Submission to the United Nations Secretary-General on "Artificial intelligence in the military domain and its implications for international peace and security"

April 10, 2025

Project Ploughshares, a Canadian peace research institute, has for over a decade focused its advocacy and research on the military applications of emerging technologies, including artificial intelligence (AI) and autonomous weapons. As AI systems are rapidly advancing and being tested in contemporary conflict zones, international governance frameworks have struggled to keep pace. Meanwhile, intensifying geopolitical competition increases the likelihood that AI technologies will be deployed in complex, dynamic environments for which they are not suited—raising significant risks for civilians.

The wide-ranging use of AI in military applications demands urgent and coordinated international attention. We encourage the Secretary-General and member states to focus on three particularly pressing areas: the use of AI in decision-support systems related to the use of force, the dual-use nature of AI technologies, and the widening capacity gap among states engaging in multilateral discussions.

AI decision-support systems

One area that remains insufficiently addressed in current international discussions is the use of AI in military decision-making, especially decisions about the use of force. Of particular concern are AI-enabled targeting tools such as "Lavender" and "Gospel," reportedly used in in Gaza. These systems are classified as "decision support" because a human is technically required to approve target selections. However, there is little transparency regarding how these decisions are made, how frequently AI-generated recommendations are rejected, or whether human operators fully understand how the AI systems reach their conclusions.

In practice, these systems raise the risk of "rubber-stamping," in which human oversight becomes superficial, thereby undermining the principle of meaningful human control and increasing the likelihood of harm to civilians. The potential use of such AI systems in early-

warning, surveillance, reconnaissance, and nuclear command-and-control systems further amplifies these concerns.

To mitigate these risks, states must work toward clear norms, regulations, and training requirements that enhance operator understanding, counter automation bias, and ensure genuine human engagement in decision-making processes.

.Dual-use challenges

AI's dual-use nature—its applicability to both civilian and military domains—creates further governance complexity. Civilian-developed technologies can be repurposed for military use without appropriate testing or safeguards, increasing the risk of conflict escalation, misuse, and error. Additionally, the accessibility of certain AI tools means that nonstate armed groups may also gain access, potentially using them to target civilians and infrastructure.

We urge states to develop policy mechanisms, including export controls, technology impact assessments, and multistakeholder engagement, to account for dual-use risks and promote responsible innovation.

Capacity- and knowledge-building

Current multilateral discussions reveal stark capacity disparities among states, many of which do not have the resources or technical expertise to participate meaningfully in governance efforts. To ensure inclusive and equitable global engagement, we recommend that states collaborate with the UN Office for Disarmament Affairs to strengthen capacity-building initiatives.

The scientific and academic communities also have a role to play in supporting the development of accessible resources and training materials. International forums, such as the upcoming REAIM Summit in Spain, should include dedicated sessions for knowledge-sharing, especially to support representatives from under-resourced states.

Final thoughts

The international community is at a crossroads. The accelerating militarization of AI demands robust diplomatic responses. We can—and must—move from aspirational principles to concrete, enforceable frameworks, by employing political will, inclusive dialogue, and cross-sector collaboration.

AI-powered warfare is no longer a theoretical risk; it is a present reality. Whether this new era enhances global security or undermines it will depend on the steps states take now to

strengthen governance, manage technological competition, and uphold international humanitarian norms.

Without timely, coordinated action, the risks of accidental escalation and unintended conflict will only increase.