

Building an investable deep-tech spinout



K3Metrology — from research asset to investable company

£2.75m SEED ROUND STRUCTURED	£5m SERIES A ROADMAP	£20m+ REVENUE SCALE (5YR)	15+ yrs R&D TRANSLATED
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EXECUTIVE SUMMARY

K3Metrology (K3M) is a deep-tech company spun out of the UK's National Physical Laboratory (NPL) to commercialise Metralis, a next-generation large-volume metrology system developed over more than fifteen years of research.

Ben Adeline was engaged to support the transformation of K3M from a technically strong research programme into a venture-ready company capable of raising institutional capital and executing a commercial scale-up. The mandate spanned the full commercial, financial and strategic foundation required for investment — market positioning, go-to-market strategy, business model design, financial modelling and spinout structuring. Ben also mentored Mike Campbell, the spinout CEO, in all aspects of the journey. The work was conducted in close partnership with NPL's Technology Transfer function, building on the industrial relationships and commercial foundations that had been established.

STARTING POINT: Exceptional Science, Needing Commercial Shape

At engagement, K3M had already been substantially de-risked through NPL's research investment and the work of its Technology Transfer function — more than fifteen years of R&D, roughly £10m of prior research investment, prototype deployments in industrial settings, and validation from partners including BAE Systems and the AMRC. The next stage of the journey required a different kind of commercial framework. To be ready for institutional venture capital, the company needed an investor-facing commercial narrative, a defined go-to-market strategy, a coherent business model and pricing logic, an institutional-grade financial model, and a spinout structure capable of carrying outside investment. This is the classic "valley of death" — technically validated and commercially proven in research settings, but not yet shaped for venture-scale capital.

"Ben Adeline supported us throughout the spinout journey. His guidance was instrumental in making K3Metrology investable — helping us define our strategy, structure our funding approach, and successfully spin out from NPL. Having him as a sounding board was invaluable, particularly given his firsthand experience of the Founder/CEO journey and his ability to navigate complex stakeholder landscapes at every stage."

Mike Campbell – CEO, K3Metrology

THE APPROACH

Guidance on the overall process and foundational mentoring were at the core of the engagement. This provided the CEO with an experienced sounding board to help navigate the challenges of complex stakeholder management, leadership and the transition from research professional to start-up CEO.

Specific topics focused on eight integrated workstreams, run in parallel to continually iterate and refine the business plan through to successful closing of the investment.

Management and Mentoring

- Clear guidance on priorities and timescales throughout the process
- Provided credibility to the team with investors
- Independent commercial voice across all stakeholders
- Mentoring for the CEO on transition from research to commercial leadership
- One-to-one support ranging from short calls to in-depth sessions as required

1. Commercial narrative & positioning

- Reframed Metralis as a critical enabler of Industry 4.0, not a laboratory instrument.

2. Market definition & go-to-market

- Targeted aerospace, defence and nuclear as beachhead sectors prioritising flagship customers: BAE Systems, Airbus, Rolls-Royce.

3. Business model design

- Value-based pricing with premium positioning and solid margins with later building of recurring software revenues.

4. Financial model & investment case

- Full 7-year model with revenue scenarios, cost structure, hiring plan and cash runway linked to milestones.

5. Spinout structuring

- Cap table across founders, institution and investors with guidance on governance balancing founder, institutional and investor interests.

6. Team structure and leadership

- Definition of team roles, skills matrix and resource growth through to Series A.

7. Fundraising preparation

- Designed and ran the investor engagement strategy and developed pitch deck, model and supporting narratives.

8. Fundraise

- Investor introductions, pitch support and feedback with advice on term sheet and consortium negotiation, investment agreement and professional services engagement.

“Ensuring long-term impact from NPL-developed intellectual property was a central objective in the spin-out of K3Metrology. Ben Adeline worked closely with NPL and partner stakeholders to structure a credible commercial and investment framework around the Metralis IP, enabling its transition from long-term research into an investable company. This support was instrumental in translating publicly funded research into a vehicle capable of delivering sustained industrial impact and public value.”

Phil Cooper — National Physical Laboratory (NPL)

OUTCOMES ACHIEVED

Company formation	Successful spinout from NPL; clear commercial identity and positioning.
Investment	Three institutional investors — £2.75m seed round successfully closed.
Commercial foundations	Structured go-to-market, pricing logic, and prioritised customer pipeline.
Early traction	Forecast revenue from strategic partners (BAE Systems, AMRC) and live engagement with major OEMs.
Scalable growth path	Credible plan to ~£20–25m revenue within five years at high-margin (40%+ EBIT potential).

STRATEGIC INSIGHTS

01

Investability is constructed

Deep-tech does not become investable through technology alone. Narrative, market logic and financial credibility must be built deliberately.

02

RTOs are a commercial bridge

In conservative industrial markets, RTOs supply the validation and visibility that unlock downstream OEM adoption.

03

Commercial reality

Science and innovation are the foundation. Transitioning this to commercial application with clear product market fit is key to investability.

04

Leadership and ambition are key

Scientific founders need to develop commercial leadership skills and have the drive and ambition for spinout ventures to succeed in a commercial environment.

“Ben Adeline’s work in translating K3Metrology from research asset to fundable business made backing the company a straightforward decision for us. What too often holds back UK deep-tech is not the science but exactly that translation — and K3M is a textbook example of it done well: a coherent commercial narrative, a defensible route to market, and a spinout structure that worked for every party around the table.”

Sakura Holloway – Investment Director, Future Planet Capital

WHAT THIS CASE DEMONSTRATES

Deep-tech success depends as much on commercial architecture as technical excellence. The “valley of death” is primarily a translation problem, not a technology problem. Technical founders benefit from structured commercial framework and mentoring by someone who has lived the process themselves. In the end, investors back commercial credibility underpinned by a strong coherent team with exceptional leadership and ambition — not just innovation.