2 ATEX Readiness & Phase 2 Magnesium Safety Plan

NT Partners LTD's Phase 1 facility processes aluminium and steel — materials that do not require ATEX classification under standard industrial conditions. However, the building design incorporates **ATEX-ready infrastructure** (conduit routing, zone boundaries, extraction pre-connections) to enable a low-cost Phase 2 upgrade to full magnesium alloy processing capability. The Phase 2 safety plan below documents the incremental measures required and is prepared in accordance with EU Directive 2014/34/EU (ATEX) and Bulgarian Ordinance No. RD-07-3.

- **Zone classification:** Machining and grinding areas classified as ATEX Zone 22 (combustible dust present occasionally). Laser cutting area classified Zone 22. Coating booths classified Zone 2 (solvent vapour). Boundaries defined in facility layout drawings.
- **ATEX ventilation:** Dedicated ATEX-certified extraction system per machining cell (Equipment item 25). Minimum 10 air changes/hour. Interlocked with machine start: machine cannot operate if extraction is offline.
- **Fire suppression:** Class D (metal fire) dry powder suppression system in machining area. Class ABC in coating and assembly areas. Automatic detection linked to central panel and BMS.
- **Mg swarf management:** Mg swarf collected in closed metal containers (never plastic). Segregated from other metal waste. Licensed recycler contracted for monthly collection. No Mg waste stored on-site for more than 14 days.
- **Prohibition zones:** No water or CO2 extinguishers in Mg processing areas (react violently with burning Mg). Water sprinklers replaced with sand/dry powder in machining zone. Clearly signposted.
- **Emergency response:** Annual evacuation drill. Mg fire response procedure posted at each machining station. First-aider certification for all production staff. Local fire brigade pre-notified of facility classification.

## 32.3 Environmental Compliance

• **Chemical waste (anodising/coating):** Pickling and pre-treatment chemicals managed under Waste Management Act (ZUO). Licensed hazardous waste contractor for collection and disposal. Closed-loop rinse water system reduces volume.

• **Metal dust:** Captured by ATEX extraction. Filtered and compacted. Sold to licensed Mg/Al recycler (positive revenue of ~EUR 2,000-5,000/year).

• **Noise:** Facility located in industrial zone with no residential neighbours within 200m. Acoustic survey not required under current zoning.

• **ISO 14001:** Environmental Management System documentation begins Year 1 alongside ISO 9001. Target certification Year 3.

## 32.4 Insurance Requirements

NT Partners LTD will arrange the following insurance policies before commencing production operations. All policies will be provided to the lending institution as a condition of the first loan drawdown.

| Insurance Policy | Coverage Required | Est. Annual Premium | Trigger |
|---|---|---|---|
| All-risks property insurance (building + equipment) | EUR 4,235,000 (full replacement value) | EUR 18,000-25,000/yr | Before first loan drawdown |
| Business interruption insurance | 12 months gross profit (est. EUR 900k Year 2+) | EUR 8,000-12,000/yr | Before first commercial production |
| Employers liability & workplace accident | Statutory minimum per Bulgarian law + top-up | EUR 3,000-5,000/yr | Before any employees hired |
| Product liability insurance | EUR 2,000,000 per occurrence (defence-adjacent supply) | EUR 4,000-8,000/yr | Before first delivery to customer |
| Key-person life/disability (both directors) | EUR 500,000 per person (lender requirement) | EUR 3,000-5,000/yr | Before loan signing (lender condition) |
| Environmental liability insurance | EUR 500,000 for pollution/contamination events | EUR 2,000-4,000/yr | Before commencement of coating operations |

# 33. Customer Acquisition Plan

The financial model's revenue projections are grounded in a bottom-up customer acquisition plan, not a top-down market share estimate. This section documents the specific target customer universe, the sales process, and the funnel assumptions underlying the Year 1 revenue forecast of EUR 1,800,000.

## 33.1 Sales Funnel Model

| Stage | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Assumption |
|---|---|---|---|---|---|---|---|
| Total addressable contacts identified | 200 | 250 | 300 | 300 | 300 | 300 | Trade databases, referrals, trade fairs |
| Initial outreach (email/call/trade fair) | 40 | 60 | 60 | 50 | 50 | 50 | 20% of identified contacts contacted/quarter |
| Technical meetings / facility visits | 8 | 15 | 18 | 15 | 15 | 15 | 20% conversion from outreach to meeting |
| RFQ / sample requests received | 2 | 5 | 8 | 10 | 10 | 10 | ~35% of meetings result in RFQ |
| Trial orders / qualification batches | 0 | 1 | 3 | 5 | 5 | 5 | 50% of RFQs proceed to trial order |
| Active framework contracts | 0 | 0 | 1 | 3 | 5 | 7 | 70% trial order conversion to contract (3-6 mo) |
| Est. annual revenue per active contract | — | — | — | — | EUR 80-200k | EUR 80-200k | Avg. EUR 120k/contract. Range EUR 30k-500k. |

## 33.2 Target Customer Segments — Priority 50 Companies

The following table identifies the priority customer targets by sector, geography, and expected annual volume. This list is based on publicly available supplier databases (Kompass, Europages, Bulgarian Chamber of Commerce, defence industry directories) and the founding team's existing industry contacts.

| Sector | Country | # Targets | Product Need | Est. Annual Vol. | Entry Barrier |
|---|---|---|---|---|---|
| Tier-2 Automotive Suppliers | BG, RO, RS | **12** | Seat frames, HVAC housings, brackets, heat shields | EUR 80-250k/yr | ISO 9001 + sample approval |
| Agricultural Machinery OEMs | BG, RO, TR | **8** | Gearbox housings, protective covers, chassis parts | EUR 50-150k/yr | ISO 9001 + technical audit |
| Defence / Dual-Use Integrators (Tier-3) | BG, HU, CZ | **6** | Enclosures, vehicle brackets, UAV frames, shelter fittings | EUR 100-400k/yr | AQAP 2110 + end-user decl. |
| UAV & Unmanned Systems Manufacturers | BG, PL, UA (postwar) | **5** | Airframe structures, payload bay, motor mounts | EUR 60-200k/yr | ISO 9001 + DU certification |

| | | | | | |
|---|---|---|---|---|---|
| Industrial Equipment Manufacturers | BG, TR, GR | **7** | Custom enclosures, mounting brackets, machined components | EUR 40-100k/yr | ISO 9001 |
| German/Austrian Precision Engineering (subcontract) | DE, AT, CH | **6** | Overflow capacity, cost-sensitive medium-volume runs | EUR 100-500k/yr | ISO 9001 + quality audit + EN 9100 prep |
| Medical Device Component Suppliers | BG, DE, AT | **3** | Precision Al housings, surgical instrument components | EUR 60-180k/yr | ISO 9001 + ISO 13485 prep |
| Rail & Transport Equipment Suppliers | BG, RO, RS | **3** | Lightweight structural components, interior fittings | EUR 80-200k/yr | EN 15085 weld cert. + ISO 9001 |
| **TOTAL TARGET PIPELINE** | Multi-country | **50** | Full portfolio coverage | **EUR 570k-1.98M/yr** | Phased by certification stage |

## 33.3 Sales & Marketing Channel Strategy

• **Founding team network (existing EU project clients):** Krasimir Trufev has direct relationships with 50+ industrial companies across Bulgaria, Romania, Hungary and North Macedonia through 4+ years of EU project management. These companies will be the first outreach targets, benefiting from existing trust and familiarity.

• **Trade fair participation:** Hannover Messe (Germany), MSV Brno (Czechia), Bulprod (Bulgaria) — Years 1 and 2. Estimated cost EUR 15,000/year. Target: 30+ new qualified contacts per fair.

• **Bulgarian Defence Industry Association:** Membership applied for in Year 1. Provides access to NATO-adjacent procurement network and Tier-2 integrators seeking Bulgarian Tier-3 subcontractors.

• **InvestEU project promoter visibility:** Participation in InvestEU-organised matchmaking events for beneficiaries. European Investment Advisory Hub (EIAH) may introduce NT Partners LTD to relevant supply chain contacts.

• **Digital presence:** English-language website with product capability matrix, material certifications, and online RFQ submission. LinkedIn company page targeting procurement managers in target sectors.

# 34. Key Hires & Advisory Board

Beyond the two founding principals (Section 25), NT Partners LTD's business plan requires the recruitment of five critical specialists and the formation of a part-time advisory board. The profiles below define the requirements, compensation ranges, and expected hire timing. All costs are included in the Year 1-2 labour budget.

## 34.1 Critical Hire Profiles

| Role | Hire Timing | Qualifications Required | Salary Range (EUR/mo.) | Recruiment Source |
|---|---|---|---|---|
| **Production Director** | Q3 (before commissioning) | 10+ years CNC/metal processing management. Experience with Mg/Al alloys. Strong FAT/SAT commissioning background. | **2,500-3,500** | Bulgarian/Romanian engineering sector. VTU network. |
| **Lead CNC Operator / Cell Leader** | Q3-Q4 | 5+ years 5-axis CNC machining. CAM programming (Mastercam/Fusion). Experience with light alloys preferred. | **1,800-2,200** | Automotive Tier-2 suppliers in BG/RO. OEM training provided. |
| **Coating & Surface Treatment Specialist** | Q4 | 5+ years powder coating or anodising. QUALICOAT process knowledge. Experience with Mg pre-treatment chemistry strongly preferred. | **1,600-2,000** | Coating industry associations. German/Italian coating line OEM referrals. |
| **Quality Manager (ISO 9001 / AQAP 2110)** | Q4-Q5 | ISO 9001 lead auditor qualification. Experience implementing AQAP 2110 or IATF 16949. CMM operation and dimensional reporting. | **2,000-2,800** | Automotive/defence supply chain in BG, RO, HU. |
| **ATEX / HSE Consultant** (External, part-time) | Q1 (immediately) | Certified ATEX competent person (notified body trained). Experience with metal dust Zone 22 facilities. Will oversee ATEX installation and certification process. | **500-1,000/ month retainer** | Bulgarian ATEX certification body network. German HSE specialist firms with BG coverage. |

## 34.2 Advisory Board

NT Partners LTD will form an advisory board of 3-4 independent specialists by end of Year 1. Advisory board members will be offered a nominal equity stake (0.5-1.0% each) in exchange for 4 meetings per year, availability for investor introductions, and domain expertise on request. Target profiles:

- **Defence Industry Advisor:** Former procurement officer or supply chain director from Bulgarian MoD, NATO NSPA, or a Tier-1 defence prime. Provides access to defence procurement networks and navigates AQAP/STANAG qualification.

• **German/Austrian Industrial Expert:** Active or recently retired senior engineer from a German precision engineering Mittelstand company. Provides technical credibility and potential customer introductions in DACH markets.

• **ESG / Sustainability Advisor:** ESG reporting specialist, ideally with InvestEU or EIB Group experience. Supports InvestEU reporting obligations and positions the company for green finance instruments in Phase 2.

• **Financial Advisor:** CFO or corporate finance specialist with Bulgarian SME and international investor experience. Supports investor relations, management accounts preparation, and eventual exit process management.

## 34.3 Total Labour Cost Budget — Years 1-3

The following table summarises the full headcount plan and associated labour costs, consistent with the P&L; model in Section 10. All figures include employer social security contributions at Bulgarian statutory rates (approximately 18.9% on top of gross salary).

| Role | # FTE Y1 | # FTE Y2 | # FTE Y3 | Avg. Gross Salary | Y1 Cost | Y3 Cost |
|---|---|---|---|---|---|---|
| CEO / Managing Director (Krasimir Trufev) | 1 | 1 | 1 | EUR 3,000/mo | 43,200 | 43,200 |
| Finance & Legal Director (Kremena Trufeva) | 1 | 1 | 1 | EUR 2,000/mo | 28,800 | 28,800 |
| Production Director | 1 | 1 | 1 | EUR 3,000/mo | 43,200 | 43,200 |
| Quality Manager | 1 | 1 | 1 | EUR 2,400/mo | 34,560 | 34,560 |
| CNC Operators (lead + junior) | 3 | 4 | 5 | EUR 1,800/mo | 77,760 | 129,600 |
| Coating / Surface Treatment | 2 | 3 | 4 | EUR 1,600/mo | 45,888 | 91,776 |
| Assembly & QC Technicians | 2 | 3 | 4 | EUR 1,500/mo | 43,200 | 86,400 |
| Logistics / Warehouse | 1 | 2 | 3 | EUR 1,200/mo | 17,280 | 51,840 |
| Sales & Admin | 1 | 1 | 2 | EUR 1,500/mo | 21,600 | 43,200 |
| ATEX/HSE Consultant (retainer) | 0.25 | 0.25 | 0.25 | EUR 800/mo retainer | 9,600 | 9,600 |
| **TOTAL HEADCOUNT / LABOUR COST** | **13.25** | **17.25** | **22.25** | — | **EUR 365,088** | **EUR 562,176** |

*Note: Figures include employer social security contributions (18.9%). The P&L; model uses EUR 420,000 (Year 1) and EUR 675,000 (Year 3) — slight rounding difference reflects ATEX consultant classified partly under professional services. All figures are consistent with prevailing Veliko Tarnovo industrial labour market rates as of 2025-2026.*

## 35. Defence / Dual-Use Compliance Statement

NT Partners LTD operates in a sector where some products have potential applications in both civilian and military contexts (dual-use goods). This section provides a formal compliance statement for lenders, InvestEU reviewers, and investors regarding the company's approach to export control and defence-adjacent manufacturing.

| | |
|---|---|
| **Nature of Products** | NT Partners LTD will manufacture **precision metal components** — machined, formed, and coated parts made from aluminium and magnesium alloys. These are **sub-components and semi-finished parts**, not weapons, munitions, explosive devices, or complete weapons systems. The company will not manufacture firearms, artillery, missiles, or any item covered by the EU Common Military List (2023/C 292/01) as a complete end item. |
| **Dual-Use Classification** | Certain components (UAV airframe structures, hardened electronic enclosures, vehicle armour sub-brackets) may fall under EU Dual-Use Regulation 2021/821. NT Partners LTD will: (a) conduct an export control classification review for each product line before commercial launch; (b) apply for export licences where required; and (c) implement a Technology Control Plan (TCP) for any controlled technology. The founding team's EU compliance background (Krasimir Trufev, EU project manager with regulatory compliance experience) is directly relevant. |
| **End-User Screening** | All orders for products with potential dual-use applications will require a signed End-User Declaration (EUD) from the customer, specifying the intended end use and confirming the goods will not be re-exported without NT Partners LTD's written consent. EUDs will be retained for a minimum of 10 years in compliance with Bulgarian export control regulations. |
| **EU Sanctions Compliance** | NT Partners LTD will implement an EU Sanctions screening procedure against the EU Consolidated Sanctions List (EFMS) for all customers, agents, and end users before accepting orders. Screening will be conducted using the European Commission's Sanctions Map tool and will be documented and auditable. |
| **No Arms Manufacturing Commitment** | NT Partners LTD formally confirms that: (a) it will not manufacture complete weapons, munitions, or explosive devices; (b) all production will be for civilian or defence-adjacent sub-component supply only; (c) it will comply with all applicable Bulgarian and EU export control, dual-use, and arms trade regulations; and (d) it will submit to any additional compliance audit required by InvestEU or the lending financial intermediary. |
| **AQAP 2110 Compliance Context** | NATO AQAP 2110 is a **quality management standard**, not a weapons manufacturing licence. It is widely applied by Tier-3 suppliers producing components for defence integrators, including items as routine as fasteners, housings, and structural brackets. Achieving AQAP 2110 certification does not in itself subject NT Partners LTD to additional export control obligations beyond those already applicable under EU Dual-Use Regulation 2021/821. |

# 36. Evidence Package & Supporting Documents

This section lists the supporting documentation that accompanies or will be provided to support this proposal. Documents marked **Available Now** can be provided immediately upon request. Documents marked **In Preparation** will be completed during the financing application process. Documents marked **Post-Approval** will be obtained after InvestEU financing is confirmed.

## 36.1 Company & Legal Documentation

| Document | Status | Notes |
|---|---|---|
| Company registration certificate (EIK 201445044) | Available Now | NT Partners LTD, registered at Bulgarian Commercial Register. |
| Founding shareholders' CVs (Krasimir & Kremena Trufev) | Available Now | Included in Section 25 and available as separate PDF. |
| Letter of Recommendation (EU project portfolio) | Available Now | Issued by current employer — confirms EU programme management track record. |
| Company financial statements (last 3 years, if available) | In Preparation | Tax declarations and VAT registration certificate available. Opening balance sheet for manufacturing entity prepared by certified accountant (Zapryan Petkov CPA, Veliko Tarnovo). Available within 10 business days. |
| Criminal record clearance — both directors | Available Now | Issued by Ministry of Interior Bulgaria. Valid 6 months. Both directors: Krasimir Trufev and Kremena Tsvetanova Trufeva. |

## 36.2 Market Evidence & Customer Pipeline

| Document | Status | Notes |
|---|---|---|
| Letters of Intent / Expressions of Interest from target customers | 3 Available | 3 signed EOIs available (automotive Tier-2 supplier, industrial enclosure OEM, e-mobility component buyer). Additional 2-3 EOIs in final review. Full LOI package available under NDA. |
| Market research sources — Mg die-casting market size data | Available Now | Grand View Research (2024), MarketsandMarkets, European Aluminium Association, Eurostat Industrial Production Database. |
| European Defence Industrial Strategy (EDIS, COM(2024) 150 final) | Available Now | March 2024. Confirms EUR 1.5B SME defence-industrial programme 2025-2027. |
| Regional competitor analysis — SE Balkans precision metal sector | Available Now | Kompass, Europages, Bulgarian Industrial Portal. No equivalent vertically integrated Mg/Al facility identified in BG/RO/RS based on desk research. |
| Trade fair contact lists and RFQ correspondence | Available Now | Customer pipeline spreadsheet with 14 identified contacts across 5 sectors: automotive, enclosures, e-mobility, defence, medical. Hannover Messe 2025 contact log included. Available upon request. |

## 36.3 Technical & Equipment Documentation

| Document | Status | Notes |
|---|---|---|
| Indicative equipment quotations (minimum 3 per major item) | **Partial — 18/25** | 18 of 25 systems quoted. Suppliers: Trumpf (laser), Mazak (CNC), Wagner/Gema (coating), KUKA (robot), Zeiss (CMM), Becker (hydraulics). Remaining 7 quotes expected within 3 weeks. |
| Facility layout drawing (2,000 m2 production floor plan) | **Available Now** | Conceptual floor plan (2,000 m²) with machine footprints, material flow, utility connections and safety zones. Produced by NT Partners LTD engineering team. CAD version available on request. |
| Building structural pre-design and cost estimate | **Available Now** | Two indicative quotes received: EUR 380/m² and EUR 395/m² for steel-frame industrial hall. Total range EUR 684k–711k (within EUR 800k budget). Full quotes with scope of works available. |
| ATEX Zone Classification Drawing | Post-Approval | Produced by ATEX consultant after detailed facility layout confirmed. Required before building permit application. |
| ISO 9001 gap analysis report | Post-Approval | Commissioned in Q4/Q5. Certification body engaged after production start. |

**Document request process:** All available documents can be provided as a secure PDF package within 5 business days of request. Documents in preparation will be provided on a rolling basis as the application progresses. NT Partners LTD is committed to full transparency and will provide additional documentation upon reasonable request from InvestEU reviewers or accredited financial intermediaries.

## 36.4 Key Market Data Sources

The financial projections and market size claims in this proposal are based on publicly available data from the following sources:

| Claim in Proposal | Source | Publication Year |
|---|---|---|
| Global Mg die-casting market USD 3.3B, CAGR 5.5% | Grand View Research — 'Magnesium Die Casting Market Size Report 2024' | 2024 |
| EU defence spending commitment 2% GDP / EDIS EUR 1.5B | European Commission COM(2024) 150 final — European Defence Industrial Strategy | March 2024 |
| Mg supply crisis 2021 — China 85% of global production | European Aluminium / IMA (International Magnesium Association) crisis report | 2021-2022 |
| Mg CO2 savings: 4 tonnes CO2 per tonne Mg substituted | International Magnesium Association Life Cycle Assessment data | 2023 |
| Bulgarian industrial labour rates (CNC, coating operators) | Bulgarian National Statistics Institute (NSI) — Labour Cost Survey 2024 | 2024 |
| Powder coating margin premium 15-20% (QUALICOAT) | QUALICOAT Technical Report — market pricing analysis | 2023 |
| EV lightweighting: 1kg weight reduction = 0.1g CO2/km saving | European Environment Agency — 'CO2 emissions from new passenger cars' | 2023 |

| | | |
|---|---|---|
| SE Balkans: no equivalent Mg/Al integrated facility identified (desk research) | Kompass.com, Europages, Bulgarian Industrial Portal desk research — search terms: 'magnesium machining', 'aluminium precision', 'CNC coating BG/RO/RS' | 2024-2025 |
| InvestEU SME Window terms (interest rate, tenor, guarantee) | European Investment Bank — InvestEU Programme Guide for SMEs, 2024 edition | 2024 |

NT Partners LTD will update market size data and competitor analysis annually as part of its InvestEU reporting obligations. All market claims will be referenced with specific page citations in the final application package submitted to the accredited financial intermediary.

## 36.5 Promoter Declaration

The undersigned, acting as authorised representative(s) of NT Partners LTD (EIK 201445044), hereby confirm that:

- All information contained in this project proposal is accurate and complete to the best of our knowledge as of the date of submission.
- No material information has been withheld that would be relevant to the assessment of this project by InvestEU reviewers, accredited financial intermediaries, or equity investors.
- NT Partners LTD is not subject to any insolvency proceedings, outstanding tax liabilities, or sanctions that would affect its eligibility under the InvestEU Programme.
- The company commits to full compliance with InvestEU reporting requirements, including semi-annual progress reports, annual financial statements, and notification of any material changes to project scope, ownership, or financing structure.