



CAMPAIGN TO **STOP** KILLER ROBOTS



Report on Activities

2019 Meeting of High Contracting Parties to the Convention on Conventional Weapons (CCW)

United Nations Geneva

13-15 November 2019

About this report

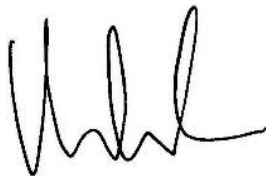
This report details activities by the Campaign to Stop Killer Robots at the annual Convention on Conventional Weapons (CCW) Meeting of High Contracting Parties held at the United Nations (UN) in Geneva on 13-15 November 2019. It also includes an overview of the Campaign's activities at the 74th session of the UN General Assembly in October 2019.

The report records the campaign's contributions, reviews the participation of governments in these meetings, and its annexes provide a summary of country views and the campaign's delegation list.

Campaign coordinator Mary Wareham and arms associate Jacquelyn Kantack of Human Rights Watch prepared this report, drawing from statements posted online by the CCW implementation support unit and WILPF's Reaching Critical Will Project. The report also draws on notes of the deliberations taken by Bonnie Docherty of Human Rights Watch and her Harvard Law School International Human Rights Clinic students Alev Erhan and Shaiba Rather.

The Campaign to Stop Killer Robots is grateful for the generous donor support that enabled us to have a strong presence at the CCW meeting and to conduct outreach in the lead-up and afterwards.

This report is available on the Campaign to Stop Killer Robots website at:
www.stopkillerrobots.org/publications.

A handwritten signature in black ink, appearing to read 'Mary Wareham', with a stylized, cursive script.

Mary Wareham
Coordinator, Campaign to Stop Killer Robots
Washington DC
24 February 2020

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Lead-up to the CCW Meeting of High Contracting Parties

At the previous CCW annual meeting in November 2018, states agreed to continue in the Group of Governmental Experts (GGE) on lethal autonomous weapons systems (LAWS) established in 2016 and hold two GGE meetings in 2019: on 25-29 March and 20-21 August 2019, in addition to several days of “informal consultations.”

There were several events and initiatives on killer robots in the period between the August GGE meeting and November CCW meeting, most notably the high-level opening of the United Nations General Assembly in September and UNGA First Committee on Disarmament and International Security in October 2019.

Foreign ministers from Canada, Chile, France, Germany, Mexico, and dozens of other countries endorsed a declaration on lethal autonomous weapons system at UNGA on 26 September, which marks the first time the killer robots challenge has been acknowledged by such a large group of high-level representatives. The “Alliance for Multilateralism” initiative spearheaded by France and Germany to promote a “rules-based international order” has prioritized killer robots concerns along with climate change and other “politically relevant” issues.

A total of 41 states raised killer robots in their statements to the First Committee, while dozens more aligned themselves with statements by the European Union, Non-Aligned Movement, and Nordic group statements on killer robots. Libya, Namibia, and San Marino spoke on killer robots for the first time, bringing the number of countries that have commented on this topic since 2013 to a total of 93. On 24 October at the First Committee, Namibia added its name to the [list of 30 countries](#) calling for a ban on fully autonomous weapons.

At the Paris Peace Forum on 11 November, UN Secretary-General António Guterres [repeated](#) his call for a ban on fully autonomous weapons, stating, “And a new arms race — the cyberarms race — is already under way. The danger is that the next war will be triggered by a massive cyberattack. Tomorrow, killer robots could take the place of soldiers. We must ban all autonomous weapons. Machines that have the power and discretion to kill without human intervention are politically unacceptable and morally despicable.”

CCW Meeting of High Contracting Parties

Ambassador Khalil-ur-Rahman Hashmi of Pakistan served as president of the CCW Meeting of High Contracting Parties in November 2019, which 91 countries attended.¹ Other participants included UN agency UNIDIR, the International Committee of the Red Cross (ICRC), the Campaign to Stop Killer Robots, and various academics.

This was the seventh annual CCW meeting to discuss the appropriate multilateral response needed for the topic of lethal autonomous weapons systems (LAWS). The meeting opened on 13 November with a general debate during which nearly all of the 43 states that spoke commented on killer robots, most supporting a continuation of the GGE's work in the lead-up to the CCW's Sixth Review Conference at the end of 2021.²

During the Meeting of States Parties, the GGE chair delivered his report and the recommended mandate for continued GGE work in 2020. States broadly agreed that more days of discussion were needed after the mere seven days of GGE meetings in 2019.

The vast majority of states that spoke on the issue supported the goal of “development of a normative and operational framework” on fully autonomous weapons. Many of the 30 states that had previously expressed support for a ban repeated that position, including Brazil, Chile, China, Egypt, El Salvador, Iraq, Pakistan, Panama, Peru, Sri Lanka, and Venezuela. A handful of states, including Ireland, Italy, and Switzerland, expressed support for a political declaration.

Russia and the US continued their opposition to the development of any legally-binding instrument or political measures, arguing that existing law is sufficient.

At the conclusion of the meeting, states agreed to continue the CCW Group of Governmental Experts (GGE) on LAWS and meet for ten days in 2020 and ten to twenty 20 days in 2021. In this period, the GGE is tasked with providing “consensus recommendations on the clarification,

¹ According to the draft final report issued by the UN on 15 November 2019, the 91 states attending the August meeting were comprised of 83 high contracting parties (Afghanistan, Albania, Algeria, Argentina, Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, Chile, China, Colombia, Costa Rica, Croatia, Cuba, Cyprus, Czech Republic, Dominican Republic, Ecuador, El Salvador, Estonia, Finland, France, Georgia, Germany, Greece, Guatemala, Holy See, Honduras, Hungary, India, Iraq, Ireland, Israel, Italy, Japan, Jordan, Kazakhstan, Kuwait, Lao People's Democratic Republic, Latvia, Lebanon, Lithuania, Luxembourg, Mexico, Moldova, Montenegro, Morocco, Netherlands, North Macedonia, New Zealand, Norway, Pakistan, Panama, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Romania, Russian Federation, Saudi Arabia, Senegal, Serbia, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, State of Palestine, Sweden, Switzerland, Turkey, Ukraine, United Arab Emirates, United Kingdom of Great Britain and Northern Ireland, United States of America, Uruguay, and Venezuela), two signatory states (Egypt and Sudan), and seven non-signatories (Azerbaijan, Ghana, Mozambique, Myanmar, Oman, Somalia, and Thailand).

² Canada, Algeria, Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Chile, China, Colombia, Costa Rica, Cuba, Ecuador, France, Germany, Greece, India, Iraq, Ireland, Israel, Italy, Japan, Kazakhstan, Latvia, Mexico, Montenegro, Netherlands, Pakistan, Panama, Peru, Philippines, Republic of Korea, Russia, South Africa, Spain, Sri Lanka, Sweden, Turkey, United Kingdom. In addition, the European Union and the Non-Aligned Movement (delivered by Venezuela) also provided statements that discussed killer robots.

consideration and development of aspects of the normative and operational framework on emerging technologies in the area of lethal autonomous weapons systems.”

The annual meeting approved Ambassador Jānis Kārklīņš of Latvia to chair the GGE in 2020 and scheduled two CCW meetings on 22-26 June and 10-14 August. Permanent Representative of the Kingdom of the Netherlands to the Conference on Disarmament Ambassador Robert Jan Gabriëlse will serve as president of the CCW’s next Meeting of High Contracting Parties on 11-13 November 2020.

Campaign Activities

During UNGA in October 2019 the Campaign met with representatives from dozens of countries with outreach facilitated by the Campaign’s government relations consultant Cindy Ebbs. The Campaign’s Silicon Valley Lead Marta Kosmyna delivered a UNGA [statement](#) on 18 October urging states to launch negotiations on a ban treaty. The Campaign hosted an all-female [side event](#) on 21 October featuring [opening remarks](#) by UN disarmament chief Izumi Nakamitsu and Nobel laureate Jody Williams, as well as presentations by tech worker Liz O’Sullivan of ICRAC and youth campaigner Mariana Sanz Posse. The Campaign brought its friendly robot mascot “David Wreckham” to New York for a UN press conference, photo shoot in Times Square, and visits to various tech companies.

In the lead-up to the CCW’s annual meeting, the Campaign coordinator met with Japan’s foreign minister Tarō Kōno on 6 September 2019.

The Campaign to Stop Killer Robots delegation to the November 2019 CCW meeting consisted of more than two dozen representatives from thirteen organizations (see Annex II). During the CCW meeting, campaign representatives met with delegates from dozens of countries and hosted a [side event](#) on 13 November to introduce its new discussion paper entitled “Key Elements of a Treaty on Fully Autonomous Weapons.”

[Human Rights Watch](#) and other members of the [Campaign to Stop Killer Robots](#) published press releases highlighting the findings of a recent YouGov public opinion poll of European states on killer robots. The Campaign to Stop Killer Robots also published a web story and [press release](#) at the conclusion of the meeting.

For more information, please see:

- CCW Meeting of High Contracting Parties [2019 website](#)
- WILPF Reaching Critical Will [2019 CCW webpage](#)
- Campaign to Stop Killer Robots [website](#) and [Flickr site](#) (photos)
- Campaign to Stop Killer Robots [YouTube page](#)

Annex I: Country Views on Killer Robots

25 October 2019

The Campaign to Stop Killer Robots monitors the positions of countries on the call to ban fully autonomous weapons.

Who wants to ban killer robots?

Thirty countries are calling for a prohibition on fully autonomous weapons:

Alphabetical order

1. Algeria
2. Argentina
3. Austria
4. Bolivia
5. Brazil
6. Chile
7. China*
8. Colombia
9. Costa Rica
10. Cuba
11. Djibouti
12. Ecuador
13. Egypt
14. El Salvador
15. Ghana
16. Guatemala
17. Holy See
18. Jordan
19. Iraq
20. Mexico
21. Morocco
22. Namibia
23. Nicaragua
24. Pakistan
25. Panama
26. Peru
27. State of Palestine
28. Uganda
29. Venezuela
30. Zimbabwe

Chronological order

1. Pakistan on [30 May 2013](#)

2. Ecuador on [13 May 2014](#)
3. Egypt on [13 May 2014](#)
4. Holy See on [13 May 2014](#)
5. Cuba on [16 May 2014](#)
6. Ghana on [16 April 2015](#)
7. Bolivia on 17 April 2015
8. State of Palestine on 13 November 2015
9. Zimbabwe on [12 November 2015](#)
10. Algeria on [11 April 2016](#)
11. Costa Rica on [11 April 2016](#)
12. Mexico on [13 April 2016](#)
13. Chile on [14 April 2016](#)
14. Nicaragua on 14 April 2016
15. Panama on 12 December 2016
16. Peru on 12 December 2016
17. Argentina on 12 December 2016
18. Venezuela on 13 December 2016
19. Guatemala on 13 December 2016
20. Brazil on 13 November 2017
21. Iraq on 13 November 2017
22. Uganda on 17 November 2017
23. Austria on 9 April 2018
24. China* on 13 April 2018
25. Djibouti on 13 April 2018
26. Colombia on 13 April 2018
27. El Salvador on 22 November 2018
28. Morocco on 22 November 2018
29. Jordan on 21 August 2019
30. Namibia on 24 October 2019

* China [states that its call](#) is to ban the use of fully autonomous weapons, but not their development or production.

On 9 April 2018, [a group of African states](#) recommended concluding a legally binding instrument “at the earliest” and found that “fully autonomous weapons systems or LAWS that are not under human control should be banned.”

A March 2018 [working paper by the Non-Aligned Movement](#) calls for a “legally binding international instrument stipulating prohibitions and regulations on lethal autonomous weapons systems.” The campaign invites national statements affirming support for these objectives.

Who is opposed to creating new international law on killer robots?

Approximately a dozen states indicate they do not support negotiating new international law on fully autonomous weapons:

Australia
France

Israel
Republic of Korea
Russia
Turkey
United States
United Kingdom

Who has spoken on the topic of killer robots?

A total of 93 countries have publicly elaborated their views on lethal autonomous weapons systems in a multilateral forum since 2013: 44 states in 2013, eight in 2014, fifteen in 2015, fourteen in 2016, and three in 2017, six in 2018, and four to date in 2019.

Most states made their statements at meetings of the Convention on Conventional Weapons in Geneva and annual sessions of the United Nations General Assembly in New York. Almost two-dozen states spoke during the first debate on the topic at the Human Rights Council in Geneva in May 2013.

1. Algeria on 30 May 2013
2. Argentina on 30 May 2013
3. Australia on 14 November 2013
4. Austria on 30 May 2013
5. Bangladesh on 21 October 2016
6. Belarus on 14 November 2013
7. Belgium on 11 November 2013
8. Bolivia on 17 April 2015
9. Botswana on 27 October 2015
10. Brazil on 30 May 2013
11. Bulgaria on 23 October 2014
12. Burkina Faso on 23 October 2017
13. Cambodia on 13 November 2017
14. Cameroon on 12 December 2016
15. Canada on 11 November 2013
16. Chile on 13 April 2015
17. China on 30 May 2013
18. Colombia on 17 April 2015
19. Costa Rica on 29 October 2013
20. Croatia on 15 November 2013
21. Cuba on 30 May 2013
22. Czech Republic on 13 May 2014
23. Denmark on 13 April 2015
24. Djibouti on 13 April 2018
25. Ecuador on 29 October 2013
26. Egypt on 30 May 2013
27. El Salvador on 29 October 2018
28. Estonia on 31 August 2016
29. Finland on 22 October 2014
30. France on 30 May 2013
31. Germany on 30 May 2013
32. Ghana on 14 November 2013

33. Greece on 29 October 2013
34. Guatemala on 16 May 2014
35. Holy See on 14 November 2013
36. Hungary on 7 October 2016
37. India on 30 October 2013
38. Indonesia on 30 May 2013
39. Iran on 30 May 2013
40. Iraq on 13 November 2015
41. Ireland on 29 October 2013
42. Israel on 15 November 2013
43. Italy on 14 November 2013
44. Japan on 29 October 2013
45. Jordan on 31 August 2016
46. Kazakhstan on 13 November 2015
47. Kuwait on 26 October 2015
48. Latvia on 21 October 2016
49. Lebanon on 26 October 2015
50. Libya on 14 October 2019
51. Liechtenstein on 15 October 2018
52. Lithuania on 14 November 2013
53. Madagascar on 14 November 2013
54. Mali on 13 May 2014
55. Mexico on 30 May 2013
56. Moldova, Rep. on 12 December 2016
57. Montenegro on 12 December 2016
58. Morocco on 30 May 2013
59. Myanmar on 10 October 2017
60. Namibia on 24 October 2019
61. Nepal on 11 October 2018
62. Netherlands on 29 October 2013
63. New Zealand on 30 October 2013
64. Nicaragua on 13 November 2015
65. Norway on 13 May 2014
66. North Macedonia on 14 November 2019
67. Pakistan on 30 May 2013
68. Palestine on 13 November 2014
69. Panama on 12 December 2016
70. Peru on 12 December 2016
71. Philippines on 14 April 2016
72. Poland on 13 April 2015
73. Portugal on 14 October 2014
74. Romania on 26 October 2015
75. Russia on 30 May 2013
76. San Marino on 16 October 2019
77. Sierra Leone on 30 May 2013
78. Slovakia on 12 December 2016
79. Slovenia on 12 December 2016
80. South Africa on 30 October 2013
81. South Korea on 14 November 2013
82. Spain on 11 November 2013
83. Sri Lanka on 13 April 2015
84. Sweden on 30 May 2013
85. Switzerland on 30 May 2013

86. Thailand on 29 October 2018
87. Tunisia on 17 October 2018
88. Turkey on 14 November 2013
89. Ukraine on 14 November 2013
90. United Kingdom on 30 May 2013
91. United States on 30 May 2013
92. Venezuela on 13 December 2016
93. Zambia on 17 April 2015
94. Zimbabwe on 12 November 2015

Annex II: Campaign Delegation List

Campaign Delegation

2019 Meeting of High Contracting Parties to the Convention on Conventional Weapons (CCW)
United Nations, Geneva
13-15 November 2019

Campaign to Stop Killer Robots, @bankillerrobots

Head of Delegation: Ms. Mary Wareham, @marywareham

Ms. Isabelle Jones, @issjones

Ms. Clare Conboy-Stephenson, @ClareConboy

Ms. Farah Bogani, @_farahbogani

Ms. Marta Kosmyna, @martakosmyna

Ms. Alena Popova, @alyonapopova

Article 36, @article36

Mr. Richard Moyes, @rjmoyes

Ms. Elizabeth Minor, @elizabethminor3

Center for International Security and Policy (Kazakhstan), @cisp_astana

Mr. Alimzhan Akhmetov, @alimzhan_at

Facing Finance, @FacingFinance

Mr. Thomas Küchenmeister

Ms. Johanna Trittenbach, @Trittenbach

Human Rights Watch, @hrw

Mr. Steve Goose

Ms. Bonnie Docherty

Mr. Gen Hidari, @GenHidari

Ms. Alev Erhan

Ms. Shaiba Rather

International Committee for Robot Arms Control, @icracnet

Dr. Thompson Chengeta, @DrThompsonLaw

Ms. Laura Nolan, @lauralifts

Mr. Noel Sharkey, @NoelSharkey

Mines Action Canada, @MinesActionCan

Mr. Paul Hannon, @PCHannon

Ms. Erin Hunt, @erinlynnhunt

PAX, @PAXforpeace

Mr. Frank Slijper, @FrankSlijper

Protection

Mr. Ayman Sorour, @aymansorour

Pugwash

Ms. Johanna Friman

SEHLAC, @SehlaOrg

Mr. Camilo Serna

Sustainable Peace and Development Organisation (SPADO), @SPADOorg

Mr. Raza Shah Khan

Women's International League for Peace and Freedom, @WILPF @RCW_

Ms. Katrin Geyer

Ms. Sylvie Ndongmo

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Annex III: Side Event Flyer



Convention on Conventional Weapons annual meeting

SIDE EVENT BRIEFING

How to Ban Killer Robots, and Why It's Time

Conference Room XXI, Palais des Nations
United Nations Geneva

Wednesday, 13 November 2019
13:00-14:30

Sandwiches & refreshments will be provided.

Speakers

- Ms. Bonnie Docherty, **Human Rights Watch**
- Mr. Frank Slijper, **PAX**
- Ms. Laura Nolan, **ICRAC**
- Mr. Steve Goose, **Human Rights Watch**

Moderator

- Ms. Marta Kosmyna, **Campaign to Stop Killer Robots**

The **Campaign to Stop Killer Robots** is a coalition of 130 non-governmental organizations in 60 countries working to preemptively ban weapons systems that would select and engage without meaningful human control. This briefing will look at ethical, political, and other drivers towards launching negotiations on a new treaty and unpack possible elements for such a treaty.

For more information see www.stopkillerrobots.org or contact: Farah Bogani, Tel. +1 (613) 298-4744, (mobile), farah@stopkillerrobots.org.

Annex IV: CCW and Campaign Media Coverage

The Campaign to Stop Killer Robots identified coverage of the CCW in English, Dutch, Finnish, French, German, and Russian. English-language highlights include a [20-minute CNN feature](#) on the CCW talks and an [article in the Bulletin of the Atomic Scientists](#) calling for the US to support a legally binding instrument.

Articles are arranged by language, and then by date of publication.

English:

Video: “Crunch time for UN talks on killer robots as business demands clarity,” *CNN*, 22 November 2019. <https://www.cnnmoney.ch/shows/international-geneva/videos/crunch-time-un-talks-killer-robots-business-demands-clarity>

Podcast: “Inside Geneva: How to cope with killer robots,” *SwissInfo*, 21 November 2019. https://www.swissinfo.ch/eng/multimedia/podcast_inside-geneva--how-to-cope-with-killer-robots/45381690#.XdZhs0_bpQ8.twitter

“The United States should drop its opposition to a killer robot treaty,” *Bulletin of the Atomic Scientists*, 7 November 2019. https://thebulletin.org/2019/11/the-united-states-should-drop-its-opposition-to-a-killer-robot-treaty/?utm_source=Twitter&utm_medium=SocialMedia&utm_campaign=TwitterPost112019&utm_content=NuclearRisk_KillerRobotTreaty_11072019

Landmines, cluster munitions, incendiary weapons, blinding lasers, exploding bullets, and much more: The list of weapons banned or regulated by international humanitarian law has grown steadily over the past 150 years. If an international campaign of civil society organizations—supported by about two dozen countries and growing—is successful, there could soon be another to add: autonomous weapons.

Given the unprecedented risks autonomous weapons pose, and the strength of the movement against them, a new treaty regulating such weapons is both desirable and viable. Whether that treaty is effective, however, will depend primarily on whether the United States decides to engage in negotiating it and convinces other militarily important countries to do the same. Not yet deployed. Autonomous weapons, or “killer robots,” as their opponents and the media often call them, are weapons that select and attack targets without direct human control. Think of a drone scanning the battlefield and using artificial intelligence to identify and fire upon a suspected enemy combatant, without waiting for a human operator to approve the strike. The exact definition of a lethal autonomous weapon is hotly contested. While critics also express concern about non-lethal, anti-materiel, or semi-autonomous weapons, for now international talks have focused only on fully autonomous, lethal anti-personnel weapons. Under this broad definition, no military has deployed such weapons yet, but the technology to do so already exists and is developing rapidly.

To address the humanitarian risks of autonomous weapons, about 100 countries have been discussing the possibility of negotiating a new treaty within the Convention on Certain Conventional Weapons (CCW), a little-appreciated, United Nations-affiliated forum for regulating inhumane weapons. Since 2014, the slow-moving CCW has agreed to renew talks on

the issue without being able to reach the consensus the convention requires to actually start negotiating a treaty.

Too soon to regulate? One of the driving forces behind these discussions is an international movement of groups and activists opposed to the unrestricted use of autonomous weapons. Chief among these are the ubiquitous International Committee of the Red Cross and the more militant Campaign to Stop Killer Robots, a coalition of nongovernmental organizations, including Human Rights Watch, that have been active in earlier campaigns to ban landmines and cluster munitions. So far, the campaign has managed to convince about two dozen countries—including Austria, Brazil, and Mexico—to support a preemptive ban on the development and deployment of lethal autonomous weapons. Several more countries, like Germany and France, support a political declaration, but not a legally binding treaty.

The Campaign to Stop Killer Robots and other critics charge that autonomous weapons are immoral and dangerous because they lack the human traits (like mercy) needed for moral decision making, as well as the ability to distinguish between civilians and combatants and to judge the proportionate use of force, two key principles of international humanitarian law. The critics argue convincingly that if the development of autonomous weapons is left unregulated it could lead to a destabilizing arms race. This threat would be made worse by the difficulty in determining who is responsible for the actions of an autonomous weapon, meaning a small incident could spark an international crisis. As with drones, autonomous weapons could make it easier for countries to start unnecessary wars by keeping soldiers off the battlefield, offering the illusion of “risk-free” military intervention but providing no protections for civilians.

The United States, Russia, Israel, and a few other countries oppose either a new treaty or a political declaration. These countries are investing heavily in robots and artificial intelligence. They argue it is too soon to know how autonomous weapons might be used in the future and therefore too soon to know how best to regulate them, if at all. The United States has stated that autonomous weapons could even improve compliance with international law by being better than humans at identifying civilians and judging how to use force proportionately.

Prospects for a standalone treaty. Unhappy with the lack of progress in the CCW, the Campaign to Stop Killer Robots is increasingly urging countries to consider bypassing the convention entirely to negotiate a separate treaty, stating, “If the CCW cannot produce a credible outcome [at its annual meeting on November 15], alternative pathways must be pursued to avoid a future of autonomous warfare and violence.” Unfortunately, such a decision, while understandable and feasible, would be unlikely to produce a truly effective treaty.

One might ask what chance nongovernmental organizations like Human Rights Watch have for achieving a standalone treaty against the opposition of some of the world’s most powerful militaries. Plenty, actually.

By the 1990s, the widespread and indiscriminate use of landmines had become a humanitarian disaster, and the members of the CCW tried to solve the crisis by strengthening an existing CCW treaty regulating this weapon. Frustrated by the perceived weakness of the CCW agreement, the International Campaign to Ban Landmines pushed for a new treaty, under the auspices of the Canadian government, that would ban all landmines without requiring the burdensome consensus decision-making of the CCW. The resulting Mine Ban Treaty mostly ended the large-scale use of landmines outside of a few conflict zones and earned the campaign a Nobel Peace Prize.

In 2008, a similar coalition of nongovernmental organizations repeated this feat, successfully pushing for a Convention on Cluster Munitions outlawing this once-ubiquitous weapon, after years of talks in the CCW had produced only modest results. Even though the United States,

Russia, and other major military powers have not joined either treaty, the treaties have created a powerful stigma against landmines and cluster munitions.

Given this history of success, it is tempting to conclude that a strong, standalone treaty is the best way to deal with the threat posed by autonomous weapons, despite the fact that countries like the United States and Russia would almost certainly refuse to join. Autonomous weapons, however, are not landmines or cluster munitions. Landmines and cluster munitions were used around the world for decades in conflicts large and small, in many cases causing great civilian harm.

Treaties banning these weapons have value even when the United States, Russia, China, and other major military powers do not participate. In contrast, autonomous weapons are a developing technology likely to be used by only the most advanced militaries for some time. A treaty that excludes almost all the countries with the interest and ability to deploy autonomous weapons would have comparatively little value either as arms control or as a humanitarian norm builder.

At a time when even the taboos against chemical and nuclear weapons appear to be waning, it is hard to imagine that Russia, for example, would consider its autonomous weapons program constrained by the perceived stigma created by a treaty it had no hand in making. A more modest treaty, negotiated in the CCW with the agreement of the world's major military powers, offers the best chance of providing meaningful restrictions on autonomous weapons in the foreseeable future.

A US policy solution. What could the United States do to achieve such a treaty? The CCW treaty on blinding laser weapons may offer a guide. While blinding lasers and autonomous weapons differ in terms of their military utility and humanitarian threat, both weapons became the subject of campaigns to ban them before they were ever deployed. Opponents of autonomous weapons point to this analogy as proof that a weapon can be banned preemptively, but it also shows how the United States can use a national policy to help reach a difficult international compromise.

The United States had long resisted any attempts to regulate the use of lasers to cause blindness, worried that any such regulation could interfere with unrelated military uses of lasers. Then in 1995, as CCW negotiations were underway, the Defense Department adopted a limited national ban on blinding laser weapons. By using this new policy as a basis for negotiations, the United States was able to broker an agreement in the CCW that satisfied countries that wanted a broader ban, countries that opposed any ban, and the requirements of the US military. In doing so, the United States was able to make sure the treaty did not restrict other, less controversial uses of lasers—a concern that is highly relevant to autonomous weapons as well.

In fact, the United States already has a national policy that could serve as the basis for a new CCW treaty. In 2012, the Department of Defense issued a directive requiring “appropriate levels of human judgment over the use of force,” thereby becoming the first country to publicly adopt a national policy on autonomous weapons. The Pentagon even tasked a committee of ethicists, scientists, and other experts with creating an ethical framework for artificial intelligence—their just-released report endorses strong principles of responsibility, traceability, and more .

Clearly, the US government shares some of the activists' concerns over the ethics of autonomous weapons and is comfortable with some limitations on their use. If the United States can strengthen its existing national restriction on autonomous weapons, it would be well placed to negotiate a new treaty in the CCW. While there is no guarantee that Russia and other countries would agree to start negotiations, US support would increase the pressure on them considerably. “Killer robots” will soon no longer be confined to the realm of science fiction. To address the new risks autonomous weapons will bring, the world needs a new and effective treaty regulating

them. The best chance to achieve such a treaty is for the United States to drop its opposition and take an active role in negotiating a new agreement in the existing forum for regulating inhumane weapons.

“Killer robots? It’s only a matter of time,” *CityAM*, 12 November 2019.

<https://www.cityam.com/killer-robots-its-only-a-matter-of-time/>

Artificial intelligence (AI) is everywhere in the news at the moment, but there is little discussion of an area where huge sums are being spent by all the major powers: automated intelligent weapons — or killer robots, as they are usually called.

Some strategists now envision military operations conducted entirely by automata. Such fully automated forces need have no relation to the human form — they could be huge flocks of small boats or submersibles, drones in the air, or fleets of automated armoured cars, all equipped with powerful weapons.

Present day developments have eerie connotations with Stanley Kubrick’s 1964 movie *Dr Strangelove*, which introduced (as satire) both a “Doomsday machine” that would respond automatically without human intervention to an atomic attack, and the character of the Doctor himself, played by Peter Sellers, a psychopathic character determined to kill on a huge scale. US experts have conceded recently that the Doomsday Machine was nearer to the truth than was ever admitted at the time. It is even closer now. It’s a terrifying prospect, but it may in fact still be better to have automated controls of such weapons, because of the failings of human psychology.

There really are quasi-psychopaths like *Dr Strangelove* involved in military planning and in battle. For example, Frederick Lindemann, Churchill’s chief scientist in the Second World War, not only planned the mass bombing of Germany but wanted all German males castrated (advice that Churchill wisely ignored). And among the troops themselves, while most soldiers do not want to kill and go to great lengths to avoid doing so, 10 per cent of them do almost all the killing.

Clearly, careful vetting would be necessary to keep anyone with unsavoury psychological tendencies away from weapons development, deployment, and associated computer control of them. But assuming that this is possible, automated weapons could address both of these challenges: removing human decision-making from high-stakes situations, and leaving the actual killing to a machine (which will be better at it), rather than a reluctant human.

The additional — obvious — advantage of automated weapons would be the lack of human casualties on “our” side.

That’s the case for. Against, we have the ethical quandaries.

Ethical worries about particular weapons long predate AI — it is said that the Church forbade crossbows in the Middle Ages as “abhorrent to Christians”. The more powerful the technology, the more powerful the case against using it.

The main argument against AI-based weapons, urged by activists such as my colleague Professor Noel Sharkey as he tries to get the UN to ban such weapons, is that AI technology is not sufficiently advanced to separate combatants from non-combatants as targets, and so war crimes will inevitably be committed if it is deployed.

But this was always the case with weapons guided by humans, as the bombings of Dresden, London and Hiroshima show on a vast scale. And, indeed, the concern about AI’s lack of discretion may be temporary. If automated cars can successfully separate cyclists from

pedestrians — and they can — we may hope that battlefield discriminations will soon be possible too, and perhaps be better than those made by human soldiers.

So if we are to trust automated cars on our roads to make life and death decisions about humans, as we are about to, why would we not eventually trust such decisions to a flock of armoured cars using similar technology? Might such cheap weapons not be a better investment than a £3bn aircraft carrier with no planes on it and that we cannot defend from cheap hyper-missiles?

One final warning, though, which is not about ethics but practicalities. Cheap assassination drones already exist on the battlefield, but as automated weapon technology develops, we may find them being used elsewhere. Are we really prepared for small drones with guns that can look into the windows of Downing Street, or Buckingham Palace?

The history of military technology shows that it cannot be kept out of private hands, but we have to hope that killer robots are an exception.

“Pakistan-chaired meeting of Convention on Certain Conventional Weapons make progress on key issues,” *Associated Press of Pakistan*, 17 November 2019.

<https://www.app.com.pk/ccw-convention-makes-progress-on-key-issues-of-deadly-autonomous-weapons/>

GENEVA, Nov 17 (APP):A meeting of the Convention on Certain Conventional Weapons (CCW), held under Pakistan’s presidency, has agreed to renew efforts aimed at forging an international consensus on regulating the use of deadly autonomous weapons, which are capable of making their own combat decisions without human intervention, as the state parties to the treaty remains divided on the question.

The annual meeting of CCW, which concluded on Friday evening, also agreed on a package of financial measures to help with the long-term implementation of the treaty as well as on the dates of the next Review Conference in 2021 at which major decisions in follow-up to this year’s meeting are expected.

Diplomats complimented Pakistan’s new Ambassador to the U.N. and other international organizations at Geneva, Khalil Hashmi, who chaired the meeting, for his “savvy handling” of the three days of intense discussions to accommodate divergent positions.

The talks in Geneva took place under the 1983 convention, which is intended to restrict the use of weapons that are considered to cause unnecessary or unjustifiable suffering to combatants or to affect civilians indiscriminately. It already covers landmines, booby traps, incendiary weapons, blinding laser weapons and clearance of explosive remnants of war.

Delegates have had discussions on potential restrictions under international law to so-called lethal autonomous weapons systems, known as “killer robots”, which use artificial intelligence to help decide when and who to kill.

Most states taking part – and particularly those from the global south, including Pakistan – support either a total ban or strict legal regulation governing their development and deployment, a position backed by the UN Secretary General, Antonio Guterres, who has described machines empowered to kill as morally repugnant.

But a group of states with advance technological base, including the UK, Australia, Israel, Russia and the US – oppose any legal regulation. Even India doesn’t support a ban on autonomous weapons.

As discussions operate on a consensus basis, their objections are preventing any progress on regulation.

Pakistan has long been viewed as an honest-broker at international multilateral forums; building bridges between parties with diverse positions and helping reach a common understanding. This year as well, this longstanding tradition of Pakistan's diplomacy was at full view as Pakistani chairperson played an instrumental role in facilitating agreement on several key issues, including a new mandate for future work on autonomous weapons.

As Chairman, Ambassador Hashmi carefully balanced the views of participating states as well as those of the strong contingent of civil society and NGOs who were also present as observers.

“At a time when polarization is increasing and the challenges facing the international disarmament regime are multiplying,” the Pakistani envoy said, “the continued success of this instrument is a very positive sign.

“Annual meeting of Convention of Certain Conventional Weapons ends in Geneva,” *Ary News*, 17 November 2019. <https://arynews.tv/en/annual-meeting-convention-of-certain-conventional-weapons-geneva/>

GENEVA: An annual meeting of the Convention of Certain Conventional Weapons (CCW) has ended in Geneva.

The meeting of the Convention on Certain Conventional Weapons (CCW) was held in Geneva from Nov 13-15 under the chairmanship of Ambassador Khalil Hashmi, Permanent Representative of Pakistan to the United Nations in Geneva.

Under ambassador Hashmi's stewardship, Pakistan played an important role at the forum in facilitating consensus on several key issues, including a new mandate for future work on autonomous weapons and financial measures to put the Convention on a sustainable footing. The successful conclusion of the meeting has been viewed as a welcome development on the multilateral arms control landscape.

It is noteworthy that Hashmi has been elected as the chairperson of the annual meeting of state parties to the CCW, according to Foreign Office spokesperson Dr Muhammad Faisal.

He said, “Pakistan's unanimous election reflects recognition by the international community of the country's longstanding contribution to promote international security through arms control instruments.”

Dr. Faisal said that it was also an endorsement of Pakistan's strong credentials in multilateral diplomacy.

“‘Killer robots could take the place of soldiers’ in ‘a war triggered by a massive cyberattack,’ UN Secretary-General warns, as he calls for ban on ‘machines that have the power to kill,’” *Daily Mail*, 21 November 2019. <https://www.dailymail.co.uk/news/article-7710241/Killer-robots-replace-soldiers-Secretary-General-warns-calls-ban-machines.html>

The secretary-general of the UN has warned 'killer robots' could replace human soldiers and called for an international ban on such war machines.

Antonio Guterres said a cyberarms race was already underway and suggested that a huge cyberattack could trigger a global conflict.

At a speech to the United Nations Paris Peace Forum earlier this month, Guterres said that these killer machines could take the place of traditional armies.

He went on to call for a ban on this 'morally despicable' autonomous weapons and for tighter regulation on cybercrime. The warning comes as major military powers are racing to develop weapons that select and fire on targets without meaningful human control.

These largely automatic systems have driven fears the weapons could become uncontrollable and wipe out huge numbers of people.

Guterres has now called for an new international treaty to ban such killer robots, saying that 'machines that have the power and discretion to kill without human intervention are politically unacceptable and morally despicable'.

He said: 'Cybercrime thrives in a poorly regulated or unregulated environment.

'Disinformation campaigns, orchestrated very cheaply, can reach the furthest side of the world.

Cyberattacks can paralyse entire countries or companies.

'And a new arms race - the cyberarms race - is already under way. The danger is that the next war will be triggered by a massive cyberattack.

'Tomorrow, killer robots could take the place of soldiers. We must ban all autonomous weapons.

'Machines that have the power and discretion to kill without human intervention are politically unacceptable and morally despicable.'

In September China said it would join 28 states, saying it would support prohibiting fully autonomous weapons, but then clarified Beijing was only against their use on the battlefield and not their production and development.

Both the US and Russia have blocked any moves to form legally binding agreements on autonomous weaponry and its MQ-9 Reaper drone is set to incorporate AI for making decisions in the battlefield.

The US military's new initiative, Project Quarterback, is using AI to make split-second decisions on how to carry out attacks in the field.

Other countries investing heavily in ever increasingly autonomous weapon systems include South Korea and the United Kingdom, with suggestions Turkey and Iran may also be investigating the technology.

“No progress in UN talks on regulating lethal autonomous weapons,” *Euractiv*, 22

November 2019. <https://www.euractiv.com/section/defence-and-security/news/no-progress-in-un-talks-on-regulating-lethal-autonomous-weapons/>

Attempts to regulate lethal autonomous weapon systems (LAWs), often dubbed as “killer robots”, have once again ended in a stalemate as UN talks in November produced few results.

Europe, meanwhile, is struggling with its role in the regulation efforts.

So far, discussions sought to address the ramifications of autonomous weapons systems on human rights as well as the ethical and security issues that arise as part of the assimilation of such systems into modern warfare.

Autonomous weapons are technologies such as drones, tanks and other machinery controlled by a computer run on artificial intelligence systems and programmed to select and attack targets, without human control.

At the UN level, at least 28 governments are demanding a ban on artificial intelligence weapons, while both the US and Russia have blocked any moves to form legally binding agreements on autonomous weaponry.

Other major military powers, including China, Israel, South Korea and the UK, are also racing to develop autonomous weapons systems.

In September, China announced it would join the ban group, saying it would support prohibiting fully autonomous weapons, but clarified Beijing was only against their use on the battlefield and not their production and development.

No progress at UN level

At the November meeting of member countries of the Convention on Conventional Weapons (CCW) at the United Nations in Geneva, diplomats could not agree on a binding common approach towards the issues and decided to continue talks regulating lethal autonomous weapons systems or fully autonomous weapons for the next two years.

UN diplomats expressed disappointment that “the next two years will be spent on non-binding talks instead of concrete legal work”. According to them, it was mainly “Russia watering down the agenda contents and pushing back on all fronts, while developing their robot army until 2025.”

Unsatisfied with the lack of progress in the CCW, the Campaign to Stop Killer Robots, an international NGO, is increasingly urging countries to consider bypassing the convention entirely to negotiate a separate treaty.

“If the CCW cannot produce a credible outcome, alternative pathways must be pursued to avoid a future of autonomous warfare and violence,” the Campaign said.

In a speech to the Paris Peace Forum earlier this month, UN Secretary-General Antonio Guterres once again called for a new international treaty to ban LAWs, saying that “machines that have the power and discretion to kill without human intervention are politically unacceptable and morally despicable”.

“And a new arms race – the cyberarms race – is already underway. The danger is that the next war will be triggered by a massive cyberattack,” Guterres recently warned.

Activists against the so-called “killer robots” have pleaded with world leaders to draft regulations for any arms product heading into battle as they fear they could become dangerous in a cyber-attack or as a result of a mistake in their programming.

EU: Ban or regulate?

Almost three in every four Europeans want their governments to work for an international treaty prohibiting lethal autonomous weapons systems, according to a recent poll from across 10 European countries conducted by the International Campaign to Abolish Nuclear Weapons (ICAN).

“Banning killer robots is both politically savvy and morally necessary,” said Mary Wareham, campaign coordinator and the arms division advocacy director at Human Rights Watch.

“European states should take the lead and open ban treaty negotiations if they are serious about protecting the world from this horrific development,” she added.

The EU took a stance against “killer robots” last year when the European Parliament passed a resolution calling for an international ban on the development, production and use of weapons that kill without human involvement.

Experts, however, point out that technological development might have progressed already too far to implement a full ban and argue for regulatory measures instead.

“Autonomy is neither new nor problematic per se, because defensive weapons systems such as missile defence 30 years ago already had such features,” said Frank Sauer, senior researcher at the Bundeswehr University Munich.

According to him, the novelty is using the “select and engage” option without human intervention in all kinds of weapons systems, not only defensive ones.

“If we delegate the decision of killing a combatant on the battlefield, we are infringing on the human dignity with leaving the act to an anonymous machine that does not understand what human life is,” Sauer said.

EU lawmakers are currently looking for ways on how to impose certain limits and standards with work towards a common definition steering towards the creation of norms, even in the absence of binding legal instruments.

A majority argues that there should be a similar kind of agreement established for LAWs as has been done in the past with the use of chemical weapons, branding users as pariahs.

EU's military projects

Asked how it will be ensured on EU level that LAWs don't find their way into the EU's military initiatives or research conducted under the European Defence Fund (EDF), Green MEP Hannah Neumann recently stressed that the main problem with EU projects is transparency.

"I do not understand why the European Parliament has given up the power of oversight," she said, adding that the EDF statutes include an ethical committee controlling funding proposals.

Nevertheless, Neumann stressed there is no full framework yet in place and a problem is also in attempts to use the civilian framework for research and development for defence research.

"At the moment, LAWs are banned, but there is technology in development that just needs adding on LAWs-components to make the systems autonomous," the Green MEP said, pointing to the fact that bilateral projects, such as the future European next-generation fighter jet (FCAS), are more difficult to monitor.

Unlike other fighter jets in use, the FCAS will also include a range of associated weapons, such as swarms of unmanned aerial carriers (drones) interconnected by a cloud, surveillance and command aircraft, cruise missiles, satellites and ground stations.

Poll Coverage:

"Poll: most Swiss support ban on killer robots," *SwissInfo*, 13 November 2019.

https://www.swissinfo.ch/eng/controversial-weapons_poll--most-swiss-support-ban-on-killer-robots-/45366424

Seven out of ten Swiss people believe their country should support a ban on lethal autonomous weapons systems (LAWS), so-called killer robots, a new poll has revealed.

The survey conducted by YouGov, commissioned by the Campaign to Stop Killer Robots^{external link}, found widespread support in ten European countries, including Switzerland, for a ban on killer robots.

The poll showed that 72% of respondents in Switzerland favoured a ban. The largest support was found in Ireland (81%) and the Netherlands (80%).

In all, 13% of respondents in the ten nations believe their country should not support such a ban, and 14% said they don't know or preferred not to answer. Support for a ban was equally strong among both women (74%) and men (71%). A previous poll^{external link} conducted in 2018 showed that 61% of the general public in 26 countries were against the use of killer robots.

Fully autonomous weapons do not yet exist, but campaigners say they could be deployed in battle in just a few years given rapid advances and spending on artificial intelligence and other technologies.

But partly autonomous weapon and military robotics systems – such as AI-powered tanks, planes and ships – have reportedly been deployed or are under development in 12 countries, including Britain, China, France, Israel, Russia and the United States. And the technology is proliferating globally. A new report by Pax for Peace^{external link} said many companies are on a "slippery slope to producing ever more autonomous weapons".

Legal and ethical challenges

LAWS have been the subject of intense international scrutiny. Since 2013, diplomats, disarmament experts and campaigners have met in Geneva within the multilateral Convention on Conventional Weapons (CCW)external link framework to discuss the multiple ethical, legal, operational, security and technical challenges of killer robots. But the CCW has yet to produce any tangible result.

On Wednesday, state parties to the CCW gathered in Geneva for a three-day annual meeting to discuss killer robots, as well as issues such as explosive weapons in populated areas, incendiary weapons, mines other than anti-personnel mines and financial matters. They are expected to agree on the CCW's work programme for the next two years.

Some campaigners complain that the CCW continues to drag its feet on killer robots.

“While the CCW makes minimal progress, the rest of the world is racing ahead to embrace a ban and tech firms are racing ahead for ever greater autonomy. If the CCW doesn't get its act together it'll become irrelevant,” said Steve Goose from Human Rights Watch.

Some 30 countries have called for a pre-emptive global ban treaty on the development, possession and use of such future weapons. Others advocate strict regulation to affirm the principle of “meaningful human control” over critical functions.

But there is strong opposition to a treaty from a handful of countries, including the US, Russia, Israel and South Korea. Supporters argue that LAWS will make war more humane. They will be more accurate in choosing and eliminating targets, not give way to human emotions such as fear or vengeance, and will limit civilian deaths, say those in favour.

Swiss position on killer robots

The Swiss government is sceptical about a preventive ban at this stage, but it backs practical, and if necessary, regulatory measures to prevent any use of LAWS that would violate international law. In 2017, it tabled a working paper entitled a “Compliance-based approach to Autonomous Weapons Systemexternal link” that reaffirms the importance of international law.

In 2017, the Swiss Federal Council (executive body) rejectedexternal link calls for an international ban on LAWS. It said it had “reservations” and that clarification was first needed regarding “desirable”, “acceptable” and “unacceptable” autonomy of weapons systems.

At the last CCW meeting in March 2019external link, Switzerland said it remains convinced “that a political declaration represents the most promising way forward”. It could “enshrine common principles regarding the development and use of autonomous weapon systems”.

Switzerland stated that a “key element that a declaration should cover is the applicability and the centrality of ensuring respect for international humanitarian law in all circumstances”.

A declaration “should highlight that High Contracting Parties remain responsible for wrongful acts and that individual responsibility should be guaranteed”. Switzerland added that “a declaration should also capture that it is in nobody's interests to deploy weapons that are unpredictable, and no weapon should be used without appropriate human control”.

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