Governments are running out of time to prevent the development of weapons systems that would select targets and attack without further human intervention. This year, nations should agree to begin negotiating new international law on fully autonomous weapons. Any lesser measures will be doomed to failure.

Several autonomous weapons systems with decreasing levels of human control are currently in development and use by high-tech militaries such as the US, China, Israel, South Korea, Russia, and the UK. The concern is that a variety of available sensors and advances in artificial intelligence are making it increasingly practical to design weapon systems that would target and attack without any meaningful human control. If the trend towards autonomy continues, humans may start to fade out of the decision-making loop for certain military actions, perhaps retaining only a limited oversight role, or simply setting broad mission parameters.

This month marks five years since the launch of our Campaign to Stop Killer Robots, the global coalition of non-governmental organisations working to preemptively ban the development, production, and use of fully autonomous weapons, also known as lethal autonomous weapon systems (LAWs). The campaign fundamentally objects to permitting machines to take human life on the battlefield or in policing, border control, and other circumstances.

April also marks the fifth time since May 2014 that countries have convened at the Convention on Conventional Weapons (CCW) to discuss lethal autonomous weapon systems. At the last meeting in November 2017, many states expressed their strong desire to begin negotiating new international law. Almost all states have agreed with the need to retain some form of human control over future weapons systems and several say they have “no plans” to acquire or develop fully autonomous weapons. To date, 22 countries have unequivocally called for a ban on fully autonomous weapons and we hope to hear more expressions of support for the ban objective this week.

In a Briefing Note prepared for this week’s CCW meeting, the Campaign urges states to identify the relevant “touchpoints” of human/machine interaction in weapons systems and explain how control is applied over existing weapons systems, especially those with certain autonomous or automatic functions. States should be explicit in stating that meaningful human control is required over individual attacks and that weapon systems that operate without such human control should be prohibited.

While the exact wording of legal definitions would be finalised during negotiations as required, the Campaign also encourages states to elaborate the key characteristics for a working definition of LAWs—based on them being systems that are operating without meaningful human control in the “critical functions” of identifying, selecting, and applying force to targets.

The Campaign to Stop Killer Robots is calling on states to conclude by 2020 a legally binding instrument prohibiting fully autonomous weapon systems. Other diplomatic options should be explored if the CCW is not up to this task. It also encourages states to swiftly adopt national legislation banning fully autonomous weapons systems.
We are crossing a moral line

Governments must act now...

before it’s too late

Taken from “No Country Would be Safe from Fully Autonomous Weapons”, a new video from the Campaign to Stop Killer Robots. Available at https://www.youtube.com/user/StopKillerRobots/videos.
While some tech companies take their responsibility to prevent the development of autonomous weapons seriously, others need additional incentives to do so—and the financial sector is particularly well placed to engage with those companies.

Last week there was strong media interest in lethal autonomous weapon systems (LAWs). First was the news of Google employees protesting against the company’s involvement in “Project Maven”, a Pentagon-led project that uses artificial intelligence to interpret video imagery. The employees’ message was clear: “We believe that Google should not be in the business of war.” Another prominent news story was the boycott by artificial intelligence (AI) researchers of the Korea Advanced Institute of Science and Technology (KAIST) due to its collaboration with defence manufacturer Hanwha. The AI researchers are concerned that this collaboration could lead to the development of LAWs. These developments are important as the technology industry has a crucial role to play in preventing the development of LAWs.

In 2017 the chief executive officers (CEOs) of 116 tech companies called on the UN to protect us from the dangers related to autonomous weapons. Robotics and artificial intelligence experts and companies are especially well situated to judge the effects and dangers of autonomous weapon systems. Another positive example is the pledge from Clearpath Robotics in 2014 to not contribute to the development of these weapons.

States should take the progressive tech companies’ warnings seriously and prevent the development of autonomous weapons systems by adopting an international ban on weapons without meaningful human control. At the same time—and in the current absence of international law specifically applicable towards this issue—it is necessary that the industry itself take steps to ensure autonomous weapons never become reality. Tech companies should develop and commit themselves to policies in which they pledge to not contribute to the development and production of autonomous weapons.

But although some tech companies are taking up their responsibility to prevent the development of autonomous weapons, other companies will need additional incentives to do so. The financial sector can play a key role in preventing the development of fully autonomous weapons by using its contacts with and leverage over the tech and AI sectors.

PAX has experience in working with the financial sector on other weapon systems, and leads the international divestment campaigns on nuclear weapons and cluster munitions. In our “Don’t Bank on the Bomb” and “Worldwide Investments in Cluster Munitions” reports we investigate which banks, insurers, pension funds, and other financial institutions invest in companies that produce nuclear weapons or cluster munitions. However, we also show examples of financial institutions that are leading the way by excluding companies that produce controversial weapons from their investments. From our experience, we have seen the impact the financial sector can have in shaping policy. For example, many financial institutions began to exclude Singaporean company S&T Dynamics because it produced cluster munitions. In 2014, S&T announced it would end the production of cluster munitions, and mentioned to PAX that it hoped it would again become eligible for investments.

In its campaigns, PAX stresses that financial institutions worldwide have the responsibility to not be linked with the production or development of controversial weapons. This includes LAWs, or “killer robots”. Due to the technical nature and the stage that the development of killer robots is in at this moment, financial institutions have a key role to play in engaging with AI and tech companies on their involvement in the militarisation of AI. Financial institutions have special leverage as the providers of financing to those companies. In that role, they can require AI and tech companies to actively help prevent the development of killer robots. The Norwegian government pension fund set the right example when it announced in 2016 that it would start monitoring companies investing in the potential development of fully autonomous weapons systems.

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PAX aims to engage increasingly with the financial sector on this issue, by continuing to speak with commercial tech companies about their responsibilities. It will be interesting to explore the possibilities of moving towards an international sub-campaign on financial sector engagement within the broader campaign against killer robots. We realise of course that it is not that easy (yet) to define crucial components of LAWs as it was with cluster munitions or nuclear weapons. The issue of LAWs needs another approach. But in essence it is the same and we believe that all actors have the responsibility to start to engage, to initiate code of conducts, and to see what action they can take. We welcome any suggestions or ideas on this. •

Notes