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under the Chairperson's responsibility

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EDITORIAL: FROM “CONSTRUCTIVE AMBIGUITY” TO UNAMBIGUOUS DESTRUCTION

Ray Acheson | Women's International League for Peace and Freedom

Once again, states that are actively developing autonomous weapon systems (AWS) have managed to subvert diplomatic attempts to develop any restrictions, regulations, or prohibitions for such systems. The final session of the 2021 Group of Governmental Experts (GGE) on AWS failed to agree to any recommendations for the Convention on Certain Conventional Weapons (CCW) Review Conference, set to take place next week. After months of work on an ambitious draft report, the GGE ultimately succumbed to the tyranny of consensus, leaving it up to the Review Conference to determine if any progress will be possible within the CCW. Since the same delegations will be determining the fate of the GGE there, it's hard to imagine a different outcome. What this means for most countries, which have already worked for years to prevent the development and use of AWS, is that action is needed elsewhere.

Destroying “constructive ambiguity”

During the final three days of the GGE, participants deliberated over **three drafts** of the Group's report. This report was to contain recommendations for the CCW Review Conference, including next steps for the GGE's work—including the adoption of a political declaration, the development of an instrument, and a series of topics for further discussion. Participants suggested edits to various iterations of the text, seeming to advance the Group closer and closer to a consensus outcome. While not as precise or as progressive as most participants would have wanted it to be, the report contained what some UN insiders refer to as “constructive ambiguity” to allow for the possibility of further work.

However, in the final hours a few heavily militarised states—led by Russia, Israel, India, and the United States—repeatedly took the floor to call for the deletion of the most critical sections of the report. The main sticking points were the “general commitments” and the “way forward” sections of the report. While most states are ready

to accept that prohibitions and regulations of AWS are necessary, including through a legally binding instrument and/or other mechanisms, a tiny handful of states continued to resist any language that would, in their view, place any constraints on their ability to build new tools of violence and oppression. This same minority also objected to the report's inclusion of ethical considerations, challenges of social biases, the relevance of human rights, and other critical elements.

In the end, the GGE was unable to adopt any substantive aspects of the draft report. All the recommendations that participants worked on the past few months were turned into a Chair's summary, to be submitted to the Review Conference under the authority of GGE Chair Ambassador Marc Pecsteen de Buytswerve of Belgium. The final report made no recommendation regarding a mandate for future work, leaving this entirely up to the CCW Review Conference. High contracting parties (HCPs) to the CCW only managed to agree on two sentences to describe what the GGE had achieved: “The Group considered different proposals on how to reflect the deliberations including possible conclusions and recommendations of the Group, but no consensus was reached;” and “A summary of the discussion held during the meetings of the Group, prepared under the Chairperson's responsibility, is attached as [Annex II].”

Taking action elsewhere

Like all consensus-based disarmament forums, the CCW has proven itself once again to be controlled by a handful of states that put the profits of their military-industrial complexes, as well as their perception that power is derived through weapons and war, above the interests of humanity. This is by no means the first time this has happened. To effectively deal with the humanitarian catastrophe created by antipersonnel landmines and cluster munitions, states and civil society had to bring those issues outside of the CCW to prevent further

harm and provide for victims. To make progress on nuclear disarmament, states had to go outside the consensus-oppressed Conference on Disarmament and nuclear Non-Proliferation Treaty to negotiate and adopt the Treaty on the Prohibition of Nuclear Weapons in the UN General Assembly.

The CCW has one last chance to prove itself worthy of the claim that it is the appropriate forum to address AWS. The best way for it to do so is to adopt a mandate for 2022 to negotiate and adopt a legally binding instrument on AWS. This would reflect the clear demand of the majority of states, as well as the International Committee of the Red Cross and a broad spectrum of civil society, including, as **Stop Killer Robots** noted in its final statement, “thousands of campaigners, 187 NGOs in 67 countries, to include world leading experts in AI and technology, lawyers who practice in the fields of human rights and international humanitarian law, academics and researchers from universities in all continents, leaders in faith and ethics, young people, scouts, students, medical

professionals, artists, musicians, humanitarians, activists, individuals and families from all walks of life.”

There is **more attention** currently being paid to this issue than likely any other on the disarmament agenda. People understand how this issue will affect them personally, and what it will mean for humanity. Most of the world wants to safeguard human rights and dignity from digital dehumanisation. Most of the world wants to maintain meaningful human control over weapons. If a handful of states in the CCW refuse to act, then the rest must seek an alternative path forward. Killer robots are not inevitable, they are a choice. If states that have raised their voices in favour of restrictions and prohibitions over the past several years choose to do nothing, to allow the issue to wallow in the CCW for another two, five, ten, twenty years, they are actively choosing a future with autonomous weapons and all the horror we know will follow. We can prevent this future, starting now.



REVIEW OF REV.0

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On Monday, 6 December, CCW high contracting parties (HCPs) participating in the Group of Governmental Experts (GGE) on autonomous weapon systems (AWS) continued discussing the [draft report \(Rev.0\)](#) issued on 22 November 2021, which they also discussed last week (see the [previous edition of the CCW Report](#) for details on other aspects of the text).

Application of international law

Greece urged the HCPs participating in the GGE not to be archivists that witness history, but to take agency to shape history, and to therefore not just rephrase and rehash existing and agreed language. The Group of 11 (G11) made similar observations.

Switzerland reminded that deliberations so far have brought clarity about which international law (IL) applies, and how it applies. It noted that this section focuses on the way ahead.

The United Kingdom (UK) suggested a new para in this section to read: "Autonomy is a function rather than a weapon system (WS) in itself. Therefore, international humanitarian law (IHL) is the most appropriate means of regulating new means and methods of warfare as it is technology agnostic. It is principle-based and looks at how a weapon is used, and its effects. It provides a flexible and principle-based framework, one, which is specifically tailored for the regulation of armed conflict and the use of weapons, including those with advanced technology. In armed conflict, it imposes positive obligations to take account of the core principles of IHL when engaged in military activity: distinction, proportionality, and feasible precautions. This applies to all WS, autonomous or not." Australia welcomed this.

The G11 proposed replacing "WS based on emerging technologies (ET) in the area of LAWS" with "AWS" in all relevant paras.

The G11 argued that reference to "applicable" when making references to IL should be deleted in all relevant paras.

India reiterated its wish to delete all titles and sub-titles in the document.

Switzerland expressed support for referencing other branches of IL, such as international criminal law (ICL), and said language in this regard could be stronger. Austria supported this.

Brazil, Chile, and Mexico jointly proposed to have a first para in this section that sets the scene for this area of IHL: "The potential development, deployment, and use of WS based on ET in the area of LAWS creates unique challenge for the respect of IHL in the battlefield. To confront these challenges, normative development is required."

Paragraph 18

Current text: *Applicable international law, including the Charter of the United Nations and, international humanitarian law continues to apply fully to all weapons systems, including the potential development and use of lethal autonomous weapons systems. Other bodies of international law, including international human rights law and international criminal law can also apply to the potential development and use of all weapons, including lethal autonomous weapons systems.*

The United States (US) would like to revert to agreed language of Guiding Principle (GP) (a) in this para. It argued that references to international human rights law (IHRL) and ICL are already made in the preambular introduction section, which is the most appropriate place for such references. Australia supported this. If retained, it suggested to amend language to align more closely with GP(a): "IHL continues to apply fully to all weapons systems, including the potential development and use of LAWS." It further suggested the para to continue to read: "Other bodies of IL, including the UN Charter, IHRL, and ICL, as applicable, also apply."

Brazil, Chile, and Mexico jointly could accept Australia's proposal as consensus compromise.

India would also like to revert back to agreed language. It argued that as the para currently stands, it gives the impression that the UN Charter applies to AWS. India and Israel called for deletion of the second sentence of this para.

The G11 proposed new language, based on a previous version of this paper: “International law, including the Charter of the UN, IHL, IHRL, and ICL applies fully to all weapon systems, in particular in the development and use of AWS.”

Paragraph 19

Current text: *In cases involving weapons systems based on emerging technologies in the area of lethal autonomous weapons systems not covered by the Convention and its annexed Protocols or by other international agreements, the civilian population and the combatants shall at all times remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience.*

Greece said “principles” was superfluous, and it should instead read “authority of all applicable international law”.

The US supported this para as is.

The G11 preferred to see deletion of “WS based on ET in the area of LAWS” and to reflect the exact quotation of the Marten’s Clause.

Paragraph 20

Current text: *The potential development and use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems must be conducted in accordance with applicable international law, in particular international humanitarian law and its requirements and principles, including inter alia those related to distinction, proportionality and precautions and the protection of persons placed hors de combat.*

The US proposed to delete “development and,” as development is not regulated by IHL, focusing only on the use of weapon systems. Australia and India supported this.

The US proposed deletion “and the protection of persons placed hors de combat”. It argued that this concept was not of particular relevance to international law related to weapons and proposed it should rather refer to “precaution in attack” at the end of this para. India and Israel supported this. Australia also favoured deletion of reference to persons placed hors de combat as it argued this is captured by the principle of distinction.

The Netherlands argued that IHL obligations with respect to precautions are broader than just “attack”, including also effects of attacks. It suggested to retain existing language. The G11 proposed to add “in attack” after “precautions”.

Switzerland stressed that respect for IHL is not limited to rules and principles governing the conduct of hostilities, but that other provisions may be relevant as well, such as the rules of protection of medical and religious persons and objects. It proposed to make this more explicit, by adding at the end of para 20: “as well as those relating to those specially protected persons or objects or any other activities governed by IHL.” Brazil, Chile, and Mexico jointly expressed support.

The G11 requested deletion of “potential” and requested to replace “requirements” with “rules”.

Paragraph 21

Current text: *The international humanitarian law requirements, obligations and principles, including inter alia distinction, proportionality and precautions in attack must be applied through a chain of responsible command and control by the human operators and commanders who use weapons systems based on emerging technologies in the area of lethal autonomous weapons systems.*

The US proposed to delete “obligations,” calling it redundant. It argued this creates confusion and should instead be “rules and principles” or “requirements and principles”. India and the G11 supported this.

The G11 requested to delete “responsible”.

The Netherlands argued that IHL obligations with respect to precautions are broader than

just “attack,” including also effects of attacks. It suggested to delete “in attack”.

Israel proposed to delete this para. Alternatively, it suggested following new language: “Human commanders and operators who use WS based on ET in the area of LAWS, as well as their commanders and subordinates, are obliged to comply with IHL in the respective area of responsibility.”

Brazil, Chile, and Mexico jointly argued that it was important to stress that requirements, obligations, and principles of IHL must not only be “applied” but also must at all times be “respected,” including through a responsible chain of command and control.

Paragraph 22

Current text: *Compliance with the international humanitarian law requirements and principles, including inter alia distinction, proportionality and precautions in attack, in the potential use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems requires inter alia that human beings make certain context-based judgements based on their consideration of all relevant information available to them at the time of the decision.*

The US suggested to revert to agreed language in para 17(f) of the 2019 GGE report. India supported this. Para 17(f) reads: “Compliance with the IHL requirements and principles, including inter alia distinction, proportionality and precautions in attack, in the potential use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems requires inter alia that human beings make certain judgements in good faith based on their assessment of the information available to them at the time.”

The US noted the new language, including “all relevant information” is an unrealistically high standard. The US said the 17(f) reference to “making judgement in good faith” is a crucial concept that should be preserved. It acknowledged that while 17(f) does not refer to “context-based judgement,” it is an important concept, and should be referred to at the end of this para after

“decision”, by adding: “including relevant context”.

Australia proposed alternative language as it said that the current text may imply that decisions on the use of force must be made by humans in real time: “Compliance with IHL requires, inter alia, that human beings make judgements, considering all relevant information, reasonably available at the time of decision, to apply military force.”

The Netherlands argued that IHL obligations with respect to precautions are broader than just “attack,” including also effects of attacks. It suggested to delete “in attack”.

The G11 proposed to add “Rules and principles of IHL” after “compliance with” in the first sentence.

Paragraph 22bis

Israel proposed new language, based on the 2018 GGE report, paragraph 23(f): “Human responsibility for the use of force must be retained, to the extent possible or feasible, this could extend to intervention of the operation of a weapon, if necessary, to ensure compliance with IHL.”

State and human responsibility

Austria warned against mixing state responsibility and accountability of individuals.

Paragraph 24

Current text: States, parties to armed conflict and individuals remain at all times responsible for adhering to their obligations under applicable international law, including international humanitarian law. States must also ensure individual responsibility for the employment of means or methods of warfare involving the potential use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems in accordance with their obligations under international law.

The G11 requested deletion of “potential”.

The US said the para should end with a reference to IHL, not international law. India echoed this.

Paragraph 25

Current text: Under principles of State responsibility, every internationally wrongful act of a State, including such acts or omissions involving the use of emerging technologies in the area of lethal autonomous weapons systems, entails the international responsibility of that State.

The G11 requested addition of “or act attributable to the state” after “internationally wrongful act of a State”.

Paragraph 26

Current text: *A State remains responsible for, inter alia, all acts or omissions committed by its organs such as its armed forces as well as all acts or omissions attributable to the State, including any use of emerging technologies in the area of lethal autonomous weapons systems, in accordance with applicable international law.*

The US noted this para comes from the draft articles of state responsibility. Article 2 acknowledges that conduct includes acts and omissions, and therefore proposed: “A state remains responsible for, inter alia, all conduct of its organs, such as armed forces as well as other conduct attributable to the state, including any such acts or omissions, involving the use of ET in area of LAWS in accordance with applicable IL.”

Switzerland welcomed references to omissions and attributions and supports references to “rules and principles” of IHL, making it clear that the text refers to all legally binding obligations. Austria supported this.

Paragraph 27

Current text: *Human responsibility must be retained across the entire life cycle of weapon systems based on emerging technologies in the area of lethal autonomous weapon systems since accountability cannot be transferred to machines.*

The US suggested adding after “human responsibility” “for decisions” to make clear what responsibility is for. India supported this. Austria preferred to replace “responsibility” with

“accountability” or “control,” given the legal notion of accountability.

Israel suggested to revert to agreed language of GP(b). It reads: “Human responsibility for decisions on the use of weapons systems must be retained since accountability cannot be transferred to machines. This should be considered across the entire life cycle of the weapons system.”

Israel proposed for this para to appear first in this section due to its status.

Paragraph 28

Current text: *Humans must at all times remain accountable in accordance with applicable international law for decisions on the use of force.*

Australia proposed to replace the last part with “for decisions on the application of military force”.

Paragraph 29

Current text: *Accountability for developing, deploying and using any emerging weapons system in the framework of the Convention must be ensured in accordance with applicable international law, including through the operation of such systems within a responsible chain of human command and control.*

Greece suggested to replace “responsible” with “distinct”.

The US was fine with the language as is but proposed to align it more with the mandate, and to refer to “WS based on ET in the area of LAWS”. India echoed this.

Paragraph 30

Current text: *States must provide mechanisms to ensure accountability for any violations of international law involving any weapon system, in accordance with applicable international law, in particular international humanitarian law, including by investigating allegations of war crimes, bringing perpetrators to justice and providing remediation to victims.*

Greece proposed to include, after IHL: “and ICL, including the investigations of allegations of war crimes, crimes against humanity, and genocide, bringing perpetrators to justice through due process and providing remediation to victims.” It argued that there is wisdom to be found in international criminal tribunals, the residual mechanism, and the International Criminal Court when deliberating on liability, responsibility, and chains of command.

Israel proposed following language: “States must provide mechanisms to ensure accountability for any violations of international law involving any weapon system used by the state forces in armed conflict, in accordance....”

Israel proposed to change “allegation” to “reasonable suspicion”.

The US noted it needs to be clear that states must provide mechanisms to ensure accountability of violations of “their” violations, and not “any” violations. The US would like to see “and providing remediation to victims” deleted, as this is not grounded in IHL. The entire para would therefore read: “States must provide mechanisms to ensure accountability for any violations of their obligations under IL, in particular IHL, involving any WS based on ET in the area of LAWS, in accordance with applicable IL, in particular IHL, including by providing for investigating allegations of war crimes and bringing perpetrators to justice.” India agreed but would like to see all language deleted after “IHL”.

Brazil, Chile, and Mexico jointly proposed to include, after “war crimes,” “crimes against humanity, and genocide”.

Human-machine interaction

Paragraph 33

Current text: *Human-machine interaction, which may take various forms and be implemented at various stages of the life cycle of a weapon, should ensure that the potential use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems is in compliance with applicable international law, in particular*

international humanitarian law. In determining the quality and extent of human-machine interaction, a range of factors should be considered, including the operational context, and the characteristics and capabilities of the weapons system as a whole.

Brazil, Chile, and Mexico jointly said this para is superfluous.

The G11 observed that this para confuses the relationship between human control and HMI. They proposed replacing “ensure that the potential use of WS based on ET in the area of LAWS is in compliance with applicable IL” with “ensure that use of AWS is in compliance with IL”.

Paragraph 34

Current text: *Human control over the use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems can be exercised in various ways across the life-cycle of these weapon systems and through human-machine interaction.*

Russia said this para should be brought in line with para 21 of the 2019 GGE report. The US and Japan echoed this. Para 21 reads: “Human responsibility for the use of WS based on ET in the area of LAWS can be exercised in various ways across the life-cycle of these WS and through HMI.”

Russia suggested to replace “control over the use of WS...” with “responsibility for the use of WS...”. Israel, India, and Japan echoed this.

Brazil, Chile, and Mexico jointly said this para is superfluous, as the same ideas are also captured in para 33.

The G11 observed that this para confuses the relationship between human control and HMI.

Paragraph 35

Current text: *The touch points of the life-cycle of a weapon system may include: political direction related to the pre-development phase; research and development; testing, evaluation and certification; training; command and control; deployment; use and abort; post-use assessment; decommissioning.*

Russia said the content in this para was never agreed upon, and different states have different methodologies of identifying the different phases of a lifecycle of a weapon system. It said it was ready to accept deletion of this para, or to maintain it, but without reference to the different phases. India echoed this. Japan said it could go along with deletion of this para but noted that this para is based on previously agreed language.

The US observed that the term “decommissioning” could benefit from further clarification, and proposed following language: “and weapons management, including storage, handling and disposal” so to better capture the intent of decommissioning and general military practice.

Brazil, Chile, and Mexico jointly said this para is superfluous. The G11 made similar observations.

Paragraph 36

Current text: *The following practices in human-machine interactions may contribute to the implementation of international humanitarian law by ensuring sufficient human control:*

Brazil, Chile, and Mexico, as well as the Netherlands, opposed deletion of this para since it is the only part in the text including substantive developments regarding the human element. Austria and South Africa echoed this. Austria stressed that it needs to be clear that humans and machines are not equal, and that technology needs to serve human beings.

Switzerland expressed its support for sufficient human control (SHC) or meaningful human control (MHC) to have a meaningful outcome and encouraged states to be flexible. The Netherlands welcomed this section and reiterated its support for MHC. Austria, Cuba, South Africa, and Pakistan also reiterated their support for MHC.

Pakistan held off its comments until it sees revisions of paras 31 and 32.

Russia requested deletion of para 36, but also reiterated its view on MHC or SHC, arguing that these notions cannot be applied to AWS.

The US requested deletion of SHC. Japan requested to replace SHC with “human responsibility”. Cuba said that in IL, the concept of human responsibility does not exist, there only is individual criminal responsibility.

Israel proposed to replace SHC with “human involvement” or alternatively delete reference to SHC.

The G11 and South Africa requested replacement of SHC with MHC.

The G11 asked for the chapeau to read: “The following practices in HMI may contribute, among other things, towards MHC, and therefore, towards compliance with IHL.”

Switzerland said that the chapeau could be stronger and not just indicate that elements “may” contribute to IHL compliance but are of “key importance”.

Switzerland proposed that the chapeau could indicate that the list is non-exhaustive, or for it to read: “The following specific practices in HMI...”. South Africa supported this.

India said that this para contains new language, and that there is merit in either deleting all sub-paras, or to revert back to agreed language of para 23(b) of the 2019 GGE report, which reads: “Risk mitigation measures can include: rigorous testing and evaluation of systems, legal reviews, readily understandable human-machine interfaces and controls, training personnel, establishing doctrine and procedures, and circumscribing weapons use through appropriate rules of engagement.”

The US proposed to add the two additional purposes of “accountability and risk mitigation” in the chapeau, for it to read: “The following practices in HMI may contribute to the implementation of IHL, effective accountability and mitigation of risks in the use of WS based on ET in the area of LAWS.”

36(a): Humans make informed decisions about the deployment and use of weapons.

The US proposed to combine sub-paras (a) and (b) to be more operative and impactful, so it

would read: “Human commanders and operators make decisions about the deployment and use of weapons, with sufficient information to ensure that force is used in accordance with IL, including information about the potential targets, the capabilities and characteristics of the weapon to be used and the operational context in which the weapon is deployed.”

36(b): Humans have sufficient information to ensure that force is used in accordance with international law, including information about the potential targets, the capabilities and characteristics of the weapon to be used and the operational context in which the weapon is deployed.

Israel proposed to replace “that force is used” with “that LAWS are used” in accordance with the GGE’s mandate.

Israel suggested to replace “sufficient information” with “information reasonably available at the time”.

Israel proposed to delete “operational” since context is wider than operational context.

Austria proposed to add: “Humans must be able to understand and explain actions to be performed by a weapon system.”

36(c): Humans should be able to understand and explain the actions to be performed by the weapon system and the actions it has performed.

The UK recommended to change this to para to: “Relevant individuals throughout the lifecycle should have an appropriate understanding of the WS and its effects. This includes, but is not limited to, those conducting test and evaluation, lawyers conducting weapons reviews, and military commanders and operators. Each may require a different level of understanding of the WS and its effects.”

The US proposed new language: “Human commanders and operators should be able to properly assess the expected effects of using the weapon system.” Israel supported this.

Austria said it did not understand why the past tense is used in the second part of this para.

36(d): The weapon is properly tested and human operators are properly trained, to ensure that the weapon is deployed in a lawful manner.

The US said this para could be strengthened language already agreed from para 23(b) of 2019 GGE report so that it reads: “Risk mitigation measures can include: rigorous testing and evaluation of systems, legal reviews, readily understandable human-machine interfaces and controls, training personnel, establishing doctrine and procedures, and circumscribing weapons use through appropriate rules of engagement.”

Otherwise, the US proposed for the para to read: “The WS is subject to rigorous testing and evaluation and human operators and other personnel are properly trained.” It noted that the last clause “to ensure that the weapon is deployed in a lawful manner” is superfluous.

The G11 requested deletion of the first part of “The weapon is properly tested and”.

Austria noted that it should also refer to the “use” of AWS in a lawful manner.

36(e)bis: Greece proposed to add the para: “Humans involved in the use of WS based on ET in the area of LAWS are fully aware of the implications deriving from the chain of command and their own responsibility when using aforementioned weapons following an order from a commander or other superiors.”

The G11 proposed new language: “Humans should be able to exercise supervision, timely intervention and deactivation of a WS.”

Paragraph 37

Current text: *It would be beneficial to identify good practices for human-machine interaction, including such practices identified in academic research or developed in industry, should be shared on a voluntary basis and be implemented to strengthen compliance with international humanitarian law when potentially using weapons systems based on emerging technologies in the area of lethal autonomous weapons systems.*

Russia proposed technical amendments, for the para to start with: “It would be beneficial to identify and share, on a voluntary basis, good practices for HMI...”

Russia requested deletion of “should be shared on a voluntary basis and be implemented”. India supported this para but also proposed to delete “and be implemented”.

Brazil, Chile, and Mexico jointly said that this para confounds human control and HMI. They argued it was premature to identify good practice with respect to HMI, and that they do not want to give the false impression that challenges posed by AWS can be solved by exchanging good practices.

Israel proposed following language for this para: “It would be beneficial to identify good practices for HMI, which may include practices identified in academic research or developed in industry, which could be shared on a voluntary basis and be implemented to strengthen compliance with IHL when potentially using WS based on ET in the area of LAWS.”

Weapons reviews

Russia would like to align language with previous reports and refer to “legal reviews” or “legal WRs” instead of “WRs”.

The Group of 11 (G11) urged to keep “WR” instead of “legal review,” as this takes into account that reviews should not only be based on legal but also ethical considerations.

Brazil, Chile, and Mexico jointly proposed a new introduction para to this section: “While existing legal WR obligations under IHL remain fully applicable to ET in the area of AWS, there are also specific challenges to its implementation due to, among others, the unpredictability derived from potential self-learning, and data and algorithm biases of such systems, particularly taking into account the complex and changing nature of environments where force is used.”

Brazil, Chile, and Mexico jointly expressed concern that paras 41(b) and (d) would side-line the above-mentioned challenges.

The G11 requested deletion of “lethal” in all relevant paras.

Paragraph 38

Current text: *In accordance with States’ obligations under applicable international law, in the study, development, acquisition, or adoption of a new weapon, means or method of warfare, determination must be made whether its employment would, in some or all circumstances, be prohibited by international law.*

The US would like to revert back to GP(e), and delete “applicable”. India and Russia echoed this.

The US said it could accept for “applicable” to be added at the end of the sentence.

Brazil, Chile, and Mexico jointly requested deletion of this para.

Paragraph 39

Current text: *Such reviews are a useful tool to assess nationally whether potential weapons systems based on emerging technologies in the area of lethal autonomous weapons systems would be prohibited by any rule of international law applicable to that State in all or some circumstances. States are free to independently determine the means to conduct weapons reviews although the voluntary exchange of best practices could be beneficial, bearing in mind national security considerations or commercial restrictions on proprietary information.*

Russia proposed to replace “although” with “and”.

Sweden suggested replacing “useful” with “essential”.

The G11 requested deletion of this para as recommendations for states to exchange best practices is already reflected in para 42.

Paragraph 40

Current text: *All States that have not yet done so should undertake weapon reviews or are otherwise encouraged to consider joining Additional Protocol I to the Geneva Conventions of 12 August 1949.*

The US objected to the second clause of this para and requested for it to end after “reviews” for reasons explained before.

The G11, Russia, and Sweden expressed their support for this para.

India as well as Brazil, Chile, and Mexico jointly requested deletion of this para.

Paragraph 41

Current text: *The following elements of practice can be applied in the conduct of weapon reviews, at the national level, in the study, development, acquisition, or adoption of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems:*

Russia suggested deletion of this para as it seems as though the GGE seeks to agree on a set of standards, which it opposes.

It proposed this para could be replaced with para 23(c) from the 2018 report, overlapping with para 41(a): “A WS under development or modification which significantly changes the use of a WS must be reviewed as applicable to ensure compliance with IHL.” India could support this.

41(a): *A weapon system under modification which significantly changes the use of existing weapons systems in a manner which may affect the system’s compatibility with international law, must be reviewed to ensure compliance with international law*

The US proposed to replace “must” with “should” as it is not a requirement of existing law but good practice. Sweden and Israel supported this.

Switzerland noted that any change to a weapon or its use, which may influence IL implementation in good faith is significant, and therefore argued that “significant” is redundant in this para. Brazil, Chile, and Mexico jointly supported this.

Israel observed that “existing” is misplaced and should be placed at the beginning of the sentence.

41(b): *New operational contexts for the employment of existing weapons should be reviewed, when such*

operational contexts differ significantly from the use that the authorization was based upon.

The US proposed technical amendments for the para to read: “Proposals for authorising the use of existing weapon systems in new operational contexts should be reviewed when such operational contexts differ from those that the earlier authorisation was based upon.” Switzerland could support this.

Switzerland noted that any change to a weapon or its use, which may influence IL implementation in good faith is significant, and therefore argued that “significantly” is redundant in this para. Brazil, Chile, and Mexico jointly supported this.

Israel proposed to add, at the end of the sentence: “and which may affect the system compatibility with international law.”

41(c): *In light of the particular challenges of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems, including potential for self- learning that could introduce a risk of unpredictability, weapons reviews should be conducted with a full understanding of the weapons’ capabilities and limitations, in light of its normal or expected uses and sufficient confidence about its effects in those circumstances.*

The US and Israel requested deletion of this para. The US argued it was redundant in view of the next para, and contains ideas and concepts which have not reached consensus, such as self-learning and unpredictability.

New Zealand would like to keep this para as it is one of the few elements in which specific considerations is given to AWS, as otherwise the text is rather generic.

Paragraph 42

Current text: *States are encouraged to further identify, adopt and implement guidelines and to share, on a voluntary basis, information and good practice on the conduct of weapon reviews of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems.*

The US suggested to replace “are encouraged” with “should”.

The US proposed to add “national” before “guidelines”.

Russia proposed to use language of para 37 of the draft report Rev.0: “It would be beneficial to identify and share on a voluntary basis information and good practices on the conduct of legal reviews in the area of emerging technologies in the area of LAWS.” India could support this.

To ensure transparency, the G11 proposed to delete the caveat “on a voluntary basis”.

Paragraph 43

Current text: *Where feasible and appropriate, interdisciplinary legal, technological, military and ethical perspectives should be integrated in research and development of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems, including through independent ethics reviews bearing in mind national security considerations and restrictions on commercial proprietary information.*

Russia supported this para.

While it welcomed the reference to ethics reviews, Switzerland would like clarification of what is meant by “independent” ethics review, and wondered from what or from whom the review should be independent.

The Netherlands had similar questions and said this concept requires further discussion. It recommended to end the sentence after “systems”.

The G11 would like to see deletion of “where feasible and appropriate” and “bearing in mind national security considerations and restrictions on commercial proprietary information.”

Risk mitigation

In his opening comments, the Chair observed that para 44 is drawn from Guiding Principle (GP) F; that para 45 is taken from para 2(a) of the 2019 Group of Governmental Experts (GGE) report; and that

para 47 is based on GP G.

Pakistan reiterated a position it had shared in earlier GGE sessions about the risks that autonomous weapon systems (AWS) pose to regional and international security, which are not reflected in this version of the report. It noted that it has argued for inclusion of these risks by making the connection with the objectives and principles of the Convention on Certain Conventional Weapons (CCW). They include arms racing and a lowered threshold for the use of force, among other things.

Germany expressed support for the sub-section in its entirety, calling it a well-balanced approach.

The US suggested a new para to follow 44, which would be drawn from paragraph 23(a) of the 2019 GGE final report: “During the design, development, testing, and deployment of weapon systems based on emerging technology in the area of LAWS, the risks inter alia, of civilian casualties, as well as of precautions to help minimize incidental loss of life, injury to civilians and damage to civilian objects must be considered. Other types of risks should be considered as appropriate, including but not limited to, risk of unintended engagement, the risk of loss of control of system, the risk of proliferation, and the risk of acquisition by terrorist groups.”

The G11 requested deleting the word “lethal” ahead of “autonomous weapon systems” in this sub-section and throughout the draft report.

In a more general statement delivered at the close of the meeting, Russia reminded that earlier in the session states agreed to move current section III of the draft report to the end of the document. On that basis, Russia believes that a separate paragraph is needed to cover items that will require further consideration. It suggested putting in an extra para after para 48. The chapeau would read “The Group agreed that the following aspects may benefit from additional clarification or review”. A sub-para (a) would read: “The role of operational constraints regarding tasks, target profiles, time frame of operation, and scope of movement over an area and operating environment” and sub-para (b) would read possible bias in the datasets used in algorithm-based programming, relevant to emerging technology in the area of LAWS.” The

Chair responded to say that if this occurs, then the list should offer examples for future discussion and not be limiting.

Paragraph 44

Current text: *When developing or acquiring new weapons systems based on emerging technologies in the area of lethal autonomous weapons systems, physical security, appropriate non-physical safeguards, including cyber-security against hacking or data spoofing, the risk of acquisition by terrorist groups and the risk of proliferation should be considered.*

Brazil, Chile, and Mexico jointly said that while this paragraph is drawn from a GP, they don't see the added value in how it is presented here.

Greece observed that while para 44 is based on a GP, it suggests a small amendment to the first line by adding the words "throughout the lifecycle of new weapons," in order to make it broader and ensure that such considerations are not only during development.

The G11 requested to add reference to "other unauthorised recipients".

Paragraph 45

Current text: *States must ensure that algorithm-based programming do not rely on data sets that can perpetuate or amplify unintentional social biases, including gender and racial bias, and that can thus have implications for compliance with international law.*

Norway suggested replacing "algorithm-based programming" with "weapon systems based on emerging technology in the area of LAWS," noting that this risk could also apply to the testing environment as well as data sets and programming. It said it also would have preferred more specific emphasis on the risks, and not just implying them in the way the current language does.

The G11 said it is imperative that states undertake methods to avoid perpetrating bias, noting gender bias in particular.

The US acknowledged that it had wanted to delete past iterations of this para. It offered a reformulation as compromise: "States should take deliberate steps to minimize unintentional bias in AI capabilities in weapon systems based on emerging technology in the area of LAWS."

Russia and Israel requested deleting this paragraph as both feel that the issue had not been sufficiently discussed.

Japan suggested replacing "must ensure" with "should bear in mind the concern."

Brazil, Chile, and Mexico jointly appreciated the mention of bias as an important issue but would prefer more direct language that does not condition events or their legal implications. They offered a modified formulation: "States must ensure that the use of LAWS do not perpetuate or amplify unintentional social bias, including gender and racial bias, and which could have implications for compliance with international law."

Greece asked to delete "unintentional" before "social bias" so as to not infer that there are positive biases.

Paragraph 46

Current text: *Risk mitigation measures to help minimize the risk of incidental loss of life can include, inter alia, incorporating autonomous self-destruct, self-deactivation, or self-neutralization mechanisms into munitions and weapon systems.*

The US suggested a reformulation to strengthen this para: "Risk mitigation measures to help minimize risk of incidental loss of life, injuries to civilians, damages to civilian objects, on weapon based on emerging technology in the area of LAWS, may include: incorporating autonomous self-destruct, self-deactivation, or self-neutralization mechanisms into weapons and weapon systems." This would be followed by three sub-paragraphs: b) measures to control the types of targets that the system can engage; c) measures to control duration, geographic scope, and scale of operation, of the weapon system; and d) measures that enhance control over the use of force in relation to precision, timing, and accuracy."

Russia suggested replacing “can” with “may” and deleting “autonomous” after “incorporating”, as well as deleting the reference to “munitions”.

Brazil, Chile, and Mexico jointly suggested that this paragraph make reference to other paras in the report that bring this same concept forward (i.e. draft paras 32 and 36).

Israel asked to omit the words “risk of,” for the sake of legal accuracy. It observed that the language here about safety mechanisms draws inspiration from landmines, but that LAWS may not be considered in the same manner as mine. It proposed replacing “munitions and weapon systems” with “LAWS”. “Non-engagement mechanisms” could replace the other types of mechanisms described currently.

Paragraph 47

Current text: *Risk assessments and mitigation measures should be part of the design, development, testing and deployment cycle of emerging technologies in any weapons systems, including weapons systems based on emerging technologies in the area of lethal autonomous weapons systems.*

Brazil, Chile, and Mexico jointly asked to include “use” alongside design, development, testing, and

deployment, as well as references to paras 32 and 36. They would also like to see language that stresses the ability to intervene, abort, or suspend a system but could accept references to those other paragraphs instead.

The G11 asked to replace “should” with “must”.

Paragraph 48

Current text: *Where feasible and appropriate, verifiability and certification procedures covering all likely or intended use scenarios must be developed, the experience of applying such procedures should be shared bearing in mind national security considerations or commercial restrictions on proprietary information.*

Japan asked to replace “must” with “should”. To harmonise language, Greece suggested changing “must” to “are encouraged to be”.

Brazil, Chile, and Mexico jointly suggested removing this paragraph noting that even though it is drawn from paragraph 23 (d) of the 2018 GGE report, its many caveats make it hard to accept as a conclusion or recommendation.

The G11 suggested deleting this para.

REVIEW OF REV.1

Ray Acheson and Katrin Geyer | Women’s International League for Peace and Freedom

On Tuesday, 7 December, CCW high contracting parties (HCPs) participating in the Group of Governmental Experts (GGE) on autonomous weapon systems (AWS) discussed the **first revised draft report (Rev.1)**, issued on 6 December 2021.

General comments

The Chair explained that in Rev.1, he sought to retain language that would bring HCPs closer to consensus, and deleted some paragraphs (paras) as they either were not necessary, nor were agreed language that does not need to be repeated. The Chair also explained that he added new language,

and streamlined terminology, such as using “rules and principles” throughout the text.

On weapons reviews, the Chair took up Russia’s suggestion to use “legal weapons reviews”. He also observed that he kept headlines in Section III for ease of reading and discussion, but noted that these could be dropped if there is general agreement. Overall, the Chair urged delegations to be flexible.

India, Russia, and the United States (US) said they would have preferred for the text to be displayed on a shared screen, but the Chair encouraged

delegations to focus on main issues, and to work on finetuning the text on the final day of the GGE's session. Brazil, Chile, and Mexico jointly expressed support for the Chair's approach.

Argentina urged the Chair to start discussing the most important sections of the revised report given the time constraints, and to therefore discuss sections on "The way forward" as well as "General commitments". The Philippines echoed this. The Chair explained that some delegations require more time to consult with their capitals on the most important sections of the report.

The Group of 11 (G11) regretted that this draft moved further away from the views of the majority. It, along with Palestine and the Philippines, expressed concern that the proposal to include a new section on ethics was not included, as ethical considerations (ECs) are integral to the GGE's mandate, and should drive its deliberations. The G11 stressed that the draft report should reflect coalescence of the idea for a legally binding instrument (LBI) as final destination, and that a political declaration (PD) can only be viewed as an intermediary step towards an LBI.

Finland welcomed the revised report as "well-balanced" and "essential foundation for future discussions". Germany also welcomed the revised version, and that it adheres to the two-tier approach.

Japan expressed its opposition to language in para 30 that bans a certain category of AWS, which is not part of agreed language.

Brazil, Chile, and Mexico jointly welcomed deletion of section III of Rev.0 to streamline the report, and also welcomed deletion of references to potential benefits of AWS.

Austria said it supports including international human rights law (IHRL) and international criminal law (ICL) throughout the report. Stop Killer Robots agreed.

Introduction

Russia proposed that the quotation from the decision of the final document of the CCW Meeting

of States Parties (MSP) in 2019, currently in para 2, should be added at the end of para 1. It requested for the first two sentences in para 2 to be placed under para 1, and for para 2 to start with "Due to extraordinary circumstances...". It proposed a few other technical changes in paras 1 and 2 to reflect quotes of past agreed decisions accurately.

Paragraph 3

Current text: *Due to the extraordinary circumstances related to the COVID-19 pandemic, the High Contracting Parties agreed to postpone the meetings of the Group of Governmental Experts of the High Contracting Parties related to emerging technologies in the area of lethal autonomous weapons systems from 28 June to 5 July 2021.*

Russia argued that this para needs to clarify that the changes of meeting dates impacted all of the GGE sessions in 2021. This should be reflected accurately in this para, to reflect that postponement was agreed upon based on a written silent procedure, as a result of which agreements on specific dates for 2021 were agreed.

Conclusions and recommendations

Paragraph 15

Current text: *Delegations presented different options to address these potential risks and challenges in the context of the objectives and purposes of the Convention. Their pros and cons were discussed under four categories, including a legally binding instrument, a political declaration, and clarity on the implementation of existing obligations under international law, in particular international humanitarian law.*

China wondered if para 15 was better placed in the "Conclusions and recommendations" section, as it appears to reflect different policy options.

The Republic of Korea (ROK) said it was not strongly opposed to the introduction of categories but observed that these seem contrived or unnatural as all options are not always clearly cut off from each other. It instead proposed to use the term "different options" or "different views". India and Japan supported this. Cuba supported the

approach of categorising into distinct positions but said it was flexible which term is used to describe different positions.

The US observed that there was an additional, distinct category relating to non-legally binding approaches, such as codes of conduct, or compendia or guidelines. It therefore suggested to refer to five categories in this para, and to insert, after “political declaration (PD),” “other non-legally binding documents”. Australia, India, Japan, and ROK supported this.

India would like to see language added that none of the proposals enjoys consensus and said it sees bias in the listing of the options.

Ireland proposed to delete everything after “Convention” in the first sentence, and to instead reference the relevant para in the 2018 GGE report. It noted it might be redundant to repackage language when it is already said elsewhere that agreed language is given consideration. Austria and Switzerland supported this. The Philippines supported the need for streamlining the text. However, the Philippines preferred to add elements to reflect the evolution of discussions since 2018 as well as the factual deliberations of the Group. Argentina supported this. Similarly, Austria argued that reflecting only language from 2018 does not do justice to the debate but due to time constraints, agrees with Ireland’s proposal to shorten the para.

Brazil, Chile, and Mexico jointly expressed worry that by including this para, the section might prejudice the negotiations of a mandate, and supported deletion of this para. Otherwise, they can support Ireland’s proposal. Russia said it was flexible regarding these proposals.

Israel proposed to replace “these potential risks and challenges” with “these aspects” and to add “work towards” before “clarity”. The US supported this. India supported the word “aspects”.

Canada proposed to add language to reflect that the options listed are not mutually exclusive.

15(a). Under the first category, a proposal for a legally binding instrument stipulating prohibitions and regulations on autonomous weapons systems

was made. A mandate to negotiate a legally binding instrument to ensure human control over the critical functions in autonomous weapons systems was proposed.

The Philippines would like to see added at the end of this para: “The majority of delegations supported this proposal.” Argentina supported this. It argued that it was important to reflect the level of support received for each proposal. India opposed this, arguing that this type of language is not agreed terminology, and proposed instead to indicate that some delegations expressed one view, while other delegations expressed another view.

Cuba and China preferred to end the sentence after “LBI” to reflect all positions.

China noted that not all options were presented, and asked that, if the sub-para are kept, to add the following language, either as part of para 15(a) or as a new sub-para: “There is also a proposal for a LBI stipulating prohibitions or restrictions on LAWS on the basis of clear definitions, which may take the form of a new protocol to the CCW.”

15(b). Under the second category, a proposal for a political declaration that would commit States not to develop, produce, acquire, possess, deploy or use certain weapon systems based on emerging technologies in the area of lethal autonomous weapons systems and to regulate all other types of such systems, was made.

The Philippines would like to add language at the end of this para: “In that regard, the majority of delegations stated that a PD could be considered as an intermediary step towards an LBI.” Argentina supported this.

ROK said it was open to a PD as long as it is based on agreed language and agreed GPs. India echoed this. India stressed that it never understood a PD to commit states not to develop, produce, acquire, possess, deploy, or use certain AWS.

Cuba said that PDs do not “regulate” anything, as the term has legal implications, and suggested to replace this with “and other possible non-binding measures” instead of “and to regulate all other types of such systems”.

15(b)bis: The US suggested to add following language: “Under the third category, proposals for other non-legally binding documents were made that would articulate principles and practices that support effective implementation of international humanitarian law (IHL), strengthen accountability and mitigate risks of emerging technologies (ET) in the area of LAWS.” Canada supported this.

15(c). *Under the third category, proposals were made to further discuss the human-machine interface and the application of existing international legal obligations. The need to identify practical measures, best practices and information sharing for improving compliance with international law, including legal weapons reviews required by Article 36 of the Additional Protocol I to the Geneva Conventions, was also underlined.*

Israel requested deletion of the para as of “required by Article 36” to account for states parties not party to the Protocol.

Cuba said this para could be deleted, and that the content can be included in 15(b).

15(d). *As international humanitarian law is fully applicable to potential lethal autonomous weapons systems a view was also expressed that no further legal measures were needed.*

India requested deletion of “also”. Russia agreed.

The Philippines proposed to add: “The majority of delegations affirmed that IHRL and ICL are applicable, and that ECs should drive the development of a NOF.” Argentina supported this.

India argued that this option should be presented as an option, and “view” should be replaced with “proposal”.

Cuba said this para is not a category but rather a conclusion, and it should therefore be either deleted or moved to another section.

Paragraph 16

Current text: *In this connection, the Group considered: (1) the guiding principles, which the Meeting of High Contracting Parties endorsed in*

2019, (2) the work on the legal, technological and military aspects and (3) the conclusions of the Group, as reflected in its reports of 2017, 2018 and 2019; and it used them as a basis for its work in 2021 and its consensus recommendations in relation to the clarification, consideration and development of aspects of the normative and operational framework on emerging technologies in the area of lethal autonomous weapons systems, in accordance with Decision 1 of the Fifth Review Conference of the High Contracting Parties to the Convention (CCW/CONF.V/10), consistent with CCW/CONF.V/2.

Russia argued that the introductory sentence was superfluous. It argued there should be a reference to the Guiding Principles (GPs) as contained in the 2019 GGE report, either as reference within the para, or as a footnote. It argued this was important to clearly indicate what is being talked about.

Pakistan also said this para was superfluous, as it repeats text already referenced earlier in the report.

Austria said the para should clarify that it quotes the GGE’s mandate as adopted in 2019, and suggested for the para to start: “Following the mandate agreed in 2019”.

Paragraph 17

Current text: *The Group recommends that the High Contracting Parties affirm the following principles and practices at the Sixth Review Conference in order to contribute to the clarification, consideration, development and strengthening of aspects of the normative and operational framework on emerging technologies in the area of lethal autonomous weapons systems.*

The Philippines, supported by Palestine, proposed two new paras on ethical considerations (ECs) to be included in this section:

“ECs, including the principles of humanity and dictates of public conscience, are central to determining the acceptability of, and limits to autonomy in weapon systems (WS). ECs on AWS include consideration of compatibility with international law (IL), but go beyond this to encompass moral acceptability.”

"Human decision-making on the use of force should never be displaced by artificial intelligence (AI) and computer-controlled processes. In scenarios that involve life and death decisions, final human determination should apply. As a rule, life and death decision should not be ceded to AI systems."

Russia said this para as is was superfluous, as the same content is already covered in para 49(a) of this draft report. Similarly, Switzerland also proposed to align paras 17 and 49.

India observed that what follows in para 17 are not necessarily principles or practices, as indicated in the chapeau. Brazil, Chile, and Mexico jointly agreed. They proposed following language instead: "The following elements, based on the work on the GPs and previous reports of the GGE, at the Sixth Review Conference..." Pakistan supported this.

Pakistan preferred deletion of "strengthening".

Cuba proposed to adjust the para in the following way: "In addition, the following elements were considered and recommended for assessment/review at the Sixth Review Conference." The proposal would enable deletion of the sub-paras and to transform them into individual paras. This would allow for amendments or modifications. Argentina, the Philippines, and Panama agreed.

The US clarified that the way that it sees paras 17–48 is a synthesis of work done, and identification of new and additional work, and therefore would prefer to keep the chapeau to para 17 as is.

Introduction

Russia would like to see all sub headings removed as these do not correspond to usual practice when preparing final reports. It also called for the sub-paras to be represented as separate paras.

Russia and the US, amongst others, expressed concern that para 17 is not balanced anymore, and called for inclusion of sub-para e of the previous draft in this section.

Palestine expressed disappointment that references to ECs have shrunk and would have preferred a sub-section on ethics in the text.

17(b). Recognize the risks and challenges posed by emerging technologies in the area of lethal autonomous weapons systems in ensuring respect in all circumstances for international law, including international humanitarian law.

Australia preferred "In ensuring compliance with IL, including ensuring respect in all circumstances for IHL" instead of "systems in ensuring respect in all circumstances for IL, including IHL," as this is taken from the Geneva Conventions, and Australia was not sure this was appropriate when referring to broader IHL. The US echoed this.

Russia argued that this para has become unbalanced, as it does not acknowledge the technologies' capability to make "positive contributions" to IHL. It proposed to replace this para with agreed language of the 2019 GGE report in 25(a), or to delete the para entirely.

Israel also called for replacing "risks" with "advantages". The US supported this. Otherwise it suggested to replace language, after "posed by" with "the potential misuse of ET in the area of LAWS in respecting in all circumstances IL, including in particular IHL."

Argentina and Pakistan opposed inclusion of any reference to benefits of AWS.

Brazil, Chile, and Mexico jointly welcomed this para.

17(b)bis: India would like to see an additional para referring to the potential of AWS to uphold IHL obligations.

Japan would like to reinsert 17(e) of the previous version of the draft report after 17(b) which reads: "Consider the potential for ET in the area of LAWS, to be used in upholding compliance with IHL and other applicable international legal obligations".

If this does not garner consensus, Japan supports Israel's proposal to replace "risks and challenges" with "aspects".

17(c). Consider the risks and challenges posed by emerging technologies in the area of lethal autonomous weapons systems in ensuring respect for other bodies of international law, as applicable,

including international human rights law and international criminal law, as well as to relevant ethical considerations, non-proliferation and the maintenance of international peace and security.

India opposed references to IHRL and ICL. The US would also like to see this deleted but acknowledged it was important to some delegations. It said it could accept this if “potential” is added before “risks and challenges” and if “in ensuring respect” is replaced with “respecting”. Panama and Palestine supported retention of references to IHRL and ICL.

Australia would like to see “as they relate” after “ECs”.

Pakistan proposed new language at the end of the sentence: “including thresholds of armed conflicts, and new arms races.”

The Netherlands said it is difficult to “ensure respect” for ECs, and the last part should instead read: “as well as consideration of relevant ethical perspectives in the maintenance of international peace and security.”

Argentina, Brazil, Chile, Mexico, Palestine, and Panama called for replacement of “consider” with “recognise”. They also called for deletion of “relevant” before “ECs”.

Russia called for deletion of this para as there was no consensus.

17(d). *Affirm that the normative and operational framework on emerging technologies in the area of lethal autonomous weapons systems should also account for ethical considerations in connection with legal considerations.*

Russia said it preferred previous wording from draft report Rev.0. It requested to delete “addresses ECs” as well as “should also”.

Israel would like to add “balance military necessity with humanitarian considerations” after “systems”.

Panama noted the language on ECs is weaker than in the previous version of the report, and would like to revert to that language. Argentina echoed this.

17(d)bis: The US would like to add a new para here quoting GP(h): “Reaffirm that consideration should be given to the use of ET in the area of LAWS in upholding compliance with IHL and other applicable international legal obligations.”

Application of international law: International humanitarian law and other relevant bodies of law

Russia argued this report should reflect the results of the work achieved over the previous years and review cycle. It said that this can be presented in various ways but urged not to leave anything out, and opposed a selective approach. India echoed this. The US concurred, arguing that the GGE should offer the RevCon a product that shows the evolution of the Group’s work, and therefore needs to include the full body of work which has led to a point where delegations can focus on concrete commitments.

Russia would like to include a reference to the balance between “military necessity and humanitarian considerations” and that any potential measures adopted should not prevent progress or access to peaceful uses of technologies. It would like to see the importance of researching technologies for peaceful uses reflected in the report, as well as the understanding that states must ensure individual responsibility for the use of methods of war, including the potential use of new emerging technologies (ET) in the area of LAWS, in keeping with obligations of IHL. This could be reflected with inclusion of GP(a) in this section. Australia, the US, and UK echoed this.

The US opposed references to IHRL and ICL in this section, as states have different obligations under these different bodies of international law. It argued that it was premature to include these topics in this section but it was ready to accept references in the previous section.

Russia would also like to add a para on characteristics from previous reports in 2017 and 2018. India echoed this.

Panama would have preferred to have a subsection on international law other than IHL.

Paragraph 19

Current text: *The use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems must be conducted in accordance with applicable international law, in particular international humanitarian law and its rules and principles, including inter alia those related to distinction, proportionality and precautions in attack.*

Russia requested to add “potential” before “use”. Argentina and Panama could not accept this.

Russia asked to drop “inter alia those related to”.

Russia preferred to refer to “requirements” and not “rules”.

Argentina and Panama would like to see deletion of “applicable”. The Netherlands did not understand this request as not the whole body of law might be relevant to certain subjects. Australia and the UK also said inclusion of “as applicable” is important.

Switzerland suggested adding “other” before “acts or omissions”. It also noted that the draft article on state responsibility uses the term “actions” and not “acts”.

Israel would like to see this para placed ahead of current para 18. Cuba could agree to this.

Pakistan would like to add at the start of the sentence “the potential use development, deployment, and use” since there is no agreement to allow for the development and deployment of AWS.

Paragraph 20

Current text: *The international humanitarian law rules and principles, including inter alia distinction, proportionality and precautions in attack must be applied through a chain of responsible command and control by the human operators and commanders who use weapons systems based on emerging technologies in the area of lethal autonomous weapons systems.*

Panama requested to retain “rules and principles”.

Brazil, Chile, and Mexico jointly argued that that rules and principles must not only be applied but also respected, and suggested to replace “applied” with “observed” or “respected”.

Israel requested deletion of this para as it was not sure why this reiteration from the 2019 report receives special treatment. If this para remains, Israel requested inclusion of many other paras from previous reports.

Australia would like to end the sentence after “command and control”.

Paragraph 21

Current text: *Compliance with the international humanitarian law rules and principles, including inter alia distinction, proportionality and precautions in attack, in the potential use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems requires inter alia that human beings make certain judgements in good faith based on their assessment of information available to them at the time, including relevant context.*

Panama requested to retain “rules and principles”. Brazil, Chile, and Mexico said this para adds uncertainty, and would prefer to revert back to language of the previous version. Pakistan echoed this.

Israel would like to add “reasonably” before “available” to align with the common standard under IHL.

Australia made a new language proposal of the latter part to read: “make certain judgements in good faith based on assessment of all relevant information reasonably available to them at the time.”

The Netherlands offered amendments in the last sentence, after “assessment of information,” it proposed to add: “from all sources, available at the time and all relevant context.”

Paragraph 21bis

Panama proposed new language, based on para 18 of the previous draft: “Of international, including

the Charter of UN, IHRL, and ICL also apply to the development and use of all weapons, including AWS.” Argentina, Cuba, and Palestine agreed.

Russia proposed an additional para that was found in the previous version of the draft report in 17(f) noting that human judgement is fundamental, to ensure that the potential use of LAWS would be carried out in full keeping with IL, in particular IHL. India supported this.

State and human responsibility

The UK objected to the term human responsibility, arguing state responsibility is linked to IHL. It suggested the title of this sub-section just be “state responsibility”.

Paragraph 22

Current text: *International humanitarian law imposes obligations on States, parties to armed conflict and individuals, not machines.*

Brazil, Chile, and Mexico jointly proposed deleting para 22 as it’s redundant with the first part of para 23.

Paragraph 23

Current text: *States, parties to armed conflict and individuals remain at all times responsible for adhering to their obligations under applicable international law, including international humanitarian law. States must also ensure individual responsibility for the employment of means or methods of warfare involving the potential use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems in accordance with their obligations under international humanitarian law.*

Brazil, Chile, and Mexico jointly suggested replacing “individual responsibility” with “individual accountability”. They also suggested adding “and applicable ICL”. Austria and Panama agreed.

Paragraph 24

Current text: *Under principles of State responsibility, every internationally wrongful act of a State,*

including such acts or omissions involving the use of emerging technologies in the area of lethal autonomous weapons systems, entails the international responsibility of that State.

Brazil, Chile, and Mexico suggested replacing “act” with “actions” and adding “as applicable ICL.”

Paragraph 25

Current text: *A State remains responsible for, inter alia, all conduct of its organs such as its armed forces as well as all acts or omissions attributable to the State, including any use of emerging technologies in the area of lethal autonomous weapons systems, in accordance with applicable international law.*

The US suggested adding the word “other” before “acts and omissions”. It also suggested adding “involving the,” to mirror the language in para 24. India supported this second proposal.

Israel would like to see the words “all conduct of its organs such as its armed forces ...to the state” replaced with “all conduct attributable to it, including those committed by its organs, including its armed forces.”

Paragraph 26

Current text: *Human responsibility for decisions across the entire life cycle of weapon systems based on emerging technologies in the area of lethal autonomous weapon systems must be retained since accountability cannot be transferred to machines.*

Israel said this para draws from GP(b), and sees no reason why language should be altered here. It argued this para should appear in the first part of the report due to its general nature and importance, and due to the status of the GPs.

Russia called for the use of previously agreed text in this para.

Brazil, Chile, and Mexico also jointly called for reversion to the language of GP(b), which addresses responsibility for decisions on the use of weapons. They indicated the para should read: “Human responsibility for decisions across entire lifecycle of WS based on ET in the area of LAWS,

especially in the stages of deployment and use, must be retained since accountability cannot be transferred to machines.”

Austria suggested using the phrase “human accountability”. Cuba supported this. Austria also suggested adding “deployment and use”.

Cuba argued this para should be moved to the next section.

Paragraph 28

Current text: *Accountability for developing, deploying and using any weapons systems based on emerging technologies in the area of lethal autonomous weapons system in the framework of the Convention must be ensured in accordance with applicable international law, including through the operation of such systems within a responsible chain of human command and control.*

Austria suggested deleting “in the framework of the Convention”.

Paragraph 29

Current text: *States must provide mechanisms to ensure accountability for any violations of their obligations under international law involving any weapon system based on emerging technologies in the area of lethal autonomous weapon systems, in accordance with applicable international law, in particular international humanitarian law, including by providing for investigations of reasonable suspicions of war crimes, bringing perpetrators to justice and providing remediation to victims.*

Israel requested deletion of the last part of this para, from “bringing perpetrators...”.

The US suggested adding “in particular, IHL” after the reference to IL.

The US also suggested changing the reference to “war crimes” to “violations,” arguing that there may be instances in which states want to conduct investigations about violations of IHL that might not amount to war crimes; it also helps avoid list of specific crimes.

The US argued the para should end after “and bringing perpetrators to justice” and delete the reference to “providing remediation to victims,” which it asserted is not an IHL requirement. Panama objected to this suggestion, arguing that the right of victims to receive effective remedy is an obligation under IHL, IHRL, and ICL. Stop Killer Robots agreed.

Australia and the Netherlands said they will take a closer look at the US proposal.

Russia proposed deleting the end of the para after the words “IHL,” arguing this wording has led to serious differences of opinion among delegations. India supported this proposal.

Australia argued this para blurs state responsibility and individual criminal accountability. It suggested that to the extent that it is about criminal accountability for war crimes, it should say: “States must investigate war crimes involving AWS allegedly committed by their nationals or armed forces or on their territory or over which they have jurisdiction, and if appropriate, prosecute the suspects.”

Brazil, Chile, and Mexico proposed the following rewording for this para: “States must provide mechanisms to ensure accountability for any violations of their obligations under IL and other applicable legal frameworks involving any weapon system (WS) based on emerging technologies (ET) in the area of lethal AWS.”

General commitments

The US asked if these commitments are framed as commitments of all states or only HCPs to the CCW. It prefers specifying HCPs throughout.

Russia said it cannot approve any of the paragraphs in this section, because there is no possibility of making commitments without even first jointly understanding what to call the weapons under discussions. The Chair clarified that this report only contains recommendations, not commitments, and it is up to the RevCon to decide whether or not to adopt them.

Ireland said this section is vital. Cuba agreed, noting that the content here is insufficient for those wanting to work for an LBI, but it is the minimum acceptable for consensus. Switzerland noted this section is where the most progress is visible. Philippines said it is not prepared to consider the deletion of this section. Japan, Canada, and ROK agreed this section is important.

Stop Killer Robots reiterated its support for an LBI and argued that the general commitments section of this report “should encompass prohibitions on weapons that cannot be used with meaningful human control (MHC) and on weapons systems (AWS) that target human beings and regulations to ensure all other AWS are used with MHC.” The campaign also said the word “lethal” should only be used in reference to past agreements and not future work, because “a WS can be lethal and lawful, or non-lethal but unlawful, and so the use of the word is constraining in our broader aim of ensuring compliance with IL.”

Japan and ROK said they would consider further the US proposals in this section. Australia said it has difficulties with these two paras but it would also consider the US proposals.

Paragraph 30

Current text: *States commit not to use or to develop, produce, acquire, possess, deploy or transfer weapon systems based on emerging technologies in the area of lethal autonomous weapons systems, if:*

The US argued that this para should be limited to use of weapons and should not include reference to development, production, acquisition, deployment, or transfer. It said that in the process of a military operation, a state might come into the possession of an enemy’s weapon and asked, would that put that in state into breach of this principle? India and Israel agreed.

Canada said it should be made clear that this list of activities doesn’t include research and development, tests, and assessments for the purposes of countermeasures.

Cuba opposed this limitation, pointing out that if a state comes across someone else’s illegal weapon,

they should destroy it. Otherwise, it might be interpreted that it would be acceptable to develop, produce, or sell biological or chemical weapons, for example.

Austria and Ecuador agreed it is important to retain the other activities listed here. Ecuador said it is open to considering exclusion of the word “possess” if that would address the problem highlighted by the US. Philippines and Stop Killer Robots welcomed the inclusion of “transfer” in this list. In relation to request to remove the list of activities other than use, Philippines suggested a compromise could be the earlier US proposal for listing these activities along with the phrase “with a view to using”.

Germany said this para needs precise commitments on the type of WS. Stop Killer Robots said the commitments under para 30 should also cover systems that are designed to target human beings.

Pakistan suggested that para 30 could be broken into two paras, in which the first would deal with use and include the text from 30(a), while the second part would have all the other activities listed and include the content of sub-paras (b) and (c). Austria said this is a constructive proposal.

30(a). *It is of a nature to cause superfluous injury or unnecessary suffering, or if it is inherently indiscriminate or is otherwise incapable of being used in accordance with international humanitarian law; or*

The US recommend breaking this up into two pieces and retaining the first part here—though deleting the word “if” because that’s in the chapeau, and then moving the second part, “or if it is otherwise...” to later in the document.

30(b). *It can perform the critical functions of selecting and engaging to apply force against targets without further intervention by a human operator and it may operate outside a responsible chain of human command and control; or*

The US expressed concern with the reference to “perform the critical functions of selecting and engaging to apply force against targets,” arguing

that there might be existing WS that already meet this qualification. It thus called for the deletion of this part of the sentence. Canada agreed the emphasis on critical functions is “not appropriate”. In contrast, Ecuador said it is important to keep a clear reference to non-use of AWS that perform critical functions, especially when talking about human targets.

The US also argued that the report should give meaning to the idea of operations outside a responsible chain of human command and control (CC), as related specifically to the autonomous functions of a WS. It thus proposed 30(b) be formulated as: “Its autonomous functions are designed to be used to conduct attacks outside a responsible chain of human command and control.”

The Netherlands agreed this could affect existing WS and suggested deleting the phrase “it may”.

Ireland urged not reintroducing the concept of weapons designed for specific purposes, since concerns with this have been raised repeatedly.

Philippines said it could accept moving the phrase “perform the critical functions of selecting and engaging to apply force against targets” to the chapeau and remove from (b).

The UK agreed the wording of this sub-para is problematic and suggested amending it to: “It can perform the critical functions of selecting and engaging to apply force against targets without appropriate human involvement and operating outside of responsible chain of human command and control.”

Switzerland welcomed the changes made in 30(b) and said it would not object to referring to weapons designed to operate outside a chain of human command and control, but emphasised that limiting it to that is not enough. AWS that could be freed from a chain of command are just as worrisome in terms of IHL.

Pakistan said the phrase “further intervention” doesn’t necessarily relate to use of force.

India said it is not ready to undertake this commitment. Japan, Israel, and China agreed it

should be deleted. Israel said it if its retained, it should be replaced with a new para that reads: “a WS based on ET in the area of LAWS may not be operated outside of any framework of human command responsible for its use.”

30(c). *Its effects cannot be reasonably predicted or are not fully understood by a human operator.*

The US argued that concepts like incidental loss can’t be reasonably predicted, so there needs to be a more focused articulation of this commitment. It suggested: “The incidental loss of civilian life, injury to civilians, and damage to civilian objects expected to result from the use of the weapon to conduct attacks cannot be reasonably predicted.” The US also suggested adding “or as otherwise incapable of being used in accordance with IHL” at the end.

The UK suggested deleting “fully” and adding “reasonably”. Austria said it is critical for IHL that a user fully understands how a WS works and this language should be retained.

The Netherlands suggested replacing “predictable” with “foreseen,” which it said is more in line with IHL. Philippines said it is flexible on this.

India said it is not ready to undertake this commitment. Japan, Israel, and China agreed it should be deleted.

Ireland welcomed the inclusion of this sub-para, noting it reflects the call of many delegations. Switzerland, Philippines, and Stop Killer Robots agreed.

Paragraph 31

Current text: States commit to exercise appropriate human involvement that is sufficient to maintain control necessary to comply with international humanitarian law over the development and use of all other types of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems through feasible precautions and risk mitigation measures as may be required by the operational context, which may include, but not limited to:

Brazil, Chile, and Mexico jointly argued that while risk mitigation and feasible precautions might be a possibility to address challenges of AWS, they are not enough. Thus they suggested deleting “through feasible precautions and risk mitigation measures, as may be required by the operational context,” so that other alternatives can be considered. New Zealand, Ireland, Pakistan, and Austria agreed.

The US suggested adding “throughout the lifecycle of the WS”. Israel agreed.

The US also suggested deleting “is sufficient to maintain” and adding “judgement and control”. It suggested ending the para with: “including through feasible precautions, good practices in human-machine interaction (HMI), legal weapon reviews (WRs), and risk assess and mitigation measures, as have been elaborated in this report and previous reports of the GGE”.

Switzerland welcomed the amendments to this para that make it clear that weapons that are not useable by definition under IHL need to be in a framework to ensure IHL is respected. It will consider the proposals from the US.

Germany said it would have preferred the term “sufficient human control” but can accept the compromise language of “appropriate human involvement”. Japan said it would prefer to use “human responsibility” instead of “appropriate human involvement”. Philippines said it would prefer “meaningful human control” but is open to the US suggestion of “appropriate human judgement throughout the lifecycle of the WS.”

Israel argued that the phrase “human involvement is already a compromise.” It suggested rephrasing as: “The use of all other WS based on ET in the area of LAWS requires the exercise of appropriate human involvement during the lifecycle of a WS as necessary to comply with IHL inter alia through feasible precautions that may include risk mitigation measures as may be required by the operational context.” It urged the deletion of the sub-paras, but said if they retained, the chapeau should be supplemented by “where feasible and appropriate such measures may include but not limited to.”

India argued it does not see the added value of this para, given that its elements are contained elsewhere in the report and in the GPs.

Philippines said it can’t agree to the deletion of the sub-paras. Austria said they are helpful to enhance common understandings. China said it is flexible on this.

31(a). Limits on the type of target, such as targets that are military objectives by their nature;

The US and India called for its deletion.

New Zealand said the example noted in this sub-para is not necessary and might be limiting in future, so it suggested removing “such as targets that are military targets by their nature.” Ireland, Israel, and Pakistan agreed, and Pakistan suggested elaborating examples could be part of the future work of the GGE. Philippines said it should be retained.

31(b). Limits on the duration, geographical scope and scale of use, including to enable human judgement and control in relation to a specific attack;

The US and India called for its deletion.

Israel argued that including human judge and control in relation to specific attacks is redundant, the concept of “control” is controversial, and the relation between judgement and control is unclear.

31(c). Requirements for human-machine interaction and timely intervention and deactivation;

The US and India called for its deletion.

Austria welcomed the inclusion of this sub-para.

Israel suggested saying “potentially including” intervention or deactivation.

China suggested changing “timely” to “necessary”.

31(d). Clear procedures to ensure that human operators are informed and empowered to effect or control the behaviour of weapon systems.

Brazil, Chile, and Mexico argued that by including “their behaviour” the report risks anthropomorphising machines. New Zealand, Ireland, Netherlands, Philippines, Pakistan, Austria, and Ecuador agreed.

New Zealand also said the phrase “empowered to effect” is strange. Austria agreed this language could be simplified. The Netherlands said “informed and empowered” is vague.

The US, India, and Israel called for its deletion.

Paragraph 32

Current text: *States commit to continue to identify and set out any further characteristics of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems that may make compliance with international humanitarian law inherently impossible.*

The US said limiting further work to this task is too narrow and states should also work to clarify applicable IHL. It suggested the following reformulation: “HCPs commit to continue to identify and set out any further characteristics of characterize WS based on ET in the area of lethal AWS in order to promote a common understanding on concepts and characteristics relevant to the objectives and purposes of the Convention that may make compliance with international humanitarian law inherently impossible. HCPs commit to continue to clarify the application of IHL to the potential use of WS based on ET in the area of lethal AWS.” India and Israel agreed.

New Zealand suggested changing “inherently impossible” to “may prevent complying with IHL.” The Netherlands said it would study this suggestion. Ecuador supported the comments aimed at simplifying this para.

Stop Killer Robots suggested this para be expanded to refer to compliance with international law and ethical standards.

China said this is not the right place for this para and suggested it be moved to the “way forward” section, rather than listed as a commitment.

Human-machine interaction

Paragraph 33

Current text: *Human-machine interaction, which may take various forms and be implemented at various stages of the life cycle of a weapon, should ensure that the potential use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems is in compliance with applicable international law, in particular international humanitarian law. In determining the quality and extent of human-machine interaction, a range of factors should be considered, including the operational context, and the characteristics and capabilities of the weapons system as a whole.*

Austria reiterated that human-machine interaction (HMI) alone is a neutral term that doesn't indicate the nature of the relationship between machines and humans. It suggested inserting “meaningful HMI” to clarify that it isn't empty term. Pakistan agreed.

Paragraph 34

Current text: *Human responsibility for the use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems can be exercised in various ways across the life-cycle of these weapon systems and through human-machine interaction.*

Cuba said “human responsibility” should instead be “human accountability” or “human control”. Austria supported changing “responsibility” to “control”. It also preferred to use “meaningful HMI” at the end. Pakistan agreed.

Paragraph 35

Current text: *The touch points of the life-cycle of a weapon system may include: political direction related to the pre-development phase; research and development; testing, evaluation and certification; training; deployment; use; post-use assessment; weapons management, including storage, handling and disposal.*

Russia called for the deletion of this para.

Paragraph 36

Current text: *The following specific practices in human-machine interactions may contribute to the implementation of international humanitarian law, effective accountability and the mitigation of risks posed by weapon systems based on emerging technologies in the area of lethal autonomous weapon systems:*

The US said the first line should refer to interaction in the singular.

Russia said this chapeau is superfluous.

36(a). *Human commanders and operators make informed decisions about the deployment and use of weapons with information reasonably available at the time to ensure that force is used in accordance with international law, including information about the potential targets, the capabilities and characteristics of the weapon to be used and the context in which the weapon is deployed.*

The US suggested deleting “informed” before “decisions,” which it sees as being redundant with the longer clause that follows. It also suggested changing “is used” to “will be used,” because many decisions concern actions that will be taken later in time.

Russia said this para is acceptable though it could agree to deleting “informed”. It also said that after the word weapons, it should clarify these are WS based on ET in the area of LAWS.

36(b). *Humans commanders and operators should be able to properly assess the effects of a weapon system.*

The US suggested changing “humans” to “human” and adding “using” before “a WS”.

The UK suggested adding “prior to use” at end of sentence.

Russia argued this subject hasn’t been discussed in the GGE. While it could be subject for further development it should be deleted from this part of report.

36(c). *Human commanders and operators are properly trained, to ensure that the weapon is deployed and used in a lawful manner.*

The US suggested rephrasing as: “Human commanders, operators, and other personnel are properly trained with regard to the WS and relevant IHL requirements commensurate with their duties.”

Russia argued that “properly” is subjective not legal and suggested deleting it. It also said that after the word weapons, it should clarify these are WS based on ET in the area of LAWS. Russia also said “in a lawful manner” should be “in conformity with IHL”.

Legal weapon reviews

Paragraph 38

Current text: *In accordance with States’ obligations under international law, in the study, development, acquisition, or adoption of a new weapon, means or method of warfare, determination must be made whether its employment would, in some or all circumstances, be prohibited by applicable international law.*

New Zealand said it is prepared to let go of 41(c) from Rev.0, but noted that it is odd that in the weapon reviews (WR) section there is no mention of ET in field of LAWS. It thus proposed a sentence to go at end of para 38: “National reviews of weapons based on ET in the field of LAWS are particularly important in light of concerns about compliance with IHL these have raised.” Ireland and Pakistan agreed.

Russia suggested deleting the word “applicable”.

Paragraph 39

Current text: *Legal weapon reviews at the national level are a useful tool to assess nationally whether potential weapons systems based on emerging technologies in the area of lethal autonomous weapons systems would be prohibited by any rule of international law applicable to that State in all or some circumstances. States are free to independently determine the means to conduct weapons reviews and the voluntary exchange of best practices could*

be beneficial, bearing in mind national security considerations or commercial restrictions on proprietary information.

Russia suggested adding include “legal” before WR.

Paragraph 41

Current text: Weapons systems under development, or modification which significantly changes the use of existing weapons systems, must be reviewed as applicable to ensure compliance with international humanitarian law.

Switzerland suggested changing to: “WS under development or modification which changes the effects or use of WS in a way that it may effect is compatibility with IHL must be reviewed.”

Paragraph 42

Current text: It would be beneficial to identify and share on a voluntary basis information and good practice on the conduct of legal weapon reviews of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems.

Russia said “practice” needs to be plural.

Paragraph 43

Current text: Where feasible and appropriate, inter-disciplinary legal, technological, military and ethical perspectives should be integrated in research and development of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems, bearing in mind national security considerations and restrictions on commercial proprietary information.

Russia suggested deleting “legal, technological, military and ethical” after the word “inter-disciplinary”.

Risk mitigation

Brazil, Chile, and Mexico jointly said the report needs to be careful how it balances this section with the rest of the report. It suggested de-linking risk mitigation from regulatory measures.

Paragraph 44

Current text: When developing or acquiring new weapons systems based on emerging technologies in the area of lethal autonomous weapons systems, physical security, appropriate non-physical safeguards, including cyber-security against hacking or data spoofing, the risk of acquisition by terrorist groups and other unauthorized recipients and the risk of proliferation should be considered.

Russia suggested deleting the wording “and other authorised recipients,” arguing this could be subjective.

Paragraph 45

Current text: During the design, development, testing and deployment of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems, the risks inter alia of civilian casualties, as well as precautions to help minimize the risk of incidental loss of life, injuries to civilians and damage to civilian objects must be considered. Other types of risks should be considered, as appropriate, including but not limited to the risk of unintended engagements, risk of loss of control of the system, risk of proliferation, and risk of acquisition by terrorist groups.

Israel suggested adding incidental loss.

Paragraph 46

Current text: States should ensure that weapons systems based on emerging technologies in the area of lethal autonomous weapons systems do not rely on data sets that can perpetuate or amplify unintentional social biases, including gender and racial bias, and that can thus have implications for compliance with international law.

The US suggested simplifying to say: “States should take steps to address the risk that WS based on ET in the area of LAWS involving AI capabilities do not entail bias and that may have implications for compliance with IHL.”

Israel argued this para is premature and should be deleted, or it should replace “ensure” with

“consider the concern,” and replace “do not” before “data sets”.

Russia suggested deleting this para.

Paragraph 47

Current text: *Risk mitigation measures to help minimize incidental loss of life, injuries to civilian and damage to civilian objects resulting from the use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems may include, inter alia: (a) incorporating self-destruct, self-deactivation, or self-neutralization mechanisms into weapon systems; (b) measures to control the types of targets that the system can engage; (c) measures to control the duration, geographical scope and scale of the operation of the weapons system; and (d) measures that enhance control over the use of force.*

The US suggested adding a point (e): “clear procedures for trained human operations to activate and deactivate functions in WS.”

Russia suggested deleting “scale of operations,” arguing it could be subjective. Russia also suggested deleting 47(d). India suggested deleting 47(b), (c), and (d).

Paragraph 48

Current text: *Risk assessments and mitigation measures should be part of the design, development, testing and deployment and use cycle of emerging technologies in any weapons systems, including weapons systems based on emerging technologies in the area of lethal autonomous weapons systems, in conformity with paragraph 32 and 37.*

The US suggested deleting the last clause of this para. Russia agreed.

The way forward

Russia reiterated its position that it does see the need for a political declaration (PD) or an LBI.

The US circulated a concept note for a non-binding international code of conduct, with a two-year mandate, which it sees as the best

option for providing a vehicle for future work given differences of position. Australia supported this proposal. Cuba said it could consider this proposal.

Paragraph 49

Current text: *The Group recommends that the High Contracting Parties, at their Sixth Review Conference:*

49(a). *endorse the recommendations of the Group of Governmental Experts*

49(b). *consider and adopt a political declaration, on the basis of the paragraphs 17 to 49 of this report*

The G11 said the PD is acceptable but insufficient and suggested this sub-para clarify that this PD would be an intermediary step towards the eventual adoption of an LBI.

India said its support for a PD depends on the content of paras 17–48.

Israel suggested adding a reference to past reports and GPs as the basis for the PD.

49(c). *decide that the Group of Governmental Experts shall:*

49(c)(i). *develop and adopt by consensus an instrument on the regulation of weapons systems based on emerging technologies in the area of autonomous weapons systems, on the basis of the relevant paragraphs of this report, especially paragraphs 30 and 32*

Cuba said this sub-para should include a reference to an LBI. It also suggested the end of the para should say “on the basis of the relevant work,” not just paras of this report.

The G11 agreed this should be clarified that the instrument would be legally binding. Stop Killer Robots and Pakistan agreed.

The G11 also suggested replacing “develop” with “negotiate”. Stop Killer Robots agreed.

China said it would prefer the former formulation, but in view of differences of opinion, it proposed a new text: “Negotiate an instrument on WS based

on ET in the area of LAWS on the basis of the discussions conducted so far within the framework of the CCW. Any decision should be made on the basis of consensus.”

Japan said the current wording is acceptable with the understanding that the next mandate still includes various options to be discussed, including a draft code of conduct.

Israel did not support the reference to an instrument, suggested adding “lethal,” and said the words “on basis of relevant paras of this report” should be changed to refer to all previous work by the GGE. China agreed with adding “lethal”.

49(c)(ii). Without prejudice to paragraph 49(c)(i) of this report, identify and elaborate by consensus (1) practices in human-machine interactions may contribute to the implementation of international humanitarian law by ensuring sufficient human control over weapons systems based on emerging technologies in the area of autonomous weapons systems; (2) good practices on a national level which may help accountability in military operations involving the use of weapons systems based on emerging technologies in the area of autonomous weapons systems; (3) elements of practice that can be applied in the conduct of weapon reviews, at the national level, in the study, development, acquisition, or adoption of based on emerging technologies in the area of autonomous weapons systems; (4) risk mitigation measures to help minimize incidental loss of life, injury to civilians and damage to civilian objects when designing, developing, testing, deploying or using weapons systems based on emerging technologies in the area of autonomous weapons systems.

Cuba and the G11 called for this sub-para’s deletion.

China proposed adding two elements: 1) Definitions and technical characteristics of LAWS; and 2) Elements of the legally binding instrument to prohibit the use of fully LAWS.

Russia said the current GGE mandate should just be extended, arguing this set of issues is too narrow.

Japan said it wants to keep the term “lethal” in the next mandate. China agreed.

Pakistan said the items here should be clarified as work that complements work on an LBI, otherwise it will create confusion to have two mandates.

Paragraph 50

Current text: The Group should meet for an initial duration of [xx days] in 2022 in Geneva. The chairperson of the Group, in consultation with the High Contracting Parties, shall propose the duration, timing and location of subsequent sessions of the Group, as might be required for the completion of its work.

Paragraph 51

Current text: The work of the Group is to be based on: (i) the guiding principles; (ii) the conclusions and recommendations of the Group in its reports of 2017, 2018, 2019 and 2021; (iii) all proposals past and present; (iv) the political declaration.

Pakistan said the reference to the GPs should add: “which it may further develop and elaborate.”

Paragraph 52

Current text: The work of the Group could also benefit from further discussion and clarification of the following aspects, inter alia:

- (a) The role of operational constraints regarding tasks, target profiles, time-frame of operation, and scope of movement over an area and operating environment;*
- (b) Possible bias in the data sets used in algorithm-based programming relevant to emerging technologies in the area of lethal autonomous weapons systems;*
- (c) Different potential characteristics of emerging technologies in the area of lethal autonomous weapons systems, including: self-adaption; predictability; explainability; reliability; ability to be subject to intervention; ability to redefine or modify objectives or goals or otherwise adapt to the environment; and ability to self-initiate;*
- (d) The possible effects of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems on regional and*

global security and stability, including thresholds for armed conflict, and compliance with international humanitarian law.

Cuba called for this para's deletion, arguing it gives too broad a mandate.

Russia said it likes this para in terms of the format of future work of the GGE. It suggested the formula agreed to in the 2019 GGE report, where the Group

indicated it would work and agree to report on basis of consensus and specific rules of procedure, in addition to deadlines.

The G11 suggested adding language on ethics in para 52 as a new sub-para: "The ethical implications of development of AWS, with view of ensuring that as a rule life and death decisions should not be ceded to AI systems."

REVIEW OF REV.2

Katrin Geyer and Allison Pytlak | Women's International League for Peace and Freedom

On Wednesday, 8 December, CCW high contracting parties (HCPs) participating in the Group of Governmental Experts (GGE) on autonomous weapon systems (AWS) discussed the **second revised draft report (Rev.2)**, issued on 7 December 2021.

No substantive comments were made to the first two sections of the draft report. Russia made a suggestion for one technical amendment to paragraph (para) 2, to add a "(a)" before the second para of the quotation found in para 1.

Conclusions and recommendations

Paragraph 15

Current text: Delegations presented different options to address the potential risks and challenges in the context of the objectives and purposes of the Convention. Their pros and cons were discussed, including a legally binding instrument, a political declaration, and clarity on the implementation of existing obligations under international law, in particular international humanitarian law, as set out in paragraph 28 of the report of the Group in 2018 (CCW/GGE.1/2018/3), as well as other non-legally binding documents. It was emphasized that these options were not necessarily mutually exclusive.

Argentina, Pakistan, and Panama supported the para as drafted for the sake of consensus.

Argentina preferred language of Rev.1 of this para.

Russia proposed rewording this para: "Delegations presented different options to address the potential risks and challenges in the context of the objectives and purposes of the Convention as set out in paragraph 28 of the report of the Group in 2018 (CCW/GGE.1/2018/3), as well as other non-legally binding documents. Their pros and cons were discussed." India supported this. The United States (US) could support Russia's proposal. Argentina opposed this, and said it was important to reflect requests for a legally binding instrument (LBI). Ireland and Panama echoed this.

The US would like to see "potential risks, benefits, and challenges" included in this para. Ireland and Panama opposed inclusion of "benefits".

India observed that this para gives the impression that the Group is analysing the entire Convention, and not AWS in the context of the Convention.

Russia proposed to add, after LBI, "a political declaration (PD), clarity on the implementation of existing obligations under international law (IL), in particular international humanitarian law (IHL), and the option that no further legal measures are needed." This way, all options as laid out in the 2018 GGE report are fully captured.

Paragraph 16

Current text: Following the mandate agreed in 2019, in this connection, the Group considered: (1) the guiding principles, which the Meeting of High

Contracting Parties endorsed in 2019,8 (2) the work on the legal, technological and military aspects and (3) the conclusions of the Group, as reflected in its reports of 2017, 2018 and 2019; as well as all proposals past and present; and it used them as a basis for its work in 2021 and its consensus recommendations in relation to the clarification, consideration and development of aspects of the normative and operational framework on emerging technologies in the area of lethal autonomous weapons systems, in accordance with Decision 1 of the Fifth Review Conference of the High Contracting Parties to the Convention (CCW/CONF.V/10), consistent with CCW/CONF.V/2.

Russia would like to replace “mandate agreed in 2019, and in this connection” with “Following the para 31 of the 2019 meeting of the HCP final document” and include reference to that outcome document with a footnote.

India said that this para should also mention that the Guiding Principles (GPs) may be further elaborated.

Paragraph 17

Current text: *The Group recommends that the High Contracting Parties affirm the following elements in order to contribute to the clarification, consideration and development of aspects of the normative and operational framework on emerging technologies in the area of lethal autonomous weapons systems.*

Russia said this para should look like a chapeau, followed by consensus recommendations, and should not duplicate current para 55 referring to approving recommendations of the Group. It recommended the following wording: “In order to contribute to the clarification, consideration and development of aspects of the normative and operational framework (NOF) on emerging technologies (ET) in the area of lethal autonomous weapons systems (LAWS), the Group recommends that”.

The US could accept this para but said it is not clear to whom the Group is making recommendations, and it could therefore say: ““The Group recommends that the HCP at the Sixth Review Conference (RevCon) affirm the following....”

The UK supported this.

Russia argued that in this para, all consensus recommendations should be listed as sub- paras.

Introduction

Russia reiterated its wish to delete all sub-headings, including “Introduction,” as this does not align with the methodology that the Group has used when considering aspects of AWS.

Russia observed that paras 18–24 are not consensus recommendations but conclusions by the Group, and should be moved ahead of para 17, as para 16bis.

Austria said it was surprised at the text and observed that many GPs have been added back into the text. It argued that for any future political declaration (PD), it would have difficulties selectively quoting GPs. Cuba and Pakistan echoed these concerns.

The US supported the Chair’s structuring of the report, observing that most paras as of para 18 are reaffirmation of core conclusions and principles framing work the Group has done.

The US made a language proposal to articulate the difference between the introduction and recommendations.

The Chair proposed to delete the section “Introduction” from paras 18–24, and to leave this content for the preambular of the PD to the Review Conference (RevCon), when it will be drafted. Brazil, Chile, Costa Rica, Mexico, New Zealand, Russia, and the UK said they could support this approach.

Brazil, Chile, Mexico jointly proposed to use the chapeau of the GPs as introductory text for this section.

Russia said it can sacrifice para 18, and for all other paras to be presented as sub-paras of para 17, with some technical amendments to ensure correct grammar.

Japan said it could support this section as proposed by the Chair.

Paragraph 20

Current text: *Recognize the potential risks and challenges posed by emerging technologies in the area of lethal autonomous weapons systems in ensuring respect in all circumstances for international humanitarian law.*

Russia said this para should be balanced with para 22. It proposed to merge these two paras to strike a balance, for it to read: "Reaffirm that consideration should be given to the use of ET in the area of LAWS in upholding compliance with international humanitarian law (IHL) and other applicable international legal obligations and to the potential risks and challenges posed by ET in the area of LAWS in relation to IHL."

The US proposed to add "certain uses of" before "ET in the area of LAWS".

The US proposed to delete "ensuring respect" and "for," and to replace it with "respecting".

Panama could not accept "potential".

Pakistan proposed to move this para to the section on risk mitigation.

Paragraph 21

Current text: *Recognize the potential risks and challenges posed by emerging technologies in the area of lethal autonomous weapons systems in respecting other bodies of international law, as applicable, including international human rights law and international criminal law, as well as consideration of ethical considerations as they relate to legal considerations, non- proliferation and the maintenance of international peace and security, including thresholds for armed conflict and new arms races.*

Russia proposed deletion of this para. Pakistan and Panama could not support deletion.

India would like to see deletion of language after "other bodies of international law (IL)".

Austria welcomed this para but said there was a factual mistake by reducing ethical considerations

(ECs) to legal considerations. It argued that ECs include other elements, such as political acceptability, and therefore proposed, in the spirit of compromise: "As well as consideration of ECs, including as they relate to legal considerations." Argentina, Costa Rica, Panama, New Zealand, and the US supported this.

Panama could not accept "potential".

The US would like to end this para after "security". Argentina did not support deletion of this part.

Pakistan proposed to move this para to the section on risk mitigation.

Paragraph 22

Current text: *Reaffirm that consideration should be given to the use of emerging technologies in the area of lethal autonomous weapons systems in upholding compliance with international humanitarian law and other applicable international legal obligations.*

Panama requested deletion of this para, as the Group should not promote benefits of weapon systems (WS).

Paragraph 23

Current text: *Affirm that legal aspects of the normative and operational framework on emerging technologies in the area of lethal autonomous weapons systems also addresses ethical considerations, including in connection with legal considerations.*

Russia proposed deletion of "legal aspects of," and to end the sentence after "ECs".

The US proposed to replace "addresses" with "address" and to delete "including in connection with legal considerations."

Paragraph 24

Current text: *Affirm that discussions and any potential policy measures taken within the context of the Convention should not hamper progress in or access to peaceful uses of intelligent autonomous technologies.*

Russia proposed alternative language: "Acknowledging the dual nature of technologies in the area of intelligent autonomous systems that continue to develop rapidly, discussions and any potential policy measures taken within the context of the Convention, should not hamper progress or access to peaceful uses of intelligent autonomous technologies. But at the same time, research and development of autonomous technologies should not be restricted based on the sole rationale that such technologies could be used for WS."

Austria said this was new language, and stressed it was not in a position to consider this proposal on the last day of the GGE's meeting.

Panama said it prefers the para as is.

Application of international law

Russia requested deletion of sub-headings and sub-sub-headings in this section.

Panama would like to reinsert a reference to international law in this section for it to be consistent with the section's title. It proposed a new para, to be placed between para 25 and 26: "Other bodies of IL, including the Charter of the UN, international human rights law (IHRL), and international criminal law (ICL) also apply to the development and use of all weapons, including AWS". Cuba, amongst others, supported this while India and Israel could not support this.

International humanitarian law and other applicable bodies of international law

Russia would like to add paras 17(c) as well as 23(c) of the 2019 GGE report to this section.

Russia would like to include earlier agreed understandings on characteristics, as reflected in paras 19(a) and (b) from the GGE 2019 report, and paras 22(d) and (c) from the 2018 report. It argued it was necessary to include these paras to avoid a selective approach in the report.

The Chair clarified that this sub-section is dealing with application of IL, and that the logic of content should be respected.

Paragraph 26

Current text: *The potential use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems must be conducted in accordance with applicable international law, in particular international humanitarian law and its rules and principles, including inter alia those related to distinction, proportionality and feasible precautions.*

Russia would like to replace "rules and principles" with "requirements and principles". Israel and the US supported this while Australia, Spain, Chile, Sweden, the Netherlands, and New Zealand stressed current language should be retained.

Russia would like to delete "those related to" and "feasible" and to add, after "precautions" "in attack". The US supported this.

The US said it should be "precaution" instead of "precautions".

Spain would like to include "fundamentally" before "inter alia".

Paragraph 28

Current text: *The international humanitarian law rules and principles, including inter alia distinction, proportionality and precautions in attack must be respected through a chain of responsible command and control.*

Russia would like to replace "rules and principles" with "requirements and principles". India and the US supported this.

Russia would also like to replace "respected" with "applied". The US supported this.

Russia would like to add, at the end of the sentence: "by the human operators and commanders who use WS based on ET in area of LAWS". The US and Switzerland supported this.

Israel welcomed this para as is.

Paragraph 29

Current text: *Compliance with the international humanitarian law rules and principles, including inter alia distinction, proportionality and precautions in attack, in the potential use of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems requires inter alia that human beings make certain judgements in good faith based on their assessment of information from all sources reasonably available to them at the time of the use of force, including relevant context.*

Russia requested deletion of “from all sources reasonably” and “of the use of force, including relevant context” to align it with previous understandings. The US supported the latter proposal but would like to retain “from all sources reasonably” as a principle part of precaution. Australia and the Netherlands would also like to retain this.

Switzerland said this should read “at the time of the decision to use force” instead of “at the time to use force”. Brazil, Chile, and Mexico jointly supported this.

Australia, New Zealand, and the UK urged for retention of existing language. Alternatively, Australia proposed to say: “at the time those judgements are made.” The US could support this.

New Zealand wondered what “in good faith” means in this context and proposed deletion of this expression. Australia also was not sure about the meaning. Alternatively, New Zealand proposed following language: “In an awareness of the law, requires inter alia, that human beings make certain judgements in an awareness of the law in their assessment of information from all sources reasonably available to them at the time of the use of force, including relevant context.”

Paragraph 32

Current text: *Under principles of State responsibility, every internationally wrongful act of a State, including such other actions or omissions involving the use of emerging technologies in the area of lethal autonomous weapons systems, entails the international responsibility of that State.*

The US proposed to delete “other” after “such”. Israel supported this.

General commitments

Russia said that paras 38 and 39 have excessive detail, and instead of paras 38 and 39, it suggested wording from para 17(h): “A WS based on ET in the area of LAWS must not be used if it is of a nature to cause superfluous injury or unnecessary suffering or if it is inherently indiscriminate or is otherwise incapable of being used in accordance with requirements and principles of IHL.” India welcomed this. Austria said it was flexible regarding the inclusion of this para but said it could not accept this as replacement of paras 38 and 39.

Russia reiterated its fundamental position that IHL is sufficient to regulate WS based on ET in the area of LAWS.

Norway said it was difficult to accept the formulation of “states should commit to” something already prohibited. It worried that this formulation undermines IL. Argentina, Canada, Ireland, the Philippines, and Panama supported this. Norway proposed to change it to “States must not use” instead.

The Chair explained that the word “should” was added following a comment by Russia, to make clear that this section are recommendations. But since this has been resolved now with a change in para 17, it is possible to return to the original language, e.g. “States commit not to...”. Ireland agreed with this.

Switzerland said this section was at the heart of the report and would like to see stronger language. Ireland and South Africa echoed this. South Africa stressed that measures should be clear, implementable, and meaningful, forming the basis for the GGE’s new mandate.

India would like to see “requirements and principles” used throughout this section.

Canada said that the concept of human control is too restrictive and said it would instead accept “conformity with IHL” in this section.

Paragraph 38

Current text: *States should commit not to use, or to develop, produce, acquire, possess, deploy or transfer with a view towards use, any weapons system based on emerging technologies in the area of lethal autonomous weapons systems that can perform the critical functions of selecting and engaging to apply force against targets without further intervention by a human operator, if:*

Norway suggested to add “inter alia” after “if” to make sure the below list not exhaustive.

Panama said it preferred language from Rev.1 of this para. It proposed to delete “with a view towards”. Argentina, Cuba, and Palestine supported this.

The US would like to replace “can perform the critical functions of” with “utilise autonomous functions in targets with force without prior decision or further intervention by a human operator.” It proposed this to remove ambiguity of “critical function”. Bulgaria and Canada welcomed this.

Israel also would like to see deletion of “that can perform critical functions of selecting and engaging to apply force against targets without further intervention by a human operator”.

38(a). *It is of a nature to cause superfluous injury or unnecessary suffering, or it is inherently indiscriminate; or*

India and the US welcomed this para.

38(b). *Its autonomous functions are designed to be used to conduct attacks outside a responsible chain of human command and control;*

The US welcomed this para. Israel suggested to replace “outside a” with “outside of any”.

Israel would like to delete “and control”.

Norway questioned the focus on the design of a WS. It proposed to rather read: “It operates outside of a responsible chain of command and control.”

Switzerland proposed different language: “Are designed to be used or are used in a way to conduct attacks.” Austria, Ireland, and the Netherlands supported this while Israel said it could not.

Ireland proposed alternative language: “Its autonomous functions are designed or may be used to conduct attacks outside a responsible chain of human command and control.” Austria, Argentina, Bulgaria, and the Philippines welcomed this while the Netherlands could not support this, arguing that “may” is too vague.

Pakistan proposed new language: “It can perform the critical functions of selecting and engaging to apply force against targets without human control, except stationed, defensive weapons, designed to target projectiles only.” The Philippines supported this, but to add “human” before “targets” in Pakistan’s proposed language. The Netherlands could not support this, arguing that many defensive WS do not only target projectiles but also airplanes or boats.

38(c). *The incidental loss of civilian life, injury to civilians, and damage to civilian objects expected to result from the use of the weapon to conduct attacks cannot be reasonably foreseen or are not fully understood by a human operator; or*

Switzerland welcomed that the aspect of predictability was included.

Switzerland regretted that the para is limited to incidental harm, as this risks excluding other effects that may affect IHL, for instance harm to protected persons or objects, whether incidental or not. It proposed following addition: “If the harm to life or injury to protected persons and damage to protected objects is expected to result from the use of a WS to conduct attacks cannot be reasonably foreseen, or not fully understood by a human operator.”

The UK proposed alternative language, speaking to the same concerns as Switzerland’s: “Its effects upon combatants and non-combatants cannot be reasonably predicted and understood by a human operator.” Bulgaria supported this while Ireland could support both Switzerland’s and the UK’s proposal.

The US preferred to delete “are not fully understood by a human operator,” as it finds this expression vague. Canada echoed this.

Israel requested deletion of this para as it does not reflect existing IHL. Japan and Republic of Korea (ROK) also would like to see deletion.

38(d). It is otherwise incapable of being used in accordance with international humanitarian law.

India welcomed this para. Palestine proposed new language: “It is otherwise incapable of being used in accordance with IHL, IHRL, and ECs, such as the use of WS to target human beings.”

Paragraph 39

Current text: *States should commit to exercise appropriate human involvement throughout the life-cycle of the weapons system that is sufficient to ensure human judgment and control necessary in the circumstances to comply with international humanitarian law over the use of all other types of weapons systems based on emerging technologies in the area of lethal autonomous weapons systems. This may include, but is not limited to:*

The US preferred to add “systems of” before “control” and to replace “over” with “in”.

The Netherlands requested deletion of “other” before “types”.

The US suggested to delete sub-paras 39(a)-(c) and instead write: “Such feasible precautions, good practices, legal WR, risk assessments and mitigation measures, as have been elaborated in the following sections of this report, and such measures as may be further developed by the HCP.”

Israel would like to change “throughout” to “during”, as well as “human judgement and control” to “human judgement or control”, and to add “as” before “necessary”.

The way forward

Not surprisingly, there was significant debate about this section. Most of this centred around paragraph 55 and its sub-paragraphs and took up so much

time in the final meeting of the session that it was not possible to review all the other paragraphs.

Ultimately, differences in opinion around this key section—which relate to divergent views in other areas of the document—made it impossible for states to come to consensus and adopt a report and thus identify a way forward. Elsewhere in this edition there is coverage of the meeting time spent discussing the procedural report that was issued instead of a substantive report.

In presenting this second revision, the Chair explained that through it he was attempting to find a way out between the many different positions and proposals that have been made. He explained it as a way to still move forward, but without prejudice to any one of those various proposals (i.e. to establish a political declaration (PD) and a legally binding instrument (LBI), among other proposals). This was described by the Chair as “constructive ambiguity”.

Pakistan appreciated these remarks of the Chair but pointed out that for many delegations, a PD is not a solution to this issue. An understanding has been built up that it would be acceptable only as an intermediary step. So, Pakistan noted, if a PD is now accepted then the other side of that understanding must be present as well. Philippines said that this is an important question and that most delegations realise that this will necessarily be a central element in the way forward. It observed that “constructive” is the key word, however, and that all views be incorporated. Spain said constructive ambiguity is the best option for now.

The United Kingdom (UK) offered support for the United States’ (US) proposal to establish a Code of Conduct.

Several times, Russia said that discussing these paras in such detail was a waste of time and urged a focus on other subsections.

Austria cautioned against bringing entirely new textual proposals to the meeting so late. India observed that some delegations bring new language when it suits them, others say to not do so when it doesn’t suit them.

Paragraph 55(a) and (b)

Current text: *The Group recommends that the High Contracting Parties, at their Sixth Review Conference:*

a. endorse the recommendations of the Group of Governmental Experts

b. consider and adopt a political declaration, on the basis of this report

Cuba said that 55(a) and (b) should be put into square brackets. It asked that after the reference to a PD in 55(b) text be included to clarify that a declaration is an intermediary step to an LBI, specifically a CCW protocol.

Paragraph 55(c)

Current text: *decide that the Group of Governmental Experts shall develop and adopt by consensus, as appropriate, an instrument on the regulation of weapons systems based on emerging technologies in the area of autonomous weapons systems, on the basis of the relevant paragraphs of this report, especially paragraphs [38] and [39].*

There was significant discussion about 55(c) and several revisions were made during the final meeting, although none were adopted. Points below attempt to capture key suggestions and reactions.

The US proposed adding “or instruments” after “instrument.” Australia supported this.

The US proposed deleting “...on the regulation of weapon systems based on...” and replacing it with “To promote responsible behaviour and practice in compliance with international humanitarian law (IHL) in relation to LAWS.”

Cuba took issue with this, feeling that the language about “promoting responsible behaviour” is closer to the US’ position (presumably to create a code of conduct) and thus further away from an LBI.

In a later reformulation from the Chair, the US clarified the reference to regulation is necessary for its delegation; however, the US could live with a formulation using “related to the regulation of...”, in place of “...on the regulation of...”. There was some

back and forth between the US delegation and the Chair about this, and confusion over what the US had or had not proposed.

The US proposed adding “lethal” throughout.

The US proposed deleting “on the basis of relevant paragraphs” and suggested to refer instead to past reports and consensus-based conclusions.

Mexico, Brazil, and Chile jointly suggested moving the placement of the words “as appropriate” so that it would come after “and adopt” in 55(c). The Chair said this would be helpful and at one point offered a revision taking this into account. The US had concerns with the repositioning.

Cuba felt it was unnecessary to reference on what basis an instrument would be developed (i.e. consensus). Austria later suggested a different placement for the word “consensus” in relation to “recommend”, which matches the relationship between the GGE and the CCW, which Australia built upon, and Russia said could be useful to study.

At a later point in the meeting and in reaction to a different proposed version of 55(c), the US commented on the placement of “by consensus” vis-à-vis the words “and agree”. It said it could accept a version that was put forward if the reference to IHL implementation could be inserted in para 56.

Regarding the reference to paras 38 and 39, Australia said it reserved its position on them.

Russia observed that 55(c) contradicts the options set out in para 15. It offered some new sub-paras for consideration, which it described “fundamental” paras that have always been in GGE reports. These describe, variously, items like the total number of days that a future GGE would meet for; that the CCW Sixth Review Conference take a decision on meeting dates and times; about rules of procedure (RoP); and promoting wide participation via the sponsorship programme. These topics are all covered by paras 57–59.

Cuba later said that the Russian suggestion has nuances within it that could be useful, but that it rejects just repeating the same GGE mandate. It

could however accept the language on RoP and sponsorship. Panama reinforced that rolling over the same mandate is unacceptable. Philippines also said it could include elements from Russia's proposal but would not agree to any rehashing of the GGE's mandate.

Paragraph 56

Current text: *The work of the Group could also benefit from further discussion and clarification of the following aspects, inter alia:*

- (a) *The role of operational constraints regarding tasks, target profiles, time-frame of operation, and scope of movement over an area and operating environment;*
- (b) *Possible bias in the data sets used in algorithm-based programming relevant to emerging technologies in the area of autonomous weapons systems;*
- (c) *Different potential characteristics and definitions of emerging technologies in the area of autonomous weapons systems, including: self-adaption; predictability; explainability; reliability; ability to be subject to intervention; ability to redefine or modify objectives or goals or otherwise adapt to the environment; and ability to self-initiate;*
- (d) *The possible effects of weapons systems based on emerging technologies in the area of autonomous weapons systems on regional and global security and stability, including thresholds for armed conflict, and compliance with international humanitarian law.*
- (e) *The contribution of ethical considerations in determining the acceptability of and limits on autonomous weapon systems.*

Cuba observed that significant elements are missing and that paragraph 56 should be deleted.

The US proposed a new 56(f): "practices to strengthen implementation of IHL". This was intended to balance the removal of references to IHL in 55(c). Cuba and Philippines said they could accept this.

Paragraph 57

Current text: *The work of the Group is to be based on: (i) the guiding principles, which it may further develop and elaborate; (ii) the conclusions and recommendations of the Group in its reports of 2017, 2018, 2019 and 2021; (iii) all proposals past and present; (iv) the political declaration.*

Russia would prefer to restore the word "lethal" throughout.

Paragraph 59

Current text: *The rules of procedure of the Review Conference will apply mutatis mutandis to the Group. The Group will conduct its work and adopt its reports by consensus. In accordance with the goals of the CCW Sponsorship Programme, the Meeting encouraged the widest possible participation of all High Contracting Parties.*

Russia suggested removing this paragraph. Its earlier suggestion of another sub-para in 55 would utilise the same text.



PROCEDURAL REPORT

Allison Pytlak | Women's International League for Peace and Freedom

Following lengthy negotiation on the content of the **second revised version of the final report** of the Group of Governmental Experts (GGE), the Chair announced on 8 December that he had no choice but to issue a procedural report accompanied by a Chair's summary. Consensus did not exist on many substantive issues, and time had run out.

A few delegations, such as Japan and Cuba, said it was too early to throw away the achievements that had already been made. Russia urged that the hard work of the GGE still be reflected in a procedural report.

Following a suspension of the meeting in the afternoon of 8 December, the Chair presented the draft procedural report. He described it as a minimalist report. It included sections I and II of the second revised draft report as amended orally during the morning meeting of 8 December. Paragraphs 14–16 as amended orally of the same revised draft would also be included; however they required review by the Group. This report covers the discussion up until UN Web TV stopped broadcasting at about 18:30 CEST.

Paragraph 14

As orally revised: *The Group explored and sought agreement on possible recommendations on options related to emerging technologies in the area of lethal autonomous weapons systems, in the context of the objectives and purposes of the Convention, taking into account all proposals (past, present and future) and the agenda items as reflected in paragraph 11 and annex I of the Report of its 2019 session.⁷ In its discussions under each agenda item the Group considered the legal, technological and military aspects and the interaction between them, and bearing in mind ethical considerations.*

No comments were received on this section.

Paragraph 15

As orally revised: *Delegations presented different options related to emerging technologies in the area*

of LAWS in the context of the objectives and purposes of the Convention as set out in paragraph 28 of the report of the Group in 2018 (CCW/GGE.1/2018/3), including legally binding instrument, a political declaration, clarity on the implementation of existing obligations of international law in particular international humanitarian law and the option that no further legal measures are needed, as well as other non-legally binding instruments. Their pros and cons were discussed. It was emphasized that these options were not necessarily mutually exclusive.

Russia requested deleting the last sentence. It remained in square brackets at the time when the broadcast of the meeting had stopped.

There was discussion about the placement of “as well as other non-legally binding instruments,” as the United Kingdom (UK) pointed out that it doesn't sit well as currently placed. The Chair proposed moving this so that it would be listed after the reference to a political declaration. Russia proposed an alternative, which Cuba rejected. Following other tweaking of the language, the reference to “as well as other non-legally binding instruments” was deleted as a clause and made into its own sentence: “Other non-legally binding instruments were also presented.”

Paragraph 17 (new)

The Group considered proposals on how to reflect the deliberations including possible conclusions and recommendations of the Group, but no consensus was reached.

Paragraph 18 (new)

Document CCW/GGE.1/2021/WP.9 was submitted by the Chair, to reflect his understanding of the state of discussions and to inform the work of the Group in 2022.

Russia offered its own formulation for paragraph 18: The Chair under his own responsibility and initiative has prepared a document [insert

document number] listing the considerations, lessons, perspectives, recommendations, conclusions, and proposals drawn from the presentations, statements, working papers, and interventions, on the agenda items under discussion at the Meetings of the Group. The Group noted that this paper that this paper had not been agreed and had no status. It was the Chair's view that the paper could assist delegations in their preparations for further meetings of the Group. The paper, prepared by the Chair, in consultation with States parties is attached as the document [insert document number]."

The Chair proposed a merging of his original para 18 with Russia's suggestion, which Russia was rejecting at the time the broadcast stopped.

Prior to that, there was significant debate about the status of the Chair's summary—is it a working paper, or an attachment? What status is ascribed to either?—and to what extent the paragraph should describe what the Chair's paper would include. India and Netherlands noted, albeit for possibly different reasons, that states would not have seen the Chair's paper prior to adoption of this paragraph so including a description of the paper's contents in the report would not make sense.

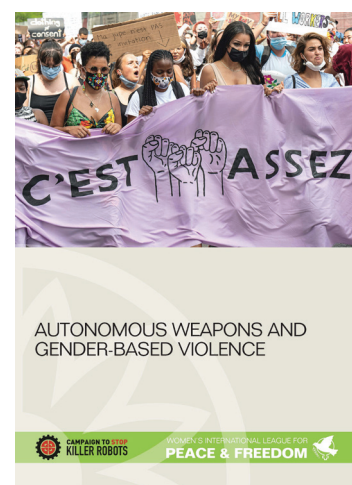
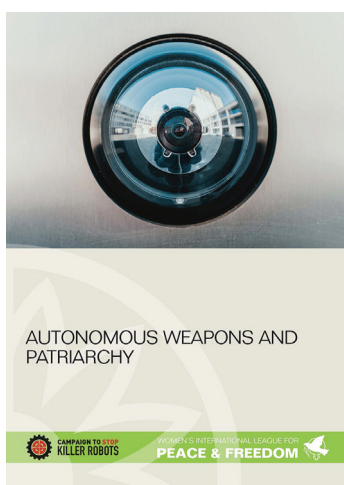
The Chair expressed strongly that he would appreciate "the small privilege" of being able to decide what the paper would include, as he would be the author and owner of it, a position the UK defended. The Chair also reminded that working papers do have status as such and it would factual.

The US attempted to find a compromise, proposing new language: "The Group requested that the Chair consider, in the preparation of the document, the perspectives, recommendations, conclusions, and proposals drawn from the drawn from the presentations, statements, working papers, and interventions, on the agenda items under discussion at the Meetings of the Group. The Group noted that this paper that this paper had not been agreed and had no status. It was the Chair's view that the paper could assist delegations in their preparations for further meetings of the Group."

Brazil, Chile, and Mexico jointly reminded that in 2017 the GGE report had a similar paragraph, which could be useful to use again here as precedent. Paragraph 15 of the 2017 report simply said that "A summary of discussions held during the Group prepared under the Chairperson's responsibility is attached to this report [as Annex II]." At this point, the webcast ended.

WILPF PUBLICATIONS ON AUTONOMOUS WEAPONS

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Incendiary Weapons: The Humanitarian Call for Stronger Law

Friday, 10 December 2021

14:00-15:00 CET

Via Zoom

Register Here:

https://harvard.zoom.us/webinar/register/WN_8bWGgvoRSkW37tkgBg172Q

This online event will offer humanitarian arguments for strengthening the international law governing incendiary weapons. It will feature a napalm survivor who was shown fleeing an attack in a famous Vietnam War photograph; a British doctor who treated incendiary weapons victims in Syria; and the author of a new report on divestment from incendiary weapons. Together these speakers' personal experiences and fresh perspectives will underscore why states should agree to initiate a process to revisit Protocol III at the upcoming Review Conference of the Convention on Conventional Weapons.

Speakers:

- **Kim Phuc**, Survivor of a napalm attack in Vietnam and founder of the KIM Foundation International
- **Dr. Rola Hallam**, Medical doctor and founder of CanDo Action
- **Roos Boer**, Humanitarian Disarmament Project Leader at PAX
- **Bonnie Docherty**, Senior Researcher at Human Rights Watch (Moderator)

For more information, see Human Rights Watch, [“Incendiary Weapons: Human Cost Demands Stronger Law.”](#) November 9, 2020.

For more information, please contact Susan Aboeid, aboheids@hrw.org

CCW REPORT

Reaching Critical Will (RCW) is the disarmament programme of the Women's International League for Peace and Freedom (WILPF), the oldest feminist peace organisation in the world. RCW works for disarmament and the prohibition of many different weapon systems; confronting militarism and military spending; and exposing gendered aspects of the impact of weapons and disarmament processes with a feminist lens. RCW also monitors and analyses international disarmament processes, providing primary resources, reporting, and civil society coordination at various UN-related forums.

The *CCW Report* is produced by the Reaching Critical Will programme of the Women's International League for Peace and Freedom (WILPF). WILPF is a steering group member of Stop Killer Robots.

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Reaching Critical Will



WILPF

WOMEN'S INTERNATIONAL
LEAGUE FOR PEACE & FREEDOM

