

STRATEGIC DEFENCE REVIEW 2025: IMPLICATIONS FOR THE UK UAV INDUSTRY



EXECUTIVE SUMMARY

The 2025 Strategic Defence Review (SDR) introduces a transformative vision for UK defence policy focused on autonomy, industrial sovereignty, and accelerated innovation. The document marks a policy shift away from prolonged platform-centric procurement and towards integrated, agile, and uncrewed capabilities. This paper explores what the SDR means for the UAV (Unmanned Aerial Vehicle) and UAS (Unmanned Aerial Systems) industry, outlining both challenges and opportunities for OEMs, system integrators, and supply chain SMEs. As a UK leader in propulsion and modular UAV integration, Rotron Aerospace is uniquely positioned to support this shift, offering high-reliability rotary propulsion systems tailored for next-generation defence applications.

1. CONTEXT AND STRATEGIC DRIVERS

The Chief of Defence Staff summarised the SDR in three strategic priorities: Nuclear, NATO, and the US alliance. While these may not directly relate to UAVs, they set a clear strategic direction:

- End of the "peace dividend" era: Defence spending is set to rise.
- Stronger commitment to sovereign industrial capability.
- Heavy emphasis on rapid delivery of high-tech systems.

This sets the stage for a future-ready force with UAVs playing a central role in surveillance, logistics, precision strike, and force multiplication. Rotron's rapid design-to-deployment cycle, backed by in-house manufacturing and R&D, aligns with the MoD's urgent need for sovereign, scalable UAV solutions

2. KEY SDR COMMITMENTS AFFECTING UAVS

2.1 INTEGRATED FORCE MODEL

The future UK Armed Forces will operate under an "Integrated Force" model that fuses manned, unmanned, and autonomous systems across all domains—land, sea, air, space, and cyber.

Key directives:

- High-volume deployment of uncrewed platforms within five years.
- Blending of long-range precision strike and low-cost "one-way" effectors.
- Emphasis on multi-domain collaboration and rapid sensor-to-shooter loops.

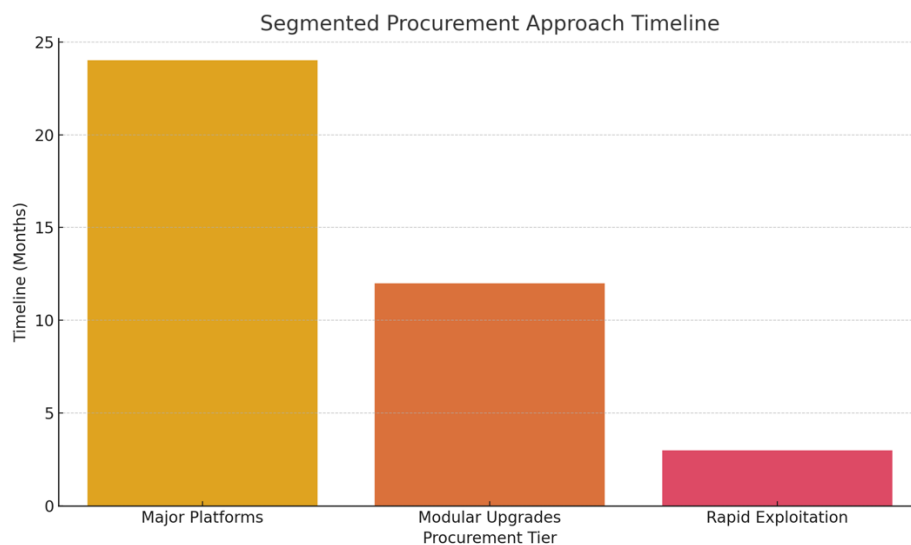
For the UAV industry, this creates a demand for:

- Modular, rapidly deployable platforms.
- Interoperable software and open communication standards.
- Scalable manufacturing models for both expendable and reusable UAVs.

Rotron's UAV propulsion systems and modular architecture are already being integrated into experimental hybrid-wing platforms for both expendable and reusable missions, with a focus on rapid field adaptation and secure networked operations.

3. PROCUREMENT REFORM: A GAME CHANGER FOR UAV DEVELOPERS

One of the most significant policy innovations is the **Segmented Procurement Approach**. This framework introduces tiered contracting designed to match procurement timelines to platform complexity and readiness level:



SEGMENTED PROCUREMENT TIERS

Tier	Description	Contracting Timeline
Major Platforms	Full-scale systems with high complexity	Within 2 years
Spiral/Modular Upgrades	Iterative enhancements to platforms	Within 1 year
Rapid Exploitation	New, novel or dual-use tech	Within 3 months

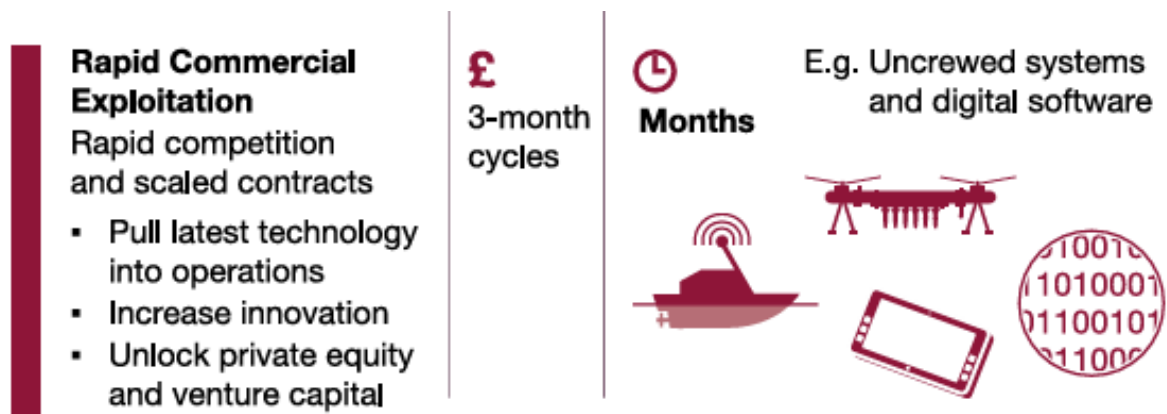


Figure 1 - extract from SDR, Market segmentation for smarter procurement

This segmented approach is revolutionary for SMEs and innovators, enabling faster access to MoD funding and reducing the bureaucratic friction typically associated with defence acquisition.

4. INDUSTRIAL STRATEGY AND SME ENABLEMENT

The SDR acknowledges long-standing challenges for SMEs and outlines concrete steps to address them:

Reforms to Enable SME Participation

- Early industry engagement and problem-solving partnerships.
- Protection of SME-targeted budgets to avoid displacement by major primes.
- Risk-reward incentives to encourage bold investment by small firms.
- Streamlined procurement tailored to supplier maturity and system complexity.

“

*This requires a more intelligent approach...
Removing barriers to collaboration, especially
for smaller companies.*

”

—Strategic Defence Review 2025

5. INVESTMENT IN INNOVATION AND DIGITAL SYSTEMS

The SDR earmarks at least **£400 million annually** for the new **UK Defence Innovation (UKDI)** organisation, with an emphasis on:

- Dual-use technology exploitation
- Commercial partnerships and venture-backed R&D
- Integration into digital warfighting networks like the **Digital Targeting Web**

This web will connect sensors, decision-makers, and effectors across the integrated force, and UAVs will play a central role as both “sensor” and “effector.” Open architecture, common standards, and rapid data interoperability are non-negotiable design principles.

6. REGULATORY AND EXPORT REFORM

The SDR also initiates major structural changes to enhance UAV industry growth through:

Export Enablement

- Transfer of defence export responsibility to the MoD.
- Government-to-government partnerships to support platform interoperability.
- Faster export licensing processes and clearer prioritisation.

Regulatory Modernisation

- Establishment of regulatory sandboxes (e.g., via the Defence Maritime Regulator).
- Flexible certification frameworks for autonomous and dual-use systems.

- Inclusion of unmanned systems in long-range precision weapon categories.

7. USE CASE SIGNALS FROM THE ARMED FORCES

Royal Navy

- Transition to a hybrid carrier airwing including autonomous drones.
- Emphasis on drones for anti-submarine warfare and logistics.
- Demand for deck-launched, modular UAVs for strike and surveillance.

Army

- Adoption of a 20:40:40 force mix (20% crewed, 40% reusable UAVs, 40% one-way effectors).
- Requirement for AI-enabled, battlefield-resilient UAVs.

RAF & Strategic Strike

- Focus on UAV swarm coordination, loitering munitions, and long-range ISR.
- UAVs as force extenders for manned fighter platforms.

8. CHALLENGES AHEAD

Despite its ambition, the SDR is not without uncertainties:

- Lack of specific platform commitments in UAV categories.
- Delays expected in implementation due to complexity and cross-governmental coordination.
- Pressure on SMEs to rapidly scale and secure compliance with digital and security standards.

The real litmus test will be the upcoming **Defence Industrial Strategy (July 2025)** and **Spending Statement (Autumn 2025)**, which will determine the scope and speed of rollout.

9. STRATEGIC RECOMMENDATIONS FOR THE UAV INDUSTRY

Strategic Priority	Recommended Industry Action
Integration with Defence Architecture	Adopt open standards and prepare for Digital Targeting Web integration
Speed to Market	Align R&D with 3-month and 12-month procurement timelines
Funding & Partnerships	Engage early with UKDI and investor-backed MOD innovation channels
Export Readiness	Position platforms for interoperability with NATO and Five Eyes
Modular Design Philosophy	Build platforms for rapid adaptation and mission reconfiguration

10. CONCLUSION

The Strategic Defence Review of 2025 reaffirms the UK's intent to transform its defence ecosystem—and the UAV industry stands to gain more than any other. With commitments to funding, flexibility, and digital-first operations, UK-based UAV manufacturers and technology providers are well positioned to become global leaders in the next generation of defence capabilities. As a trusted propulsion supplier to UK defence innovators, Rotron Aerospace is poised to play a pivotal role in shaping and sustaining Britain's UAV sovereignty.

The future is modular, autonomous, and digitally integrated - and the time to build is now.