

Advances in Artificial Intelligence and Challenges to the Convention

The Harvard Sussex Program
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Chairperson, Director-General, Excellencies, Distinguished Representatives, Colleagues,

Artificial intelligence continues to capture our attention and provoke deep concern.

AI systems converge with many fields that the OPCW SAB has reviewed: additive manufacturing, nanotechnology, micro-reactors, robotics, and more.

However, the use of AI extends well beyond the lab. It is now present in communication, transport, planning, and logistics; it is used in everyday life for all manner of tasks.

It is woven into the systems that shape our everyday lives.

And so, it seems to me, the implications of AI for chemical weapons cannot be confined to the laboratory bench. AI reaches into the wider pathways that malicious actors might follow in pursuit of chemical weapons.

We must now consider how AI could influence radicalisation and intent; planning and logistics; the storage, targeting, and dissemination of agents; and the deliberate use of disinformation to obscure attribution and evade accountability.

Chairperson,

To help us better frame and analyse the implications of AI for anti-chemical weapons policy, I want to briefly present four enduring and foundational challenges.

By examining AI in relation to these challenges we can begin to more concretely assess the risks posed by AI within the framework of the Convention.

The first challenge is the perceptions of utility of chemical weapons.

We must ask: how might AI and other converging technologies change what chemical weapons appear to *offer for actors*—whether in speed, precision, or deniability? How does AI change perceptions of utility?

The second challenge relates to circumvention and proliferation.

In what ways could AI and emerging technologies open new routes around existing controls, allowing actors to solve problems that previously limited their capability? In other words, how might the use of AI undermine the constraints you have built.

The third challenge is creeping legitimisation.

Without careful oversight, some AI-driven applications and related technologies may blur the line between permitted and prohibited activities. How might AI contribute to the gradual normalisation of practices that test the boundaries of the Convention?

The final challenge is normative divergence.

How might the perceived potential of AI encourage both states and non-state actors to re-examine the perceived strategic value of having a chemical weapons capability?

Chairperson,

AI's capacity to accelerate processes, reveal new pathways, shape perceptions, and alter transparency underscores the need for a deliberate and structured approach within the Convention's framework.

We must remain attentive not only to what new technologies might enable, but to how they influence perceptions of utility, strategic calculations, operational feasibility, and deniability.

And to remain attentive, we need to continue to deepen opportunities for engagement.

Such engagement strengthens our ability to sense-make and develop new ways of thinking about challenges; it helps us to anticipate and respond to technological change, and to build effective governance to support the norms that lie at the heart of this Convention.

It is here that the Harvard Sussex Program can support the needs of States Parties in understanding and addressing the implications of AI for the Convention.

We believe that structured approaches, through workshops, frameworks, collaborative initiatives, and research projects can form the practical basis of a new era of engagement between the OPCW and civil society.

To do this, we urge states parties to provide voluntary funds to the Technical Secretariat to enable them to develop a programme of activities that bring us together to work on specific, technical questions that can support greater understanding of AI's implications.

The Harvard Sussex Program remains ready to engage and work with you.

Chairperson,

I will now conclude.

The Chemical Weapons Convention is a living instrument. Its continued success depends on our ability to adapt and respond in a measured, sustainable, and strategic manner.

That requires both exploration and introspection—an eye on what is changing, and an eye on what remains constant.

Thank you for your attention.