Codifying intelligentized warfare: The People's Liberation Army's doctrine's turn in *Science of Military Strategy 2020*

Peyton Mayer

The *Science of Military Strategy 2020* (*SMS 2020*), published by China's National Defense University marks a decisive doctrinal turn in the People's Liberation Army's (PLA) modernization. By elevating *intelligentized warfare* (智能化战争) as the dominant paradigm of future conflict, *SMS 2020* codifies artificial intelligence (AI), autonomy, big data, and cognitive operations as essential to China's strategic outlook. While the concept of informatization (信息化) had shaped PLA thought since the 1990s, *SMS 2020* institutionalizes the idea that twenty-first-century war hinges on using machine intelligence and human–machine collaboration to gain decision advantage ([National Defense University, 2020](#)).

SMS 2020's integration of intelligentization into PLA strategy has significant implications for East Asian security in 2025. China's embrace of intelligentized warfare represents both a technological ambition and a political project, aiming for algorithmic dominance in warfighting while limited by Chinese Communist Party (CCP) ideology and authoritarian military structures. These tensions shape how doctrine is implemented and how effective intelligentization will be in practice.

Situated within wider debates on military innovation, SMS 2020 raises key questions that remain relevant in 2025. To what extent do CCP ideological requirements constrain AI and potential artificial general intelligence (AGI) in decision-making? Does authoritarian control limit mission command adaptability, or promote AI adoption to centralize authority? Can the PLA's tolerance for fewer ethical and operational constraints than liberal democracies yield a short- or medium-term military edge? How might emerging Chinese systems, including DeepSeek and other large language models (LLM), shape doctrine and operational planning?

These questions are immediate. The doctrinal codification of intelligentized warfare shapes US and allied defense planning in the Indo-Pacific. For Washington, *SMS 2020* underscores the urgency of concepts like Joint All-Domain Command and Control (JADC2) to maintain decision-making superiority under AI-enabled conditions ([U.S. Department of Defense, 2024](#)). For Tokyo, it validates Japan's defense white papers prioritizing cognitive warfare, automated systems, and cyber resilience ([Ministry of Defense Japan, 2024](#)). Regionally, it highlights how China's doctrinal innovations are reshaping deterrence, escalation dynamics, and East Asian stability.

SMS 2020 reflects not just technological trends but a roadmap for the PLA's doctrinal transformation. By clarifying the political and operational dimensions of intelligentized warfare, it assesses both the opportunities and constraints of China's military modernization and the implications for regional security in 2025 and beyond.

CCP ideology and constraints on AI/AGI

Chinese doctrine consistently emphasizes the "absolute leadership of the Party" over the armed forces, and *SMS 2020* frames intelligentization as inseparable from CCP guidance ([National Defense University, 2020](#)). This implies that Chinese AI—and eventually AGI—must conform to political reliability requirements, potentially embedding ideological filters into data training, operational parameters, or outputs.

These constraints may limit adaptability by excluding perspectives deemed politically unreliable ([Allen, 2019](#)). Yet they also ensure that AI recommendations do not undermine Party legitimacy or strategic narratives. In wartime, AI-enabled systems may prioritize regime security alongside operational efficiency. Intelligentization in China is as much a political project as a technological one, with CCP oversight shaping its possibilities and limitations.

Mission command, authoritarianism, and AI

Western militaries embrace mission command, empowering subordinates to interpret and execute intent under uncertainty. The PLA remains deeply hierarchical. *SMS 2020* acknowledges the need for operational flexibility but presents AI as a means to accelerate centralized decision-making rather than delegate autonomy ([Fravel, 2022](#)).

AI and AGI may therefore function as instruments of tighter Party control, allowing senior leaders monitor operations in detail ([Hibbs, 2021](#)). This authoritarian paradox—adopting flexible systems while using them to reinforce hierarchy—may constrain PLA agility even as it increases political reliability.

Implications for US and allied defense policy

SMS 2020 functions as a forcing mechanism for US and allied defense planning. For the US, it validates initiatives such as JADC2 and investments in resilient, distributed force postures ([U.S. Department of Defense, 2024](#)). It also highlights a normative asymmetry: Washington emphasizes "responsible AI" under ethical guidelines, while Beijing faces fewer limits, allowing faster, riskier deployment ([NATO, 2021](#)).

For Japan, the doctrine underscores threats that have already driven Tokyo's expanded defense strategy. Japan's 2024 Defense White Paper highlights PLA advances in automated systems, cognitive warfare, and electronic attack as key risks, prompting investments in countermeasures and deeper US–Japan interoperability ([Ministry of Defense Japan, 2024](#)). For other US allies, including Australia and the UK, *SMS 2020* reinforces the importance of AUKUS Pillar II, which centers on AI, quantum technologies, and autonomy ([White House, 2024](#)). Thus, doctrinal codification in Beijing reverberates across allied defense planning, forcing adaptation in concepts, technology, and policy.

Does intelligentization give China a decisive edge?

In the short term, China faces major constraints: limited access to advanced semiconductors due to US-led export controls (U.S. Department of Commerce, 2023), organizational barriers to cultural adaptation, and unresolved technical challenges in autonomy and resilience. These bottlenecks suggest *SMS 2020* will not yield a decisive edge immediately.

In the medium term, structural factors may narrow the gap. Civil–military fusion converts civilian breakthroughs into military applications (Hibbs, 2021). China's willingness to deploy systems without the ethical and legal restrictions of liberal democracies may allow earlier use of automated swarms, cognitive operations, and AI-driven command systems (Kania, 2021). *SMS 2020* is thus less an immediate leap than a doctrinal bet that Beijing can close relative gaps through risk-tolerant innovation.

AGI and fewer constraints

SMS 2020 also opens the door to speculation about AGI. While Western militaries debate meaningful human control and compliance with humanitarian law (U.S. Department of Defense, 2023; NATO, 2021), the PLA operates under fewer normative restrictions. AGI is framed as an extension of intelligentization, not as an ethical dilemma (Guo, 2024). This creates an asymmetry of restraint: democracies may face limits in deploying controversial applications, while Beijing could field immature but militarily useful AGI systems earlier. The result is not guaranteed superiority but a greater willingness to test high-risk, high-payoff applications.

DeepSeek and the PLA's future

Recent advances in LLMs underscore the practical side of *SMS 2020*. Although civilian in origin, DeepSeek demonstrates the scale and sophistication of Chinese AI research (Reuters, 2024). Under civil–military fusion, such platforms will likely be integrated into PLA research, wargaming, and decision-support.

SMS 2020 emphasizes cognitive warfare and algorithmic advantage; LLMs like DeepSeek are ideally suited to information campaigns, influence operations, and scenario modeling. For instance, they could simulate adversary decision-making or generate tailored propaganda to erode will in Taiwan or US alliance networks. Linking *SMS 2020* to DeepSeek highlights that doctrinal visions are increasingly underpinned by real technological ecosystems.

Conclusion

SMS 2020 represents more than a conceptual update: it is a political and doctrinal roadmap for embedding intelligentization into PLA modernization. Elevating AI, autonomy, and cognitive warfare to doctrinal centrality signals Beijing's intention to achieve algorithmic advantage in future conflicts. Yet the doctrine is constrained by CCP ideology and authoritarian command culture, which may limit flexibility even as they ensure political reliability.

For the US and allies, *SMS 2020* underscores the need to harden networks, accelerate responsible AI adoption, and adapt regional postures to anticipate PLA experimentation with fewer constraints. In 2025, the key question is how will intelligentization unfold: constrained by ideology, accelerated by civil–military fusion, or increasingly tied to platforms such as DeepSeek. *SMS 2020* thus serves as a blueprint for China's military future and a warning for regional security planners.

[Peyton Mayer] *is a doctoral student in Business Administration at Edgewood College, focusing on security studies and military innovation. His research examines the intersection of doctrine, technology, and strategic competition, with an emphasis on East Asian security and the impact of artificial intelligence on warfare.*

Reference list

Allen, G. (2019). *Understanding China's AI Strategy: Clues to Chinese Strategic Thinking on Artificial Intelligence and National Security*. http://www.globalhha.com/doclib/data/upload/doc_con/5e50c522eeb91.pdf

Fravel, M. T. (2020). China's changing approach to military strategy. Journal of Strategic Studies, 43(5–6), 655–685. http://www.globalhha.com/doclib/data/upload/doc_con/5e50c522eeb91.pdf

Guo, Ya-nan. (2024). *Reflections and Perspectives on Artificial Intelligence Enabling the Military - CNKI*. Cnki.net. https://www.cnki.net/KCMS/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLAST2024&filename=JSJZ202405001&uniplatform=OVERSEA&v=hC4mltstEve0wUjz-qAkj5BZ0U1UefkzSVn5-gtZPZTKG1WalKvMPgvgjOj43kV1

Hibbs, M. (2021). *Military-Civil fusion and China's nuclear program*. Carnegie Endowment for International Peace. https://carnegieendowment.org/posts/2021/06/military-civil-fusion-and-chinas-nuclear-program?lang=en

Kania, E. B. (2021). Artificial intelligence in China's revolution in military affairs. *Journal of Strategic Studies*, *44*(4), 1–28. https://doi.org/10.1080/01402390.2021.1894136

Ministry of Defense Japan. (2024). *Defense of Japan 2024: Annual White Paper.* Tokyo: Government of Japan. Retrieved from https://www.mod.go.jp/j/press/wp/wp2024/pdf/DOJ2024_Digest_EN.pdf

National Defense University. (2020). *Science of Military Strategy* (Author's translation). Beijing: National Defense University Press. Retrieved from 2022-01-26 2020 Science of Military Strategy.pdf

North Atlantic Treaty Organization (NATO). (2021). *Summary of the NATO Artificial Intelligence Strategy.* Brussels: NATO. Retrieved from https://www.nato.int/cps/en/natohq/official_texts_187617.htm

Reuters. (2024). *Chinese AI developer DeepSeek releases model it calls an intermediate step toward next-generation systems.* Retrieved from https://www.reuters.com/technology/deepseek-releases-model-it-calls-intermediate-step-towards-next-generation-2025-09-29/

U.S. Department of Commerce. (2023). *Implementation of Additional Export Controls: Certain Advanced Computing Items and Supercomputer End Use.* Bureau of Industry and Security. Retrieved from https://www.govinfo.gov/app/details/FR-2023-10-25/2023-23055

U.S. Department of Defense. (2023). *Directive 3000.09: Autonomy in Weapon Systems* (Updated). Washington, DC: Department of Defense. Retrieved from https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodd/300009p.pdf

U.S. Department of Defense. (2024). *Military and Security Developments Involving the People's Republic of China: Annual Report to Congress.* Washington, DC: Department of Defense. Retrieved from https://media.defense.gov/2024/Dec/18/2003615520/-1/-1/0/MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA-2024.PDF

White House. (2024). *Joint Leaders' Statement to Mark the Third Anniversary of AUKUS.* Washington, DC. Retrieved from https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/09/17/joint-leaders-statement-to-mark-the-third-anniversary-of-aukus/