White Paper 3: Strategic Sovereignty and Technological Independence

Part of the series: The Argument for Embedded Logic at the Edge vs Centralised Large AI in Modern and Future Warfare

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Executive Summary

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The accelerating adoption of AI in defence and security domains brings extraordinary potential and profound risk. While many Western states have invested in advanced capabilities, too often these are built atop foreign-owned infrastructure, opaque models, and centralised cloud architectures. In a geopolitical landscape marked by great power rivalry, supply chain fragility, and alliance uncertainty, this is no longer tenable.

This white paper makes the case that true technological sovereignty cannot be achieved without embedded logic at the edge, AI that is owned, auditable, deployable, and controlled by the nation or force employing it.

Unlike centralised large models, typically hosted by US hyperscalers or dependent on global data-centre networks, embedded AI systems:

- Operate independently of foreign compute infrastructure.
- Enable mission-specific deployment without third-party reliance.
- Support sovereign auditability and ethical compliance.
- Preserve decision-making control, even in denied, degraded, or politically sensitive conditions.

The Core Argument

1

Sovereignty

Sovereignty in modern warfare is not just about data, borders, or supply chains.

2

Logic

It is about logic. Who owns it. Who controls it. And who can deploy it under fire.

Key Takeaways

Strategic independence is undermined by reliance on centralised cloud AI, especially when hosted offshore or managed under foreign legal jurisdictions.

Embedded AI enables modular, export-ready autonomy, tailored to national doctrine and coalition frameworks.

Auditability, control, and field agility are essential to trust in AI-enabled systems—and can only be guaranteed when logic is sovereign.

Edge-deployed AI architecture empowers states to fight, adapt, and evolve independently, even under alliance strain or infrastructure collapse.

What This Paper Provides

Strategic Framework

A strategic framework for embedding AI sovereignty into national defence capability.

Evidence

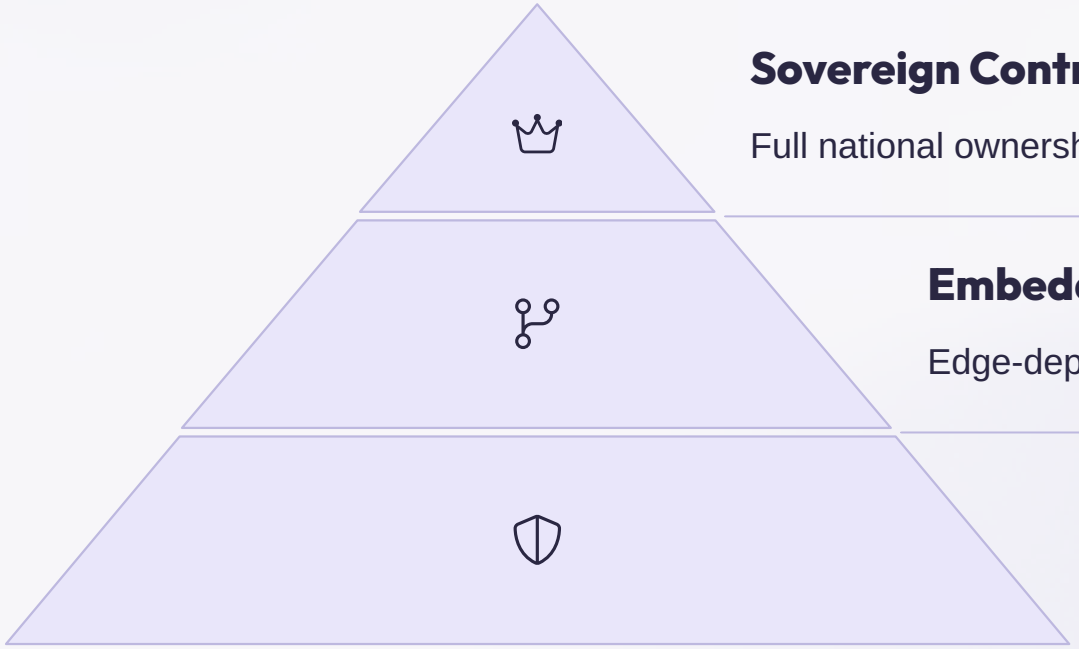
Evidence from current conflicts and industry failures that highlight the risk of AI dependency.

Recommendations

Recommendations for government, industry, and defence leaders to regain control of their decision architectures.

Strategic Vision

> "If we do not control the logic that makes decisions in our name, then we are no longer the ones making them."



Sovereign Control

Full national ownership of decision logic

Embedded Systems

Edge-deployed AI architecture

Strategic Independence

Freedom from foreign infrastructure

NEXT in the Series

1. Chapter 9: Dependency by Design – How Centralised AI Undermines Sovereignty
2. Chapter 10: Embedded Logic and the Architecture of Sovereignty
3. Chapter 11: Ethical Alignment, Export Confidence, and Alliance Resilience
4. Chapter 12: From Dependency to Deterrence – Strategic Autonomy in the AI Age