Imagine if the catastrophically destructive power of a nuclear weapon had not been developed. Imagine the lives saved not only from the bombings in Japan but also the places poisoned by testing. Imagine if anti-personnel landmines had not been developed and used widely: the lives, limbs, and livelihoods of individuals that would be intact, as well as swathes of land that could be free for farming, building, or transportation routes. Imagine if a lot of things had not been created and were not now being used to smash cities, and everything they contain, into oblivion.

We cannot turn back the clock and undo what has been done. We instead find ourselves labouring hard to identify ways to remedy the situation in the present, and prevent such things from reoccurring in future.

With autonomous weapons, there is still a choice. Such types of weapon systems may be under development by some, but the genie is not yet out of the bottle. Discussions at the Group of Governmental Experts (GGE) meeting this week made it very clear that the concept of human control is firmly at the heart of the debate over what to do about killer robots. No state supports a weapon that operates entirely without it, particularly in taking decisions about taking human life. Differences exist as to the extent and nature of human control among states, and possibly the motivations of some are not entirely altruistic. Yet the clear take away message is that this is the right thing to do, for ethical, moral, and legal reasons that have been enumerated by so many voices in government, academia, military, science, and elsewhere, and were reiterated at this GGE meeting.

A prohibition on autonomous weapon systems, which is gaining support from a steadily growing group countries participating in the GGE, is the best response to that concern. It would be clear, preventive, and forward-looking. Other options that have been presented have merit but do not go far enough. They cannot be as effective, binding, or lasting. This is not to say that negotiating such a prohibition would be easy but nothing worthwhile ever is. In the context of the Convention on Certain Conventional Weapons (CCW) there is precedent of the ban on blinding laser weapons to learn from, as some states pointed out.

During the week I spoke on a side event panel about some of the lessons learned from various multilateral discussions on cyber conflict. The two issues are unique, although similar in that they are both about intangible things and hypothetical scenarios, and both involve dual-use items in which intent and purpose of use make a significant difference. The international community has made some progress in articulating norms for behaviour in cyber-space, but it is widely agreed that the gap between law and digital capability is growing exponentially. It may never close. There is a very real risk that the same will happen with autonomous weapons if decisive action is not taken quickly. To stay ahead of the curve, the opportunity of this GGE and its next meeting must be maximised in order to set out the course for swift policy response at the end of this year.

We can, of course, meet again in five or ten years to discuss how to react to the use of autonomous weapons and their systems, their proliferation, and inevitable “misuse” as we do virtually all other weapon types. Wouldn’t it be a welcome change however, to get it right this time and not have that conversation? This is a unique opportunity to learn from mistakes and do better in future.
Choices, continued

The following summary is organised by topics and themes that came up frequently in the course of thematic discussion on Friday 13 April about “possible options”.

International humanitarian law (IHL) and human rights

Virtually every statement re-affirmed the centrality of IHL. There were no statements to the contrary.

Germany noted that IHL fully applies to lethal autonomous weapon systems (LAWs), like any other weapon system. There is no need to adapt or modify IHL, but all aspects must be considered.

The United States stated that IHL is a robust and coherent framework for addressing autonomous weapon systems because it balances all interests. It feels IHL is sufficient to address the issue.

Panama expressed that placing faith in code and algorithms reduces the role of humans into one of mere observation, which raises human rights concerns for civilians, and those who are wounded, and infringing in particular on the right to life.

Human control

Netherlands said meaningful human control should be exercised throughout the entire weapon cycle.

Ireland noted that most states have agreed that humans must make decisions about using force and that it would be good if this agreement could be captured in some way. Switzerland made a similar point.

The International Committee of the Red Cross (ICRC) emphasised that human control must be retained over weapon selection and use of force. Whatever adjective is agreed on will help agree the limits on autonomy for weapon systems.

The United States expressed that these are more complex issues than the phrase “meaningful human control” can capture.

South Africa stressed that this GGE should focus on determining definitions and the degree of human control required in a system, toward developing a legally binding instrument.

Lethality

Ireland cautioned that even if this issue is “parked” for now, it would have to be addressed at some point in future.

Chile said that to define LAWs depending on level of lethality that a human has control over.

Political declaration

France reviewed its proposal, made jointly with Germany, for a political declaration, which could do the following: emphasise humans must preserve the capability of deciding about use of lethal force and exercise sufficient control over systems they would use; re-affirm that the rules of international law and IHL apply fully; and, possibly propose establishing a technical experts group within the CCW to take into account technological developments.

Argentina feels the French-German proposal of a political declaration would strike a good balance between the interests of all states; it stated a preventive approach could be an alternative for years to come.

Belgium supports a political declaration and urged that states focus on identifying common characteristics.

Switzerland views a political declaration as a flexible way forward at this stage, as it could confirm a few key principles and validate common understandings, but this should not prevent further regulatory work, if necessary.

Bulgaria, Italy, and Sweden support the proposal for a declaration.

New legally binding instrument

Egypt, Costa Rica, Colombia, Cuba, South Africa, Sierra Leone, Panama, and Nicaragua spoke in favour of a new legally binding instrument.

China urges the establishment of common definition for LAWs and then move to negotiating and concluding a succinct protocol on a prohibition to ban the use of fully autonomous and lethal autonomous weapons.

Djibouti announced for the first time that it supports a new protocol that will prohibit autonomous weapon systems.

Brazil said that only a legally binding instrument can effectively deal with the challenges posed by autonomous weapon systems and feels states are on the right path to negotiate a protocol to the CCW. It outlined five areas of convergence that it has observed which could form the basis of a negotiating process: 1) autonomy is in and of itself a function of human control over specific system; 2) all weapon systems must comply with international law in general and IHL in particular; 3) only humans and states are subject to the law and can comply and account for it; 4) autonomous weapon systems can only comply with international law as long as they are under a degree continued on next page
Choices, continued

of human control; 5) there is strong international concern with these systems.

Chile said that ethical and legal considerations should be the compass as states begin a process for a legally binding instrument.

Iraq said that to avoid dangers in the future, based on the experiences of the past, is to prohibit them preventively.

A legally binding instrument is Pakistan’s first option, and would see non-binding agreements, or transparency and confidence-building measures (TCBMs), as secondary and interim steps only.

Sweden said there already is a legally binding instrument in the form of IHL. If states proceed with something else than definitions must be clear, and at present the different characterisations that have been put forward are very different from one another.

The UK said that trying to impose a legal prohibition without understanding what is being prohibited will risk it becoming redundant, and could undermine the utility of existing obligations.

Republic of Korea and France said it is premature to consider this option.

Venezuela said that a specific recommendation, in the form of new legally binding agreement, is needed and until then national moratoria should be put in place.

National measures
Argentina suggested drafting a best practices agreement for national level weapon review mechanisms, as a medium term solution. Germany supports building or developing effective national review mechanisms, such as included in the guide from the International Committee of the Red Cross (ICRC).

Germany said states should consider developing best practices for export control of goods related to autonomous weapon development, including software, such as through transport or trafficking laws. It highlighted the importance of transparency and sharing of information, as did the UK.

China said that national transparency and confidence-building measures (CBMs) are important, but cannot replace an international legal obligation.

Egypt noted that the rapidly evolving nature of technology in the area of autonomous weapons would make national reviews ineffective and irrelevant. It also recommends sharing of data and information, including

Netherlands spoke about the importance of national weapon reviews under Article 36, stressing the need to increase the number of high-contracting parties implementing these; incorporate the concept of meaningful human control; and improve transparency and information sharing.

The UK referred to its weapons review procedures that have been published and welcomes comments.

Italy encouraged all states that have not yet done so to set up formal procedures of A36 reviews set up before any development of autonomous weapons.

New Zealand appreciated the presentations and detailed information that were presented over the week about weapon reviews, and related considerations them by LAWs. It presented an overview of its own review methods, noting that meaningful human control will be a contextual part of that assessment. It would like to see additional work on this as part of the response to LAWs and not as a separate track.

Cuba stated that some high contracting parties say that national reviews are enough, but after reviewing all the information presented over the last several years it feels its’ time to go beyond that and create international standards.

Austria agrees national reviews are important and useful, but they do not complete the picture or create common standards, as they are internal.

Other measures
Germany said that a code of conduct based on a political declaration could be developed as a next step.

Egypt suggested the establishment of an observatory, to include academia and civil society.

Netherlands suggesting working toward work toward an interpretive guide that could also include best practices on how to incorporate concept of meaningful human control into design and use of new weapon systems. It also urged that states consider new “out of the box” solutions for new security challenges related to technological change.

Ireland proposed an oversight regime that could become a subsidiary body within the CCW framework to monitor applications of autonomous weapons and report to states parties about compliance. A best practices guide was also suggested.

Sierra Leone stated that it would not exclude some of these other suggestions, like a guide.
Choices, continued

Switzerland suggested other options for addressing LAWs that could be triggered either via a political declaration, or GGE mandate. They include identifying standard methods and protocols for testing autonomous weapon systems in connection with national legal reviews; establishing TCBMs and further information sharing between states; and collating and clarifying relevant existing legal provisions that are applicable to autonomous weapon systems.

Brazil does not support taking ownership away from CCW high contracting parties, such as through the establishment of scientific panels or sub-bodies.

New Zealand said it is of an open mind with respect to the different options for the way forward that were proposed, and that these proposals are not mutually exclusive. At this stage they are interesting in the existing obligations that high contract parties already have, such as through weapon reviews.

Sweden said that an oversight group on export issues would be valuable and could take a technical focus. It also encourages states to ensure that researchers, engineers, and others involved in arms development understand IHL.

Accountability and responsibility

Argentina suggested finding ways to attribute criminal liability applicable to those involved in the design of a new weapons, specifically if found guilty of a mistake, in order to avoid a legal vacuum. Mexico also referenced criminal liability.

Germany suggested that individuals should be held accountable at all stages of a weapon cycle in accordance with standard principles of attribution and responsibility.

Bulgaria emphasised that machines cannot be legal agents, and that the use of lethal force, as well as other actions, must be authorised by a human as part of military command structures.

Proliferation

China suggested that LAWs could be considered within the framework of the 1540 Committee, especially with regard to export control. Sweden does not feel that would be a relevant space for addressing proliferation of LAWs because that Committee relates to existing legal instruments.

Germany highlighted the risks of proliferation, including through software transfer. At present it is assumed that LAWs require a high level of technological sophistication, but this could change.

Chile, Jordan, and Peru, among others, expressed concern about a new arms race.

Non-state actors

Sweden said it is not sure that the CCW is the best place to discuss proliferation to non-state actors not because it’s unacceptable to do so, but that there are other actors better suited for that discussion.

Cuba expressed concerns about hacking of autonomous systems, and terrorism, taking from experiences with cyber security.

Civilian or dual-use nature of autonomous weapons

Colombia would not like a new instrument to counter or constrain scientific research.

Jordan spoke about the challenges of the dual-use nature of technology related to autonomous weapon systems.

Japan underlined the concerning endeavors of the private sector and the need for establishing ethical guidelines to prevent artificial intelligence not being used for the wrong purposes.

Sweden suggests adding to any political declaration a note about the dual-use nature of autonomous technology, and that it is not intended to restrict civilian uses. This was supported by Bulgaria.

The US pointed out that emerging technology in LAWs could create entirely new opportunities to reduce civilian harm that should not be stigmatised but advanced, in order to also advance the purpose of the CCW.

Gender

Canada would welcome more gender analysis and perspectives in the debate on LAWs. It welcomed that some states used both “he” and/or “she” when referring to operators.

Degree of autonomy

Cuba would prefer to include semi-autonomous weapons, specifically drones in a future legal instrument, or at least explore this issue further.

Special thanks to Harvard Law School’s International Human Rights Clinic for support with summaries.
The April Group of Governmental Experts (GGE) meeting was the first I’ve been to on the issue of autonomous weapons and as part of the Campaign to Stop Killer Robots—which is collectively shouting a big “no!” to lethal autonomous weapons (LAWs).

Participation at the meeting was very active and regionally diverse. Coming from Cameroon, I paid particular attention to Africa’s participation. While regretting the low number of national statements from African countries during the meeting, it was very heartening to see the active participation of the women-led delegations from Sierra Leone and South Africa. I was also comforted that for the first time since the start of CCW process, the African Group has made a statement expressing their support for a prohibition on autonomous weapons. A prohibition on LAWs will be relevant to African countries as we find it inhumane, abhorrent, repugnant, and against public conscience for humans to give up control to machines and allow them to decide who lives or dies. The African Group asserted strongly that technology should be solely dedicated for the prosperity and progress of human beings in all spheres of life.

It also indicated that fully autonomous weapons systems or LAWs that are not under human control should be banned even before they come into existence. Until this ban is achieved the African Group statement called for a moratorium on the development and manufacture of such weapons systems without impediments or constraints on the use and transfer of the relevant emerging technologies for peaceful and civilian purposes.

Until this recent meeting, African states have not been particularly vocal about the issue because, as they shared with me, it is highly technical. It is urgent that the African Union (AU) begin discussions on this issue in order to give direction to its member states. Africa’s voice can be stronger when it comes from national capitals, regional communities, and the AU. It will also be important that the AU, together with non-governmental organisations, and academics help to sensitize states about autonomous weapon systems.

In speaking with the African countries that were present, it became clear that a better turnout from the region would have been an excellent opportunity for those states to build greater understanding and capacity on LAWs.

On a personal level I found the meeting very challenging at times. I was shocked to hear states debating over weapons and ways to “kill better”, leaving me feeling very confused and even sad at some point, thinking of my African continent where many people lack access to basic needs including water, electricity, education, and health. How could people debate over new weapons for killing, while millions of people are dying because of extreme poverty and vulnerability? I kept asking myself, “Can’t the money used to develop LAWs and other weapons be redirected to peace efforts worldwide?” It was reassuring to learn that this feeling is shared by many states, and to be part of a global campaign movement working very hard to ban these killer robots. In leaving Geneva, I am more determined than before to work harder for a violence free and peaceful world.