AI in Defense

Turning Potential into an Impact Strategic Ecosystem

MAJ Sebastien Haverals – MRC&I - Sebastien.haverals@mil.be
Mr Steven Beeckman – OCIO – steven.beeckman@mil.be

I. INTRO

Artificial intelligence has rapidly become ubiquitous across society, driven by promises of efficiency, automation, and decision optimisation. Defence is no exception. Across organisations, teams and individuals are already experimenting with AI tools to support daily work and operational processes. While this bottom-up momentum demonstrates clear interest and perceived value, it also exposes a growing risk: fragmented adoption without shared governance, guidance, or strategic alignment.

In a Defence context, uncontrolled AI usage is not merely inefficient—it is potentially dangerous. Risks related to security, data leakage, sovereignty, trust, and misuse are often underestimated when AI initiatives emerge in isolation. At the same time, overly restrictive approaches risk stifling innovation and losing operational momentum. The central challenge therefore is not whether Defence should adopt AI, but how to do so in a controlled, mission-relevant, and sustainable way.

II. OUTLINE

This presentation explores that challenge through four lenses.

First, it sets the **context**: AI as both opportunity and hype. While the technology is widely perceived as transformative, its risks and organisational implications are less visible. Without clear structures, Defence risks drifting into uncoordinated experimentation rather than purposeful capability development.

Second, the presentation illustrates **the art of the possible** by highlighting concrete military-relevant AI use cases, including cyber defence, logistics and maintenance, decision support, training and simulation, and operational command and control. These examples demonstrate that AI has the potential to act as a genuine force multiplier—provided it is applied with discipline, oversight, and operational realism.

Third, the presentation argues that **AI is fundamentally more than a technology topic**. Sustainable success depends on governance models, operating structures, organisational change management, AI literacy, and clearly defined human-oversight principles. Without these elements, AI initiatives are almost guaranteed to fail or remain trapped at pilot level.

Finally, a pragmatic **roadmap** is outlined for implementing AI within Defence. This phased approach builds from early pilots and readiness assessment, toward a mature, governed ecosystem and, ultimately, a strategic partnership capable of supporting scale, sovereignty, and long-term value delivery.

The key message is clear: Defence must move from isolated AI potential to a strategic ecosystem that delivers trusted, measurable, and mission-aligned impact.

REFERENCES

[1] AI Strategy – study Draft
[2] Ref 2
[3] Ref 3