21 August 2020

E. Tendayi Achiume
United Nations Special Rapporteur on Racism, Racial Discrimination, Xenophobia and Related Intolerance

RE: Submission from the Campaign to Stop Killer Robots

Dear Ms. Achiume,

We welcome your recent report on racial discrimination in the design and use of emerging digital technologies, which outlines the human rights obligations of States and responsibility of corporations to combat this discrimination.

We are glad to hear that you are preparing another report on racism and emerging technologies, this time for presentation to the United Nations (UN) General Assembly this October. We understand this next report will focus on racism and technological experimentation in the context of military, policing, and other circumstances, such as border enforcement.

On behalf of the Campaign to Stop Killer Robots, I am pleased to provide this submission focusing on the latter (border control) for your consideration in this second report. I want to acknowledge the Campaign members who contributed to this submission:

- Hayley Ramsay-Jones, Director, Geneva Liaison Office - Office for UN Affairs, Soka Gakkai International
- Ray Acheson, Reaching Critical Will Director, Women's International League for Peace and Freedom
- Rasha Abdul-Rahim, Deputy Tech Director, Amnesty International.

Please do not hesitate to contact us if you have any questions.

Sincerely,

Mary Wareham
Human Rights Watch Arms Division
Coordinator, Campaign to Stop Killer Robots
Tel. +1 (646) 203-8292 (Washington DC)
www.stopkillerrobots.org

Submission from the Campaign to Stop Killer Robots
For the United Nations Special Rapporteur on Racism, Racial Discrimination, Xenophobia and
Related Intolerance
21 August 2020

1. The Campaign to Stop Killer Robots, a global coalition of more than 160 non-governmental organizations in 65 countries working to prohibit fully autonomous weapons and retain meaningful human control over the use of force.

2. There is an increasing body of evidence that shows how artificial intelligence (AI) and related emerging technologies are not neutral, and that racism operates at every level of the design process, production, implementation, distribution and regulation.[1] Yet AI and emerging technologies are increasingly used by militaries in weapons systems, used by law enforcement and used in border control.

3. Therefore, a race-sensitive, intersectional approach is needed to consider the disproportionate impacts that fully autonomous weapons would have on marginalized and vulnerable groups particularly refugees, migrants, asylum seekers, stateless persons, non-citizens, and any individuals and groups who are or are perceived to be foreign.

4. Weapons systems that would select and engage targets without meaningful human control are unacceptable and need to be prevented. Utilizing biased AI in automated use of force risks amplifying discriminatory and lethal instances to unprecedented scale and speed. This would lead to further exclusion and marginalization of social groups that have been historically racially and ethnically discriminated against.

5. The Campaign to Stop Killer Robots is therefore, working to prohibit fully autonomous weapons and retain meaningful human control over the use of force. A legally binding instrument could lay down explicit rules to ensure appropriate constraints on autonomy in weapons systems and resolve differing views on human control over the use of force. It would show that states are serious about responding appropriately and with urgency to this existential threat to humanity. We regard a new international treaty to retain meaningful human control over the use of force as an ethical imperative, a legal necessity, and a moral obligation.

6. International deliberations on lethal autonomous weapons systems began in May 2013 at the Human Rights Council and since then, human control, decision-making, and/or judgment has been at the center of discussion. All eight Convention on Conventional Weapons (CCW) meetings on lethal autonomous weapons systems since 2014 have seen strong interest in the

---

[1] Privacy International, https://privacyinternational.org/

importance of retaining human control over weapons systems and the use of force. This is now widely regarded as critical to the acceptability and legality of future weapons systems. The Campaign encourages states to explore in depth how to retain meaningful human control over the use of force.[2]

7. In March 2016, the Human Rights Council received a report on the proper management of assemblies co-authored by Maina Kiai, the Special Rapporteur on the rights to freedom of peaceful assembly and of association, and Christof Heyns, the Special Rapporteur on extrajudicial, summary or arbitrary executions.[3] The report covered law enforcement use of advanced technology, stating "56. A growing range of weapons that are remote controlled are becoming available, particularly in the context of the policing of assemblies. Great caution should be exercised in this regard. Where advanced technology is employed, law enforcement officials must, at all times, remain personally in control of the actual delivery or release of force (see A/69/265, paras. 77-87). We draw your attention to the first recommendation, contained in Paragraph 67(f), which states, "Autonomous weapons systems that require no meaningful human control should be prohibited, and remotely controlled force should only ever be used with the greatest caution."[4]

8. A small number of military powers – most notably China, Israel, Republic of Korea, Russia, United Kingdom, and United States are investing heavily in military applications of artificial intelligence and developing air, land, and sea-based autonomous weapons systems.

9. The precise status of deployment of autonomous weapons systems emplaced on borders is often hard to determine due to a lack of transparency, but this submission highlights some examples reported to date, particularly stationary and mobile systems. The Campaign has raised questions over several weapons systems mentioned, asking if the weapon system will fire autonomously—without meaningful human control—on targets that it has identified, tracked, and selected?

---

[2] The Campaign has identified essential elements for a legally binding instrument in the spirit of contributing to shared concepts and understandings. Such a treaty should be comprised of three types of core obligations: (1) a general obligation to maintain meaningful human control over the use of force, along with (2) prohibitions and (3) positive obligations to implement it. "Control" is preferable to other terms such as judgment and intervention, which imply a weaker role for humans than control, and could be insufficient to address all concerns, while the modifier "meaningful" ensures that control is substantive. Campaign to Stop Killer Robots, "Key Elements of a Treaty to Ban Fully Autonomous Weapons," November 2019. https://www.stopkillerrobots.org/wp-content/uploads/2020/04/Key-Elements-of-a-Treaty-on-Fully-Autonomous-WeaponsvAccessible.pdf; Campaign to Stop Killer Robots, "Frequently Asked Questions," November 2019. https://www.stopkillerrobots.org/wp-content/uploads/2020/04/FAQ-Treaty-ElementsvAccessible.pdf

[3] Kiai, Maina, and Heynes, Christof, "Joint report of the Special Rapporteur on the Rights to Freedom of Peaceful Assembly and of Association and the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions on the proper management of assemblies," A/HRC/31/66, 4 February 2016. https://digitallibrary.un.org/record/831673?ln=en#record-files-collapse-header

[4] See Campaign to Stop Killer Robots review of the report, "UN rapporteurs call for ban," 9 March 2016. https://www.stopkillerrobots.org/2016/03/unreport/

10. There are more than 70 border walls around the world today and that number is rising. Some feature electric and razor wire fencing and some are as tall as 30-50 feet (10–15 meters).[5] Border walls increasingly armed and equipped with or accompanied by cameras, drones, sensors, and radars. Newer towers are now being installed with AI, giving the ability to process images collected by the tower without human input. But this submission provides some examples of sentry weapons systems intended for or emplaced along borders.

11. In the US state of Arizona, Israeli company Elbit Systems is building a network of 55 towers equipped with cameras, heat sensors, motion sensors, radar systems, and a GPS system. This system is not just used to monitor the US-Mexico border; it is also used to persistently surveil the Tohono O'odham Nation's reservation that is roughly one mile from the border.[6] While not armed, it has been described as a powerful example of "border security" tools being used for domestic policing.[7]

12. Some borders are heavily militarized, such as the Demilitarized Zone (DMZ) on the Korean peninsula, where South Korea (Republic of Korea) has deployed stationary autonomous weapons, such as the SGR-1A sentry robot made by Hanwa. The sentry robots use infrared sensors to detect body heat.[8] Currently, a human operator intervenes to take the decision for the onboard machine gun to fire. When asked how the system operates, South Korea has stated that it does not possess lethal autonomous weapons systems and has no intent to develop or acquire them.[9]

13. Turkey is installing the ASELSAN system of stationary towers across its southern border with Syria, which media reported in 2016 will be armed with machine guns and equipped with thermal cameras and alert systems that "will be activated if any element comes within 300 meters of the border line."[10] In 2017, the Campaign requested comment and Turkey responded that "there will not be any autonomous weapon system in the [ASELSAN] project" and "installation of any weapon systems is not projected."

14. An array of autonomous ground vehicles and aircraft are used to patrol borders and are being weaponized. According to a report from the Transnational Institute, "Italian arms firm Leonardo was awarded a €67.1m ($73.7m) contract in 2017 by the European Maritime Safety Agency to

---

[5] "Border militarisation," War Resisters' International, Website. https://www.wri-irg.org/en/pm-themes/border-militarisation

[6] "The U.S. Border Patrol and an Israeli Military Contractor are Putting a Native American Reservation under "Persistent Surveillance,"" *The Intercept*, 25 August 2019. https://theintercept.com/2019/08/25/border-patrol-israel-elbit-surveillance/

[7] Acheson, Ray, "Deconstructing borders," Women's International League for Peace and Freedom, undated. https://www.wilpf.org/deconstructing-borders/

[8] Tharorr, Ishaan, "Should the world kill killer robots before it's too late?" *The Washington Post*, 12 May 2014. https://www.washingtonpost.com/news/worldviews/wp/2014/05/12/should-the-world-kill-killer-robots-before-its-too-late/

[9] Government of the Republic of Korea, Statement to the Convention on Conventional Weapons Group of Governmental Experts meeting on lethal autonomous weapons systems, 25 March 2019. https://twitter.com/BanKillerRobots/status/1110209366614044675

[10] Letter from Mary Wareham to Mevlüt Çavuşoğlu, Minister of Foreign Affairs, 26 September 2019. https://www.stopkillerrobots.org/wp-content/uploads/2019/12/KRC_Turkey_Sept2019_final.pdf

supply drones for EU coastguard agencies."[11] Unmanned aerial systems are used to detect and assist in surveillance along broad stretches of land to identify migrant crossings and guide enforcement agents. A new generation of autonomous aircraft are now being deployed capable of remaining in the air for lengthy periods of time, collecting images and video, using AI to automatically detect the location of 'suspects' and even detecting what items they are carrying.

15. Machines taking human lives on the battlefield, in policing, border control and other circumstances have far reaching consequences. Attempting to determine who a person is and marking them as a potential threat based on sensors and software contributes to dehumanization and undermines human rights and dignity. Autonomous weapons systems deployed on borders carry grave potential to undermine the human rights of refugees, migrants, asylum seekers, stateless people, non-citizens, and individuals or groups who are or who are perceived to be foreign.

16. Through the replication of racial and political hierarchies, fully autonomous weapons would reproduce, reinforce, and compound discrimination and inequality including failure to respect the right to informed consent and refusal, abuse of personal data, as well as subjecting persons to technological experimentation and surveillance.

17. Such weapons risk reinforcing and exacerbating violence and discrimination, because they rely on technologies that reproduce and entrench existing biases. Historical racial and ethnic biases can be perpetuated with technologies such as facial recognition technology. Such software has been shown to draw on unrepresentative training datasets that favor light-skinned and outwardly masculine faces over darker-skinned and outwardly feminine faces.[12] As a result, the cycle of structural and institutional violence against those who are being deprived of power and privilege continues.

18. A growing number of legislators, policymakers, business leaders, AI experts, tech workers international and domestic organizations, and concerned members of the public have endorsed the call to ban fully autonomous weapons since 2013.[13] Since 2018, the United Nations Secretary-General António Guterres has repeatedly urged states to prohibit weapons systems that could, by themselves, target and attack human beings, calling them "morally repugnant and politically unacceptable."[14] Austria, Brazil, and Chile recommended launching negotiations on a legally binding instrument to ensure meaningful human control over the critical functions of weapons systems.[15]

---

[11] Gifford, Charlotte, "The true cost of the EU's border security boom," *World Finance*, 21 January 2020. https://www.worldfinance.com/featured/the-true-cost-of-the-eus-border-security-boom

[12] Buolamwini, Joy, and Gebru, Timnit, "Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification," *Proceedings of Machine Learning Research* 81:1-15, 2018. http://proceedings.mlr.press/v81/buolamwini18a/buolamwini18a.pdf

[13] For a full listing, see the Campaign website: https://www.stopkillerrobots.org/endorsers

[14] Statement by António Guterres, UN Secretary-General, to the Paris Peace Forum, 11 November 2018. https://www.un.org/sg/en/content/sg/statement/2018-11-11/allocution-du-secr%C3%A9taire-g%C3%A9n%C3%A9ral-au-forum-de-paris-sur-la-paix

[15] "Proposal for a Mandate to Negotiate a Legally-binding Instrument that addresses the Legal, Humanitarian and Ethical concerns posed by Emerging Technologies in the Area of Lethal Autonomous Weapons Systems (LAWS)," CCW working paper CCW/GGE.2/2018/WP.7 submitted by Austria, Brazil and Chile, 30 August 2018.

19. Banning fully autonomous weapons means prohibiting weapons systems that lack meaningful human control. Since 2013, 30 countries have called for a ban on such fully autonomous weapons.[16] China has called for a treaty to ban the use of lethal autonomous weapons systems, but not their development or production, which is unsurprising given that it is also among the nations most advanced in pursuing such weapons.[17]

20. Several groups of states have endorsed statements calling for a ban on killer robots. The Non-Aligned Movement (NAM), which is comprised of approximately 125 member states, has called for a "legally binding international instrument stipulating prohibitions and regulations on lethal autonomous weapons systems" several times since 2018.[18] Benin spoke in April and August 2018 on behalf of a group of African states to recommend launching negotiations on a legally binding instrument on fully autonomous weapons "at the earliest" as weapons systems "that are not under human control should be banned."[19]

21. More countries must speak up as everyone has a duty to protect humanity from this dangerous development.[20] Of the current Human Rights Council member states, 17 have not elaborated their views on the concerns raised by removing human control from the use of force of commented on calls for a new ban treaty.[21] Of the 193 UN member states, only 97 have done so.[22]

https://www.unog.ch/80256EDD006B8954/(httpAssets)/3BDD5F681113EECEC12582FE0038B22F/$file/2018_GGE+LAWS_August_Working+paper_Austria_Brazil_Chile.pdf

[16] Algeria, Argentina, Austria, Bolivia, Brazil, Chile, China, Colombia, Costa Rica, Cuba, Djibouti, Ecuador, Egypt, El Salvador, Ghana, Guatemala, Holy See, Iraq, Jordan, Mexico, Morocco, Namibia, Nicaragua, Pakistan, Panama, Peru, State of Palestine, Uganda, Venezuela, and Zimbabwe

[17] China's support is qualified as its representatives say the government supports banning use of fully autonomous weapons, but not their development or production. See Campaign to Stop Killer Robots, "Report on Activities: CCW meeting on lethal autonomous weapons systems, April 9-13, 2018," 28 June 2018. https://www.stopkillerrobots.org/wp-content/uploads/2018/07/KRC_ReportCCWX_Apr2018_UPLOADED.pdf

[18] Government of Venezuela, "General Principles on Lethal Autonomous Weapons Systems," Working Paper submitted on behalf of the Non-Aligned Movement (NAM) and other States Parties to the Convention on Conventional Weapons Group of Governmental Experts on lethal autonomous weapons systems, 28 March 2018. https://www.unog.ch/80256EDD006B8954/(httpAssets)/E9BBB3F7ACBE8790C125825F004AA329/$file/CCW_GGE_1_2018_WP.1.pdf

[19] Government of Benin, Statement on behalf of the African Group to the Convention on Conventional Weapons Group of Governmental Experts on lethal autonomous weapons systems, 9 April 2018. http://reachingcriticalwill.org/images/documents/Disarmament-fora/ccw/2018/gge/statements/9April_African-Group.pdf See also Government of Benin, Statement on behalf of the African Group to the Convention on Conventional Weapons Group of Governmental Experts on lethal autonomous weapons systems, 27 August 2018. https://www.unog.ch/80256EDD006B8954/(httpAssets)/1A00319DEB57E173C12582FD003605CF/$file/2018_GGE+LAWS+2_6b_Benin_Africa+Group.pdf

[20] See Human Rights Watch, *Stopping Killer Robots: Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control*, August 2020. https://www.hrw.org/news/2020/08/10/killer-robots-growing-support-ban

[21] Afghanistan, Angola, Armenia, Bahamas, Bahrain, Democratic Republic of the Congo, Eritrea, Fiji, Marshall Islands, Mauritania, Nigeria, Qatar, Senegal, Somalia, Sudan, Togo, and Uruguay

[22] The 96 UN member states that have not publicly stated their views on autonomous weapons systems are Afghanistan, Albania, Andorra, Angola, Antigua and Barbuda, Armenia, Azerbaijan, Bahamas, Bahrain, Barbados, Belize, Benin, Bhutan, Bosnia and Herzegovina, Brunei Darussalam, Burundi, Cape Verde, Central African Republic, Chad, Comoros, Congo, Cote d'Ivoire, Cyprus, Democratic Republic of the Congo, Dominica, Dominican Republic, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Fiji, Gabon, Gambia, Georgia, Grenada, Guinea, Guinea-

22. Several major military powers that are developing autonomous weapons are not currently members of the Human Rights Council, such as China, Russia, and the United States. This presents an opportunity for Council members serious about addressing this threat to further study and take action on the human rights and humanitarian implications of fully autonomous weapons. Potential measures are detailed below.

Recommendations

A legally binding instrument is the optimal framework for dealing with the many serious challenges raised by fully autonomous weapons. Focused deliberations will help lay the groundwork for the international ban treaty that is urgently required to retain meaningful human control over the use of force.

To achieve progress, the Campaign recommends that states:

1. Support efforts to launch negotiations on a legally binding instrument to ban fully autonomous weapons and retain meaningful human control over the use of force. Identify factors to help determine the necessary quality and extent of human control over weapons systems and the use of force;
2. Communicate with states that are investing in military applications of artificial intelligence and developing autonomous weapons systems. Request their involvement in regulation and views on human control; and
3. Establish a working group to further examine emerging technologies, including autonomous weapons systems and how they deny, undermine, or otherwise violate human rights, especially the human rights of refugees, migrants, asylum seekers, stateless people, non-citizens, and individuals or groups who are or who are perceived to be foreign. Conduct a thematic review of the issue and report.

Bissau, Guyana, Haiti, Iceland, Jamaica, Kenya, Kiribati, Kyrgyzstan, Lao PDR, Lesotho, Liberia, Malawi, Malaysia, Maldives, Malta, Marshall Islands, Mauritania, Mauritius, Micronesia, Monaco, Mongolia, Nauru, Niger, Nigeria, Oman, Palau, Papua New Guinea, Paraguay, Qatar, Rwanda, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tome and Principe, Saudi Arabia, Senegal, Servia, Seychelles, Singapore, Solomon Islands, Somalia, South Sudan, Sudan, Suriname, Syria, Tajikistan, Tanzania, Timor-Leste, Togo, Tonga, Trinidad and Tobago, Turkmenistan, Tuvalu, United Arab Emirates, Uruguay, Uzbekistan, Vanuatu, Vietnam, and Yemen.