



### US NATIONAL SECURITY COMMISSION ON ARTIFICIAL INTELLIGENCE REPORT: A CALL TO ARMS IN THE AI ERA

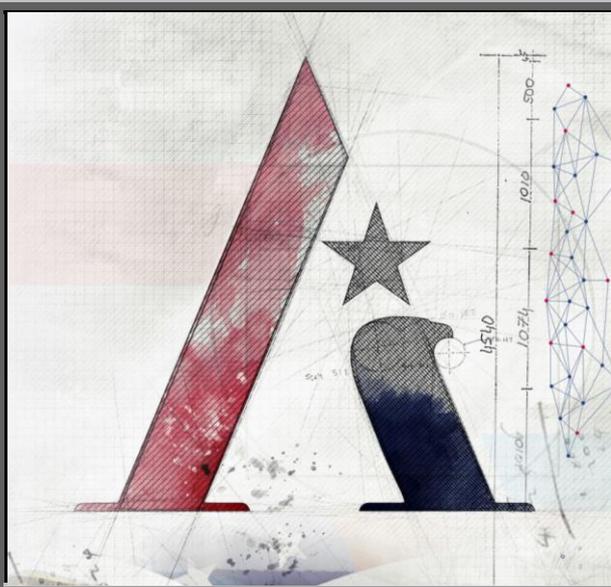
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June 16, 2021

*(Views expressed in the brief are those of the author, and do not represent those of ISSI)*



The US National Security Commission on Artificial Intelligence (NSCAI), a commission created by the US Congress, released a comprehensive report on March 1, 2021. The report presents a strategy to defend against Artificial Intelligence (AI) threats, responsibly employ AI for national security and win the broader technology competition.<sup>1</sup> It recommends the US to take certain actions to ensure that it achieves a state of ‘military AI’ readiness by 2025, to stay ahead of China and Russia as the global AI leader. The NSCAI report is another clear indication of the current state of global power competition, which has in recent years shifted towards AI and emerging technologies.

#### Key Takeaways from NSCAI Report

One of the key takeaways from the NSCAI report is that the US is far from “AI-ready,” and it urges the Department of Defense (DOD) and Intelligence Community to take action by 2025. To accomplish this, the NSCAI recommends that the Pentagon should increase annual investment in AI Research and Development (R&D), which is currently at US\$1.5 billion, to US\$8 billion by 2025.<sup>2</sup> It also suggests that the US government should increase non-defence AI R&D funding to \$32 billion by

<sup>1</sup> National Security Commission on Artificial Intelligence (NSCAI), *Final Report*, March 1, 2021, <https://www.nsc.ai.gov/wp-content/uploads/2021/03/Full-Report-Digital-1.pdf>

<sup>2</sup> “Wakeup call’: Report Calls for Massive AI Investments to Counter China” *C4ISRNET*, March 1, 2021, <https://www.c4isrnet.com/artificial-intelligence/2021/03/01/wakeup-call-report-calls-for-massive-ai-investments-to-counter-china/>

2026.<sup>3</sup> Additionally, the NSCAI wants the DOD to implement a completely top-down approach through which it focuses on integrating AI-enabled technologies into every facet of war-fighting.<sup>4</sup> Essentially, the report is warning the US that it needs a completely new approach towards AI and emerging technologies, otherwise it risks being replaced as a global leader.

The report goes on to urge the US to promote AI interoperability and adopt critical emerging technologies among its allies and partners, including the Five Eyes, NATO and across the Indo-Pacific.<sup>5</sup> It states that the US must be the one to lead international efforts to reduce risks associated with AI-enabled and autonomous weapons systems and encourage safety and compliance with International Humanitarian Law.<sup>6</sup> There need to be some international standards of practice regarding how states should responsibly develop, test and employ AI-enabled and autonomous weapons systems.<sup>7</sup> Although the NSCAI agrees that there needs to be an international understanding regarding AI, it also states that the likes of China and Russia cannot be trusted to lead these efforts. This shows the inherent distrust currently present between the states and another reason why power competition in regards to AI seems likely.

The report also highlights the probability of large-scale proliferation of AI-enabled capabilities. Since AI algorithms are often accessible, hardware is generally available and only modest resources and expertise will be required, the NSCAI predicts that both state and non-state actors will have access to AI-enabled technologies. This is a significant point, as the NSCAI essentially confirms that a potential AI arms race would be much more difficult to control than the Cold War-era nuclear arms race between the US and Russia. Indeed, when it comes to AI-enabled technologies, the rate of advancement and proliferation would far exceed the rate of any diplomatic negotiations between states.

Another important takeaway from the NSCAI report is the current level of technological competition between world powers. The military-technical superiority enjoyed by the US since the Cold War is now under threat by the likes of China and Russia. Currently, the report claims, China is the biggest technological rival to the US and is determined to become the global AI leader. The report warns that “if the United States does not act, it will likely lose its leadership position in AI to China in the

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<sup>3</sup> Ibid

<sup>4</sup> “Stop the Emerging AI Cold War” *Nature*, May 11, 2021, <https://www.nature.com/articles/d41586-021-01244-z>

<sup>5</sup> NSCAI, *Final Report*, 84.

<sup>6</sup> Ibid, 99.

<sup>7</sup> Ibid., 102.

next decade and become more vulnerable to a spectrum of AI-enabled threats from a host of state and non-state actors.”<sup>8</sup>

### **What This Means for the Future of AI in Warfare**

The suggestions made in the NSCAI report are significant for several reasons. The US, China and Russia have all already made huge advancements in the fields of AI and emerging technologies over the past decade or so. The NSCAI report indicates, however, that the US feels a certain level of threat from China and Russia and fears that it may be left behind when it comes to AI. Both China and Russia, in recent years, have shown the intent to take the lead in the global AI power competition.

In 2017, China released the “Next Generation Artificial Intelligence Development Plan,” in which it announced its strategy to become the world leader in AI by 2030, to monetise AI into a US\$150 billion industry and to emerge as the driving force in defining ethical norms and standards for AI.<sup>9</sup> Similarly, in 2019, Russia had released their own national AI strategy, in which they had identified various AI goals to be reached by 2030. Russian President, Vladimir Putin, said earlier in 2017, “the one who becomes the leader in this sphere (AI) will be the ruler of the world.”<sup>10</sup> The NSCAI report can be seen as a direct response to the ambitious goals of China and Russia. Currently, however, the US is still seen as the global AI leader; especially when it comes to defence. However, the next 5 to 10 years will be crucial in determining who the global leader in AI will be for years to come.

In terms of efforts towards developing some set of international standards for the use of AI in warfare, no substantial progress has been made so far. Major states largely differ in terms of the role lethal autonomous weapons systems should be allowed to play in warfare, although there seems to be a consensus that a certain level of human involvement must be ensured. Still, the lack of international consensus in regards to AI-enabled warfare is worrying. The NSCAI report certainly won't help the efforts, as it openly highlights the distrust that exists between major states when it comes to AI.

### **Conclusion**

In the past, states that have gained a technological edge over their rivals have gone on to be the global military leaders of that era. AI will certainly have that effect and much more; its potential is

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<sup>8</sup> “Wakeup call.”

<sup>9</sup> Huw Roberts, *et al*, “The Chinese Approach to Artificial Intelligence: An Analysis of Policy, Ethics and Regulation,” *AI & Soc* 36, (2021): 59-77, <https://link.springer.com/article/10.1007/s00146-020-00992-2>

<sup>10</sup> “Putin: Leader in Artificial Intelligence will Rule the World,” *CNBC*, September 4, 2017, <https://www.cnbc.com/2017/09/04/putin-leader-in-artificial-intelligence-will-rule-world.html>

limitless. In terms of its military application, however, the dangers of AI are clear, as stated multiple times in the NSCAI report. The report can truly be seen as a sort of call to arms for the US against the likes of China and Russia. Although still seen as the global AI leader, the NSCAI wants the US to greatly increase AI spending, lead international efforts to create a set of standards for the use of AI and keep its global leadership position. Rival states, such as China and Russia, could easily see this report as a direct message being sent to them; that the US is ready for an AI arms race should it come to that. This arms race, however, needs to be avoided at all costs.