Inconsistencies in Artificial Intelligence Strategy Alignment of NATO Member States

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1 Introduction

The discourse and concerns surrounding the use of lethal autonomous weapons systems in conflict situations has increased over the last few years with artificial intelligence (AI) capabilities (40; 107; 5). These applications of AI tools are a major concern for global security and peace. The potential uses of AI in war, from systematized surveillance of targeted populations (19) to AI-guided drone strikes (47), are not only innumerable but also confidential: countries are obviously unlikely to publicly announce how they use AI in their military, just as they are tight-lipped about their use of conventional weapons. However, a policy of opacity about military uses of AI may, in fact, increase the risk of such systems and harm scholarly research in technical AI governance (102). As with nuclear weapon proliferation concerns in the mid-twentieth century (45; 21), uncertainty about how far other states are willing to go regarding the development of novel weapons systems may encourage countries to amass increasingly lethal arsenals, at the expense of cooperation, investment into more productive uses of AI, and international peace. It is therefore essential for countries to establish enforceable policies about previous, current, and potential usage of AI in conflict and security contexts. Allies and adversaries may not all need to know about exact capabilities, but they should at least know where the line is drawn to ensure that it is not crossed.

Our research endeavours to understand how much international allies appear willing to cooperate with one another regarding the usage of AI in the military. We focus our attention on the world's largest military alliance: the North Atlantic Treaty Organization (NATO). By evaluating the extent to which NATO member states have publicly indicated an interest in integrating AI into their security capabilities and outlined policies for its potential usage in the military, we can begin to understand 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.

2 Methodology

We began by accumulating all official government policies, strategies, announcements, and other statements about AI in the military. We primarily rely upon two publicly available repositories: the NATO Cooperative Cyber-Defence Centre of Excellence Library of Strategy and Governance, and OECD.AI's live repository of national AI policies and strategies. In addition to policies, announcements, or other statements of usage (or intention to use) AI in the military, we also collected and categorized documents related to national AI, national digital, national security, and cybersecurity strategies. Each document was reviewed to establish its categorical theme and relevance to AI and/or military applications. After, we filled the table with other documentation that was available online.

2024 Harms and Risks of AI in the Military (HRAIM 2024).

2.1 Limitations

Access to any state classified or internal institutional policies was not attempted. Only documents readily available online were used.

3 Results

Types of AI State Strategies						
Country	National AI?	Digital?	Security ?	Military?	Cybersecurity?	Other?
United States	Yes(105; 135)	No	Yes(77; 10)	Yes(77; 10)	Yes(134)	Yes
United Kingdom	Yes(6; 138)	Yes(137)	Yes(140)	Yes(140)	Yes(140; 139)	Yes
Türkiye	Yes(101)	Yes $\Delta\Psi$(98)	No	No	Yes(99; 100)	No
Sweden	Yes(108)	Yes $\Delta\Psi$(108)	Yes(81; 108)	No	Yes(81)	No
Spain	Yes(30)	YesΔ(28; 30)	Yes(29)	No	Yes(29; 31)	No
Slovenia	Yes(97)	No	Yes(96)	No	Yes(95; 96)	No
Slovakia	No	Yes(79)	Yes(124)	No	Yes(78)	No
Romania	Yes(127)	No	Yes(103)	No	Yes(127)	Yes
Portugal	Yes(72)	No	No	No	Yes(72)	No
Poland	Yes(129)	No	Yes(131)	No	Yes(130; 132)	Yes
Norway	Yes(76)	Yes(75)	Yes(76)	Yes(55)	Yes(74)	Yes
North Macedonia	No	No	Yes(53)	No	Yes(94)	No
Netherlands	Yes(32)	YesΨ(106)	Yes(51)	No	Yes(69; 50)	Yes
Montenegro	No	Yes(66)	No	No	Yes(66)	Yes
Luxembourg	Yes(121)	YesΨ(121)	Yes(123; 122)	No	Yes(120; 122)	Yes
Lithuania	Yes(67)	YesΨ(48)	Yes(63)	No	Yes(65; 64)	Yes
Latvia	Yes(2)	Yes(3)	Yes(58)	No	Yes(1)	No
Italy	Yes(43)	No	Yes(54)	No	Yes(44; 42)	No
Iceland	Yes(26)	Yes(25)	No(24)	No	Yes(27)	No
Hungary	Yes(4)	No	Yes(23; 119)	No	Yes(13; 119)	No
Greece	Yes(41)	Yes(38; 37)	No	Yes(36)	Yes(39; 35)	Yes
Germany	Yes(114; 115; 16)	Yes(15)	Yes(113)	Yes(20; 14)	Yes(116; 17)	Yes
France	Yes(11)	No	Yes(117; 56)	Yes(56)	Yes(52)	Yes
Finland	Yes(59)	YesΨ(60; 12)	Yes Δ(59)	YesΩ (59)	Yes(104; 133)	No
Estonia	Yes(33)	Yes(93)	Yes(73; 34; 91)	Yes(46; 91)	Yes(92)	Yes
Denmark	Yes(111)	Yes(111)	Yes(61)	No	Yes(9; 110)	No
Czechia	Yes(62)	Yes(80)	Yes(126; 109; 57)	Yes(109; 57)	Yes(70; 71)	No
Croatia	Yes(8)	Yes(128)	Yes(89)	No	Yes(90)	No
Canada	Yes(118)	Yes(136)	Yes(22; 112)	Yes(49; 22; 112)	Yes(82)	Yes
Bulgaria	Yes(88)	Yes(87; 86)	Yes(85)	No	Yes(88)	No
Belgium	Yes(18)	No	No	Yes(125)	Yes(7; 18)	Yes
Albania	No	Yes(68; 84)	No	No	Yes(83)	Yes
Total Yes =	$\frac{28}{32}$	$\frac{22}{32}$	$\frac{25}{32}$	$\frac{11}{32}$	$\frac{32}{32}$	$\frac{16}{32}$

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

4 Discussion

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 into diverse applications but also into their national economic, security, and social strategies. We believe this work is important to not only shed light on NATO's use of AI in the context of security, but also to better understand emerging challenges within the field of AI and anticipate potential harms.

Immediate work will expand with a comprehensive analysis of national AI strategies and statements regarding military applications of AI and an evaluation for their potential efficacy in governing the ethical use of AI in the military. While future work will explore correlations between a NATO member state with AI military policies, their relative expenditures towards the military alliance and national R&D investments in AI.

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