

Supplementary Written evidence from Dr David Cleavelly CBE FREng FIET (SUK0112)

Following my oral evidence to the Committee on 24 June, this submission sets out in detail how a practical, costed, and coherent system could address many of the issues raised by Committee Members. It includes some further development of the ideas as a result of careful consideration of the questions and issues raised in the session.

At its core is a proposal for a three-year, £15m pilot of a national Concierge and Innovation Fellows Network. This is not a conventional government programme. It is a decentralised, peer-led system that enables structured serendipity - joining up the right people, ideas and institutions at the right time, without requiring central control.

The pilot consists of six interlocking components, each of which addresses specific problems identified during the inquiry:

1. A national Concierge Network of experienced scale-up entrepreneurs providing direct support to growing firms.
2. A UK Innovation Fellows programme to embed expertise across government, academia and business.
3. A lightweight, AI-enabled platform to generate real-time insight from thousands of peer-to-peer interactions.
4. Regional nodes to ensure decentralised delivery, learning, and leadership outside the Golden Triangle.
5. Embedded feedback loops to surface system-level policy and procurement blockages as they arise.
6. Transparent oversight, sunset clauses and outcome-focused metrics to ensure public value.

These components work together as a system - a kind of national “neural network” that learns over time, avoids duplication, and amplifies what already works in regions, clusters and sectors across the UK. It draws explicitly on proven models such as the Centre for Science and Policy, the Royal Academy of Engineering Policy Fellowships, and the Cambridge innovation ecosystem.

As I suggested in my oral evidence, the lack of capital is a symptom not a cause and the real barrier to scaling is a lack of coordination, timely intelligence, and trust. This pilot offers a practical, low-risk way of building the connective tissue we currently lack.

I would be pleased to support the Committee further if required.

Following oral evidence of 24 June 2025

Summary:

A three-year, £15m pilot will create a national concierge and innovation fellows network, connecting entrepreneurs, academia, and government. This network uses real-time data, human insight, and AI tools to surface policy barriers, improve coordination, and create the structured serendipity essential for scale-up success.

Purpose of this Supplementary Evidence

Several Peers asked how the proposals I outlined might work in practice. This submission provides that detail, presenting a practical blueprint for a three-year pilot scheme that would cost less than 0.2% of the UK's R&D budget yet could fundamentally transform how we support scale-ups. It includes some further development of the ideas as a result of careful consideration of the questions and issues raised in the session

1. Direct Responses to Committee Questions

Let me first address the specific concerns raised by Committee members:

Viscount Stansgate & Lord Mair: "How will the concierge service actually work?"

The Concierge Network operates like Uber - but for scale-up expertise. Twenty-five experienced operators (people who've built £100m+ companies) each support 2-4 scaling firms. When a firm needs help, they request support through a simple platform. The concierge uses their network to solve problems: regulatory approvals, procurement pathways, funding introductions.

Crucially, after each interaction, both parties rate each other - just as in Uber. Poor performers (whether concierges or firms) are removed. Uber-style mutual ratings are not bells and whistles-they are essential to ensuring that public money is spent only where value is demonstrably delivered. This isn't a government scheme where bureaucrats assign advisers. It's a peer-led network where quality is maintained through transparent feedback.

Lord Ranger: "Why do we need this when organic ecosystems are already emerging?"

You mentioned the excellent work in Newcastle, Birmingham Tech Week, and London Tech Week. These are vital - but disconnected. When I was in Glasgow last week opening the world's first Chemifarm, I realised their breakthrough technology was unknown in Cambridge, despite our strength in chemistry.

The concierge network doesn't replace these organic ecosystems - it connects them. Think of it as building motorways between successful cities. Each city thrives independently, but the connections multiply their collective impact.

Lord Berkeley: "How does this address system failure?"

System failure happens when we optimise locally but fail globally. The health service improves discharge times by pushing costs to social care. Procurement saves money by excluding innovative suppliers. Each department succeeds while the system fails.

My proposal builds in system-wide feedback loops. When three companies hit the same regulatory barrier, the pattern surfaces immediately through AI analysis of concierge notes. When procurement blocks innovation in Manchester, Birmingham learns the lesson. We stop repeating failures because we capture and share the learning.

Procurement emerged repeatedly as a barrier to scaling. The concierge system helps firms navigate public procurement, but the learning it generates is even more valuable. When multiple concierges encounter the same tendering constraint or contracting threshold, that intelligence feeds back to central government. In this way, systemic procurement bottlenecks can be addressed upstream.

Lord Drayson: "How do we change the cultural attitude to scaling?"

Culture changes through exposure, not exhortation. When we brought Silicon Valley entrepreneurs to Cambridge in the 1990s, they didn't lecture about ambition - they simply showed what was possible. Suddenly, Cambridge entrepreneurs thought bigger.

Both the concierge service and the Innovation Fellows programme scale this. The Innovation Fellows programme was not discussed in the session, and is an important component of the proposal. Fifty people spend 12 days a year for each of two years meeting with experts and leaders in high-growth companies, government, and academia and engaging in workshops and other events. A civil servant would meet people from companies on the journey from Series A to Series C and beyond, from local authorities and

agencies, and experts from institutions such as Cambridge University or the Royal Academy of Engineering. An entrepreneur - perhaps starting out or perhaps experienced - would meet experts in government, academia and other institutions. Each returns changed, and changes others. After five years, over 700 Fellows could have been appointed with an active network of 250 alumni, forming a network that embraces academia, business and government and makes scaling seem normal, not exceptional.

Lord Lucas: "How does government interface without picking winners?"

Government funds the network but doesn't run it. Like funding the road system without telling people where to drive. Firms apply openly; peer entrepreneurs select based on potential; government sees the patterns but doesn't intervene in individual cases.

The precedent is the Centre for Science and Policy (which I founded). Government partly funds it, benefits from it, but doesn't control which academics meet which civil servants. The system's intelligence emerges from the network, not from central planning.

Baroness Walmsley: "How do we avoid the 'who you know' problem - the COVID VIP lane trap?"

Three safeguards make this unlikely:

1. Open application - any firm can apply online, no invitation needed
2. Transparent selection - peer panel publishes criteria and scores
3. Mandatory churn - 25% of concierges rotate out annually; poor Uber ratings mean automatic removal

Unlike the VIP lane, everything is visible: who's in, why they're in, how they're performing. The network expands through merit, not connections. This principle needs to be designed-in everywhere.

Lord Borwick: "How does this relate to non-executive directors?"

An excellent parallel. The best NEDs are valuable precisely because they bring networks and pattern recognition. But NED positions are scarce and focused on individual companies. The concierge network scales this scarce resource - letting one experienced operator support multiple firms while building collective intelligence.

Baroness Willis: "What incentivises academics to engage?"

Firstly, Academics studying these issues want to see their work recognised, and experience has shown that they value to exposure to different points of view and information which can spark fresh thinking.

Secondly, being able to make the right connections is critical. When we spun out Abcam, it had a struggle with university bureaucracy made the transition possible and created a supportive environment that eventually led to creating a \$6bn company. For those considering spinning out a business, the concierge network and exposure to the network of innovation fellows will provide them with the kind of information and assistance available in places like Cambridge where the networking system is already highly developed. There are parallels here with the highly successful Enterprise Hub and the Policy Fellows Network at the Royal Academy of Engineering.

Baroness Neuberger: "Given constraints, what's the one thing government should do?"

Fund a three-year pilot. Don't overthink it. Don't bureaucratised it. Give it operational autonomy under an independent board. Judge it on outcomes: firms scaled, barriers removed, connections made. If it works, scale it. If it doesn't, end it.

"How will government get timely intelligence?" (addressing multiple members' concerns)

Several members touched on the need for better, faster feedback between industry and government. Lord Berkeley worried about system failures, Lord Lucas asked about government interface and coordination, Viscount Stansgate questioned how a concierge service would work in practice, and throughout the session there was concern about policy blind spots and delayed responses to scaling challenges.

The answer is: from the practitioners themselves. Every concierge interaction generates a brief note - "MHRA approval delayed by X", "Pension fund Y now investing in deep tech". These feed an AI-powered dashboard using natural language processing to spot patterns.

This would be efficient and timely. When multiple firms hit the same barrier, the concierges, ministers and their advisors know within days, not years. It is important to note that AI does not replace human interaction and interpretation - meetings and discussions are still critical for the system to provide the feedback in context. Sir Geoff Mulgan called this "collective

intelligence" in his prescient book *Big Mind* - combining human insight with machine pattern-recognition.

This real-time intelligence is what prevents the system failures Lord Berkeley rightly fears. It's what enables the cross-government coordination Lord Lucas seeks. And it's what ensures the concierge service Viscount Stansgate asked about doesn't operate in a vacuum but feeds learning back into policy.

2. How the Integrated System Works

As indicated above, complex challenges require collective intelligence - systems that combine human expertise with digital tools to think at scale. That's exactly what I'm proposing for UK scaling.

Think of it as a neural network for innovation:

Concierges are 25 nodes of expertise distributed across the UK, connecting firms to resources and government to policy insights. Each brings deep, experiential knowledge from building their own companies.

Innovation Fellows carry signals between sectors. They spot when patterns in one domain could solve problems in another. Their movement between organisations creates lasting connections which make innovations possible.

The AI-powered dashboard is a processor and memory - analysing thousands of interactions, spotting patterns, and ensuring learning accumulates rather than dissipates. While the term 'AI' is often used loosely, here it refers specifically to natural language processing and machine learning tools that surface patterns and feedback efficiently-not speculative general intelligence.

Like a brain developing new capabilities, the system strengthens successful pathways and prunes ineffective ones. Each interaction makes the whole network smarter.

The Concierge Network in Practice

Based on my proposal for a "Scalable, Network-Driven Concierge Model", here's how it works:

- Selection: Open call for concierges who've scaled £100m+ companies. Peer panel selects 25 across regions/sectors
- Matching: Firms apply online, criteria set by peer panel used for matching, both parties confirm fit

- Support: Flexible engagement - might be three calls to unlock funding or six months navigating regulatory approval
- Rating: After each interaction, Uber-style mutual rating. Bottom quartile replaced annually
- Payment: Modest retainer (£10k/year) plus per-session fees (£250-500). Enough to ensure quality, not enough to attract rent-seekers. The real value here will be recognition.
- Intelligence: Every interaction logged, AI extracts patterns, dashboard shows blockages in real-time

Regional nodes in Glasgow, Edinburgh, Manchester, Newcastle, Belfast, Cardiff, Bristol, and Cambridge ensure no dominance by the Golden Triangle (note these could be associated with the Royal Academy of Engineering Regional Hubs).

Innovation Fellows in Detail

Building on my "UK Innovation Fellowships" proposal:

- Who: starting with 50 fellows/year rising to perhaps 750 after 10 years - mix of entrepreneurs, civil servants, local and regional government, academics, regulators
- Journey: 24-month programme with 20+ one-to-one meetings per year, plus workshops and an annual conference with alumni. perhaps two "hot seat" 1-2 days in departments/companies
- Selection: Open application judged on "difficult problem + systems thinking + open mind"
- Activities: Curated introductions, workshops, peer coaching, reporting sessions
- Alumni: Critical to generate connections and long term value. Continued engagement through events, mentoring new fellows, feeding intelligence to system
- Cost: £20k/fellow including administration - could be mostly covered by host organisations, and at scale would be considerably less

The magic happens in unexpected connections. A regulator meets a founder and understands why current rules kill innovation. An academic sees how companies actually make decisions. These insights ripple through the network supported by systems and events.

AI as the Enabler

I should have been explicit in my original evidence - AI transforms this from an expensive coordination challenge into an efficient learning system:

- Pattern Recognition: Natural language processing identifies when multiple firms hit identical barriers
- Predictive Alerts: Machine learning predicts which firms need support before crisis hits
- Smart Matching: AI suggests optimal concierge-firm pairings based on past success patterns
- Trend Analysis: Real-time dashboard shows ministers where policy blocks scaling
- Knowledge Accumulation: Unlike human-only systems, nothing is forgotten

This isn't replacing human judgment - it's augmenting it at scale.

3. Implementation and Oversight: Cost, Metrics, and Governance

Draft Three-Year Pilot Budget (including 25% contingency)

Year 1 - Proof of Concept

- 25 concierges $\times$ £60k (retainer + sessions) = £1.5m
- 25 innovation fellows $\times$ £20k = £0.5m
- AI platform development = £0.6m
- Administration (team of 5) = £0.5m
- Regional events and workshops = £0.3m
- Contingency (25%) = £0.85m
- Total Year 1: £4.25m

Year 2 - Refinement

- Concierge network (expanded sessions) = £2.0m
- 50 innovation fellows = £1.0m
- Platform running costs = £0.4m
- Administration (team of 7) = £0.7m
- Evaluation and reporting = £0.2m
- Contingency (25%) = £1.1m
- Total Year 2: £5.4m

Year 3 - Full Operation

- Concierge network = £2.0m
- 50 innovation fellows = £1.0m
- Platform + AI enhancement = £0.6m
- Administration + evaluation = £1.0m
- Alumni network activities = £0.3m
- Contingency (25%) = £1.2m

- Total Year 3: £6.1m

Three-year total: £15.75m - approximately 0.2% of annual R&D spend

Success Metrics

While formal KPIs are necessary for accountability, experience suggests they can distort behaviour. We propose light-touch, outcome-based metrics, backed by independent evaluation to ensure system-wide learning remains the goal:

1. Connections Made: Target 20+ meaningful introductions per firm per year
2. Barriers Cleared: 60%+ of escalated issues resolved within 30 days
3. Capital Unlocked: £5 private investment per £1 public spend by Year 3
4. Firms Retained: 80%+ of supported firms still UK-headquartered after 3 years

Automatic sunset: If we miss two metrics for two consecutive years, programme ends.

Governance Structure

Independent Board

- Chair: Nominated by Royal Academy of Engineering
- 2 entrepreneurs (1 London, 1 regional)
- 2 regional mayors
- 1 academic
- 2 alumni/former high performing concierges
- DSIT/Treasury observe but don't vote

Operational Principles

- Monthly dashboard published online
- Quarterly testimony to Parliament
- Annual independent evaluation
- All selection criteria public

4. Why This Will Work

I've spent 40 years building networks that create value. Cambridge Network, Cambridge Angels, Cambridge Wireless, Centre for Science and Policy - all based on the same principle: structured serendipity.

The Lunar Society didn't transform Birmingham through central planning. They created conditions where James Watt could meet Matthew Boulton, where ideas could collide and combine. We need the 21st-century equivalent.

This isn't theoretical. When I connected Glasgow's chemistry brilliance with Cambridge's commercialisation expertise, we got the world's first robotic molecule factory. When CSaP connected climate scientists with Treasury officials, we got better green finance policy. Networks work.

Other countries understand this. Israel's Innovation Authority, Singapore's A*STAR, Germany's Fraunhofer - all are fundamentally connection machines, not funding bodies. They succeed because they facilitate, not control.

5. The Ask

The Committee has heard enough analysis. The UK's scaling problem has been studied to death. We know what's wrong: fragmentation, poor connections, slow feedback, cultural timidity.

This pilot offers a solution that is:

- Affordable - £15m over three years
- Low-risk - automatic sunset if it fails
- High-leverage - one Abcam pays for it 400 times over
- Practical - based on proven models
- Timely - can start within six months

I ask the Committee to recommend:

1. Immediate funding for a three-year pilot starting April 2026
2. Operational autonomy under an independent board
3. Outcome-based evaluation - judge on results, not process
4. Ministerial commitment to act on intelligence generated
5. Committee visit to a regional node at 18 months

As I wrote in *Serendipity: It Doesn't Happen by Accident*, innovation emerges from connections between people with different perspectives. This pilot creates those connections systematically rather than hoping they occur by chance.

The UK has brilliant science, ambitious entrepreneurs, and committed civil servants. We just need to connect them properly. This pilot shows how. This could begin in April 2026

I remain at the Committee's disposal for any clarification.

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