Inconsistencies in Artificial Intelligence Strategy Alignment of NATO Member States

Itai Epstein[4], Dane Malenfant[1,3], Sara Parker[2], Cella Wardrop[1]

McGill University[1], University of Oxford[2], Mila – The Québec AI Institute[3], Independent Researcher[4]
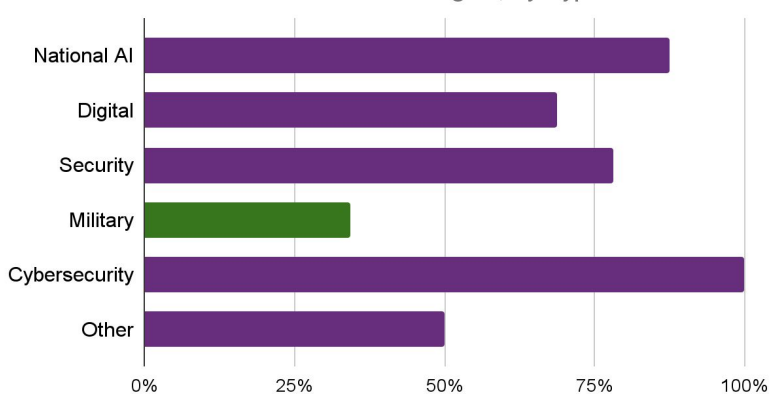
Motivations

- The discourse around the potential uses of artificial intelligence (AI) in war, from systematized surveillance of targeted populations to AI-guided drone strikes, has increased over the last few years.

- To understand how much international allies appear willing to cooperate with one another regarding the usage of AI in the military, we looked at the world's largest military alliance: the North Atlantic Treaty Organization (NATO)

- To evaluate the risk AI poses to global security – and how likely it is that it will be deployed safely and ethically on our world's most vulnerable populations.

Results

Types of AI State Strategies

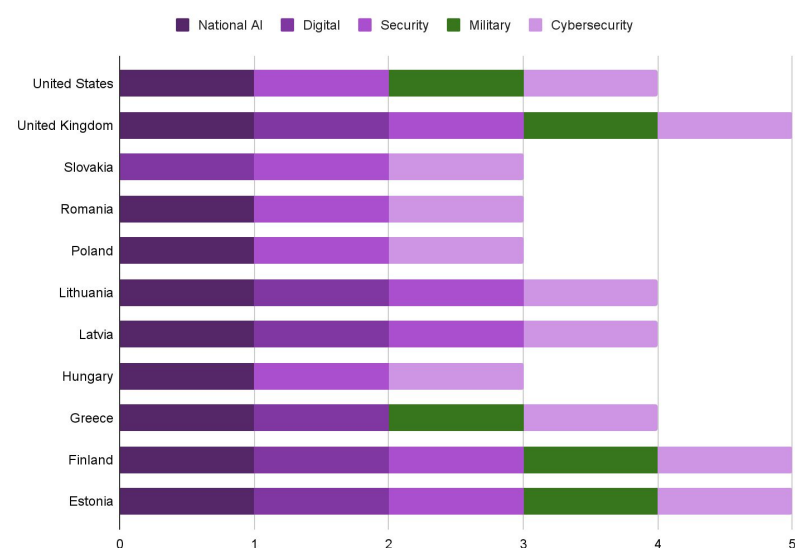| Country	National AI?	Digital?	Security ?	Military?	Cybersecurity?	Other?
United States	Yes	No	Yes	Yes	Yes	Yes
United Kingdom	Yes	Yes	Yes	Yes	Yes	Yes
Türkiye	Yes	Yes Δ Ψ	No	No	Yes	No
Sweden	Yes	Yes Δ Ψ	Yes	No	Yes	No
Spain	Yes	Yes Δ	Yes	No	Yes	No
Slovenia	Yes	No	Yes	No	Yes	No
Slovakia	No	Yes	Yes	No	Yes	No
Romania	Yes	No	Yes	No	Yes	Yes
Portugal	Yes	No	No	No	Yes	No
Poland	Yes	No	Yes	No	Yes	Yes
Norway	Yes	Yes	Yes	Yes	Yes	Yes
North Macedonia	No	No	Yes	No	Yes	No
Netherlands	Yes	YesΨ	Yes	No	Yes	Yes
Montenegro	No	Yes	No	No	Yes	Yes
Luxembourg	Yes	YesΨ	Yes	No	Yes	Yes
Lithuania	Yes	YesΨ	Yes	No	Yes	Yes
Latvia	Yes	Yes	Yes	No	Yes	No
Italy	Yes	No	Yes	No	Yes	No
Iceland	Yes	Yes	No	No	Yes	No
Hungary	Yes	No	Yes	No	Yes	No
Greece	Yes	Yes	No	Yes	Yes	Yes
Germany	Yes	Yes	Yes	Yes	Yes	Yes
France	Yes	No	Yes	Yes	Yes	Yes
Finland	Yes	YesΨ	Yes Δ	YesΩ	Yes	No
Estonia	Yes	Yes	Yes	Yes	Yes	Yes
Denmark	Yes	Yes	Yes	No	Yes	No
Czechia	Yes	Yes	Yes	Yes	Yes	No
Croatia	Yes	Yes	Yes	No	Yes	No
Canada	Yes	Yes	Yes	Yes	Yes	Yes
Bulgaria	Yes	Yes	Yes	No	Yes	No
Belgium	Yes	No	No	Yes	Yes	Yes
Albania	No	Yes	No	No	Yes	Yes
Total Yes =	28/32	22/32	25/32	11/32	32/32	16/32

Δ = In development
Ψ = Economic or industry focused
Ω = US guidelines

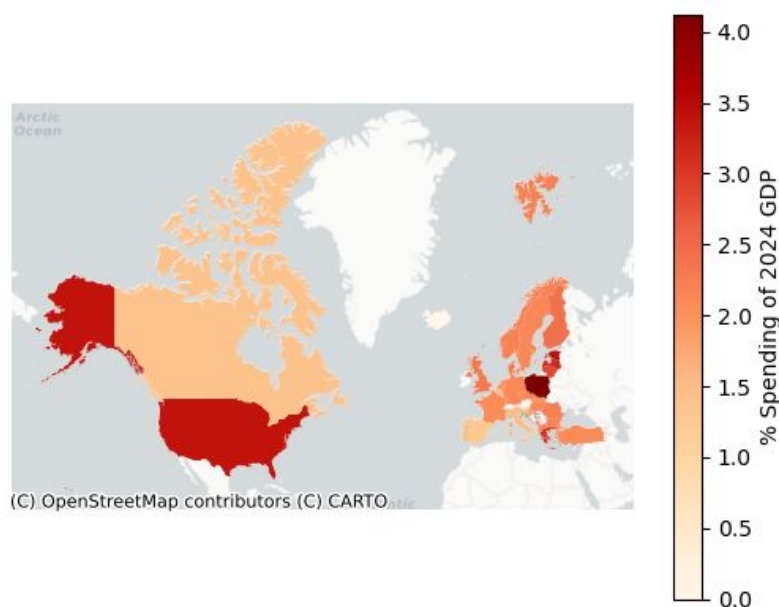### % of NATO States with AI State Strategies, by Type

Only 7 NATO countries have all four types of AI state strategies, of which the United States is not a part.

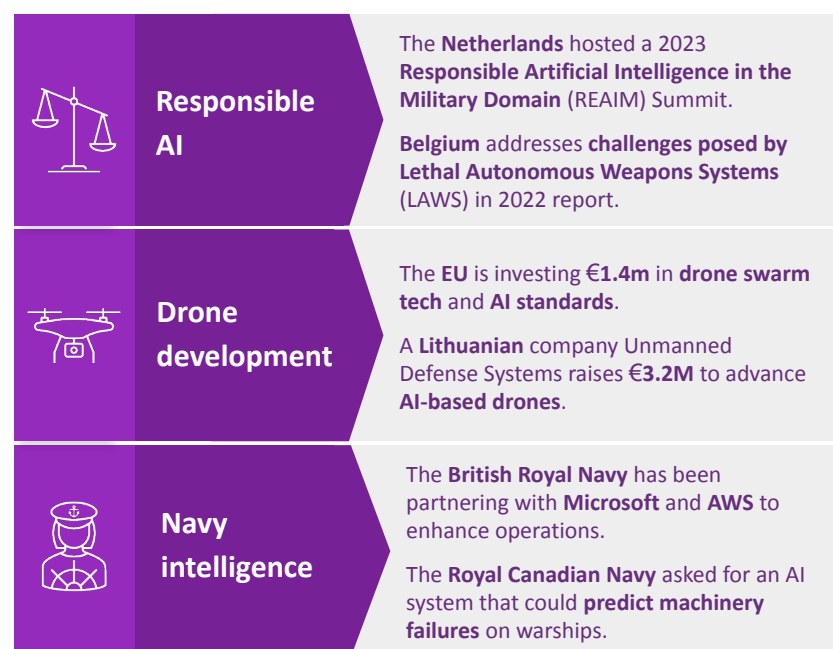AI strategies of NATO states with the highest defence expenditures as % share of state GDP

Defence Expenditure of NATO Countries (2014-2024). NATO Press Release. 2024.
https://www.nato.int/nato_static_fl2014/assets/pdf/2024/6/pdf/240617-def-exp-2024-en.pdf

NATO state defence expenditure as a share of GDP and annual real change, 2024

(C) OpenStreetMap contributors (C) CARTO

Lexical Frequency Analysis

Specialized Investments

Responsible AI

The **Netherlands** hosted a 2023 **Responsible Artificial Intelligence in the Military Domain** (REAIM) Summit.

Belgium addresses **challenges posed by Lethal Autonomous Weapons Systems** (LAWS) in 2022 report.

Drone development

The **EU** is investing **€1.4m** in **drone swarm tech** and **AI standards**.

A **Lithuanian** company Unmanned Defense Systems raises **€3.2M** to advance **AI-based drones**.

Navy intelligence

The **British Royal Navy** has been partnering with **Microsoft** and **AWS** to enhance operations.

The **Royal Canadian Navy** asked for an AI system that could **predict machinery failures** on warships.

Conclusion

- Only **34%** of NATO member states have a policy, strategy, or statement specifically regarding the use of AI in the military. However, **88%** of states have a national AI strategy, indicating a strong interest within NATO to use and integrate AI

- **19%** of NATO States' digital strategies have an economic or industry focus.

- Recent trends in global tensions has led to increased military spending with higher individual percent spending than ever before and general growth in publicly announced AI-enabled military hardware and dialogues