EDITORIAL: UN AGREES TO MORE TALKS ON AUTONOMOUS WEAPONS AS SUPPORT FOR PROHIBITION GROWS

Ray Acheson | Reaching Critical Will of WILPF

At the end of last week’s UN discussions on lethal autonomous weapon systems (LAWS), states agreed on recommendations for further, more formal deliberations next year through an open-ended Group of Governmental Experts (GGE). This body, if states accept the recommendation at the Convention on Certain Conventional Weapons (CCW) Review Conference in December 2016, would operate for a currently undetermined length of time in 2017 and might continue through 2018. While the establishment of a GGE is a welcome step, the recommendations adopted last week only call for the GGE to “explore and agree on possible recommendations on options related to emerging technologies in the area of LAWS.” This is an unambitious mandate that does not reflect either the pace of technological development nor the urgency of ensuring that meaningful human control is retained over weapon systems and the use of force.

The need for meaningful human control, as well as the ethical and moral questions around relinquishing control over the use of violent force to machines, has remained at the heart of debate over the past three years. Fourteen states, thousands of scientists, two UN special rapporteurs, and the Campaign to Stop Killer Robots are all urging the negotiation of a legally-binding instrument to prevent the development, deployment, and use of LAWS. States concerned with the challenges raised by these systems should work with urgency toward negotiations on such an instrument.

Landscape of governmental positions

After three one-week informal meetings on this issue, most states appear to support the retention of human control over weapon systems. Yet it is clear that some states—mostly higher-income, militarily and technologically advanced states—wish to slow (or even prevent) diplomatic progress toward restricting, regulating, or prohibiting the autonomous use of force by machines.

Some have tried to define autonomous weapons in a way so futuristic as to be implausible and never to affect any weapon developments they might contemplate. States such as Israel, Japan, Russia, and the United Kingdom have argued that LAWS are a possibility of the distant future and may never exist at all. But the existence of technologies such as Israel’s Harpy drone or the United Kingdom’s Taranis system indicate that the development of LAWS is not really so distant. There are gaps in our knowledge here of course and even more so in other countries that are less transparent about their arms industries.

The United States and some others have spoken favourably about the possibility of increasing autonomy in weapon systems, citing perceived benefits in precision and the reduction of civilian causalities. Others still, such as China and Russia, have spent these meetings primarily reacting to the positions of other states and interrogating their motivations, without offering any information about their own positions or perspectives on how to best deal with LAWS or what related technology they might already be contemplating, developing, or deploying in this regard.

However, the majority of the 67 states that have spoken publicly in multilateral forums about LAWS have voiced concern with their development and deployment, albeit from varying perspectives and with varying thoughts about solutions. These states have articulated a number of problems or challenges arising from LAWS, such as the difficulties of programming compliance with international law into machines; possible violations of human rights and dignity; transfer of risk of the consequences...
Editorial, continued

of warfare away from the deploying forces’ soldiers to civilians; technical challenges such as imprecision (as seen with armed drones); lack of capacity for due process in prosecuting targets; expansion of the battlefield; lowering the threshold for warfare (and use of force within warfare); and overall fuelling of militarism.

Regardless of which aspects of LAWS trouble any given state the most, the majority of those concerned have expressed the belief that some form of human control over weapon systems is necessary.

**Autonomy and human control**

Very few states have proposed a definition of LAWS. The United States defines LAWS as weapon systems that, “once activated, can select and engage targets without further intervention by a human operator,” but which “is designed to allow commanders and operators to exercise appropriate levels of human judgment over the use of force.” It is not clear where it thinks the boundaries would lie in terms of the necessary levels of human judgment for an individual attack to be permissible. The US argued there is no “one size fits all” standard for human control and that “flexible policy standards” are necessary.

Switzerland’s approach focuses on tasks rather than control. It describes LAWS as “weapons systems that are capable of carrying out tasks governed by IHL [international humanitarian law] in partial or full replacement of a human in the use of force, notably in the targeting cycle.” The Swiss delegation argues that it is premature to draw a line between acceptable and unacceptable systems.

As presenter Wendell Wallach of the Yale Interdisciplinary Center for Bioethics argued during this week’s discussions, defining LAWS does not have to be a complicated undertaking. Richard Moyes of Article 36 has suggested a straightforward formulation in which LAWS are “weapon systems with elements of autonomy operating without meaningful human control.” Some states and NGOs, including Switzerland and Amnesty International, have also noted that any definition should not be limited to weapon systems that are designed or used to operate with lethal force, in order to take into account attacks against objects and use of LAWS in law enforcement.

When it comes to defining human control, states have some work to do. But the NGO Article 36 has suggested that key elements of meaningful human control would include predictable and reliable technology; accurate information on objectives and context of the use of weapons; timely human judgment and action over the functions of weapons; and a framework for accountability.

There is an emerging picture at the CCW in which the requirement of human control over the critical functions of a weapon system would represent the boundary between a permissible weapon system and one that would be unacceptable. Requiring meaningful human control over critical functions such as target selection and munitions release in individual attacks appears to be the most straightforward, credible, and clear approach. It is the only way to meet the legal imperatives of respecting international law and of holding an individual responsible for unlawful acts. It is also the only way to ensure respect for ethics and morality in relation to preventing fully mechanised violence in which machines take human life without any human intervention.

**Prohibiting autonomous weapons**

The need for meaningful human control over individual attacks is the basis for a prohibition on autonomous weapons systems. Calls for this prohibition are growing. As noted above, fourteen states, thousands of scientists, two UN special rapporteurs, and the Campaign to Stop Killer Robots are all urging the negotiation of a legally-binding instrument to prevent the development, deployment, and use of LAWS.

Some states have suggested they believe all weapons should have meaningful human control, but reject the development of new rules in this direction. As discussions seem set to continue next year in a more formal setting, states should use the time to determine their positions about the levels of dehumanisation of war and violence they want to pursue or prevent.

When we talk about autonomous weapons we are talking about the development of new ways to kill each other—ways that ultimately reduce our
The final side event for the week was hosted by the Campaign to Stop Killer Robots. Moderated by Camilo Serna, SEHLAC (Colombia), the panel assessed the third CCW meeting of experts on autonomous weapons and discussed how the process to address AWS can move forward with momentum.

Nobel Peace Laureate Jody Williams from Nobel Women’s Initiative, Noel Sharkey from International Committee for Robot Arms Control, Rasha Abdul-Rahim from Amnesty International, and Mary Wareham, global coordinator of Campaign to Stop Killer Robots presented their views on the progress made this week in the CCW and way forward for this issue.

The panelists highlighted the positive aspects that have come out of this week; for example, five new states have announced their support for a preemptive ban on autonomous weapons, bringing the number of states calling for a ban to 14. This shows that the expert meetings are making states think about AWS and the implications of the development of this technology. The meeting this week has also demonstrated a broad acceptance of the term ‘meaningful human control’ as the majority of states party to the CCW have mentioned this principle—in some form or another—during the meeting. The panelists agreed that this week has shown we seem to be at least moving forward, if not entirely the way and the pace at which it should.

Alongside these positive outcomes from the meeting of experts, the panelists also highlighted some of the disappointments. Namely, the watering down of the language in the draft recommendations from the original draft, the lack of the right scientists called to speak on the expert panels on meaningful human control, and the pace at which the process is moving in this forum.

On the way forward, the panelists emphasised the importance of a preemptive ban. Jody Williams said that we have the opportunity to ban a revolution in warfare that should never exist. Noel Sharkey said that the only way to protect ourselves from killer robots is to ensure that we have meaningful human control. Rasha Abdul-Rahim said that AWS need to be brought under human control and other fora such as the Human Rights Council and the UN General Assembly should be seen as complementary to this process in the CCW.

Mary Wareham gave an overview of the Campaign to Stop Killer Robots, and the broad range of participation from youth, academics, Nobel Peace Laureates, faith-based constituencies, military veterans, and investors who are involved with the campaign. She also thanked a lot of people involved this week, including the Chair of the meeting, Ambassador Biontino, the Friends of the Chair, the experts—especially the outgoing Special Rapporteur on Human Rights, Christof Heynes, the CCW secretariat, UNIDIR, ICRC, and the states that have shown willingness to engage on this issue. She concluded that we’ve seen some progress this week but now it’s time to step it up!

own involvement as human beings in that killing. With autonomous weapons, we would abdicate responsibility and accountability for killing by removing our moral agency from that killing, setting the stage for a range of highly problematic challenges to law, ethics, and morality, as well as to the nature of war and violence.

Autonomy in weapon systems “poses a fundamental challenge to the body of law that human societies have set out to restrain the use of violent force based on the principles of humanity,” the NGO Article 36 has argued. In our work here at the CCW, we have “a choice to recognize and respond to this challenge or to abandon the law as it stands.” In the time between this meeting and the Group of Governmental Experts next year, states should consider this choice and prepare for concrete action. Our human principles determine our actions, and our actions determine our identities and our futures.

As the philosopher Simone Weil argued in the mid-20th century, we need to examine the social relations implied by our instruments of violence and war, not just the ends pursued by war. Do we want to seek a future in which the violence we exercise against each other is further mechanised and dehumanised, or do we want to pursue a future in which we are cooperating as human society to prevent suffering and promote peace and justice? This is a key question for us all as we continue our work on LAWS.
The News in Brief is not a comprehensive summary of all statements. It highlights positions on a few critical issues covered during plenary discussions.

**Security issues part II**

- Jai Galliott, of the University of New South Wales, Australia cautioned against overestimating computers and explained that LAWS could remain under MHC. Further, he stressed that States should employ LAWS cautiously and need to consider risk of handing critical functions to machines.

- Katrine Norgaard of the Institute of Leadership and Organization, Royal Danish Defence College discussed possible challenges with the introduction of AWS in military. She underlined that already in the context of hybrid warfare, security issues become multidimensional resulting in a greater need for situational awareness by different actors. Then with the introduction of AWS, military, political, ethical, legal aspects are increasingly blurred. In her view, the most problematic risk was the opaqueness of the interaction processes in human machine interfaces and called for further examination of these risks.

- Collin S. L. Koh of the S. Rajaratnam School of International Studies, Nanyang Technological University, Singapore presented a case study on possible implications of LAWS in the maritime domain, in particular the Asia-Pacific region. He reviewed current automated systems deployed in the region which allowed him to draw conclusions regarding the potential risks. In that connection he cautioned that with the current density of world shipping lanes, the deployment of LAWS in a maritime environment may have serious effects on shipping safety. Further, there is also a risk of controlling proliferation.

- John Borrie of UNIDIR and the Institute of International Affairs (Chatham House), reviewed some conclusions reached at a recent UNIDIR workshop regarding security, unintentional risk, and system accidents in connection with LAWS. He reminded the room that risk was probability multiplied by the consequences. Unintentional risks however was a complete sub set of the total risk in which machine systems that have targeting and attack functional fails could behave in ways unintended by their designer and operators. He cautioned that in connection with LAWS systems accidents are special phenomenon to consider that cannot be designed out.

- Canada explained that the military application of LAWS will vary by context around four factors, namely the operational environment, the geopolitical context, weapon type use and targets, as well as the level and nature of human machine relation and interaction.

- India agreed with Canada and reiterated that in a symmetric conflict the predisposition towards escalation was pretty high.

- In closing, Canada asked the panelist which of these contextual factors, was the most problematic.

- J. Borrie thought that the interactions between different factors and variables were the most concerning. He suspected that many feel the risks would outweigh the benefits.

- C.S.L. Koh thought that probably the operational environment and the level and nature of human machine relation and interaction were the most problematic.

- J. Galliott thought that probably the geopolitical environment could be least controlled, as tricky human machine interaction could probably be managed.

- China again inquired about the (possibly involuntary) involvement of programmers in the development of LAWS.

- J. Galliott referred to some mechanisms already in place, while there was room for improved systems of tracing responsibility. Dual use applications will remain a bit problematic.

- China also thought redundancy was not always bad.

- India inquired if it was possible to carve out defensive legal function or functions, which would be the obvious question from a military perspective.

- J. Galliott agreed that it was difficult to make a clear distinction and highlighted this as a reason why he did not support a complete prohibition.

- ICRAC again raised questions regarding international security in a world with swarming of LAWS.

- J. Borrie referred to a diagram of potential risks he presented and thought the risk of swarming fitted well within that diagram.

- All eight Friends of the Chair presented summaries of the discussions under the panels they presided over.

**Closing session**

- The Chair presented his draft final report he will submit to the CCW in his capacity as Chair of the expert meeting.

continued on next page
News in brief, continued

- After intense negotiations the Chair presented draft recommendations that he put before the meeting for adoption.

- In comparison to the previous draft, the preambular paragraph now includes a reference to weapons reviews in the 5th line. In reference to civil society organizations “exploring this perspective issue” was included.

- Further, in operational paragraph 1 now the 2016 meeting of high contracting parties “may decide to establish” a GGE.

- A footnote was included in connection to the appropriate period of time for the GGE to meet in 2017.

- In OP 2, both listings stand on an equal footing, through the removal of a) and b).

- Additionally, sub-points three and four regarding transparency and confidence building measures as well as information sharing have been deleted from the second paragraph.

- Further, the reference to “effects on human security” was deleted from paragraph three.

- Finally, the point referencing cyber operations, no longer includes other measures.

- India suggested including “in the context of LAWS” behind weapons reviews in preambular paragraph I, line 5.

- Cuba supported this amendment.

- The draft recommendations were accepted by consensus.

Campaign to Stop Killer Robots