Dialogue on Autonomous Weapons and Human Control

Hosted by New Zealand's Minister for Disarmament and Arms Control, Hon. Phil Twyford

10 August 2021



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Jody Williams, Nobel Peace Laureate

Jody Williams received the Nobel Peace Prize in 1997 together with the International Campaign to Ban Landmines for their central role in establishing the 1997 Mine Ban Treaty. Williams chairs the Nobel Women's Initiative, which she founded in 2006 together with five of her sister Nobel Peace laureates. In 2013, the University of California Press published her memoir entitled "My Name is Jody Williams. The Nobel Women's Initiative is a co-founder of the Campaign to Stop Killer Robots and more than 20 Nobel Peace laureates have endorsed the call to preemptively ban fully autonomous weapons. @JodyWilliams97 @NobelWomen

<u>Video Message</u>

Hello Minister Twyford. Although I am happy to be able to send words by video, I'd much rather be with you all in beautiful and progressive New Zealand.

It's very exciting that you all have a Minister for Disarmament and Arms Control, Phil Twyford, to continue to push forward New Zealand's agenda on humanitarian disarmament, as governments and civil society continue to come together to stop killer robots.

We all know that the country is no stranger to taking a strong lead on disarmament and building on its legacy of protest over nuclear weapons and New Zealand's subsequent work to ban landmines and cluster bombs, New Zealand, and Minister Twyford are again showing leadership when it comes to tackling weapons that have no place on this planet.

Mister Minister, I read with great interest your speech of July 19, outlining your thinking about how to deal with killer robots.

As you rightly pointed out, discussions in the CCW on these unconscionable weapons are on a road to nowhere. As you have pointed out there are options other than the CCW.

In the Campaign to Stop Killer Robots, we believe, like many governments do, including yourselves of course, that it is time for a new plan, a new process, and a new venue where serious talks on these weapons can actually take place.

We support your invitation to allies in this cause, to come together and negotiate a binding treaty to stop killer robots.

Thank you so much for all your efforts in this regard.

Mitzi Austero and Alliah Ampatuan, Nonviolence International Southeast Asia (Philippines)

Mitzi Austero is Programmes Manager of Nonviolence International Southeast Asia, a member of the Campaign to Stop Killer Robots. Based in the Philippines, she is a researcher on conventional weapons, arms trade, peace processes, and local history. Mitzi has conducted trainings for frontline government officials to ensure that the Philippines is at par with international standards in terms of arms trade regulations and standards. She is works to support universalization and implementation of the Mine Ban Treaty and Convention on Cluster Munition in Southeast Asia. @mitziaustero @NonviolenceAsia

Video Message

Good day everyone, my name is Mitzi Austero from Nonviolence International HR, based in the Philippines and together with me is our youth representative, Alliah Ampatuan, from the Bangsamoro.

At the outset we would like to express our appreciation to Minister Phil Twyford and his colleagues for their efforts in bringing much needed energy to humanitarian disarmament and especially for leading the process to develop a national policy on killer robots.

Political will racing up to the moment inspires. When one state shows political will, that is attune to what is for the common good and what is right, it inspires other states to also contribute to make things happen. This is basically what we ask of all of you today—to inspire the youth to build a better future.

Leadership is crucial, as a drive to make things happen sometimes just starts with one person. We, at civil society, often expect much from the state leadership, we can only do so much to contribute from where we are, especially to the multilateral discussions and to raise the level of awareness.

But do know that the civil society from our region will rally behind you in banning killer robots, and so will states, because you are not alone in realizing that humans must retain meaningful control. You have our full support.

Finding allies will be easier when the champion states and leadership is clear on what they want to achieve. From where we stand, it is clear. We want to ban fully autonomous weapons systems that can select, target, and decide to use force without human intervention, and we seek the leadership of states who believe in the same goal to start negotiating a treaty on this.

As-salamu alaykum. My name is Alliah Ampatuan and I would like to thank everyone for providing a young person like me to be heading this platform. I would like to stress that deciding on the future of autonomous weapons systems is like deciding what problems of mine and the children of today will face in our future, when it is our time to lead.

I would like to address fully autonomous weapons today so that we have more chances of being able to build a norm of avoiding our future problems so that my generation and the ones after me will have a better chance of building a better and more peaceful life.

As a member of civil society, I am proud to say that we will always be here to remind states that you have the power to change the direction of how we can live safer lives. You, as part of the leaders of today, can help us achieve living our lives to the fullest in a better environment, free from the fear and destruction that killer robots can bring. I ask you to give us some hope in these rather dark times of the pandemic. The Olympics have given us some inspiration that despite so many challenges they go through, our athletes have gone beyond themselves to show that even in competition, human compassion and kindness will get us through. Thank you very much and I wish everyone success.

Thompson Chengeta, International Committee for Robot Arms Control

Dr. Thompson Chengeta is a member of the International Committee for Robot Arms Control (ICRAC), a co-founder of the Campaign to Stop Killer Robots. Dr. Chengeta is based at the University of Southampton in the UK and has a PhD from the University of Pretoria and a Masters from Harvard Law School. Previously, Thompson worked on the mandate of the United Nations Special Rapporteur on extra-judicial killings, Professor Christof Heyns, directly supporting the first Human Rights Council report on the dangers raised by lethal autonomous weapon systems. Born in Zimbabwe, Thompson also serves as a legal expert member of the International Panel on the Regulation of Autonomous Weapons, an independent and interdisciplinary panel of international experts. @DrThompsonLaw @icracnet

Video Message

Warm greetings Honorable Phil, the New Zealand Minister of Disarmament and Arms Control, your Excellencies, ladies, and gentlemen. My name is Thompson Chengeta, I am from Zimbabwe and one of the lead campaigners of the Campaign to Stop Killer Robots on the African continent.

Honorable Minister, it was indeed a pleasure to read your statement of 19 July 2021 where you called on fellow states to join New Zealand in designing a policy response that is fit for purpose. For us, from the Campaign to Stop Killer Robots, such a policy which is fit for purpose is none other than a binding legal instrument on autonomous weapons systems, or killer robots.

Honorable Minister Phil, we as campaigners on the African continent, we are encouraging African states to work with the government of New Zealand to start the process of negotiating, or championing at least, the process of negotiating a new legally binding instrument on killer robots, because we do believe this is the only way to effectively govern autonomous weapons systems, or killer robots. In that regard, we also encourage, and continue to encourage the government of New Zealand to reach out to likeminded states, to reach out to African states, and work together towards negotiation of this very important instrument.

The discussion on killer robots has been occurring in the UN CCW for almost a decade now, and of course there are achievements that can be noted over these past years. Yet, it has become so clear, at least to me, that the UN CCW may not necessarily be the appropriate forum within which a policy response on killer robots, that is fit for purpose, may be produced. It is in view of this consideration, that it is important for states such as

New Zealand, and other likeminded states, to start seriously thinking about options of how to negotiate a legally binding instrument outside the framework of the UN CWW.

Minister Phil, your Excellencies, ladies, and gentlemen, I participated in the research and drafting of Professor Christof Heyns, the late Professor Christof Heyns' report on lethal autonomous weapons that was presented to the UN Human Rights Council in 2013.

As a black person, as an African, one of the issues that was of major concern to me was that not only will killer robots be used in the context of armed conflict, but that they will be also used in the context of law enforcement, and when that happens, people of color and other minorities are disproportionately affected.

In my mind, a comprehensive regulation of autonomous weapons systems, or Killer Robots, should cover all contexts within which these systems may be used. My legal understanding is that the UN CCW, as a convention, may only produce additional protocols that are limited in their scope of application to contexts of armed conflict. Yet-yet, it is clear that the development in potential use of killer robots may as well affect issues of law enforcement where certain groups of people may be affected. It is for these reasons, Honorable Minister, that I believe that perhaps the UN CCW may not necessarily be the appropriate forum to produce a treaty that is fit for purpose, or that is comprehensive enough to govern the issue of Killer Robots.

Honorable Minister, your Excellencies, ladies, and gentlemen, when I then consider that it is very difficult, if not impossible, for states to reach a consensus on the governance of killer robots in the UN CCW, in terms of law, legally speaking, it may be impossible for states to produce a new legally binding treaty that covers all circumstances within which killer robots may be used. It makes me believe, it makes me welcome, the call by the New Zealand Minister for likeminded states to find other ways, to find other fora, within which a new legally binding instrument may be negotiated. For thus, I want again to repeat my appreciation, my warm appreciation to the Minister.

Raza Shah Khan, Sustainable Peace and Development Organization- SPADO

Raza Shah Khan is executive director of <u>Sustainable Peace & Development Organization</u> (SPADO), a Pakistani non-governmental organization and member of the Campaign to Stop Killer Robots. He is the South Asia representative of International Peace Bureau and has conducted research on small arms, landmines, and explosive remnants of war. Raza Shah Khan participated in the negotiations of the 2008 Convention on Cluster Munitions. @razashahkhan1 @SPADOPakistan

Video Message

Greetings from Islamabad, Pakistan. My name is Raza Shah Khan and I am the Chief Executive of Sustainable Peace and Development Organization which is an active member of the Campaign to Stop Killer Robots in Pakistan.

I have also remained actually engaged in the campaign against landmines and also against cluster munitions, it is also a privilege that I am the spokesperson for the Campaign to Stop Killer Robots in Pakistan.

It is indeed an honor and pleasure for me to address my brief remarks to the New Zealand Minister for Disarmament and Arms Control, Honorable Phil Twyford, and I would like to welcome the momentum and attention that the Honorable Minister is bringing to humanitarian disarmament, especially the process for developing initial policy on killer robots.

The proposal of the Honorable Minister that the New Zealand government work with likeminded States and launch a negotiating process to adopt a new treaty banning killer robots, is highly—highly commendable.

I remember the process of the Convention on Cluster Munitions when the New Zealand government, along with other likeminded States, formed a core group, and I also attended the related meeting and other meetings of the Oslo process banning Cluster Munitions.

Later on, the Convention on Cluster Munitions signing ceremony took place in Oslo in 2008, and today we are 123 countries that have joined the Convention.

We need such sincere and committed leadership in the area of Arms Control and Disarmament, and I hope that the efforts of the Honorable Minister and the New Zealand government will pave the way of having a legally binding treaty banning killer robots.

I would like to mention here, and it is indeed a privilege to say, that Pakistan was the first country that called for fully autonomous weapons systems to be prohibited in May 2013, and since then it has repeatedly urged for the creation of a new international ban instrument on lethal autonomous weapons systems.

Moreover, the Non-Aligned movement, which is a forum of 120 developing countries, has also called for a treaty to prohibit lethal autonomous weapons systems.

The New Zealand government will find a large majority of allies and likeminded states, including the full support of the Campaign to Stop Killer Robots, which is a coalition of more than 180 international, regional and national non-governmental organizations in 65+ countries that is working to permanently ban fully autonomous weapons systems.

In the end, I would emphasis that we must stand together, irrespective of our faith, nationality, and race and to protect our shared humanity from the future devastation of killer robots. It is similar to an unimaginable scenario, like the COVID-19 pandemic, which the whole global community is facing today and that originated from one place, but the whole global community suffered alike.

It is high time to prevent the future pandemic of killer robots, which we would then be unable to control once developed and applied.

I thank Mary Wareham for inviting me to speak and I wish the Honorable Minister for Disarmament and Arms Control all the best in his noble endeavors. Thank you.

Wanda Muñoz, Human Security Network in Latin America-SEHLAC

Wanda Muñoz is a long-time activist and international consultant on humanitarian disarmament, improving the lives of people with disabilities and providing assistance to victims of war. She is a member of the Human Security Network in Latin America and the Caribbean (SEHLAC) where her work focuses on the Campaign to Stop Killer Robots. Wanda has worked at project and policy levels in Asia, Africa, Latin America and Europe and authored expert publications, translated into many languages, on victim assistance, inclusive livelihoods and gender-based violence. She contributed to the implementation of the Mine Ban Treaty and to the adoption of the Convention on Cluster Munitions, working to strengthen the victim assistance provisions. The Mexican Ministry of Foreign Affairs recently appointed her as consultant to the Working Group on Responsible Use of Artificial Intelligence in the Global Partnership for Artificial Intelligence. @ wandamunoz @SEHLAC

<u>Video Message</u>

Greeting from Mexico. I am Wanda Munoz from the Human Security Network in Latin America and the Caribbean (SEHLAC), and today we have a message for Minister Phil Twyford, New Zealand's Minister for Disarmament and Arms Control.

Dear Minister, it is a great honor to address you today, with my colleagues from Latin America I would like to share with you that we are very excited and encouraged by recent statement of New Zealand on the topic of autonomous weapons.

I personally had the chance to witness the commitment of New Zealand's stakeholders including its government, parliamentarians, and of course the civil society during the process that successfully led to a treaty banning Cluster Munitions a few years ago.

Sadly, our world keeps facing enormous challenges, including inequality, the COVID-19 pandemic, lack of adequate response to climate change, and gender-based violence, among others. Despite these challenges many countries keep investing billions in war and weaponry, and others are too busy responding to everyday challenges to invest themselves in humanitarian disarmament forums. While this happens, a minority of countries and companies believe that developing autonomous weapons, which would select and engage targets without meaningful human control, are acceptable and a good use of technology.

Minister, I will not name all the humanitarian, ethical and legal concerns that these weapons raise, as you and your colleagues are well aware of them. What I would like to do today is to let you know that the efforts that your Ministry is bringing to humanitarian

disarmament, in particular the process to develop a national policy on killer robots, is an encouraging development, not only for New Zealand, but for all of us in the civil society and particularly those of us in the global south which will probably be the first, and worst effected countries by these weapons.

Countries in Latin America are very active on the topic and, I'm sure, also looking forward to an increased evolvement and active participation of New Zealand.

The Review Conference of the CCW will take place later this year, and after so many years of discussion we need countries to take a clear decision for a negotiating mandate. It could be really helpful if New Zealand could now work with likeminded states to launch a negotiating process to adopt a new treaty banning killer robots.

Voices from various governments are rising Minister, in all continents, and the commitment of New Zealand could certainly make a huge difference in bringing them together to ensure that no machine will ever take a decision over life and death.

Thank you Minister, we count on you and please count on us as New Zealand moves forward on this commitment. ¡Muchos Gracias!

John Rodsted, Safe Ground Australia

John Rodsted is the co-founder of humanitarian group Safe Ground Australia, which coordinating Campaign to Stop Killer Robots in Australia. A professional photographer, he has documented the impact of landmines and explosive remnants of war in countries including Afghanistan, Bosnia and Herzegovina, Cambodia, Eritrea, Georgia, Kosovo, Lao PDR, Lebanon, Mozambique, Vietnam, Sri Lanka, Sudan and Western Sahara. In the Pacific, Rodsted has done extensive field research info the damage done by unexploded and abandoned ordnance dating to World War II, including in Palau and the Solomon Islands. Based in Melbourne, Rodsted produced an in-depth podcast interview with Mike Smith on killer robots concerns in late 2020. @SafeGroundInc @Ban kr aus

<u>Video Message</u>

Hello, my name is John Rodsted and I'm from Safe Ground in Australia. We are the Australian arm of the Campaign to Stop Killer Robots and we are working towards creating a treaty that is effectively going to ban lethal autonomous weapons.

Think about what is the good side and the bad side of Artificial Intelligence and lethal autonomous weapons and there is a lot of good in Artificial Intelligence. The steps going forward in the medical field where you can have computer learning doing incredible diagnostics to give faster and more accurate diagnoses for patients with complicated medical problems is an extraordinary use of powerful computing. But when you take the same kind of technologies and put them into military applications, into warfare, you end up in a very very dark space that none of us should ever be going into.

So, think about what is wrong with lethal autonomous weapons and the key word to this is the word 'autonomous.' When you create a weapons system that you launch, it seeks out targets, decides, and executes humans with its own algorithmic decision-making process without any human meaningfully in that loop, that is a step way too far, and it is a step we should never ever go to.

Lethal autonomous weapons will simply create an arms race where big players, the superpowers, medium powers, will all get paranoid and feel that they have to be part of this arms race. They will shovel massive amounts of money into something that will become redundant every few months and will need upgrades, and the fact that it is computer-driven, it is susceptible to all sorts of issues.

One of those issues would be hackability. Can you imagine a mass drone strike that is then hacked by an opposition and turned back onto yourself? Eighty four percent of the military cadets at the Australian Military College in Duntroon surveyed said they do not feel comfortable with operating alongside lethal autonomous weapons.

High end military, both serving and retired, find the concept of using autonomous weapons systems absolutely abhorrent. Now it doesn't mean autonomy is altogether bad and it can be pristine moments which could be missile defense shields for navy and issues such as that, that could have some practical solutions to them. But getting onto the infantry battlefield, getting into urban combat environments, and sending small drones out to hunt and kill people should never happen. The only winners out of this will be manufacturers, the people who sell these systems.

In Australia, New Zealand, and the Pacific we live in a great part of the world, but it can only stay a great part of the world if we are prepared to stand up against the madness that autonomous weapons systems would create.

Do not have an arms race in this part of the world, and we need leadership both locally, regionally, and internationally to drive for a treaty that will functionally restrict and ban lethal autonomous weapons.

For legal reasons, what does a failed strike look like, what does it like when you actually create collateral damage which is a horrendous word for killing a much of civilians? How do you actually hold a machine, a robot, accountable for such actions?

Warfare is an abhorrent act. It is the complete failure to have dialogue, to have diplomacy, for it to generate into war. It should never be passed over to a machine, where a machine has the power over life, over death of humans.

We need a treaty, and there is good work taking place at the moment working towards creating such a treaty, and ideally it would be in something like the United Nations, but unfortunately forums such as the CCW are failing yet again and getting locked up in so much legal speak they are finding it impossible to create functionable language that would deal with the treaty. But we do have great examples in the Landmine Treaty of 1997 and the Cluster Munitions Treaty of 2008 where it was taken out of the UN system and turned into a simply process that creates a functionable legal instrument that would bring about a ban on an abhorrent weapons system.

This is a powerful field that we need to take, and we need leadership in the area. New Zealand and Australia we are in unique positions to step up and take leadership roles. Be on the right side of history, and let's just turn the idea of lethal autonomous weapons system into a bad temporary idea that folds in the back pages of a history book for the future.

Please think carefully about this, and please think about the massive humanitarian consequences of what lethal autonomous weapons systems, if they are deployed and created, would actually be. Thank you.

Professor Noel Sharkey, International Committee for Robot Arms Control

Noel Sharkey is Emeritus Professor of Artificial Intelligence and Robotics at the University of Sheffield. He is also co-founder and chair of the International Committee for Robot Arms Control (ICRAC), a co-founder of the Campaign to Stop Killer Robots that is comprised of academics and other experts concerned with the pressing dangers that military robots pose to peace and international security. Professor Sharkey is a journal editor and has written more than 150 academic articles and books on relevant areas of robotics, psychology, computer science and machine learning. Sharkey addressed the opening of the first CCW meeting on lethal autonomous weapons systems in May 2014. @NoelSharkey @StopTheRobotWar @icracnet

Video Message

Hi, I'm here to talk to you today about a revolutionary new type of weapon that I believe could cause humanitarian crises throughout the planet if not stopped, and we have enough of those already, I believe.

These are weapons that once launched, launched, or activated, can go out there, track, and select their own targets and kill them or apply violent force without any human intervention or human knowledge.

Now imagine that I'm talking about a machine that has been delegated the decision about human life, it has no moral agency, it really doesn't understand anything about humans, or humanity. No empathy, no sympathy and certainty no moral responsibility to do the right thing.

Now I am not talking here about some sort of fancy sci-fi terminator, these look more or less like conventional tanks, fighter planes, fighter jets, ships, submarines, and small drones, armed.

It originated really when US older forces, in the early 2000's, began talking about autonomy as a way of restoring their military advantage over everyone else. But of course, immediately, there was a new arms race beginning with the US, Russia, China, Israel, Turkey, South Korea, Australia, and the UK, among others, really hellbent on trying to develop these as quickly as they can, and I believe they have been trialed in Syria according to a recent UN report.

Now when I first heard about these in 2007, my biggest concern as an AI and Robotics professor was technical. I had run big robotics labs, AI labs, machine learning for many

years and had done lots of large-scale museum exhibits, including, I must say, in 2002 developing some autonomous drones. But I was really shocked because I could not see at the time, how these could possibly- how anyone could guarantee compliance with international humanitarian law, the laws of war.

I mean how could you make these machines discriminate between combatants and non-combatants? I thought, these guys are crazy! How could machines make qualitative decisions, how could it proceduralize qualitative decisions into an algorithm -- well you can't! How can it make proportionality decisions? How could it take precautions about the appropriateness of targets? I thought this was just – you know, some sort of madness, but I wasn't the only scientist who thought that.

In the last couple of years, more than 5,000 AI researchers, including the leaders in the field, and other scientists have written to the UN and big AI companies, saying these are not fit for purpose – AI is not good for war, it cannot be trusted in that sort of way, and it's quite unpredictable. That to me alone should make it show that it doesn't comply with the laws of war. But unfortunately for those really rushing to develop them, it fell on selectively, deaf ears. Since we have started the Campaign to Stop Killer Robots in 2013, we have been arguing the case at the CCW, but military thoughts have been evolving. Another big thing is force multiplication. Nation-states are developing swarms of tanks, ships, submarines, and small armed drones. The idea of course is so that one person or a small team can unleash massive force, and that makes it even harder to comply with IHL because you cannot – one person cannot watch that many of these things, you're talking about using hundreds or thousands of them.

Another argument has been that human decision making is too slow for current conflict. Well, that cannot be right, can it? So, it's getting so fast that you want to make it faster by developing high speed, machine speed, attacks, and decisions. And then having counter weapons that are even faster and so on. So that eventually you have weapons going at such high speed that you cannot stop them, and you wouldn't be able to stop them if they clashed with another swarm, because the people who stop them would lose.

So, what is this going to do for global security. Imagine the accidently wars that could be created, and it would also be much easier to go to war if you are not putting your forces out there.

Now after eight years at the CCW, we are starting to see a large consensus emerging about the importance of some form of human control, although some are pushing that they don't even like the word 'human control,' like the US. But 35 countries, including China, are behind our call for a ban now, and that number is seen as growing. The International Committee of the Red Cross has also joined the call about a month ago and are pushing for prohibition in certain types of autonomous weapons, like antipersonnel autonomous weapons, autonomous weapons that are unpredictable, and the every other kind should be carefully regulated, legally.

Now we could really do with New Zealand's help here—it would make all the difference. A number of countries are sitting on the fence, especially European countries, because they don't want to annoy America and Russia, they want to keep them in there, but they are never going to convince them of anything. So, it would really help if we had a great peace nation like New Zealand to help knock some of these people off the fence.

I believe that with your help, we could rid the planet of these morally reprehensible automated killers. Thank you for listening.

Major General Michael Smith (retired)

Major General Mike Smith (Ret'd) had a distinguished 34-year career in the Australian Army and is an Officer in the Order of Australia. His military career started as an infantry officer and culminated with commanding all levels from Platoon to Brigade Commander. Smith served as Australia's Defence Advisor in Cambodia in 1994 and as First Deputy Force Commander of the United Nations' Transitional Administration in East Timor (UNTAET) in 2000-2001. He was the Director of Security Sector Reform for the UN Support Mission in Libya in 2011. After the army Smith headed the Australian refugee agency Austcare from 2002 until 2008. He then founded the government's Civil-Military Center, which he led until late 2011. Smith is an immediate Past President of the UN Association of Australia.

Video Message

Greeting from across the ditch in Canberra

I'm Michael Smith, an Australian retired Major General with previous command experience and with a number of leadership roles in government, the United Nations, and civil society. I'm recording this video on the traditional lands of the Ngunnawal and Ngambri people, and I pay my respects to their elders, past, present, and emerging.

My apologies for not being able to be with you in person today, but I look forward to an opportunity to meet with you later in this year, subject to COVID restrictions, of course. In the meantime, I hope that everyone remains safe and well in these challenging pandemic times.

I'd like to congratulate New Zealand, and particularly the New Zealand government, for your continuing, proactive, approach to disarmament and arms control. As a retired senior military officer, I have always believed that peace and conflict are two sides of the same coin.

Nation-states, in particular, must constantly make important choices in how best to protect their sovereignty and their people. Such choices are more important than ever given current uncertain geostrategic circumstances, coupled with the exponential advance of technology, and the destabilizing impact of climate change.

The current debate and dilemma concerning the development and use of lethal autonomous weapons systems, or LAWS, or sometimes referred to as 'killer robots' and other similar names, is one very important choice that states must address urgently. As with lethal autonomous weapons systems there are many examples where the development of weapons technology has been in advance of government policy only to

require states to then intervene and restrict or ban the use of such weapons. A ban or control on exploding bullets, biological and chemical agents, landmines, cluster munitions, and nuclear weapons is a testament to this.

The world is safer because of these latent imposed controls, and it is reassuring that such decisions have been guided and justified by international law, particularly international humanitarian law and international human rights law. In most cases, it has been civil society that has pressed their governments to impose these controls. And I believe this is even more critical in respect to lethal autonomous weapon systems.

LAWS takes weapons development to a whole new and more dangerous level because lethal autonomous weapons systems have the ability to remove humans from the decision loop, thereby allowing machines, or robots, to make decisions of life-and-death.

This is a scary, but a very real proposition, that raises the need for arms control to a new, and I believe unprecedented level. LAWS are already in existence, and they are being tested and used, so the genie is already out of the bottle. This means that governments and civil society must act quickly and decisively, and preferably through the United Nations, to establish an international treaty to regulate the development and use of lethal autonomous weapons systems. This does not mean that artificial intelligence cannot be used in weapons systems, but rather that such weapons systems must ensure that meaningful human control always remains paramount.

Simply put, human beings must always be accountable for the use of force, because machines, or robots, cannot be held accountable.

Designing a treaty that can effectively regulate the development of lethal autonomous weapons systems by ensuring meaningful human control will not be easy, not least because of the exponential growth in artificial intelligence that promises more precision and less collateral damage. States must work closely with weapons developers to agree on core principles that ensure humans remain in control and accountable.

Now political leaders must take an urgent stand to control lethal autonomous weapons systems. Or if they don't, they can expect to incur the opprobrium of successive generations. I really commend New Zealand for your leadership on this critical matter, and I would be honored to be able to assist you in any way. Thank you very much.