

International Institute of Humanitarian Law



International Institute of Humanitarian Law
Institut International de Droit Humanitaire
Istituto Internazionale di Diritto Umanitario

Weapons and the International Rule of Law

STUDI



Politica



FrancoAngeli

International Institute of Humanitarian Law
Institut International de Droit Humanitaire
Istituto Internazionale di Diritto Umanitario

Weapons and the International Rule of Law

39th Round Table on Current Issues
of International Humanitarian Law
(Sanremo, 8th-10th September 2016)

Editor Baldwin De Vidts

Associated Editor Gian Luca Beruto

 **FrancoAngeli**

Dr. Baldwin De Vidts has served in various legal functions within FPS Foreign Affairs of Belgium and SHAPE, acting also as the Legal Adviser to the Secretary General of the North Atlantic Treaty Organization.

Mr. Gian Luca Beruto holds a Master's degree in International Political Science and is currently Assistant to the Secretary-General of the International Institute of Humanitarian Law.

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Preface

As technology relentlessly modifies and shapes today's civil societies at an ever-dynamic pace, the same applies to weapons development and usage in the scenarios of conflict worldwide. The ultimate challenge facing international humanitarian law (IHL) today is to ensure that both applicable law and legal debates keep astride of any such developments, so they remain within an appropriate legal framework, thus preventing them from possibly unleashing overpowering effects in the medium and long term.

The 39th Sanremo Round Table on current issues of humanitarian law, jointly organized by the International Institute of Humanitarian Law and the International Committee of the Red Cross, took place in Sanremo from 8 to 10 September 2016, with the purpose of dealing with issues related to new weapons and engaging in open and fruitful debates in keeping with the traditional "spirit of Sanremo".

Experts from a wide range of backgrounds, including representatives from governments and international organizations, academics, military officers, legal advisers and international experts, gathered together to analyze and further discuss the core principles at stake in the relationship between the development of new weapons and the application of IHL.

The Round Table focused – as also did the message of the Secretary-General of the United Nations which was conveyed to the audience at the event – on the crucial topic of the protection of civilians which, now more than ever, constitutes a critical and delicate issue in today's international and non-international armed conflicts. The indiscriminate use of certain lethal weapons, as well as the use of weapons which cannot ensure respect for the principle of distinction, in densely-populated areas, and the brutal reality of city warfare, too often cause unnecessary suffering to those who are not directly involved in the fighting and give us, once again, a clear idea of how difficult it is to ensure the effective protection of the civilian population in warfare.

Although such actions have been condemned by the international community, it is hard to ensure accountability, in particular, when perpetrators belong to the ever-growing community of non-state actors. Several protocols and treaties have been signed through the years to regulate the use of weapons but how can compliance of non-state actors with IHL regulations be effectively ensured? There is no easy answer to such a question, in light of the difficulties of weapons control and the smuggling of and easy access to weapons, particularly in certain areas of conflict. Furthermore, even though States are no longer the only actors on the stage, they can still play a significant role in addressing issues of

compliance with IHL through an efficient regulation of weapons reviews. They can also control and possibly reduce their stockpiles of conventional and unconventional weapons, as well as monitor and address the development of autonomous weapons and cyber warfare.

The proceedings of this Round Table, in line with the Sanremo Institute's tradition, aim to further develop and contribute to the ongoing debate on these specific issues. I am confident that their publication will provide a useful instrument to highlight, once again, the increasing importance of the promotion and enforcement of international humanitarian law and human rights in this very rapidly changing security environment.

Fausto Pocar

President of the International Institute of Humanitarian Law

Opening session

Opening address

Alberto BIANCHERI

Mayor of Sanremo

It is for me a real privilege to extend, on behalf of Sanremo and its Municipality, my warmest welcome to the distinguished authorities, international experts and all the guests who are here this morning at the opening session of this important Round Table on current issues of international humanitarian law, organized by the International Institute of Humanitarian Law, which Sanremo has had the honour to host and which its Municipality co-founded forty-six years ago.

I am pleased to recall that the Institute plays an important role for the city of Sanremo, not only as a centre of excellence in the field of training and research but also as a forum for reflection on a wide range of challenges that humanity is facing today. It is because of this unique role played by the Institute since 1970 in this city and around the world, that I would like to confirm the commitment of the Municipality, already expressed at the beginning of my mandate as Mayor, to support, wherever possible, the activities of the Institute and to reiterate its determination to strengthen its co-operation and collaboration.

This 39th Round Table very well matches the vocation and tradition of Sanremo, which, since its origins has served as a crossroads for international exchanges and meetings between nations. The presence, once again, of such a large group of important and prominent representatives of governments and International Organizations, leading academics and senior military officers coming from different regions of the world gathered in our city is a great source of pride which should inspire us to further support the initiatives organized by the Institute.

I am sure that, thanks to the work of the experts invited by the International Institute of Humanitarian Law this Round Table will provide, once again, fruitful debates and set out the guidelines for possible solutions. Let me now express my warm thanks to the organizers of this Round Table, Professor Fausto Pocar, President of the International Institute of Humanitarian Law and Ms Christine Beerli, Vice-President of the International Committee of the Red Cross. I would also like to thank Mr. Serpa Soares who shared with us an important message from the Secretary-General of the United Nations, Mr. Ban Ki Moon.

I wish you all a successful Round Table and hope that you may return to this city in the future. Sanremo will be very happy to welcome you again!

Opening address

Vinicio MATI

Permanent Representative of Italy to the Conference on Disarmament

Grazie Presidente, Signor Sindaco di Sanremo, Signore e Signori.

Desidero in primo luogo esprimere il mio più vivo ringraziamento per l'invito a partecipare all'apertura dei lavori della trentanovesima edizione della Tavola Rotonda sull'attualità del Diritto Internazionale Umanitario organizzata dall'Istituto Internazionale di Diritto Umanitario, Sanremo.

Un sentito ringraziamento va anche al Comitato Internazionale della Croce Rossa ed alla sua rappresentante oggi qui presente, la Vice-Presidente Mme Christine Beerli, per la cooperazione nell'organizzazione dell'evento.

Un cordiale saluto anche al Dottor Miguel Serpa Soares, Under Secretary General for Legal Affairs delle Nazioni Unite. Ho l'onore e il piacere oggi di farmi interprete del saluto e del più cordiale augurio del Ministro degli Affari Esteri e della Cooperazione Internazionale, Onorevole Paolo Gentiloni, impossibilitato a partecipare personalmente ma che ha voluto accordare il suo Patrocinio a questo annuale appuntamento che punteggiava tradizionalmente la vita dell'Istituto. Patrocinio cui si affianca quello del Ministero della Difesa.

Sanremo non è soltanto una bellissima città universalmente conosciuta nel mondo per le sue ben note attrazioni turistiche e culturali, ma ha anche il merito di ospitare questo straordinario centro di eccellenza per lo sviluppo delle attività giuridico-internazionali nel nostro Paese. Un'istituzione che può vantare una consolidata capacità di attrazione a livello internazionale, come testimonia l'ampio e qualificato livello di partecipazione ai vari panels. Mi pare quasi superfluo sottolineare l'importanza che attribuiamo alla nostra collaborazione con l'Istituto e quanto sia prezioso il suo contributo in un settore come quello dello sviluppo del Diritto Umanitario che rappresenta uno dei punti focali del tradizionale impegno del nostro Paese sia nel quadro onusiano, sia nell'ambito dei vari fori multilaterali per il disarmo, la non proliferazione ed il controllo degli armamenti di cui Ginevra rappresenta un polo essenziale.

L'impegno del Ministero degli Affari Esteri e la volontà di intensificare la nostra cooperazione su tale terreno sono testimoniati non soltanto dal Patrocinio e dal sostegno finanziario concessi a tale evento, ma anche dalla significativa presenza di rappresentanti del Ministero, alla guida di struttu-

re di rilevante importanza in rapporto ai temi trattati. Saluto a questo proposito con piacere la presenza, in qualità di Chair del Panel relativo alla V sessione della tavola rotonda, dell'Ambasciatore Francesco Azzarello, neo-direttore dell'Autorità nazionale per le autorizzazioni dei materiali di armamento (UAMA) del Ministero degli Affari Esteri e già Ambasciatore all'Aja nonché Rappresentante Permanente italiano presso l'OPCW (l'Organizzazione per la Proibizione delle Armi Chimiche), del cui Consiglio Esecutivo è stato Presidente. Prima di svolgere alcune considerazioni sui principali temi in agenda, mi permetta, Signor Presidente di condividere un ricordo di carattere personale.

Vorrei cogliere questa occasione per rendere omaggio alla memoria dell'Ambasciatore Maurizio Moreno, ex Presidente dell'Istituto che purtroppo ci ha lasciato recentemente. L'Ambasciatore Moreno è stato uno dei miei più cari maestri avendo collaborato a lungo con lui durante la mia carriera, in particolare quando era Rappresentante Permanente d'Italia alla NATO. Lo ricordo con particolare affetto in tale circostanza nella consapevolezza dell'importanza da lui attribuita alle attività dell'Istituto ed in particolare all'annuale tavola rotonda.

But with your permission, Mr. President, I would like to continue in English. I am very pleased to note that the themes to be addressed during this Round Table are very relevant to our work conducted in Geneva, in the framework of the Conference on Disarmament and of the other organs of the UN disarmament machinery, as well as in many other disarmament and arms control processes relating to both conventional arms and weapons of mass destruction. Armed conflicts and warfare are, as they have always been, dynamic phenomena.

For a few decades now, non-international armed conflicts have increased in number and intensity, leading to a necessary adjustment of the rules of warfare that were previously aimed at regulating only international, state-to-state armed conflicts. Armed non-state actors have risen to the fore, occupying a place previously dominated by governmental forces, and their action in war defies traditional laws and principles. Access to weapons, especially conventional weapons, has become easier, as production technologies are easily replicated and weapons materials and components are easily procured. Finally, the growing pace of scientific and technological advances, that involves all domains of our life, has an impact on the development and use of weapons and, in general, on the security sector.

The development of more and more sophisticated weapons, means, and methods of warfare, and their possible humanitarian impact, pose new challenges to the international community, not only domestically, where

their compatibility with the rules and principles of international humanitarian law must be assessed, but also internationally, where their use must be regulated, and is, in some cases, prohibited. As the reality of warfare changes, the legal framework designed to regulate it must also evolve. Addressing these new developments requires a complex multidisciplinary approach, which takes into account security as well as legal and humanitarian dimensions. At the same time, it requires us to constantly reaffirm our commitment to the respect for, and promotion of, existing international humanitarian law (IHL). Italy fully shares the guiding principles of IHL and is deeply involved in their promotion and effective implementation. In this regard, I would like to underline that international humanitarian law is an integral component of training programmes for our Armed Forces.

Italy is indeed a party to all the Conventions that prohibit or restrict weapons due to their excessively injurious or indiscriminate effects. In particular, Italy plays a leading role in the Convention on anti-personnel landmines and the Convention on cluster munitions. Both Conventions have written a new, fundamental chapter of international humanitarian law. In this regard, let me recall that Italy completed the destruction of its entire stockpile of cluster munitions and related sub-munitions on 31st October 2015, five years ahead of the deadline established by the Convention. Since our ratification of the Ottawa Convention, we have devoted close to 50m EUR to clearance, stockpile destruction and victim assistance activities in relation to any kind of explosive remnants of war. Last January, we assumed the Chairmanship of the United Nations Mine Action Support Group for the next two years.

Without entering into the details of several issues we daily address in our work in the different disarmament fora in Geneva, let me share a few thoughts on some of the topics that this meeting will discuss. One of the themes that will be treated during this workshop is represented by the issue of lethal autonomous weapons systems (LAWS). While an internationally agreed definition of LAWS does not yet exist, we consider these as systems that could select targets and decide when to use force, and would be entirely beyond human control. As you are aware, the legal, ethical and operational implications of the development of such systems and of their possible future use have been addressed in several meetings held in Geneva in the framework of the Convention on Certain Conventional Weapons (CCW). This issue will be at the centre of attention during the upcoming Review Conference of the Convention, set to take place in December in Geneva, which will consider the creation of a group of governmental experts tasked with deepening discussions on the LAWS issue. Italy has

actively participated in this work and is firmly committed to continuing to do so.

In this regard, I cannot but express the hope that our co-operation with the International Institute of Humanitarian Law of Sanremo will further increase, in light of the strong connection between its expertise and the work awaiting us in this domain. Another issue that draws much attention and concern from the international community is represented by the increasing use of improvised explosive devices, so-called IEDs, in both non-international and international armed conflict, as well as in non-conflict situations, particularly in the perpetration of terrorist acts. Italy shares the concern about the use of IEDs.

We have been actively engaged in the work of the CCW on this issue and support any initiative aiming at identifying effective measures to prevent IED use and counter their destructive impacts. The increasing involvement of non-state actors in conflict and their possible access to weapons of mass destruction, raise serious and legitimate concerns in the international community, which Italy fully shares, particularly in relation to terrorist acts. In this regard, we reiterate our support for the full implementation of UNSCR 1540, and stress the importance of a successful outcome of its Review process by the end of this year.

In concluding, Mr. President, I would like to commend the initiative of this round table as an example of interaction between the political, diplomatic, military and academic domains that Italy has always considered central to effectively respond to the evolving challenges of the international security environment. The contribution of academic and research institutions, NGOs and other civil society organizations, especially in the form of technical knowledge and experience from the field, continues to remain central in our work to reaffirm and promote the crucial role of international humanitarian law. I look forward to the discussions of this round table and to the contribution that this initiative will certainly make to the ongoing work on these diverse, complex and highly relevant issues in today's world.

Conference highlight

Fausto POCAR

President, International Institute of Humanitarian Law, Sanremo

The purpose of this Round Table is to discuss and clarify current issues regarding the application of international law on weapons and other means of warfare, in light of current technological developments and abusive practices which characterize an increasingly worrying scenario of contemporary armed conflicts. International law, particularly international humanitarian law (IHL), is relatively clear on most of these issues and sets out established principles which should be complied with in any kind of armed conflict, whether international or non-international, which rotate around the basic principle that the use of weapons and means of warfare is not unlimited. Both customary international law and treaties impose limitations which restrict the choice of weapons that parties to a conflict may use in warfare.

These limitations are inherently linked to fundamental principles of IHL - the principles of distinction, the principle of proportionality, precaution and the principle of humanity - which are undisputed under international law. These restrictions entail, therefore, the prohibition of weapons which are inherently discriminatory and unsuitable for ensuring respect for the principle of distinction, of weapons which are of a nature to cause superfluous or unnecessary suffering, and, additionally, of weapons which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment. The same prohibitions impact on the use of other means of warfare, as reflected in practices in the conduct of military operations which are incompatible with the above mentioned principles of IHL, as, for example, the use of sexual violence and the use of children in hostilities.

Treaties have been adopted to reflect such prohibitions with the aim of ensuring compliance with the limitations imposed by international law on the use of weapons and other means of warfare, and some treaties have been widely ratified. I will not mention them here. Under some of these treaties, however, and under other treaties, such as the Statute of the International Criminal Court (ICC), violations of the obligations to comply with the said limitations on the use of weapons and other means of warfare have been declared to be serious breaches of IHL and defined as crimes under international law. In parallel, or even earlier than the adoption of specific treaties, customary international law has evolved to take into account new weapons technologies, as well as new (or new use of old) means of warfare, and has devised more specific rules to ensure compliance

with the said limitations, and to repress violations, as reflected in numerous instruments of the United Nations and in the increasing, and increasingly substantial, jurisprudence of international courts, including international criminal courts, human rights courts and quasi-judicial bodies.

However, many issues concerning the legality of weapons remain on the table and need to be discussed and clarified. The Round Table will take up the issue of the compliance with the States' obligations to conduct weapons reviews, as set forth in Article 36 of Additional Protocol I, an obligation which has become more and more relevant particularly in light of the increasing pace of evolving technologies. Considering the limited number of States which conduct such reviews, the reasons should be clarified and ways and means should be identified to encourage all States to conduct such reviews.

The Round Table, however, will not only deal with such a procedural means of control of the legality of new weapons but it will also focus largely on best practices in applying IHL to new weapons and new means of warfare in order to respect the prohibition of the use of weapons likely to violate the principle of distinction or to cause superfluous injury or unnecessary suffering. How IHL applies to the development of new technologies such as autonomous weapons and cyber capabilities remains an issue to be further explored, bearing in mind that its basic principles should be firmly observed.

How to ensure compliance and prevent violations is a core issue that follows the clarification of the law and the modalities of its application. It is a general problem in that it refers both to the use of traditional weapons and new weapons, but special consideration will be given to weapons that make use of new technologies. This issue does not only concern regular armies, but it also poses delicate issues particularly when an armed conflict involves the participation of non-state actors, which is most frequently the case in the current scenario characterized by non-international, rather than international, armed conflicts.

Special consideration will be justifiably given to issues of compliance and prevention of violations with respect to the prohibition of other means of warfare, such as the use of sexual violence and the use of children in hostilities, which are increasingly brought to the public attention through the media.

The presentations of speakers and panelists, together with the ensuing debates, will no doubt add substance to the already long catalogue of issues and will allow for a better understanding of the role of IHL with regard to weapons and other means of warfare. I look forward to listening to the interesting discussions in the days to come.

Conference highlight

Christine BEERLI

Vice-President, International Committee of the Red Cross, Geneva

Thank you for giving me the opportunity to address this distinguished audience. It is a pleasure for me to be here at the 39th Sanremo Round Table on current issues of international humanitarian law (IHL).

This year's Round Table allows us to reflect on a fundamental feature of warfare – weapons – the essential means to attack or defend during armed conflict; to neutralize enemy combatants and military objectives.

In today's armed conflicts, however, the main victims are invariably civilians. Fighting often goes on for many years, with massive use of heavy weapons, reducing cities to rubble. One obvious example is the towns and cities of Syria, where the widespread devastation of homes, hospitals and infrastructure has resulted in a level of suffering that almost defies description. There are many others.

In armed conflicts such as those in Syria and Yemen, Afghanistan and South Sudan and many others around the world, the ICRC's humanitarian mission entails not just life-saving assistance, but also the protection of civilians, also through the promotion of respect for international humanitarian law in the choice of weapons. The ultimate aim is to prevent the type of massive destruction we have been witnessing from happening in the first place.

The impact of weapons in warfare is so critical that it is not only regulated by the general rules of IHL, but also by a series of specific treaties limiting or prohibiting their use, as well as, in some cases, their stockpiling, production and transfer.

The general rules of IHL regulating the conduct of hostilities – distinction, proportionality, precaution – constrain the manner in which weapons can be used during armed conflicts. In order to be able to comply with the law on the conduct of hostilities, a fundamental principle is that the choice of methods and means of warfare is not unlimited.

So, what are the limits? The first limitation aims to protect civilians by prohibiting the use of indiscriminate weapons, a specific rule of customary law encompassed by the IHL prohibition of indiscriminate attacks. The aim of the second limitation is to protect combatants by prohibiting the use of weapons which are “of a nature to cause superfluous injury or unnecessary suffering”. The roots of this customary IHL norm can be found in the earliest weapons treaty - the 1868 St. Petersburg Declaration prohibiting

explosive projectiles. Since then, weapons technology has evolved rapidly, for instance, in the domain of unmanned robotic weapon platforms.

While it is always difficult for international law to keep pace with technological developments, the development of norms on weapons has, nevertheless, been quite dynamic in recent decades. States have agreed on a whole series of treaties prohibiting or regulating the use of certain kinds of weapons.

Thanks to the mobilization of civil society, international organizations, the ICRC and many States, chemical and biological weapons and weapons that “keep on killing”, such as antipersonnel mines and cluster munitions, have been banned. We can also celebrate the fact that in some cases weapons were prohibited before ever being used on the battlefield, as was the case for blinding lasers and for exploding bullets in the St. Petersburg Declaration.

Furthermore, at a time when so many of us are rightly deploring the lack of compliance with IHL by parties to armed conflicts, we should recognize that among all rules of IHL, those prohibiting the use of certain types of weapons are among the most respected. Many lives have, in fact, been saved thanks to these treaties.

The ICRC has taken an active part in the development of IHL applicable to weapons. It has done so over the decades – as it continues to do today – following its unique “evidence-based” approach. First, the ICRC witnesses the effects of the weapons on combatants and civilians directly in its field operations. Second, it collects knowledge and expertise from independent and governmental experts on health, technical, military or legal aspects which, combined with the ICRC’s own expertise, allows the Institution to develop specific recommendations that are relevant, practical and address humanitarian concerns. These humanitarian concerns are the drivers of the ICRC’s approach, which at times converges with security-driven disarmament approaches.

This Round Table is mainly dedicated to contemporary challenges related to weapons issues. And the merit of the programme over the next days is that we will discuss very concrete matters. Without mentioning them all, I would like to say a few words from an ICRC perspective on some of the topics that will be discussed.

One of these concrete issues is how to improve compliance with the obligation for States party to Additional Protocol I to review the legality of new weapons. Weapons reviews are a way to ensure that a State’s Armed Forces are capable of conducting hostilities in accordance with its international obligations and that new weapons are not employed prematurely under conditions where respect for IHL cannot be guaranteed.

It is, therefore, in each State's interest to assess the legality of any new weapon that they develop or acquire.

On the question of whether weapons reviews are adequately implemented, it is frankly deplorable that only a few States are known to have established mechanisms to assess the legality of new weapons. Having said that, it is important to stress that legal reviews do not provide all the answers. Efforts to strengthen national review procedures should be seen as complementary to and mutually reinforcing of international discussions on new technologies of warfare.

Cyber warfare and autonomous weapon systems are two technological developments giving rise to a range of complex issues, notably in relation to the necessary legal review processes, but also in terms of ensuring compliance with IHL and ethical acceptability.

Cyber means and methods of warfare are increasingly referred to as possible tools to inflict damage on the enemy without using traditional kinetic operations. The fast development of military capacities in this domain calls for a clear reiteration of the obligation to ensure that such methods and means of warfare are used (and are capable of being used) in accordance with IHL. Fortunately, cyber warfare, as far as we know, has not had any dramatic humanitarian consequences to date. Our collective responsibility is to reflect on the potential human cost of cyber warfare in an environment where essential services are increasingly connected and interdependent.

Another challenge in the domain of technological developments relates to advances in robotics more specifically, the increasing autonomy of robotic weapon systems and their critical functions of selecting and attacking targets.

Of course, there is a moral and ethical issue at stake here. Is humankind ready to enable a computer programme to effectively decide to kill human beings? There are legal challenges too, particularly around the question of whether respecting all the rules of IHL would be possible when deploying increasingly autonomous weapon systems. In order to maintain the necessary human control over weapon systems and the use of force, and ensure compliance with IHL and the dictates of public conscience, States will need to set limits on autonomy in weapon systems.

However, in today's armed conflicts, civilians are not killed by computers or autonomous weapon systems. Every year, many hundreds of thousands of them are displaced, wounded or killed because of the widespread availability and misuse of weapons. Moreover, the increasing urbanization of warfare in recent years, combined with the use of weapon

systems capable of delivering massive explosive force over a wide area, has taken a particularly devastating toll on civilians.

Explosive weapons that have a wide impact area are generally not a cause for concern when used in open battlefields. But when employed against military objectives located in populated areas, the likelihood of indiscriminate effects is high. The humanitarian consequences are often dramatic and wide-ranging. Beyond direct death and injury, the impact of damage and disruption to critical infrastructure such as power plants or water systems, or to services such as hospitals, can ultimately be even more deadly.

This is why the ICRC considers that explosive weapons with a wide impact area should be avoided in densely-populated areas.

I referred earlier to the 1868 St. Petersburg Declaration. It is worthwhile recalling how this first international weapons treaty came about. In 1867 the Russians developed a projectile that was able to explode on contact with the human body.

Considering that the bullet they just developed would have inhumane effects, the Russians themselves suggested that the use of this bullet be prohibited by international agreement. One year later States agreed to prohibit this weapon.

International relations today are, of course, not the same as they were in the 19th century. States appear generally more averse to any kind of normative development. However, in some cases the general rules of IHL have appeared insufficient in addressing the human cost of particular weapons. When this has been the case, the ICRC and the Red Cross/Red Crescent Movement, together with civil society and many States, have played an important role in raising awareness on unacceptable harm caused by particular weapons and in advocating for clarification or development of the law. And we continue to do so.

For example, the entire Red Cross and Red Crescent Movement has, since 2011, been calling on States to negotiate with urgency and determination a legally binding international agreement to prohibit the use of and completely eliminate nuclear weapons, in accordance with existing international commitments, within a time-bound framework.

Clearly, given the prominent role of this weapon of mass destruction in the defence policy of some States, the political implications of these debates are enormous. What is also clear is that any use of these weapons would have catastrophic humanitarian consequences. Moreover, as long as nuclear weapons exist there remains a danger of intentional or accidental nuclear detonation. Indeed, some experts warn that the risk of such a detonation is higher today than in the recent past. We now have much

greater knowledge of the extent of civilian harm that use of these weapons would cause. In addition, humanitarian organizations have made very clear that there is a lack of sufficient capacity at national and international levels to respond effectively to such a humanitarian catastrophe. In the face of the overwhelming evidence of the unacceptable humanitarian consequences of any use of nuclear weapons, States must urgently take action to prohibit and eliminate these weapons.

We are now embarking on three fascinating days of substantial debates on a range of issues pertaining to weapons. I look forward to some very productive and constructive discussions.

Thank you for your attention and I wish you a very successful Round Table.

Keynote address

Miguel SERPA SOARES

Under-Secretary-General for Legal Affairs
and United Nations Legal Counsel

I would first like to thank Professor Pocar for his kind invitation to the Secretary-General to attend this Round Table.

Over the past year, we have been celebrating the 70th anniversary of the United Nations. I have participated in a number of events to celebrate this occasion which proved to be an excellent opportunity for me to reflect on the achievements of the United Nations in many different areas in this period of time. In this regard, I would like to take this opportunity to briefly look back at the role of the United Nations in the development of and compliance with international humanitarian law (IHL).

UN's role in IHL matters

At a first glance, it seems natural to me that the United Nations has been involved in IHL matters since the early years of the Organization.

The United Nations was established in the aftermath of the Second World War, which saw violations of IHL on a massive scale. Thus, it is hard to imagine a United Nations that would not deal with IHL matters.

Looking at the Charter of the United Nations, the language is couched broadly to allow the United Nations to deal with humanitarian issues. The Charter, therefore, sets out in its first article by stating that one of its purposes is “to achieve international co-operation in solving international problems of an economic, social, cultural or humanitarian character”. It is significant that it refers to “international problems of a humanitarian character”.

The legislative actions of the principal organs of the United Nations also reveal the extensive role played by the Organization in IHL matters. From the late 1960s to the 1970s, the General Assembly adopted a series of resolutions entitled “Respect for human rights in armed conflict”, which contributed to the reaffirmation and development of IHL rules, particularly those pertaining to the protection of civilians, and supported the successful conclusion of the Additional Protocols in 1977. Since then, the Assembly has regularly dealt with IHL matters pertaining to specific conflicts and thematic areas.

The Security Council has also reaffirmed in its resolution 1502 adopted in 2003, “its primary responsibility for the maintenance of international peace and security and, in this context, the need to promote and ensure respect for the principles and rules of international humanitarian law”.

Additional Protocol I of 1977 further confirms the role of the United Nations in IHL matters in a concrete manner. Article 89 of that Protocol, therefore, provides that “[i]n situations of serious violations of the [Geneva] Conventions or of this Protocol, the High Contracting Parties undertake to act, jointly or individually, in co-operation with the United Nations and in conformity with the United Nations Charter. ”

These elements all confirm that the United Nations has a crucial role to play in IHL matters.

Development of IHL

One area that I wish to highlight is the role of the United Nations in developing IHL instruments. Looking back at its history, many multilateral treaties related to IHL have been negotiated and adopted within the framework of the United Nations.

In fact, many of them relate to weapons, which is the theme of this Round Table. These treaties are:

- The Convention on Conventional Weapons;
- Its first three Protocols;
- The Convention on Chemical Weapons; and most recently
- The Arms Trade Treaty.

The General Assembly played a key role in developing these treaties by convening diplomatic conferences and instructing the Conference on Disarmament to draw up the treaties. As far as the Arms Trade Treaty is concerned, after the Final Conference held in 2013 failed to adopt the draft Treaty, the General Assembly instead successfully adopted it. The Arms Trade Treaty entered into force on 24 December 2014.

There are also other relevant treaties related to IHL which were negotiated and adopted within the UN framework, such as the Rome Statute of the International Criminal Court and the Optional Protocol to the Convention on the Rights of the Child on the Involvement of Children in Armed Conflict.

The General Assembly was also instrumental in these instances, as it mandated the International Law Commission and the Commission on Human Rights, and convened diplomatic conferences to draw up these

treaties. As far as the Optional Protocol is concerned, it was adopted directly by the General Assembly.

I should also mention that these multilateral treaties that I have just mentioned are all deposited with the Secretary-General of the United Nations, and my Office, the Office of Legal Affairs, discharges the depositary functions on behalf of the Secretary-General.

In this regard, my Office annually organizes a Treaty Event in September during the high-level week of the General Assembly, which provides a unique opportunity for Heads of States, Heads of Governments, Foreign Ministers and other senior government officials to undertake various treaty actions, including signature to and ratification of IHL-related treaties.

We hope to contribute to wider acceptance of IHL-related treaties through these Treaty Events.

Compliance with IHL

I wish to note that the United Nations' contribution to IHL has not been limited to the development of new instruments, but has also extended to the strengthening of compliance with the existing rules of IHL.

Among other bodies, the Security Council, the General Assembly and the Human Rights Council, in particular, have played a key role in ensuring compliance with IHL.

A well-known example of the Security Council's contribution in this area is the establishment of and support to international and hybrid criminal tribunals, including the International Criminal Tribunal for former Yugoslavia (ICTY), International Criminal Tribunal for Rwanda (ICTR), their Residual Mechanism, and the Special Court for Sierra Leone.

The Security Council has also mandated the Secretary-General, his special representatives and envoys, peacekeeping missions and special political missions to monitor potential violations of IHL in ongoing conflicts. These mandates now cover a number of conflict situations around the world, ranging from high-profile conflicts such as Syria to other protracted conflicts such as the Democratic Republic of the Congo and Afghanistan.

These mandates also cover thematic areas such as protection of civilians in armed conflict, children in armed conflict and conflict-related sexual violence. In particular, the Secretary-General is specifically mandated to indicate those parties which have recruited children, committed violence

against children, attacked schools and hospitals, as well as parties which may have committed sexual violence in times of armed conflict.

For its part, the General Assembly has regularly dealt with a number of conflict situations and has exerted pressure on the parties to the conflict to abide by IHL. Such conflicts include Afghanistan, the Occupied Palestinian Territory, Syria and the former Yugoslavia.

It has also made efforts to ensure wider acceptance of various IHL treaties, particularly the Additional Protocols of 1977, and has adopted resolutions specifically dedicated to the status of the Additional Protocols. In these resolutions, the Assembly has also requested the Secretary-General to submit reports on the measures taken to strengthen the existing body of IHL, based on information provided by Member States and the ICRC.

The General Assembly has also occasionally recommended the Government of Switzerland, as the depositary of the Fourth Geneva Convention, to convene a Conference of High Contracting Parties to ensure compliance with the Fourth Geneva Convention in the Occupied Palestinian Territory. The General Assembly made such recommendations in 1999, 2009 and 2010.

With respect to the Human Rights Council, which is a subsidiary organ of the General Assembly specialized in human rights issues, the Council has also mandated a number of fact-finding missions, commissions of inquiry, special rapporteurs and independent experts to report on violations of international human rights law. Their reports have, in practice, also included accounts of possible violations of IHL. Currently, these mandates cover such situations of great concern such as in Syria, the Central African Republic, Mali, Somalia, the Sudan, the Occupied Palestinian Territory and Libya.

In the next few minutes, I would like to explore more in detail two particular areas in which the United Nations has played a role in improving compliance with IHL.

Protection of civilians

First is the issue of the protection of civilians in times of armed conflict. This issue has been particularly high on the agenda of the Secretary-General

In his latest report to the Security Council on the protection of civilians in armed conflict, the Secretary-General has reported that, at the end of 2015, more than 60 million people had been forced to flee their homes as a result of conflict, violence and persecution. He also warned that

humanitarian needs are at record levels and more than 80 per cent of United Nations humanitarian funding is directed at conflict response.

In this context, the Secretary-General has taken the initiative to urge parties to the conflict to renew their commitments to protect civilians by complying with IHL. The Secretary-General, therefore, issued a joint statement with the President of the ICRC last October, and convened the World Humanitarian Summit last May to, among other things, call upon all those concerned to renew their commitments to protect civilians in times of armed conflict.

The concept of “protection of civilians” has been around in the United Nations for quite a while now, and I would like to take this opportunity to take a step back to reflect upon this concept.

IHL is evidently the primary source of rules that deal with the protection of civilians in times of armed conflict, and there are specific and detailed rules in this regard.

These include:

- The obligation to distinguish between civilians and combatants;
- The obligation not to direct attacks against civilians;
- To attack only combatants;
- The obligation not to carry out indiscriminate attacks; and
- The obligation to take precautions before and during an attack to minimize civilian casualties.

IHL also envisages the establishment of zones under special protection, such as neutralized zones and demilitarized zones, in order to provide protection for the wounded, sick and civilians from the effects of hostilities. So, the protection of civilians in the context of IHL is based on a number of detailed rules of IHL. These rules comprehensively deal with the protection of civilians in times of armed conflict.

However, “protection of civilians” is also a notion that has increasingly been used in the context of United Nations peacekeeping activities, and not strictly within the context of IHL. You may recall that, in 1999, the Security Council for the first time tasked a peacekeeping operation with protecting civilians under imminent threat of physical violence. More specifically, the United Nations Mission in Sierra Leone was tasked with that mandate in the context of the conflict in that area.

Since then, the Security Council has regularly mandated peacekeeping operations to protect civilians under imminent threat. Today, United Nations operations in Abyei, the Central African Republic, Côte d’Ivoire, Darfur, the Democratic Republic of the Congo (DRC), Lebanon, Liberia,

Mali and South Sudan are all mandated to protect civilians, and in most cases, to “take all necessary measures” to carry out this mandate.

In practice, the mandate to protect civilians under imminent threat has been implemented in various ways, such as by monitoring compliance with international human rights law and IHL, conducting patrols, setting up safe areas, and, in exceptional cases, by offensive operations against armed groups.

Recently, the United Nations Mission in the Republic of South Sudan, or “UNMISS”, has been facing immense challenges in dealing with civilians who were displaced by the conflict and sought refuge in UNMISS premises. According to the latest report of the Secretary-General, there were nearly 170,000 people who were residing in six UNMISS sites for the protection of civilians. Early this year, in February 2016, there was large scale violence inside the Malakal protection site, where more than 47,000 people were housed, which resulted in many deaths and injuries. This gives an idea of how difficult it is to implement the protection-of-civilians mandate.

I wish to note at this juncture that the notion of “protection of civilians” in the context of peacekeeping is not based on IHL, but is a mandate that is given by the Security Council pursuant to the Charter of the United Nations.

While the notion of “protection of civilians” is separate and distinct in the context of IHL and peacekeeping, the actions taken by peacekeeping operations to protect civilians could be complementary to the actions taken by the conflicting parties to protect civilians pursuant to their obligations under IHL.

However, while recognizing this complementarity, I should also emphasize that the measures under IHL to protect civilians, and those measures authorized by the Security Council should, at times, be very clearly distinguished.

For example, during the conflict in Bosnia and Herzegovina in the early 1990s, the Security Council, under Chapter VII of the Charter, designated certain towns as “safe areas”, including Srebrenica, and mandated a peacekeeping operation to protect them, also by the use of force. At the same time, based on IHL provisions, the parties to the conflict voluntarily concluded an agreement which required them to withdraw their forces from Srebrenica, and ensure the security of Srebrenica by removing hostile elements from the town.

In his report on the “Fall of Srebrenica”, the Secretary-General indicated that the confusion between the two types of measures may have contributed to the tragic events in Srebrenica. In this connection, the Secretary-General

stated that there might have been confusion as to whether the “safe areas” were imposed on the parties to the conflict and protected by a military force, or rather voluntarily agreed to by the parties and protected by demilitarizing those areas.

The report also refers to concerns expressed at the time that “in failing to provide a credible military deterrent, the safe area policy would be gravely damaging to the [Security] Council’s reputation and, indeed, to the United Nations as a whole.”

I believe that we have a lot to learn from the past experience, and that the caution of the previous Secretary-General is still valid today in the context of protection of civilians by peacekeeping operations in ongoing armed conflicts.

Humanitarian access

Apart from the protection of civilians, I would like to briefly touch upon the issue of humanitarian access. In recent years, we have witnessed increasing difficulties in providing humanitarian assistance to civilians affected by armed conflicts, such as in Syria, Yemen and Ukraine. The United Nations has been particularly concerned with the obstacles in delivering humanitarian assistance to Syria across the border.

IHL clearly provides for the obligation of the parties to allow and facilitate rapid and unimpeded passage of humanitarian relief for civilians in need. However, the requirement to obtain consent of the host State in crossing the border to deliver humanitarian assistance was particularly problematic in the context of Syria.

This has prompted the Security Council to take measures. Resolution 2165 adopted in 2014, which is binding, authorized UN humanitarian agencies and their partners to use specific border crossings in Syria, in order to ensure that humanitarian assistance reached people in need throughout the country through the most direct routes. This authorization has most recently been extended to 10 January 2017. Pursuant to this authorization, a number of humanitarian convoys have used the border crossings to delivery aid to Syria. According to the latest report of the Secretary-General, during the month of July 2016, 335 trucks crossed the Syrian border under the terms of the Security Council resolutions.

Resolution 2165, however, still required the United Nations to notify the Syrian authorities of the instances in which the border crossings were used by the United Nations humanitarian agencies and their partners. Moreover, the resolution established a United Nations mechanism to monitor the

loading and any subsequent inspection of UN humanitarian consignments passing through the Syrian border crossings, in order to ensure that the consignments were humanitarian in nature. The Monitoring Mechanism is also required to notify the Syrian authorities that the consignments are humanitarian in nature.

I believe that the Security Council took an important step to improve the humanitarian situation in Syria and to complement the obligations already provided for in IHL. However, it goes without saying that more needs to be done to put an end to the seemingly endless suffering in that country.

Closing remarks

In closing, I wish to note that the United Nations has been engaged extensively in IHL matters, and will always have an important role to play in this area in the future. My Office, the Office of Legal Affairs, has also been dealing with a variety of IHL matters, and the ICRC has, in particular, been an indispensable partner in addressing such issues. We also look forward to engaging with practitioners as well as the academia on IHL matters of common interest.

Thank you for your attention and I wish you all a successful Round Table.

I. Setting the scene

The regulations of weapons under IHL

William BOOTHBY

Associate Fellow, Geneva Centre for Security Policy; former deputy Director of legal services, Royal Air Force; Member IIHL

Let me start by reflecting that international law does include legal rules that determine the lawfulness of new weapons and new weapon technologies. Briefly, weapons that are of a nature to cause superfluous injury or unnecessary suffering, that is, injury or suffering for which there is no corresponding military purpose or benefit, are prohibited. Likewise, weapons that are inherently indiscriminate, that is, that cannot be directed at a specific military objective or the effects of which cannot be reasonably limited to a military objective, are also unlawful. The third group of rules addresses the environment. There is the prohibition in the 1976 UN Environmental Modification Convention on using, essentially, the environment as a weapon and the related, but fundamentally distinct, prohibition in Additional Protocol I (AP I), prohibiting weapons that may be expected to, or which are intended to, cause widespread, long-term and severe damage to the natural environment. For states not party to Additional Protocol I, this is generally recognised as a rule requiring that due regard be had to the natural environment as a civilian object when military operations are undertaken. There are then specific rules of the law prohibiting or limiting the lawful circumstances of use of particular kinds of weapons, such as chemical or biological weapons. The final headline aspect of the law of weapons that I want to emphasise later in my comments is the legal obligation of all states, complied with by too few of them, to conduct legal reviews of all new weapons.

A rather fundamental issue concerns the definition of the word 'weapon'. I have revised my thinking and would suggest that a weapon will include an object, system or other capability that is used, intended or designed in order to cause injury or damage to an adverse party to an armed conflict. That interpretation is intended to be broad enough to encompass computer capabilities that are used, intended for use or designed to cause injury or damage.

There are numerous controversies in the weapons law field and I will touch on some of them in these comments. For example, the very notion of cyber weapon is controversial. Incapacitating chemical agents, for instance, as a means of addressing theatre sieges and similar situations, raise concerns under the Chemical Weapons Convention. Synthetic biology and

the generation of viruses capable of interfering with human genetics are an obvious matter for worry. Enhancing human performance may, for example, involve external appliances such as exoskeletons, implants or the use of drugs. Degrading the performance of personnel belonging to the adverse party will also raise obvious legal issues. Then there is the development of 'Harry Potter-esque' invisibility cloaks to which reference will be made below, and all of this is, of course, in addition to the well-known controversies surrounding the development of automated and autonomous weapons.

So, we have weapon review duties being inadequately implemented by states at the same time as technology in the weapons field is developing rapidly. There are evident dangers arising from such a situation which immediately causes one to wonder whether weapons law itself is a dynamic body of law. Noteworthy events in this regard have occurred over the last 6 or 7 years. We have had new law in the form of the Kampala Resolution amending Rome Statute War Crimes provision in relation to non-international armed conflicts by inserting new weapons-related crimes into article 8 of the Statute. In addition we have seen the adoption of the Arms Trade Treaty.

In soft law terms, the HPCR Manual on the International Law applicable to Air and Missile Warfare has been issued. Likewise, the Tallinn Manual on the International Law relating to Cyber Warfare has been published, and Tallinn 2.0's publication is expected towards the turn of this year. Under the aegis of the UN General Assembly, Groups of Governmental Experts (GGE) have been addressing Information and Communication Technologies; the reports of those groups dated 2010, 2013 and 2015 come within this wide notion of soft law, and remember that last month the next GGE was scheduled to convene. Finally, mention must be made of the publication last year of the US Department of Defence Law of War Manual. That document is not soft law as such, but its Weapons Chapter is of significance and requires mention.

Where weapon reviews are concerned, as has been mentioned, too few states do them. However, more states are developing weapon review systems and, so far as the US at least is concerned, weapon reviews are seen as central to addressing the issues raised by Lethal Autonomous Weapon systems. Increasing the capacity of states to be able to undertake weapon reviews, for example by teaching courses like the one I teach at the Geneva Centre for Security Policy, is a necessary step in promoting compliance with the legal obligation. Similarly important in this regard is international engagement among states that may take the form, for example, of the Shrivenham meetings involving state officials to discuss

weapons law issues and the various Track 1, Track 1.5 and Track 2 meetings on, for example, cyber issues. But there are general concerns about weapon reviews, which are often characterised as too rooted in self-policing by states and as lacking in transparency. However, they seem to me to be the only realistic option. Fundamental state security considerations dictate that such processes must of necessity remain confidential.

If we have seen that weapons law is dynamic the next question is how adaptable is it? In the last 15 years, the scope of the Conventional Weapons Convention has been expanded for ratifying states to apply to non-international armed conflicts. Protocol V to that Convention, on Explosive Remnants of War, has been adopted. Declarations on mines other than anti-personnel mines and on compliance, both under the aegis of CCW, were adopted. The Cluster Munitions Convention was adopted in 2008. Lethal autonomous weapons are being discussed by CCW states and there have been the GGE Reports on Information and Communications Technology to which I referred earlier.

What are the issues today? The first issue is that there seems no likelihood for a general revision of the law. States seem to be reluctant for whatever reason to contemplate such a process in relation to this as to other aspects of the law of armed conflict. Hard law developments in weapons law seem to be *ad hoc* and to be driven by the agendas of NGOs, those agendas in turn being frequently either determined or heavily influenced by funding considerations. But then to be fair, soft law in the form of international manuals such as the Air and Missile Warfare Manual and the Tallinn Manual, are also dependent on funding being made available to enable the experts to meet, discuss, prepare their papers, conduct their research and so on. So, are these soft law texts addressing the gaps in hard law relating to weapons? That is a question we will address shortly.

We have talked already of soft law and now ought to think a little about its significance. Let me raise some questions for you to consider this week. First, do states feel more comfortable with soft law? After all, it is just as contested as anyone participating in the International Manual and GGE processes will certainly confirm. Second, could it be that states feel able to participate in soft law processes and the weapon law regimes they may involve at a more acceptable pace? Third, is soft law the better way to address evolving weapons technology, for example, because of its inherent flexibility? Fourth, are states perhaps as likely to comply with soft law rules, particularly those soft law rules they have been involved in developing? But then, is soft law really flexible? Perhaps not.

With these thoughts and questions in mind, let us recognise some realities. Soft law is not law as such. It is after all neither custom as such

nor does it have the character of treaties. So soft law texts do not provide the criteria on which to base a weapon review, although relevant Manuals may of course repeat those criteria. Also, with treaty law rules, there is the ‘naming and shaming’ aspect in that the activities of states that are perceived as having breached their legal obligations may be cited, for example, by relevant NGOs, and states that have not yet chosen to be party to the treaty may be inspired to participate. Soft law does, however, have the capacity to signpost to states where development of the law is required. When considering these strands of thought, we should recognise that progress in this weapons law field will inevitably take time. There are difficult issues involved, so we should be patient while maintaining appropriate ambition.

We should also consider carefully whether new hard law is necessarily required. In this regard and as an example, bear in mind that current autonomous weapon technology is such that an autonomous weapon system that is to be used to undertake offensive attack operations, i.e. that will seek out targets and decide whether and how to attack them, should fail a weapon review because current technology, so far as is known, is not capable of performing the evaluative decision-making that current targeting law, specifically article 57 of Additional Protocol I and its customary law equivalent, requires. And yet, in its 2012 *Losing Humanity* report, Human Rights Watch seeks a ban of such autonomous technologies. One might legitimately wonder how an explicit ban of such technology in any sense increases the unlawfulness that already applies and that is reflected in the likely failure of such systems to pass a weapon review. Wouldn’t it be better to devote our efforts to ensuring that existing law is properly applied, i.e. that weapon reviews are properly and universally undertaken?

So, does soft law fill the gaps that exist in hard law? The simple answer is no. Gaps in hard law can only be filled by the adoption of additional hard law. But some soft law and other processes do show that states remain engaged in weapons law matters and the rapid developments in the technology that we have noted will ensure that that level of engagement will continue.

We should at this point briefly mention ethical matters. Arguably, weapons law is where the relationship between ethics and international law is currently being played out and the treaty law that we have reflects how far states have been prepared to go to address identified and established humanitarian concerns. States have sought and continue to seek to strike a balance between military necessity and humanitarian concerns and maintaining that balance will be critical in ensuring the acceptability of

future law in this area and these ethical challenges are likely to be even sharper in the future.

At this point we should consider where those future challenges seem likely to feature. Some 12 years ago, autonomous weapons and the challenge that concept represents was what many saw as ‘the whacky future’, whereas now it is the subject of increasingly mainstream research. One future technology to watch is the metamaterials I mentioned earlier. Is an invisibility cloak that renders a person or object invisible correctly classed as camouflage – would those who drafted article 37(2) of Additional Protocol I have been as content to include camouflage as an example of a lawful ruse without caveats had these ‘camouflage cloaks’ been known back in 1977? And if the weapon a soldier carries is rendered invisible by such technology, is he complying with the combatant’s obligation to ‘carry his arms openly’? If not, does the technology imperil the individual’s status as a combatant?

We have mentioned human enhancement already, but consider the potentially even more troubling issues arising from neuromorphic engineering in which brain processes are synthesised. What are the implications of such developments for notions of a ‘brain-machine interface’? In short, at what point does a machine become a variant of a human and when does the human become part of a weapon system as opposed to the user of such a system? Even more fundamentally, is a contest exclusively between machines something that we wish to see? And if it were to occur, is it warfare in any sensible sense? In short, where do the boundaries of the acceptable in warfare lie? Does current law reflect those boundaries and if not, what new law is required to address the perceived inadequacies?

The listener will now be considering what the implications of all this might be. You will have your own views. I offer the following. Weapons law is and must stay dynamic. The interaction between soft law and hard law should be clarified, and both of them have important roles to play in the development of weapons law. State to state consultations on weapons law issues arising, for example, from novel technologies are of great value and Track 1, Track 1.5 and Track 2 consultations and the Shrivenham discussions provide useful examples of such activity. Article 36 weapon reviews remain the vitally important method whereby states should ensure their continued compliance with weapons law rules, and training in weapons law is the essential way of enabling states to comply with these legal obligations.

The humanitarian perspective: from field to policy to law

Peter HERBY

Arms Adviser, Norwegian Red Cross

It is appropriate that this roundtable focuses on the area of international humanitarian law (IHL) that has developed most rapidly over the past 20 years: the regulation of arms. Five important treaties have been negotiated since 1995: the CCW Protocol on Blinding Laser Weapons, the strengthened version of its Protocol on landmines, the Convention on the Prohibition of Anti-personnel Mines, the Protocol on Explosive Remnants of War and most recently, the Convention on Cluster Munitions. However, these achievements provide no basis for complacency. New scientific and technical developments constantly challenge us all to defend fundamental norms and to keep the law relevant. These successes and the challenges ahead suggest that this is a field of human endeavour that deserves more attention, more expertise and more resources. Hopefully, this roundtable will help generate such elements.

One of the most striking developments in this field over the past 20-25 years has been the instrumental role of humanitarian, development, human rights and academic organizations, and of weapon victims themselves, in promoting the development and implementation of new IHL norms. The ICRC and International Movement of the Red Cross and Red Crescent have also played a more active and visible role than ever before.

These organizations and individuals, in partnership with governments, have not only ensured the adoption of new IHL treaties but have also changed how norms in this field are made. They have introduced a “field-based” and “evidence-based” approach. This approach interacts with, influences and sometimes contradicts approaches whose starting points are military requirements or desires, technological or industrial interests and abstract legal concepts. When successfully blended, these approaches can produce new norms. Yet even when treaties are not achieved, or not yet achieved, the field-based and evidence-based approaches can change the parameters within which political decision-making, military operations and technological evolution occur.

What I mean by field-based is an approach built on the documented impacts of weapons already in use on civilians, their communities and livelihoods. By evidence-based I mean an understanding, based on scientific knowledge and real-world scenarios, of the foreseeable effects of

new weapons on the human body and on civilians and civilian infrastructure.

So what types of evidence have been brought to the table by these actors? In relation to both landmines and explosive remnants of war (ERW) evidence has provided insights into the nature and scale of injuries and into the long-term impacts of weapons contamination on individual lives, social and economic development and the diversion of limited health resources.

Field-based evidence of the devastating impact of anti-personnel landmines (AP), in particular, has been extensive. Consistent patterns have been revealed linking the nature of this weapon with specific results: the majority of victims are civilians, not combatants and more casualties occur after conflicts end than during hostilities. In addition, landmine victims require more surgical operations, longer hospital stays and more blood transfusions than other war-injured. They usually require life-long orthopedic care and need to learn new skills to achieve social and economic reintegration into their societies. A high percentage of victims die without receiving treatment.

In a variety of contexts evidence revealed more civilian casualties from explosive remnants of war than from landmines. These included Kosovo where, in the year following the short 15-week conflict in 1999, two-thirds of the casualties resulted from ERW. Unexploded cluster munition submunitions caused half of the casualties in Laos and certain regions of Cambodia and Vietnam. The astonishingly high level of civilian casualties from ERW and, in particular, cluster submunitions, was ignored by all but a few small NGOs for more than a decade after the Indochina conflict. Yet high numbers of civilian casualties were entirely foreseeable. High failure rates of up to 38% were recorded even at the testing stage of certain of the most widely used submunitions. Aerial bombardment in Laos alone resulted in an estimated failure rate of up to 30% and some 80 million unexploded cluster submunitions. These are responsible for most of an estimated 20,000 casualties from explosive remnants of war since the end of hostilities in 1974.

Such evidence and compelling testimony by scores of victims have produced lasting results. Such results include the treaties on AP mines, cluster munitions and ERW, sharp reductions in the use of AP mines and cluster munitions, long-term clearance efforts, more investment in the needs of victims and survivors and sustained funding for these efforts. Taking a long-term view, I think it is fair to say that an historic shift has occurred. From a legal and political perspective, the users of weapons that cause harm to civilians long after their use are no longer free to walk away

from the threats they have created. On the preventive side the 2006 CCW Review Conference also concluded that “the foreseeable effects of explosive remnants of war on civilian populations (are)...a factor to be considered in applying the international humanitarian law rules on proportionality in attack and precautions in attack”.

It is also worth mentioning that another important non-IHL treaty, the Arms Trade Treaty, was a result of field-based documentation of the human costs of unregulated international arms transfers and of their implications for the respect for IHL, development and human rights.

Evidence provided by ICRC, civil society organizations and research institutes has also been crucial in the development of policy, norms and new IHL rules on new weapon technologies.

By the late 1980s a number of States were in the advanced stages of the development of blinding laser weapons or dual use systems that could attack both battlefield sensors and the human eye. Yet little attention had been given to the severity of blinding as an injury as compared to other war injuries from kinetic and explosive force. Nor had much thought been given to how the victims would be treated, to how societies could reintegrate large numbers of blinded combatants or civilians or to the implications of the proliferation and the inevitable use against one’s own forces. Four years of expert meetings hosted by the ICRC and the work of organizations such as Human Rights Watch, the World Blind Union and the Blinded Veterans Association of the US helped turn the tide. Diplomatic efforts led by Sweden produced an ever-increasing number of States that rejected blinding laser weapons as a matter of policy and set the stage for the 1995 CCW Review Conference to negotiate Protocol IV prohibiting such weapons. It is worth noting that this weapon was prohibited based on its permanently disabling effects despite it being promoted as a “non-lethal” weapon.

Evidence provided by scientists, academics and the ICRC has also helped to dampen interest in the use of highly toxic chemicals, sometimes called “incapacitating chemical agents”, as weapons for law enforcement. This is intended to prevent erosion of the Chemical Weapons Convention broad prohibition of the use of toxic chemical agents, whatever their nature, in warfare. Following the use of powerful anesthetic agents in the 2002 Moscow theatre siege States were embarrassingly silent about the acceptability and implications for the CWC of the use of such chemical weapons. This silence was striking in light of the fact that the 18% lethality of their use in the Moscow siege was higher than that achieved by chemical weapons in WWI and the Iran-Iraq war. The chemicals employed also had

toxicity levels comparable to “classical” chemical warfare agents such as nerve agents.

Expert documentation demonstrated the difficulty of keeping highly toxic chemicals out of warfare if accepted for “law enforcement”. It also highlighted the impossibility of quickly incapacitating large numbers of people without lethal effects and raised a range of ethical and IHL issues. These include the implications of employing medical personnel in the planning and conduct of an attack. Following consolidation of evidence at ICRC expert meetings in 2010 and 2012 and attempts by Switzerland and Australia to have this issue addressed by the OPCW’s Executive Council, State policy has begun to change. In early 2013 the ICRC called on States to ensure that the use of toxic chemicals for law enforcement was limited to traditional “riot control agents”. Since then, at least 13 States have confirmed a national position of only using riot control agents and 27 States have called for discussions among States Parties to begin in the OPCW’s Executive Council.

Without going into detail, it is worth noting that a variety of humanitarian, IHL and ethical concerns about other new types of weapons have been put on the international agenda on the basis of evidence presented by the ICRC, NGOs and academics. Some of these will be addressed in upcoming sessions. The most notable include lethal autonomous weapon systems, cyber weapons and potential military applications of developments in the life sciences. The challenges of new technologies and scientific breakthroughs are daunting.

The legal obligation to review the legality of weapons being developed or acquired is codified in Article 36 of Additional Protocol I that will be discussed in our next session. The ICRC has worked with States for many years to develop capacities and advance common understanding of how Article 36 should be implemented. One result of these efforts is a “Guide” to weapon review processes that was peer-reviewed by State experts engaged in such reviews. Yet today only a dozen or so countries appear to have any formally mandated mechanism requiring Article 36 reviews before weapons are developed or acquired. And those that do often don’t provide a consistent role for the engagement of the multidisciplinary expertise needed to conduct evidence-based evaluations of new technologies.

One can only speculate as to how many lives might have been saved if more stringent weapon reviews were in place in the 1950s, 60s and 70s. Should cluster munitions with potential failure rates of 38% at the testing stage have been approved in light of their wide-area effects and foreseeable

long-term contamination? Should their use by an ever-increasing number of countries have continued for several decades in light of their demonstrated reliability problems? Should weapons as difficult to use discriminately as landmines have been defended for decades as conforming to IHL?

What is not speculation is that new technologies now being considered for weaponization present complex challenges beyond any previously addressed. The application of autonomy to weapon systems, which seems to be leading relentlessly towards autonomous weapon systems, raises fundamental issues involving IHL rules on discrimination, proportionality and responsibility as well as a range of concerns related to human rights law, ethics, proliferation and the future of warfare. Many of these issues go far beyond the scope of Article 36. Potential hostile applications of biotechnology, advances in the life sciences, directed energy and nanotechnology, to name but a few, will challenge the public conscience and the regulatory capacity of States as never before.

For decades since the invention of dynamite by Alfred Nobel, the primary injury mechanisms of weapons have been kinetic and explosive force. The impacts of these forces on the human body are well documented and predictable. But how well will future weapon reviewers understand computer programming, impacts of directed energy on the human organism, the environmental impacts of weapons employing nanotechnologies or the implications for human rights or IHL of law enforcement agents that can change human thought, behaviour or identity? How will such agents be tested on humans and reviewed on the basis of realistic real world scenarios? These are challenges that exist today and cry out for more evidence-based analysis and debate.

Another field that cries out for the application of fundamental IHL rules to the evidence now available is nuclear weapons. The risk of nuclear weapon use through accident, escalation or intent appears to have increased in recent years. The organization Global Zero has documented some 320 “military incidents” since February 2014 involving nuclear weapon States and those allied to such States in Europe, North America, South Asia and East Asia. Twenty-five were considered “high risk”. Former US Secretary of Defense, William Perry, estimates the risk of a nuclear catastrophe to be “greater than it was during the Cold War and rising”.

States Parties to the Treaty on the Non-proliferation of Nuclear Weapons (NPT) formally recognized the “catastrophic humanitarian consequences” of nuclear weapons for the first time in 2010. Since then the first-ever intergovernmental conferences on these consequences have received new and uncontested evidence that goes far beyond what was previously known. The ICRC and United Nations agencies have

highlighted the absence of any adequate capacity or plans to assist victims of nuclear detonations at the international level. New means of estimating environmental impacts have demonstrated that even a limited exchange involving the detonation of 100 nuclear weapons would produce a cooling of global temperatures, the reduction of growing seasons in the northern hemisphere and a global famine in which over 1 billion people would perish. Doctors from Japanese Red Cross hospitals in Hiroshima and Nagasaki have cared for atomic bomb survivors since 1956. They continue to treat some 10,000 survivors per year and have witnessed rates of leukemia at rates 4-5 times that of the normal population. They are now conducting research into an expected increase in cancer among some 200,000 ageing children of survivors. These are people who weren't even directly exposed to atomic radiations but appear to be at risk due to genetic damage to their parents.

Despite the finding of the International Court of Justice 20 years ago last month that the use of nuclear weapons is "generally contrary to" the rules of international humanitarian law and that "(t)here exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament" no such negotiation has yet begun. Rather, reports indicate that nuclear weapon States are all now engaged in massive investments to modernize nuclear weapons. Such investments will take decades to justify, are likely to reduce the incentive for such States to eliminate the weapons and may make the use of such weapons more likely. A failure to draw the necessary legal conclusions about nuclear weapons, based on overwhelming evidence of their catastrophic humanitarian consequences, undermines confidence in some of the most fundamental rules of IHL on discrimination, proportionality and protection of the environment. It is long past the time to breach this "last frontier" in the field of IHL and weapons by applying the rules and the evidence to such weapons. As ICRC President Kellenberger stated in his landmark 2010 speech: "We must never allow ourselves to become morally indifferent to the terrifying effects of a weapon that defies our common humanity, calls into question the most fundamental principles of international humanitarian law, and can threaten the continued existence of the human species."

It is clear that IHL rules on weapons are an indispensable framework for the protection of humanity from some of the worst applications of technology. States, the Red Cross and Crescent Movement, individual scientists and civil society have both the opportunity and responsibility to engage in profound legal, ethical and societal reflection on where, as the 1863 St. Petersburg Declaration stated, "the necessities of war ought to

yield to the requirements of humanity". These issues are at the heart of IHL and at the core of the Red Cross Movement's mission and *raison d'être*.

It is also clear from the experience of the past two decades that we can and must base our discussions, decisions and norms on evidence. This is available in contexts where weapons are used, through scientific investigation and through analysis of real-world scenarios. Making policy or reviewing the legality of weapons under IHL without adequate evidence should not be considered acceptable professional practice. When there are too many unknowns we must choose prudence and precaution. The implications for humanity and the future of our planet of neglecting or ignoring an evidence-based approach can be just as grave as in the field of global warming. In that field, a global consensus appears to have been built and a certain level of mobilization has begun. We must do even better on arms and IHL.

II. Legal reviews of new weapons: process and procedures

Discussion panel

Legal reviews of new weapons: process and procedures

Marie VAN HOOFFSTAT

Legal Advisor, Ministry of Defence, Brussels

Belgian perspective on the legal review of weapons

As secretary for the Belgian legal Review Commission, I have conducted the legal reviews in the past four years. I have based my presentation on the experiences I have had, conducting those reviews. There might be issues that have never arisen during my time as secretary. I will, however, try to answer in as much detail as possible the following questions:

1. What is the Belgian perspective on the scope of the obligation? That is: what weapons, means and methods of warfare are eligible for being reviewed?
2. At what stage of development or acquisition is a Belgian legal review conducted?
3. To ensure an effective review, what information is required? What type of information? Source?
4. What expertise is required? Health, technical and environmental; Multidisciplinary approach.
5. What is the process of the legal review?
6. We were also asked to share our view on the need for or added value in transparency and information-sharing in weapons reviews and procedures linked with the question of resources and expertise at the national level and cooperation among States.
7. The last question deals with the promotion of legal reviews: how should other States be encouraged to undertake weapons' reviews?

While answering these questions, I will highlight some of the challenges that the Belgian Review Commission has been faced with.

As to the first question, the scope of the obligation, the Belgian legal Review Commission takes a broad view. Without going into too much detail on the meaning of the word “weapon” and “means of warfare”, it should suffice to say that the former can be generally defined as any object or device, including munitions or other pieces of equipment which are used to cause damage, and the latter as the umbrella for weapons and weapons

systems or platforms, also including munitions and other associated equipment. The Commission would review all types of such weapons and weapon systems whether lethal or non-lethal, anti-personnel anti-material.

As to the meaning of the word “new” the Belgian Commission reviews all weapons that are not yet in the Belgian arsenal. The Commission does not only review technically new weapons but a legal review would also be conducted for any significant changes made to weapons or weapons systems which are already in the Belgian arsenal but whose function is altered by a modification, for example, by equipping the weapon with an additional accessory.

Theoretically the Commission is competent to review methods of warfare as well, but since the establishment of the Commission, the reviews that have been conducted have been limited to weapons or weapon systems. It is worth noting the case of military working dogs. The Belgian Commission has not (yet) conducted a review of military working dogs, but one could wonder whether they qualify as a means of warfare. Or are they to be considered as a weapon and should their use be evaluated as a method of warfare?

A last point that I would like to make regarding the scope of the obligation is that the legal review will always require a statement on the intended use by the end-user. It is only this normal and intended use that will be reviewed. One could easily imagine a weapon being acquired for a specific and strict use in a law-enforcement situation. Hence, the review will be conducted for this limited scope.

Turning to the second question, at what stage a legal review is conducted; country specific circumstances will probably vary quite extensively. To start with, Belgian defence does not study or develop new weapons. Since this conference does not cover government spending in defence related matters nor does it cover national policies on research and development, I will not go into much detail. It should suffice to remind the audience that Belgium, the Belgian armed forces and its defence budget are most modest in size.

Before turning to the acquisition process, I should point out a certain lapsus in the system, namely the lending of material. In international coalitions, sometimes – or often – weapons or munitions are commonly used. In the past four years I have been aware of this practice, yet for none of these cases a legal review was conducted.

The legal reviews I have seen have thus been limited to situations of acquisition. Within the Belgian Armed Forces there is no single streamlined acquisition process. It is probably needless to say, but this is one of the challenges the Belgian Commission faces. Because different services on a

variety of levels are competent to instigate an acquisition, the legal Review Commission would need to be known all across these services, *quod non*. In short, one of the challenges the Commission is faced with, is the knowledge of its existence.

If, however, all goes well and the advice of the Commission is sought, the question remains as to when the Commission will start conducting its review. In theory, the Belgian acquisition process starts with a statement of requirement. To get the Commission involved at this very early stage is considered not to be efficient as many of these statements will never result in an acquisition and the workload of the Commission would rise to an unrealistic level. Nevertheless, one could also argue that getting involved at this very early stage has its advantages too, that is, stopping the process of acquiring a weapon that would not pass a legal review. Once the statement of requirements is validated and hence transmitted to the competent administrator, a document stating the key-user-requirements (KUR) will be developed. This “KUR” is the reference document for the subsequent public tender. This is the phase where ideally the legal review Commission is consulted. We now know for what intended use which type of weapon or weapon system is going to be acquired. The Commission can start working.

This brings us to the third question; what information is required to conduct a review? At the stage of starting the public tender, detailed information as to the very particular characteristics of the weapon or weapon system that will eventually be acquired is not yet available. The Commission can start its work by reviewing the intended use, but cannot at this point conduct a proper review. The Commission will follow-up on the awarding of the contract and will continue its work once the contract has been awarded. At that stage very specific information should be sought as to the working, including failure rates and the effects of the weapon. On the one hand, the supplier will provide information, but this is not the only type of information the Commission should rely on; the Commission should make sure that all available data are correct and independent. When resources are available, independent tests will be requested. However, given some of the issues already mentioned, budgetary constraints might preclude these tests. The Commission is, therefore, often forced to rely on the supplier’s information. The Commission will attempt to have critical expertise amongst its members to detect any flaws in this information and will undertake to request information from other countries that dispose of the same weapon or weapon system and might have done or are having independent testing done. This is a second challenge the Belgian Commission is faced with: disposing of reliable and independent information.

Having established what information is desired, we will turn to the fourth question: the expertise that is needed in the Commission. First of all, technical expertise is needed to explain to the Commission how the weapon or weapon system works. An understanding of the technical details is of great importance to be able to conduct a comprehensive review. Secondly, considering the norms of international law that have to be reviewed, corresponding expertise is needed. If the weapon under review has an environmental impact, evidently environmental experts will need to be present in the Commission. This point of view explains the changing composition of the Belgian Commission. The technical experts are usually the administrators who manage the acquisition. Other experts will depend on the issues the legal review will have to tackle. Evidently these types of experts are non-permanent in the Commission. Permanent members of the Commission are the president and the secretary, both legal advisors. Additional permanent members are legal advisors specialized in operational law working in the operations and training department, as well as a doctor and a representative from the strategy department responsible for all matters relating to disarmament and weapons law.

The fifth question is the time to recapitulate and tackle all remaining open-issues by describing the Belgian legal review process. I will answer by running through the more or less standardised procedure.

The starting point of a legal review has already been discussed in the second question. Ideally, the advice of the Commission is sought once there is some degree of certainty that there will be an acquisition, but before the contract has been awarded. However, there are quite a few other scenarios that happen on a regular basis. Sometimes the informal advice of the Commission is sought even before a statement of requirement has been made. This usually comes from units who have a habit of working with a legal advisor. They will question the legality of a weapon before they even consider developing a statement of requirement. In these cases, the Commission will not provide a formal legal advice but the president or secretary will informally answer directly to the unit.

Another scenario that will not end in a full and formal advice is the situation where a weapon or piece of equipment is brought before the Commission which wouldn't qualify as "new" in the Belgian arsenal. As already mentioned earlier when discussing the scope of the obligation, the Belgian Commission will preliminary decide on whether a weapon or piece of equipment constitutes a significant change to an already existing capability. Practically speaking this means that a weapon which functions in the same way and has the same effects as one already in the Belgian arsenal, will not be reviewed again. However, when an additional piece of

equipment is added to a weapon, thereby altering its function, it will be reviewed.

Once it has been established that a formal review will be conducted, the Commission will be convened by the secretary. At that point the composition of the Commission for that specific legal review will be determined by the president and the secretary. The permanent members have already been mentioned earlier. The non-permanent members are the ones who will, each in their area of expertise, brief the permanent members. For evident reasons the first briefing will be the technical briefing by the administrator, if needed assisted by another technical expert. They will be informed beforehand by the secretary on the content and standards of the information they should provide. They will explain how the weapon works, how it can be used and what its effects are. Moreover, the information upon which they provide this information should not solely rely on the manufacturer.

If there are any other concerns, such as environmental concerns, an expert will be invited to the Commission. One could argue that since the doctor is a permanent member of the Commission to tackle any possible health issues, the same should apply for an environmental expert. However, since the establishment of the Belgian Commission the former has been needed in all cases whereas the latter has not.

Once all briefings have been given, the secretary will start drafting the formal review in first instance by checking the sources of all information that has been made available. If need be, additional information will be requested. However, as already mentioned as one of the challenges, this might not always be possible, either because own testing might not be possible for budgetary reasons or sharing of information from other countries is not possible for security reasons.

The next step is the actual legal part of the review; the advice will answer the following questions for the normal or expected and intended use of the weapon:

1. Is the weapon indiscriminate in nature? It is important to note here that the Commission will not get into the law of targeting, which should be separated from this question as a purely weapons-law matter. Therefore, the question will be whether the weapon can be directed against an individual military objective; that is, can the weapon distinguish between civil and military targets? The normal and intended use will be a major factor in the answer to this question. It might not come as a surprise, but the Belgian legal Review Commission has, from a weapons-law perspective, never experienced much difficulty answering this first question. A weapon

would need to be entirely incapable of being directed for it to be considered as indiscriminate in its nature. If not entirely incapable of being directed, it will be the normal and intended use that will determine the legality of the weapon under this rule.

2. Is the weapon of a nature to cause superfluous injury or unnecessary suffering? This is the question that usually takes up most of the time to answer. To start with, I should say that suffering and pain can be lawful if it is proportionate with the military necessity. The question that needs to be answered is whether other comparable weapons exist that would be able to accomplish the military purpose with lesser injuries or suffering? It is mainly for this question that the doctor is a permanent member of the Commission. However, judging the degree of pain or suffering is sometimes an almost insurmountable task even for a doctor.
3. Is the weapon expected or intended to cause widespread, long-term and severe damage to the natural environment? Quite a few controversies exist regarding the subject of weapons and the environment. It should suffice to say that Belgium is party to both ENMOD and AP I to be able to assess the obligations that will be reviewed. The weapon must not employ environmental modification techniques and it may not cause widespread, long-term and severe damage to the natural environment. During my time as secretary, there has been no review where the need of an environmental expert has been necessary to evaluate these obligations.
4. Is there any specific legislation prohibiting or restricting the use of the weapon? The last question the review will answer is whether there is any specific legislation that prohibits Belgium from acquiring the weapon. Both obligations under international as well as national law will be evaluated at this stage.

With all of the above questions answered, the secretary will write the legal review. The weapon will either be prohibited, lawful or lawful but with certain restrictions. This is how the Belgian Commission interprets the 'in all or some circumstances' of the Article 36 obligation. An example that has already been given in a generic way at the beginning of my presentation could be hollow-point or dum-dum bullets. Whereas certain treaty obligations exist in situations of armed conflict, that might be the case in a law-enforcement setting.

This document will be reviewed by all permanent members of the Commission. They can make remarks or ask additional questions. If needed, the secretary will convene the Commission again. When there are

no further remarks, the document will finally be put under silence procedure and be unanimously adopted. The review will then be sent to the CHOD for signature. However, the review remains advice guideline for the CHOD and is not a decision on whether or not to acquire the weapon.

A final note regarding the procedure is that the reviews are not publicly available.

To round up I will shortly comment on the two remaining questions:

1. Is there a need for or added value in transparency and information-sharing in weapons reviews and procedures? Yes, for sure there is an added value in transparency and information sharing, especially for the smaller players. Resources and expertise at the national level are often limited and cooperation among States could soften this weakness. However, it is understandable for a number of reasons why States would not be willing to share.
2. How can other States be encouraged to undertake weapons reviews?

Legal reviews of new weapons: process and procedures

Richard BATTY

UK Development, Concepts and Doctrine Centre,
Ministry of Defence, Shrivenham

This panel was given effectively a set of ten questions which I shall work through and which will provide the UK legal position on the review of weapons and methods and means, and of course, give you a little bit of additional information.

Some background is always helpful. My office conducts weapons reviews on weapons and methods and means of warfare that are going to be used in armed conflict. Historically, there has not been too much interest in weapons reviews but that has been changing certainly in the past seven or eight years. I judge that that is perfectly understandable and proper that there is increasing interest. The bottom line of what we are looking at is; Can the weapon being considered be used lawfully? All weapons, of course, can be used illegally.

I sense the increased interest in what we do is because of increased general scrutiny of what is done by governments, which is an absolutely legitimate concern, and particularly interest in new weapons and more sophisticated weapons and this comes about partly as there are more specialist pressure groups, which is also a good thing so that we are challenged and looked at. Accountability is absolutely a good thing – I would say, of course, that there should be realistic limits of what should be in the public arena as well!

Who do we conduct the weapons review for? Well, it is for the United Kingdom and Commanders, service personnel and the public want to know their tools are lawful. They are conducted at the Development, Concepts and Doctrine Centre (DCDC) at the Defence Academy. We have a tri-service legal office, one Army, one Royal Navy, and one Royal Air Force. DCDC is a Ministry of Defence (MOD) think tank where we look at strategic thinking on the global future developments and the possible future operating concept.

A little bit about the scope of the obligation. Well, I have just hinted at what some of the other functions of the DCDC are. Of course, as a legal branch we also look at the UK's doctrine and review it legally. Clearly Article 36 is particularly important if you are a signatory to AP I and, of

course, you might well do more than what is set out in Article 36, in my view very clearly, basically and succinctly. Bill Boothby in his slides and also the previous speaker absolutely set out the position and I was delighted when Bill was saying that my notes pretty much mirrored what he said, that's probably because I copied the list from him when he taught me! But we have to consider what the normal use of a weapon is: whether it is of a nature to cause superfluous injury; whether it is likely to cause damage to the natural environment, and whether or not it is inherently indiscriminate. We have got to consider specific treaty or custom laws, and finally, we would also look at the future development of the law. There is no point developing weapons if it is fairly obvious that in the next few years they are likely to be illegal. So, we would certainly have that in mind.

So what are we reviewing? Obviously weapons and Bill gave a definition of weapons, so there is no need to repeat that. But, as I said, it is means and methods of warfare as well so certainly we look at UK doctrine. It is pretty obvious, or it should be pretty obvious that we are interested in platforms, i.e. aircraft, submarines, ships because these days they tend to be pretty integrated with weapons systems and they will communicate with weapons systems. Perhaps in years gone by there would not have been so much interest but platforms are certainly something we are always looking at.

What are the other things we look at? Well, certainly I would highlight cyber tools. We have certainly got to be aware of the latest developments and how easy it is to modify some of them. Part of our job is also to educate people how, when they do something, there might be a serious legal implication and we have to ensure that that is communicated to everyone in the Armed Forces. Of course, we are interested in unmanned, remote, autonomous and automatic weapons and we have a process called the Operational Law Customary Executive Board where the British Army, the Royal Navy, the Royal Air Force and Defence Academy get together and for the past couple of years have looked at the Law of Armed Conflict training and then reported to the Vice-Chief of the Defence Staff on how we are conducting our training. We, as a group, consider how we can make improvements to the training of operational law for the entire Ministry of Defence.

There is one other thing under this heading I will just mention. We do conduct something that we call Non-Reviews. We encourage people to ask the question as to whether or not a particular item needs a legal review. Sometimes it might be very straightforward that it simply does not need a legal review. If there is any doubt in our mind we analyse it, we consider it and then we write effectively a non-legal review and we file it in exactly

the same way as we would do if it were a legal review explaining why, as a matter of law, we conclude it does not need a legal review.

The next question I have on my list is at what stage do we consider weapons and weapons reviews? Well, for a couple of years now the UK has actually published the process that we follow – it is also outlined in two and a half pages on the DCDC website. The second page explains that we have effectively at least a three-stage process. Obviously it is not always as straightforward, as we might be involved at numerous times in the development of certain weapons. But we certainly give formal legal advice when there is a decision to commit funds in the development of something and we call that: initial gate. We then give another formal legal review when there is a full commitment to the procurement of a system and then we finally give formal legal advice when the finalized equipment enters into service.

One question people ask me, which I general do not answer is: How many times do you write a legal review where it says that something is illegal? If you actually think about it, it should be exceedingly rare. You have done something seriously wrong if at the last stage, having spent a few hundred million pounds, you are deciding that something is illegal. Think about it – you are involved in the development, you are advising on the legality, it would be very odd if late in the day you suddenly decide that something is completely illegal. Of course, the law might have changed, or test results might have come out but I thought I might just make that point.

Ensuring an effective review is another heading I have got. As I said, we give three formal stages of legal advice that's not to say there could not be other communications as there invariable is. There is no set committee, there are multiple meetings and we modify our process depending on what system we are reviewing. We also give legal advice when there are urgent operational requirements. Particularly in a conflict people modify weapons officially to change them and adapt them to the situation on the battlefield. It is absolutely right that those have a proper legal review and it might be that you get summoned to the Ministry of Defence to be involved in something pretty much immediately or the next day.

So, what else do we do to ensure an effective review? Well, the most important thing I guess is that absolutely full disclosure is necessary and our legal advice list is absolutely everything that has been disclosed to us. We send a draft of our initial advice out and we ask people to confirm that that is absolutely all the disclosure that could be relevant. In other words, the review is undertaken by a process of co-operation and dialogue. Obviously, there are other methods to ensure an effective review. There is testing, modeling, we might see what information other countries have

including their data, the manufacturer's data. As I am a bit cynical I am interested in seeing what a manufacturer might think of the capabilities, and being a bit cynical and having my signature at the end of the advice, I'll want to ensure that we have our own tests rather than just the manufacturer's, or a country perhaps trying to sell us something!

One of the earlier speakers was talking about the technical aspects of weapons. Do the lawyers have to understand every single technical detail? Do you have to be a geek on all electronics? I think the answer is no, but you certainly have to have a good working knowledge and you might have to meet with the geeks and the real experts and ask them to explain things and then you might have to explain to them your understanding, and get them to confirm it is correct. You have a lot of specialists, in fact, I would say that in the UK we have unlimited access to the specialists and I certainly would not be giving legal advice unless I was very happy that I understood and that I had everything explained to me that I wanted.

There is something we introduced fairly recently to our process: There would always have been a peer review if there were three of you in the office. We are absolutely open when discussing things. But we now have two lawyers sign off each legal advice. Once a legal advice is prepared the author lawyer will go and speak to one of the others, explain what it is, produce the documents and go through it. It is a bit of belt and braces and it certainly does no harm.

So, what information is needed about the weapon? Well, a business case is probably a good place to start the statement of requirement. I would certainly be looking into what it is designed to do and I would certainly be looking at the test data, and if I am not happy with the test data you have got to ask for more tests and data. You are certainly not going to rely on other people's test data. Your country's own independent and robust testing may be essential. You would tailor your advice to whatever it is you are looking at.

Another question that has been posed to this panel is what expertise is required? As I said, I don't think I have got to be an expert in computer programming or nanotechnology but I've got to understand some of those things in a certain degree of detail. Without doubt, legal reviews are getting more complex so we absolutely have to update our training of the people conducting the legal reviews to make sure that they are capable of doing them. And I don't think that that is anything unusual in that for example the Tallinn Manual was a classic example where you are dealing with a new area, cyber, and a group of people get together, thrash it out and work out what the law is and how it should be considered.

So, we do not have to be experts in every single area but we do need access to the experts. We certainly have to be legally qualified - we have professional practicing certificates - and we are members of the British Bar or Solicitors' profession. We are, therefore, bound by professional conduct rules and discipline rules of our professions. We tend to be fairly senior - one full Colonel and then there are two SO1s, one from the Royal Navy, and one from the Royal Air Force. So, there are a total of three lawyers, one from each of the services. From the list of experts, scientists, doctors, actually specialist military operators and other experts we decide who we want to hear from and engage with the project team for some while.

It is worth highlighting that in this day and age where everything gets more complex, there are courses which you can do. Bill Boothby runs one which I have attended. We also conduct in-house training. Importantly what the UK system has is experienced military officers who have operational experience and importantly lawyers who are specialists in the law of armed conflict, have some expertise in human rights law. These days, I am delighted to say, there are some pretty good publications. I am very reluctant to plug Bill Boothby's book but I have to. It is easy to read and I would regard it to be pretty much the bible on this subject and it's absolutely comprehensive. So, we have a few copies of this and the important ICRC guide in the office as well as other books and articles. It has just been updated and I think that anyone commenting on weapons reviews and how they can be conducted need to have read the book from front to back.

We have "reach back", in the sense that we have officers who have done my job in the past e.g. Bill Boothby, Charles Garraway, who have always been exceedingly helpful in answering any of our questions. There are often outside experts who come from other countries and importantly we speak with other nations – more of that in a minute.

The need for a multi-disciplinary approach is another question. In contrast with the previous speaker, we don't have a commission. I have just outlined the process we have. We do not have a committee. The lawyers lead how the advice is conducted in each particular case. I don't think it's surprising that one size does not fit all. Certain nations like my own develop fairly sophisticated weapons, some other nations do not have terribly sophisticated weapons and buy them from other States. We have different legal systems and we interpret the law perhaps slightly differently. What you do need is space and time for your experts to discuss and engage and visit those who are developing the weapons and, therefore, to have a very good and open relationship over months or indeed perhaps years and many years as that happens. I think that the suggestion by some that some

States do not take this legal obligation seriously is quite wrong, some do others do not. But of course many States do not conduct legal reviews! In the UK there are evolving and fairly sophisticated processes.

So, on the issue of process and transparency and information-sharing in weapons reviews and procedures, as I said, the process is a matter for individual States, that is what the States signed up for. Importantly, States should be willing, in fact, I think there is an obligation for States to discuss with others their process. But we have to be realistic. Many of the things I am dealing with are highly classified, they are called state secrets! I am not going to be discussing them here or anywhere else for that matter and I do not think it is remotely realistic that they should be shared or stored on an international data base or there should be an “independent” review of weapons. I think that is just failing to understand what we really do. There can absolutely be transparency on the process. As I said fairly recently, as people started take more interest in what we do, DCDC have started outlining our process publicly.

The next question we were posed is the question of resources and expertise at the national level. Well, I have already said something about expertise. Regarding the issue of resources – I have not experienced any time in my current job where we have not been allowed to do something, whether it is to have a test or to have the time to look at something but of course that is one to watch when lots of countries are having cuts to their military and there is talk about civilianization of certain posts. As I have said, my personal view is that you perhaps need to have been a lawyer in the services for twenty years to be able to conduct a weapons review to an appropriate standard. But do not forget, as I have said, weapons are certainly getting much more complex with automation and the rest. I do not have any concerns for the UK as yet. And again, last but not least, on that topic of resources and expertise, one other thing we do in the UK is that if any of the three lawyers who conduct their reviews at the DCDC have a concern or want to debate elsewhere they can go to the head of the civilian legal adviser service at the Ministry of Defence and discuss any concerns with them.

I just want to say one thing on the co-operation among States and best practices in promoting legal services and how to encourage others. Just over a year ago a very able colleague of mine, Commander Kara Chadwick RN, had the bright idea that there should be a meeting of States that conduct (or do not conduct, but would like to) legal reviews so we could learn from each other. I agreed that that was a very good idea. I was slightly surprised that it did not appear to have happened in the past. Last year we held a Weapons Review Forum at Shrivenham. It is principally for States.

Why? Because we are the practitioners! We are, dare I say, the current experts in each country that actually do the job. We are the people who know the nature of our own country's weapons, those that are being developed and have been in development for years. We are not watching Hollywood films and speculating we know what is in the pipeline and what it is we are likely to be requiring a final review later. And I judge that is rather important that it is primarily for States. That is not to say we do not invite others whose views we want to hear as we want to consider and interrogate our procedures and actually learn. So, we do invite other people. That good idea coming from Commander Chadwick is being followed up. This year we are going to host another weapons review forum at Shrivenham and we are just in the process of finalizing that. So, I think that is certainly particularly important. I do not know how many years it will go on for. That is a matter for the States. Of course, the International Committee of the Red Cross and others are invited to attend certain aspects of that debate, conversation and dialogue.

Lastly, I have just added my own title to the list of matters for this panel: Other issues, concerns and comments. Record-keeping is particularly important together with ensuring that everyone in the UK Ministry of Defence understands the requirement of legal reviews and that everything is reviewed that should be. There is no point just lawyers deciding they should conduct weapons reviews unless the people developing them alert us that they are developing something and come and engage with us.

Are there other issues, concerns or comments? Well, cyber tools are always of interest and will continue to be. They can be developed quickly, they can be modified quickly and you have got to make sure that your process and your education of people is such that it can be dealt with. We certainly need States to engage. I certainly think that we have got to engage in debate with people who have concerns. Perhaps we don't want to close the door on certain defensive and logistics technologies that could be rather useful and aren't necessarily controversial if you are looking at high levels of automation/autonomy. So, I think we have to look at the implication of banning things or considering them and engage in a slow, measured and constructive debate so we understand exactly what we are talking about.

Again, I would ask people to consider the environment of the weapons you are looking at. If you are looking in the cyber environment I think you can expect that highly automated perhaps even autonomous systems will be an area which will come first because of the need for instant responses. So, I think we certainly have got to consider that.

My last comments concern statistics. Statistics are not produced or published on how many weapons reviews are produced. As I said earlier,

systems would have failed in a country if you had too many weapons reviews that at the final hurdle said that something was illegal - because the lawyer should be involved during the research, development stages and before the commitment of large sums of money.

Legal reviews of new weapons: process and procedures

Bakhtiyar TUZMUKHAMEDOV

Vice-President, Russian Association of International Law, Moscow

Russia and Article 36: review prototypes and incentives for compliance

When the IIHL President and formerly fellow Judge Professor Fausto Pocar first suggested that I join the panel on “Legal Review of New Weapons: Process and Procedures”, my initial cautious response, along with sincere gratitude, was that the suggested theme was rather specific and of which I had mostly general knowledge. However I undertook to explore current Russian legislation and practices that might be of relevance and interest.

At the outset it may be recalled that at the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law applicable in Armed Conflicts that developed Additional Protocols a Soviet delegate with reference to prospective Article 36 of Additional Protocol II stated that “all States at present had facilities for determining specifically whether a particular type of weapon was prohibited”¹. At the very least that illustrated an awareness of the meaning of the provision and of the propriety of having domestic institutions and procedures. My preliminary research of applicable legislation and discussions with knowledgeable persons, alas, did not bring any meaningful results. Of course, there is legislation regulating requests by military to industries regarding prospective defense systems², or Government regulations providing for military representatives assigned to industries to verify and certify products³. However those acts do not specifically refer to anything that

¹ Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949/ed. Yves Sandoz e.a., 1987, p. 426, fn. 19.

² *Federalnyi zakon “O gosudarstvennom oboronnom zakaze”* [Federal Law On the State Defense Procurement], original version published in the *Sobraniye Zakonodatelstva Rossiyskoy Federatsii* [Collected Laws of the Russian Federation], hereafter – SZ RF, 31 December 2012, No. 53 (Part 1), Art. 7600. Current consolidated version inclusive of subsequent amendments available from Consultant Plus, Russian electronic reference tool.

³ *Postanovleniye Pravitelstva Rossiyskoy Federatsii “O voyennykh predstavitelstvakh Ministerstva oborony Rossiyskoy Federatsii”* [Resolution by the Government of the Russian

would echo the requirements of Art. 36. I felt obliged to share with Professor Pocar my concern that I would not have enough to say to make a substantive contribution to the panel.

Professor Pocar responded that, paucity of available information notwithstanding, it would be desirable and helpful for the panel to have views on the Russian practice in the field of review of weapons, including, but not limited to Russian legislation, offered by a Russian expert.

In my turn I could only reiterate that relevant legislation did not refer either to Art. 36 weapons review specifically, or to IHL in general. Military manuals discuss use of weapons and their choice in battle by a commander, not their development⁴. I would not be in a position to go beyond available documentary sources and discuss "Russian practice in the field of review of weapons", as was suggested to me, if there were no available indications as to what this practice is like. Of course there are export controls⁵, but they do not exactly fall within the purview of Art. 36.

It may also be hard to identify any substantive analysis of Art. 36 in Russian – or Soviet, for that matter, - academic sources, including standard texts used at training of civilian and military lawyers. Rare exceptions include a general overview of Art. 36⁶ and a brief discussion of development of new weapons from the UN Security Council Resolution 1540 (2004) perspective⁷.

Before moving any further, it would be prudent to note that the Russian Law "On State Secret"⁸ provides for classification of technical data and

Federation On Military Representations of the Ministry of Defense of the Russian Federation], SZ RF, 31 May 1999, No. 22, Art. 2766. Current consolidated version inclusive of subsequent amendments available from Consultant Plus. See also: Prikaz Ministra oborony Rossiyskoy Federatsii "Ob utverzhenii instruktsii po organizatsii deyatelnosti voennykh predstavitelstv Ministerstva Oboroni Rossiyskoy Federatsii [Order of the Minister of Defense of the Russian Federation On the Adoption of the Instruction on the Organization of Activities of Military Representations of the Ministry of Defense of the Russian Federation], 8 December 2011, No. 2424. Unclassified, on file with the author.

⁴ Nastavleniye po mezhdunarodnomu gumanitarnomu pravu dlya Vooruzhennykh Sil Rossiyskoy Federatsii [Manual for the Armed Forces of the Russian Federation on International Humanitarian Law], 2002, 88 p., at 13, 14, 22 et seq.

⁵ Federalnyi zakon "Ob eksportnom kontrole" [Federal Law On Export Control], SZ RF, 26 July 1999, No. 30, Art. 3774. Current consolidated version inclusive of subsequent amendments available from Consultant Plus.

⁶ I. I. Kotlyarov, *Mezhdunarodnoe gumanitarnoe parvo o novykh vidakh oruzhiya* [International Humanitarian Law on New Weapons], MosJIL, 2009 No.4, p. 34-55.

⁷ I. I. Sinyakin, *Terrorism s ispolzovaniem oruzhya massovogo unichtozheniya: mezhdunmarovno-pravovye voprosy protivodeystviya* [Terrorism Using Weapons of Mass Destruction: International Legal Issues of Counteraction], Moscow, 2012, p.21-22.

⁸ Zakon Rossiyskoy Federatsii "O gosudarstvennoy tayne" [The Law of the Russian Federation On State Secret], Rossiyskaya Gazeta [Russian Gazette, official publication of

tactical capabilities of weapon systems and related military materiel, information related to research and development of new systems and upgrades of existing systems, including data produced during their testing, as well as of prospective ways of their employment (Art. 5). Assuming that evaluation of a prospective or existing weapon, means or methods of warfare within the meaning of Article 36 is part of those processes, its course and outcome shall be classified. The Russian law provides for three levels of classification – secret, comprehensively secret, and the highest – of particular importance (Art. 8). An uninitiated observer may only guess how sensitive information related to a suppositious Article 36 review may be deemed by a classifying authority. However, even an unintentional and unaggravated disclosure of a state secret is a criminal offense. It is punishable, under the Russian Criminal Code, by deprivation of liberty ranging from four months to four years (Art. 283, para. 1)⁹. Prudence calls to conclude my remarks at this junction, or else I run the risk of facing criminal charges upon my return to Moscow.

And yet let me cautiously walk through that booby-trap-infested *terra incognita*. I shall be guided by available open documentary sources, however relevant, and advice received from several interlocutors. The latter included officials from government departments, executives from industry, and retired military officers. Needless to say that they were talking to me strictly unofficially, and I should take all responsibility for any accidental misinterpretation of what I have learned from them.

The Soviet Union ratified the first two protocols additional to the Geneva Conventions in 1989. The law on ratification requested the executive branch to draft amendments to national legislation “reflecting the Soviet Union’s participation in the Protocols” (para 2)¹⁰. Amendments should have been introduced to the legislature within six months of the date of ratification. Of course Art. 36 of Additional Protocol I does not specifically require that national laws be amended to provide for legal

the Government of the Russian Federation], 21 September 1993. The Law was adopted prior to introduction of new denominations of legislative acts introduced by the Russian Constitution of 1993, hence absence of qualifier ‘Federal’. Subsequent amendments were introduced by federal laws, though the original title remained unchanged. Current consolidated version inclusive of subsequent amendments available from Consultant Plus.

⁹ Ugolovnyi Kodeks Rossiyskoy Fedratsii [Criminal Code of the Russian Federation], SZ RF, 17 June 1996, No. 25, Art. 2954. Current consolidated version inclusive of subsequent amendments available from Consultant Plus.

¹⁰ Postanovlenie Verkhovnogo Soveta SSSR [Resolution of the Supreme Soviet of the USSR], 4 August 1989 No. 330-I, Izvestia [official gazette of the Supreme Soviet of the USSR at the time of ratification], 8 August 1989.

review of new weapons. However, even that general provision of the ratifying resolution had not been properly executed.

That failure was criticized six years later by the Russian Constitutional Court in a seminal case in which the Court ruled on the constitutionality of the use of force in Chechnya¹¹. Without going into further detail, it could be revealed that the Court during deliberations had been contemplating an *obiter dictum* entirely dealing with international humanitarian law. For a variety of reasons a detailed discussion of IHL had not been included into the judgment. However the Court reprimanded the legislator for failure to ensure that legislation regulating the use of Armed Forces took due account of provisions of applicable rules of IHL (para. 5 of reasoning), and reiterated that the lacunae should be covered (para. 6 of the operative part). Apparently since the Court was confronted with a situation of a non-international armed conflict, it focused on Protocol II, but its conclusions went beyond it.

A brief digression may be in order at this point. There has been a debate in the Russian and international legal communities about applicability of IHL to events in the North Caucasus in mid-90s and over the turn of the century or willingness of Russian authorities to recognize it¹². I for one can only say that all branches of government at various times from 1994 to 2004 made statements that described the events as a non-international armed conflict in the meaning of Additional Protocol II and accepted the applicability of IHL¹³.

The legislator was too slow to respond to instructions both of the Soviet legislature and, following the demise of the Soviet Union, of the Russian Constitutional Court. But it was the military who, by way of manuals and guidelines, promulgated by orders of Minister of Defense, directed service personnel to study, apply, and abide by the Conventions and Protocols. Those were, firstly, the Guidelines on Application of Norms of IHL by the Armed Forces of the USSR¹⁴, and later the Manual on IHL for the Armed

¹¹ Judgment No. 10-P, 31 July 1995, unofficial translation into English available on the website of the European Commission for Democracy through Law (the Venice Commission) at [http://www.venice.coe.int/webforms/documents/?pdf=CDL-INF\(1996\)001-e](http://www.venice.coe.int/webforms/documents/?pdf=CDL-INF(1996)001-e)

¹² See, for example, Willam Abresch, *A Human Rights Law of Internal Armed Conflict: The European Court of Human Rights in Chechnya*, EJIL, Vol. 16, No. 4, 2005, p. 754.

¹³ See Bakhtiyar Tuzmukhamedov, *Russian Perspective* (Panel on International Humanitarian Law & Non-State Actors, 102nd Annual Meeting of the American Society of international Law), Proceedings of the 102nd Annual Meeting, ASIL, 2008, p. 441-444.

¹⁴ Guidelines were part of the Order of the Minister of Defense of the USSR of 19 February 1990 No. 75, promulgating the four Geneva Conventions and Additional Protocols I and II. Ministry of Defense publication, 1990, 320 p.

Forces of the Russian Federation¹⁵. Both are well-drafted documents, both are in force, but in terms of means or methods of warfare, both are confined to Art. 35 of Additional Protocol I, and instruct the commander on the battlefield regarding restriction on the choice of weapons and mode of their employment. The Service and Disciplinary regulations that were promulgated by the President in 2007¹⁶ and have the status of enforceable law, are less specific, though they make several references to IHL¹⁷.

A search for any documentary traces of weapons review might begin with the Federal Law “On State Defense Procurement”¹⁸. Firstly, it reproduces a constitutional provision on the prevalence of an applicable international treaty in case of a conflict with that Law (Art. 2, para. 3). But this reference is too general to imply that it includes Article 36 review. Secondly, until amended, it conferred a general authority on the Government to establish within the executive branch of a supervising body (Art. 13, para. 1) which was the Federal Defense Procurement Service. The name might suggest that this could have been a natural venue for weapons review. However, the Service was dissolved as of 1 January 2015¹⁹, its functions having been distributed among several government departments, including Ministry of Defense, Ministry of Trade and Industries, Federal Security Service and others. So even if one were to assume that a centralized weapons review board could or might have been established under the original version of the Federal Law “On State Defense Procurement”, it no longer exists under the authority of the amended Law.

A seemingly apparent venue for Art. 36 weapons review could be the Ministry of Defense. Looking at the structure of the Ministry, as it appears on its public website²⁰, and description of functions of its divisions, one may assume that requests for weapons and other military materiel develop within arms and services and then mature in the Main Armaments

¹⁵ Approved by the Minister of Defense of the Russian Federation on 8 August 2001. Ministry of Defense publication, 2002, 88 p.

¹⁶ Ukaz Prezidenta Rossiyskoy Federatsii Ob Utverzhdenii Obschevoinskikh Ustavov [Decree of the President of the Russian Federation On Approval of Joint Military Regulations], 10 November 2011, No. 1495 – SZ RF, 19 November 2007, Art. 5749 (Parts One and Two). Current consolidated version inclusive of subsequent amendments available from Consultant Plus.

¹⁷ Paras. 22, 23, 77,83, 161 of Service Regulations, and paras. 3, 4, 53 of Disciplinary Regulations.

¹⁸ For citation see fn.2 above.

¹⁹ See Decree of the President of the Russian Federation, 8 September 2014, No. 613, SZ RF 15 September 2014, No. 37 Art. 4935.

²⁰ <http://structure.mil.ru/structure/structuremorf.htm>. The Ministry maintains English, French and Spanish versions of its website, though they are less detailed and informative than the Russian. See, for example, the English version at: <http://eng.mil.ru/en/index.htm>

Directorate. The process should also involve the Main Operations Directorate and the Directorate of Military Representatives. The first entity is the principal military planner. The second one deploys uniformed officers to industries for on-site quality control and inspection of procured items prior to their delivery. Other suspects could be the Legal Department with its international legal component, and the International Treaty Directorate within the Main Directorate of International Military Cooperation. One might guess that the review process could be distributed between those divisions of the Ministry and the General Staff. And yet that hypothesis does not seem to withstand the empirical test. My interlocutors could not confirm that any special and focused Article 36 review was conducted within the Ministry of Defense.

Neither could I find convincing evidence that Legal or Arms Control departments of the Ministry of Foreign Affairs are currently involved in Art. 36 review.

That brings me to a pivotal question: are there any institutions or procedures relative to review of newly developed, produced or procured weapons? The answer is not quite straightforward, and yet it may be positive.

The Federal Law “On Arms” of 1996 as amended²¹, defines three categories of individual arms, namely, civilian, service, and combat (Art. 2). As to development, modification and deployment of combat arms, the Law refers to procedures and protocols established by the Government (Art. 16), however those available to a researcher were not relevant to Art. 36.

As to civilian and service arms, the Law is fairly detailed in describing them. Moreover, there are regulations at the Government departments level that provide for weapons certification and may restrict explosive energy of propellant, velocity of projectile, force of impact and other characteristics. In particular, there are the Ministry of Health regulations on permissible effects on a human body of civilian self-defense arms²². Still more relevant may be the joint order of the Federal Security Service, the Ministry of Internal Affairs, and the Ministry of Healthcare setting up an Inter-agency Expert Commission on New Arms and Special Means²³. As a footnote: “special means” denotes non-lethal arms, ammunitions and related adjuncts.

²¹ Federalnyi zakon “Ob oruzhii” [Federal Law on Arms], SZ RF, 16 December 1996, No. 51, Art. 5681. Current consolidated version inclusive of subsequent amendments available from Consultant Plus.

²² Rossiyskaya Gazeta 21 November 2008.

²³ Print source unidentified, available from Consultant Plus.

On balance, it may be assumed that there exist legislative and institutional frameworks that may be adapted, or used as models or prototypes for a prospective Article 36 review.

One final remark. It is a fact of common knowledge that Russia ranks second as arms exporter. As two of my interlocutors, both retired general officers, one of them a senior executive in defense industry, told me, when a weapon system, other than nuclear and strategic, or covered by Missile Technology Control Regime and other restrictive export control and non-proliferation arrangements, is being developed, its export potential is most often borne in mind. My interlocutor in the industry whose main job is to promote the product internationally, said that the last thing he would need is to run the risk of compromising the product that does not comply with applicable international rules, and embarrassing the exporter and an importer. Being a fluent English-speaker, he used an English word “our watchdog” to describe the Federal Service for Military-Technical Cooperation, the agency that coordinates and oversees foreign defense transactions²⁴.

Even in the absence of an institutionalized Article 36 review, there is a strong commercial incentive to stay within its framework.

²⁴ The Service maintains an English-language website containing basic information about its mandate and activities at <http://www.fsvts.gov.ru/eng12.html>

Legal reviews of new weapons: process and procedures

Gilles GIACCA

Legal Adviser, International Committee of the Red Cross, Geneva

Introduction

As rapid advances continue to be made in new and emerging technologies of warfare, notably those relying on information technology and robotics, it is important to ensure informed discussions of the many and often complex challenges raised by these new developments. Although new technologies of warfare, such as autonomous weapons systems²⁵, are not specifically regulated by international humanitarian law treaties, their development and employment in armed conflict does not occur in a legal vacuum. As with all weapon systems, they must be capable of being used in compliance with international humanitarian law (IHL), and in particular its rules on the conduct of hostilities. The responsibility for ensuring this rests, first and foremost, with each State that is developing these new technologies of warfare.

In accordance with Article 36 of Additional Protocol I, each State Party is required to determine whether the employment of a new weapon, means or method of warfare that it studies, develops, acquires or adopts would, in some or all circumstances, be prohibited by international law. Legal reviews of new weapons, including new technologies of warfare, are a critical measure for States to ensure respect for IHL. The law anticipated to a certain extent advances in weapons' technology and the development of new means and methods of waging war and Article 36 is clear evidence of that anticipation.

²⁵ The ICRC has defined autonomous weapon systems as: "Any weapon system with autonomy in its critical functions. That is, a weapon system that can select (i.e. search for or detect, identify, track, select) and attack (i.e. use force against, neutralize, damage or destroy) targets without human intervention." ICRC (2014) *Autonomous weapon systems technical, military, legal and humanitarian aspects*, Report of an Expert Meeting held 26-28 March 2014 (published November 2014), www.icrc.org/en/download/file/1707/4221-002-autonomous-weapons-systems-full-report.pdf; ICRC (2015) *International humanitarian law and the challenges of contemporary armed conflicts*, Report to the 32nd International Conference of the Red Cross and Red Crescent held 8-10 December 2015 (published October 2015), pp. 44-47, www.icrc.org/en/download/file/15061/32ic-report-on-ihl-and-challenges-of-armed-conflicts.pdf; See also ICRC (2016), *Autonomous weapon systems: Implications of increasing autonomy in the critical functions of weapons*, Report of an Expert Meeting held in March 2016.

The present paper will address only a selection of some of the key legal and policy questions associated with weapons reviews in light of the current debate on autonomous weapon systems. The paper will first discuss the importance of conducting legal reviews. It will then examine the legal review's scope and functional aspects, as well as some of the specific challenges posed by autonomous weapon systems.

1. Why is conducting legal reviews important?

Setting or improving legal reviews procedures is important for a number of reasons. First, most of the States Parties to the CCW are party to Additional Protocol I to the Geneva Conventions. This means that they are legally required to comply with the requirements of Article 36 to that Protocol. It is arguable that a duty to conduct weapons reviews is also derived from the general obligation under Common Article 1 to the four Geneva Conventions to ensure respect for IHL. This obligation would require High Contracting Parties to ensure that their new weapon, means or method of warfare can be used in accordance with IHL.²⁶ It is self-evident that proceeding to such a review contributes to ensuring that a State's armed forces are capable of conducting hostilities in accordance with its international obligations. With regard to customary international humanitarian law, the current available evidence makes it unclear as to whether the obligation to conduct legal reviews of weapons, means and method of warfare is of a customary law nature.²⁷

On the question of how well the commitments under Article 36 are being implemented, it is fair to say that despite this legal requirement and the large number of States that develop or acquire new weapon systems every year, only a small number are known to have formal mechanisms in place to carry out legal reviews of new weapons. Further efforts are, therefore, needed to implement this obligation by States. One of the reasons for poor implementation may be that some States assume that when they acquire certain weapons they can safely rely either on the manufacturers' testing or on the reviews conducted by States from which they are procuring the weapons. This is disputable, since obligations under international law differ between States and even when they are subject to

²⁶ I. Daoust, R. Coupland and R. Ishoey, 'New wars, new weapons? The obligation of States to assess the legality of means and methods of warfare', *IRRC* 2002 Vol. 84 No. 846 p. 352.

²⁷ Some argue that it is customary, see W.H: Boothby, *Weapons and the Law of Armed Conflict*, OUP, 2009, pp. 341-42.

the same obligations, there are often differences in interpretation and implementation. Hence, the importance for States to conduct their own weapons review.

Secondly, and related to the previous point, reviewing the legality of new weapons also makes good policy sense. It is in each State's interest, regardless of whether it is party to Additional Protocol I, to assess the lawfulness of its new weapons in order to ensure that it is able to comply with its international legal obligations during armed conflicts and that new weapons are not employed prematurely under conditions in which respect for IHL cannot be guaranteed. This can be especially important in light of rapid development of new weapons technologies and it would give the opportunity to the State to develop its own national expertise in law and weapons.

Third, promoting, wherever possible, exchange of information and transparency in relation to weapons review mechanisms and procedures can enhance confidence and trust among States, confidence-building being among one of the purpose of the CCW.²⁸ Moreover, in light of Article 84 of Additional Protocol I, it can be submitted that there is a requirement for States to share among each other their review procedures to build confidence that new weapons comply with the existing law.²⁹

Different views have been expressed on the adequacy of legal reviews of new weapons for ensuring IHL compliance of autonomous weapon systems, especially given the apparent low level of implementation among States, and the possibility of inconsistent outcomes of national legal reviews. One can say that this is not different from other rules of international law; the challenge remains national implementation. This is why States gather regularly in multilateral forums like the CCW to share their views and practice on how they interpret and implement their international obligations. It is indeed an opportunity for States to share their experiences on legal reviews in order to create confidence that the unique questions and challenges raised by autonomy in weapons systems are also dealt with at the domestic level. The CCW could be an appropriate forum to share and learn good practice between States and see how other States implement their obligations.

²⁸ The Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects as amended on 21 December 2001(CCW), Sixth preambular paragraph.

²⁹ Article 84 states that "The High Contracting Parties shall communicate to one another, as soon as possible, through the depositary and, as appropriate, through the Protecting Powers, their official translations of this Protocol, as well as the laws and regulations which they may adopt to ensure its application."

In addition, it is submitted that the question is not so much whether national legal reviews are sufficient or not to deal with new technologies of warfare such as autonomous weapon systems. The need to conduct legal reviews is a legal obligation and remains a critical means for States to ensure respect for IHL regarding any types of weapons. Having said that, it is fair to say that legal reviews do not provide all the answers and efforts to strengthen national review procedures should be seen as complementary and mutually reinforcing of multilateral discussions on autonomous weapon systems.

On the question of transparency, it is true that there is little published information available about States' weapon procurement and review processes for a number of reasons: commercial, military and national security concerns, since such reviews often deal with classified material relating to the performance and use of weapons. However, States are encouraged to share information, to the extent possible, on their legal reviews mechanisms, i.e. on their procedure to review new weapons. On the one hand, disclosing the process can be seen as a way to show state commitment to legal compliance and set the example of what responsible militaries do, and on the other, this could foster the development of common standards or best practices for weapons review in the longer run.

2. What is the scope of the review and how should it be done?

The ICRC has consistently promoted over the years the importance of conducting legal reviews of new weapons. In 2006, in order to provide a tool to assist States in establishing weapons review mechanisms, the ICRC drew up *A Guide to the Legal Review of New Weapons, Means and Methods of Warfare*, which it prepared in consultation with close to thirty military and international law experts, including government experts.³⁰ The Guide aims to assist States in establishing or improving national procedures to determine the legality of new weapons being developed or acquired. The Guide also provides the ICRC's interpretation of what is required and its recommendations of what a review mechanism should look like, based notably on the ICRC Commentary to Article 36 and existing practice of States.³¹

³⁰ ICRC, *A Guide to the Legal Review of New Weapons, Means and Methods of Warfare Measures to Implement Article 36 of Additional Protocol I of 1977*, 2006, available at: www.icrc.org/eng/resources/documents/publication/p0902.htm.

³¹ At the time of writing, the ICRC is gathering new information from actual practice in order to update this Guide.

This Guide highlights both the issues of substance and those of procedure to be considered in establishing a legal review mechanism. However, Article 36 does not prescribe a method or format for weapons reviews. States are left with a wide margin of appreciation in the domestic implementation of this rule.

The legal review should apply to weapons in the widest sense as well as the ways in which they are used, bearing in mind that a means of warfare cannot be assessed in isolation from its expected method of use. Thus, the legality of a weapon does not depend solely on its design or intended purpose, but also on the manner in which it is expected to be used on the battlefield. According to the ICRC Guide, a weapon used in one manner may pass the Article 36 test, but may fail it when used in another manner. This is why Article 36 requires a State "to determine whether its employment would, *in some or all circumstances*, be prohibited" by international law.³²

The existing law that determines the legality of new weapons technology includes:

- Specific rules of international law prohibiting or restricting the use of specific weapons (e.g. BWC, CCW, landmines, cluster munitions)
- General rules of IHL applicable to the use of weapon, including:
 - whether the weapon is of a nature to cause superfluous injury or unnecessary suffering;
 - whether the weapon is likely to have indiscriminate effect;
 - whether the weapon is expected to cause widespread, long-term and severe damage to the natural environment;
 - whether the weapon is likely to be affected by future developments in the law;
 - prohibitions or restrictions based on the principles of humanity and the dictates of public conscience.³³

The assessment of a weapon in light of the relevant rules will require an examination of all relevant empirical information pertaining to the weapon, such as its technical description and actual performance and its effects on health and the environment. This is the rationale for the involvement of experts of various disciplines in the review process. Multidisciplinary expertise is important to understanding how the weapon functions, its

³² ICRC Guide, p. 10.

³³ For a detailed list of rules to be applied to new weapons, means and methods of warfare, see *ibid.*, pp. 10-17.

capabilities and its limitations and, more generally, to understand the technology itself.³⁴

New weapons, means and method of warfare include weapons in the broadest sense and ways in which weapons are used. According to the ICRC Guide, it would cover:

- weapons of all types - be they anti-personnel or anti-materiel, “lethal”, “non-lethal” or “less lethal” - and weapons systems;
- the ways in which these weapons are to be used pursuant to military doctrine, tactics, rules of engagement, operating procedures and countermeasures;
- all weapons to be acquired, be they procured further to research and development on the basis of military specifications, or purchased “off-the -shelf”;
- a weapon which the State is intending to acquire for the first time, without necessarily being “new” in a technical sense;
- an existing weapon that is modified in a way that alters its function, or
- a weapon that has already passed a legal review but that is subsequently modified;
- novel uses of existing capabilities or equipment;
- an existing weapon where a State has joined a new international treaty which may affect the legality of the weapon.³⁵

Concerning the functional aspects of the review mechanisms, the ICRC Guide provides a number of elements on how, for instance, the mechanism should be established or what should be the structure and composition of the mechanism. At the minimum, there should be a formal standing mechanism or procedures ready to carry out reviews. It should be mandatory and take place in a systematic way. It is key that the review process begins at the earliest possible stage of the procurement process (study, development, acquisition, adoption) and that it applies a multidisciplinary approach.³⁶

³⁴ A. Backstrom and I. Henderson, ‘New capabilities in warfare: an overview of contemporary technological developments and the associated legal and engineering issues in Article 36 weapons reviews’, *IRRC*, No. 886, 2012.

³⁵ *Ibid.*, pp. 9-10.

³⁶ *Ibid.*, pp. 20-28.

3. What are the specific challenges posed by autonomous weapon systems?

Weapons reviews face certain practical challenges regarding the assessment of whether an autonomous weapon system will perform as anticipated in the intended or expected circumstances of use.³⁷ Taking human beings out of the critical function of selecting and attacking targets raises important questions, including how “targeting rules” (e.g. the rules of proportionality and precautions in attack) can be considered at the weapons review stage, and before the weapon system has been deployed. Thus, where it is the weapon that takes on the targeting functions, the legal review would demand a very high level of confidence that the weapon is capable of carrying out those functions in compliance with IHL. The decision to deploy and use a particular weapon by the commander or operator can be based on constraints or parameters concerning its use, which are developed in the weapons review. Those are generally integrated into the military instructions or guidelines, for instance, to limit the use to a specific environment or situation.

Key questions include whether the weapon system would function in a way that respects the obligation to distinguish military objectives from civilian objects, combatants from civilians, and active combatants from persons *hors de combat*. Another question is whether a weapon system would function in a way that respects the obligation to weigh up the many contextual factors and variables to determine whether the attack may be expected to cause incidental civilian casualties and damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated, as required by the rule of proportionality. A further question is whether the weapon system could function in a way that respects the obligation to cancel or suspend an attack if it becomes apparent that the target is not a military objective or is subject to special protection, or that the attack may be expected to violate the rule of proportionality, as required by the rules on precautions in attack.

For autonomous weapon systems intended for use in contexts where they are likely to encounter protected persons or objects, there are serious doubts as to whether they would function in a way that respects the obligation to carry out the complex, context-dependent assessments required by the IHL rules of distinction, proportionality and precautions in

³⁷ See generally, ICRC, Expert Meeting on Autonomous weapon systems: Implications of increasing autonomy in the critical functions of weapons, Background paper, March 2016.

attack. These are inherently qualitative assessments in which unique human reasoning and judgment will continue to be required.

The above challenges for IHL compliance will need to be carefully considered by States when carrying out legal reviews of any autonomous weapon system they develop or acquire. As with all weapons, the lawfulness of a weapon with autonomy in its critical functions depends on its specific characteristics, and whether, given those characteristics, it can be employed in conformity with the rules of IHL in all of the circumstances in which it is intended and expected to be used. The ability to carry out such a review entails fully understanding the weapon's capabilities and foreseeing its effects, notably through testing. Yet foreseeing such effects may become increasingly difficult if autonomous weapon systems were to become more complex or to be given more freedom of action in their operations and, therefore, become less predictable.

Predictability about the operation of an autonomous weapon system in the context in which it is to be used must be sufficiently high to allow an accurate legal review. Indeed, deploying a weapon system whose effects are wholly or partially unpredictable would create a significant risk that IHL will not be respected. The risks may be too high to allow use of the weapon, or else mitigating the risks may require limiting or even obviating the weapons' autonomy.

An additional challenge for reviewing the legality of an autonomous weapon system is the absence of standard methods and protocols for testing and evaluation to assess the performance of these weapons, and the possible risks associated with their use. Questions arise regarding the reliability (e.g. risk of malfunction or vulnerability to cyber-attack) and predictability of the weapon tested; the level of reliability and predictability considered to be necessary. The legal review procedure faces these and other practical challenges to assess whether an autonomous weapon system will perform as anticipated in the intended or expected circumstances of use. It is hoped that States and military experts will address some of these key questions in the future debates on autonomous weapon systems.

Conclusion

The recognition by States of the importance of reviewing new weapons to ensure their compatibility with international law in the CCW discussions on autonomous weapon systems is a positive outcome. This should be seen as a complementary aspect of other debated questions such as human control and consideration of human-machine interaction, which may

provide a useful baseline from which common understandings can be developed among States.

The Fifth Review Conference of the CCW (12-16 December 2016) is an important moment for States Parties to examine the status and operation of the Convention and its Protocols, to assess developments that have occurred in the use of weapons and weapons technology and to consider enhancing the protections of international humanitarian law for the benefit of civilians and combatants. Already in 2006, the Third Review Conference of the CCW urged States that do not already do so to conduct legal reviews of new weapons, means or methods of warfare.³⁸ The Fifth Review Conference, as well as future discussions on autonomous weapon system, presents another opportunity for States to consider the importance of carrying out timely legal reviews of newly-developed or acquired weapons.

³⁸ In paragraph 17, States solemnly declared "Their determination to urge States which do not already do so to conduct reviews to determine whether any new weapon, means or methods of warfare would be prohibited under international humanitarian law or other rules of international law applicable to them." Final document of the Third CCW Review Conference, Part II, Geneva, 7-17 November 2006.

**III. Weapons reviews:
current and future challenges**

Discussion panel

Weapons reviews: current and future challenges

Blaise CATHCART

Judge Advocate General, Canadian Armed Forces, Ottawa

About reviews of Article 36 of Geneva Additional Protocol I on the use of new weapons, do they do anything in practice to prevent superfluous injuries and unnecessary suffering? How do you assess this at the weapons review stage?

I can confirm proudly and openly that Canada fully complies with Article 36. We are parties to AP I and AP II and we have had a weapons review process for a number of years. We have also made a formal pledge to the ICRC to formalize our weapons review process. Regrettably, we haven't got to that point yet but that doesn't mean we do not have one. In terms of the process of looking at superfluous injuries, unnecessary suffering and indiscriminate effects, they are very vague but useful terms for those who are conducting weapons review regarding what we actually have to look at in certain areas and what the legal analysis that has to be done is.

As far as unnecessary suffering and superfluous injuries, those are going to be focused on the test of the effects of the weapon or the ammunition to be used on humans and/or properties. We also have a broad interpretation of what a weapon is and what needs to get reviewed. That includes what normally causes death or injury to humans, destruction or damage of property, and also lethal and non-lethal weapons. From an injury and suffering perspective, our focus is really going to be on what is the effect on a human and in that regard, as legal advisor, I have the ability to reach out to a number of other experts, primarily in the case of superfluous injury. Concerning unnecessary suffering we would be talking to our medical experts to get a sense from them, keeping in mind that the test that we would be using is a civil standard test. We are not looking to prove beyond all reasonable doubt that the weapon does not cause unnecessary suffering or superfluous injury. It is essentially a civil test to see how this weapon will be used and what its normal intended use is going to be. It is not a test for every possible scenario in which the weapon could be used or more likely misused by Canadian troops in that regard.

So, we are looking very closely at the balance on a reasonable foreseeable ability test. Is there a military advantage to develop such weapon or ammunition? Does that advantage outweigh or not outweigh the

effects, death or injury to the humans in that case? In one sense that seems a very simple and straightforward approach, certainly from a legal analysis, but as you can imagine there is a lot of debate even amongst our own medical experts. But, again, the decision-maker is not going to be solely ruled by what the medical effects are. It is still going to be balanced against the military necessity of using the ammunition and the military advantage that is reasonably foreseeable for commanders at all stages of an operation, from tactical to strategic.

Talking about the aspects of indiscriminate effects, we have to be careful from a legal analysis that this concept is more related to the one of targeting than the actual effect of a weapon. It is very hard to think of a weapon that is intentionally designed to be indiscriminate. A possible exception could be the V1 or the V2 rockets from Germany in World War II. The real targeting concept is to protect civilians and civilian property in all circumstances. Even if the target is a legitimate military objective we have to look at proportionality, collateral damage, the effect of the valid military attack and an assessment of what is going to be the unintended or incidental loss of civilian lives in those circumstances. Those are really targeting principles, but they are not completely separate from our analysis under Article 36 of what an indiscriminate effect would be.

Would you think that a little bit more attention to the kinds of medical criteria you have mentioned could be drawn up as criteria or principles or things to look at by every State?

Picking up on Richard's comments, I think you might have been referring to the ICRC SIrUS (Serious Injury or Unnecessary Suffering) Project on serious injury and unnecessary suffering in the late 1990s. I can certainly say from a Canadian perspective that, while we ultimately disagreed with the project because we didn't feel it paid sufficient attention to the military necessity balance issue that Richard was just talking about, we appreciated the medical aspects, the types of percentages for wounding and the mortality rates that were produced which was the underlying purpose of the SIrUS Project. Indeed, the purpose of SIrUS was to try to achieve an objective test that all States and all persons could look to and say "now we have a better idea of what superfluous injury and unnecessary suffering really means". So I would say that there was a lot of value in the type of medical approaches and data that you could have extracted from SIrUS and we would still incorporate today and I would certainly encourage other States to do that but keeping in mind that no matter what your determination is from that objective medical perspective, if you want

to phrase it that way, it still has to be balanced against the military necessity piece, as it can't be determined on its own.

Where does the proportionality test concerning unnecessary suffering come from?

We focus on necessary and unnecessary for superfluous suffering. The aspect of proportionality is more of a targeting concept of how the weapon is actually employed in the battle space as opposed to determining whether it is necessary or unnecessary suffering upfront. That doesn't mean that they are totally disconnected. It is theoretically possible to develop a weapon that is completely indiscriminate and that would factor in very much into its ability to cause unnecessary suffering or superfluous injury. The concept of proportionality for us is more in the area of targeting and the employment of the weapon.

How can prohibition on widespread long-term and severe environmental damage possibly be assessed at the weapons review process?

Canada is a party so we do comply with Article 35 and also the ENMOD (Environmental Modification) Convention. I think it is extremely difficult, especially for fairly modest resourced nations like Canada although it is a G7 and G20 country. But in terms of weapon development we are generally not in that business so our reviews would take place of weapons and platforms developed by other States and manufacturers. We definitely do include the Article 35 and ENMOD tests in our Article 36 review process. How do you do that? It is a challenge; again we have to rely, as the legal advisor, almost exclusively on environmental experts, engineering experts. We do our best to get their knowledge, which doesn't stop at the doorway of the Canadian armed forces and the Department of Defense but goes beyond to the wider academic community as well, looking for information to the extent that we can work with our research and development scientists. We do our best not only in the environment but in all areas to try to use computer modeling to see what those effects would be.

Having said that, the threshold for violating Article 35 from a Canadian perspective would seem extremely high when you look at the language in terms of the damage that maybe intended or expected to cause widespread long term and severe damage to the natural environment. We are dealing with the environment which in itself is under constant review and updating. So, in our moment in time, much like the commander in the battlefield, the decision would have to be judged from the existing information at that

time, not *post facto*. Having said that, the *post facto* information can cause us to go back to review our position, but at the time the decision is made we do our very best to collect all that very complex data on the effects on the environment, and then how do we match that through a legal analysis with the language of Article 35 or the language of the Environmental Modification Convention (ENMOD). ENMOD for us is a bit easier to determine because it actually requires the deliberate manipulation of the environment to achieve a military effect. I'm not sure any State has that capability, so we are really back to the Article 35 piece. From our perspective, when you look at experience both from the technical data on damage to the environment and practical effects of instances, it is hard to look at recent scenarios where environment had that impact done on it. In the first Iraq war, when the Iraqis were withdrawing from Kuwait and lighting all the oil fields on fire, there was an immediate reaction that this was a clear violation. But when you talk to scientists of the day, there's not that much long term widespread damage to the environment even though it looks extremely bad when the oil fields are burning on a daily basis.

Is the employment of the term “military advantage” confused with “military necessity”?

From a Canadian perspective the term military advantage, that's in your discrimination analysis, it is a targeting term, so it is the military advantage to be gained either at the time or at a later part of the conflict balanced against the incidental loss of civilian life or property. Military necessity does nicely enfold advantage – it's hard to think of an advantage that wouldn't be necessary. Necessary gives the impression that in that particular moment it is necessary, but from a commander's perspective it is necessary for the longer campaign not necessarily in the tactical attack in that very moment. So, I don't think from a military commander's or legal perspective that the terms are that far apart, but I do acknowledge they are different terms as you look at both when you are looking at the point. I think the military necessity term for us is used more often in the analysis of superfluous injury or unnecessary suffering, hence the word necessary suffering related to the necessary military aspect of having the weapon.

In relation to new technology, and specifically autonomous systems, how can you know and assess in relation to what you don't know is going to happen?

In Canada's perspective, if we deal with specific Article 36 process, which is in place, the law exists, there are processes. It is never easy as potential weapons become more complex. Then the challenge becomes

harder. But saying the challenge is harder doesn't mean you stop your process, it doesn't mean the weapon is prohibited. When we talk about trying to know the unknown, that's why you have the test, that's why the law exists so that States are forced into finding out as best they can and again it is not a standard of certainty, it's a balance of probability essentially that this weapon will be predictable and act in the intended and normal way that it was designed to be used. So, from that perspective, where I think some of the mixing of the issue comes in and switching to the concept of disarmament or arms control issues, you're still talking about the same issues in terms of morality and ethics, but that's a far different process. You can have prohibitions for other reasons on weapons that would easily pass the Article 36 review. They are related but separate concepts to keep in mind. And again going back to that question of knowing the unknown, well, all of our nations put deadly weapons in the hands of very young men and women and send them to tough circumstances. I cannot possibly predict what each and every one of those soldiers will do in every circumstance. We do our best to predict through training and reaffirming and more training. The same applies when you are developing or looking at taking on new weapons systems as well.

And the last point which encompasses the whole broad sense of weapons and new technologies, is that the discussion that must take place about morality, ethics and policies. From a Canadian perspective it's not devoid but it is not the purpose of Article 36. It is a legal review. We run a parallel process for all of our weapons being a policy review. So the Assistant Deputy Minister of Policy engages both inside the department and outside of it to determine, even if the weapon being reviewed is approved from a legal perspective, whether Canada, from a policy perspective, wants to use or acquire the use of such a weapon system? Again this is related to Article 36 but it's a separate process from a Canadian perspective. The process applies to any weapon system. We focused on what might be determined as the "sexy weapon system" of LAWS (Lethal Autonomous Weapons Systems) or "killer robots" in the vernacular and cyber. Frankly, I'm far more concerned about developments and military uses of nanotechnology than LAWS because you can't see nanotechnology.

It has often been said today that all of these reviews must be evidence based. One of the difficulties about not being able to have perhaps more transparency, because of all of the commercial and state secrecy about, is that it isn't usually possible to track down whether

governments are using best evidence. Can you say something about that? Where do you get your evidence from?

Everywhere. It's not a restrictive process where we say this is the only source of evidence, particularly in the modern world where there's a wealth of information not always reliable but at least you can find out about it, literally just on the world-wide web, for example. So, we do work very hard to do so. In the same way, to give a broad interpretation to weapons review, we look to a broad number of sources to confirm the credibility and reliability of the test that we are using.

I'm not here to give in any way, shape or form the impression that it is an easy process. It is not. But it's one that I think certainly Canada and other States who have signed up, agree and believe in; the United States, even if they have not signed up, still follow the practice and that is a key point. I think Article 36 like many aspects of Geneva Conventions and the Protocols all work to help create norms and state practice, particularly concerning States that are heavily into war fighting, and development of weapons systems. So, to have an actual legal review before the weapon is used and employed is really an unquestioned advantage to my mind and results in a presumption of legality that all States should strive for.

Having said that, I think we all agree that given the small amount of States who have publicly stated that they have processes that they actually use, it is not a good story. So there needs to be more encouragement not only from NGOs and the international civil community but from States and military to military relationship with allies and others to encourage taking up those causes. But we have to be realistic because a number of those States are the same States that have the same challenges that we are all still concerned about namely, how they consider targeting; how they treat detainees in conflicts. So, there's only so much you can realistically take on and try to influence. But again, that doesn't mean you stop all together, you keep trying and do your best. So, I think in the Canadian perspective on this is that there is a valid purpose to Article 36 and I agree fully with Richard Moyes. It's not viewed and never was viewed frankly designed to be the all source fix for the challenges that we've talked about all day today. But there are other mechanisms. Again, I agree with Moyes and other speakers who spoke of the value of engagement with NGOs and civil society who can hold States accountable despite the challenges of transparency and lack of information. I think that the proof is in the proverbial pudding with the number of recent treaties that were drawn up which again from my perspective are not really about an Article 36 concern. They are really concerned about arms control and disarmament which is another effective and valuable tool in the toolbox of regulating violence. My fear is that if

you get too cynical and say “let’s walk away from Article 36 Review” then I think it would be a slippery slope and we would be back down to the unlimited warfare approach particularly where States who haven’t signed Article 36 are concerned. I think there’s a danger of encouraging the sense that war is unlimited when clearly it’s not.

Imagine two weapons come up for review: one of them can be used at close range but definitely not at long range because at longer range it causes injuries that are definitely superfluous, while the other weapon can be used in the open air but not in confined spaces. When carrying out a weapons review do you simply say “we know it is intended and designed for that so that’s enough we’ll just say it’s lawful” or do you say “it’s lawful for use only as intended by the manufacturer” or do you actually say “you must not use this at longer range and you must not use this in confined spaces”? Cathcart referred to the fact that you can’t predict what people do in the field, but you can as sure as hell shape it! If something is lawful in some circumstances and unlawful in others, do you actually issue a specific health warning: “do not do the following”, because otherwise, I think that makes weapons reviews much less effective.

Are you aware of any weapon that has been modified or abandoned as a result of weapons reviews? If not, isn’t it a sort of mild deterrent for manufacturers who know when coming up with an idea you’ve got to talk the talk and make sure that that is not intrinsically unlawful? So it’s a small barrier for manufacturers to get over it. That doesn’t mean it’s useless but it just means it has got a deterrent effect rather than any other effect.

On the first question, yes, absolutely, we can certainly shape our soldiers, sailors and air persons out there, and we do. My point there being that if we are talking compared to a robotic system and you don’t know until you start working that system if it’s going to be a disastrous approach which we would never approve or some have argued that you get a better result controlling robots than humans in those circumstances. And we do control the use of force and in that regard the types of weapons in the use of force primarily through rules of engagement that are issued for each and every mission that we operate whether it’s armed conflict, peace support or even domestic operations at home. There are rules of engagement that certainly address specific weapons and how to use them and when not to use them. A common example for most modern militaries is our military police officers deployed with our troops primarily for the purpose of enforcing discipline. They normally have policing weapons and expanding

hollow point bullets, but when we send them to a war zone we give them specific instructions when to separate that ammunition, when they are only going to be using it in context of enforcing our own discipline versus going out and doing operations and engaging in the armed conflict.

Another example that we had in the past was called long-range acoustic device (LRAD), like a big speaker that my parents used to hate in the seventies when I played my rock and roll Rolling Stones, but this is even bigger, the kind you would mount on a vessel or an aircraft or an armored vehicle. Its designed intended use by those originally looking at it was to be able to hail at long distances particularly on maritime interdiction operations or counter piracy operations. But the LRAD also has the capability, if you are close enough, to blow ear drums for example so you would look very close and say you can't use it for the purpose of a use of force, for example, but you can use it for hailing. So I absolutely agree that it's necessary and we do that through that process.

And as Michael Meier indicated and others have said earlier as well, we have to be very flexible and adaptive during operations so that if the troops, and believe me, those who know the troops are very inventive, if they come up with a standard weapon that they want to use in a different way, they are clearly prohibited from doing that until they get the authorization from the chain of command which requires the Article 36 review. But that can be done; it's not uncommon because most of those types of adaptations are not particularly complex in our experience. Regarding the question as to whether a weapon system has ever been rejected, well, again you have the same approach. If you're so engaged in the whole process of developing and procurement that from a legal perspective unless we're somehow completely walled off from any review whatsoever, we would be working with the operators and the procurement officers to say "if it doesn't meet the standards today this is what you need to do to meet those standards, if you can do that". So, really, your goal is never to get to the point of rejecting a weapon, it's not necessary to go out and say: "I love every weapon I see" but you work with them from a legal perspective and then say this is what the law requires of you.

Weapons reviews: current and future challenges

Michael W. MEIER

Special Assistant for Law of War Matters,
Office of the Judge Advocate General, International and Operational
Law Division, US Department of Defense, Washington

About reviews of Article 36 of Geneva Additional Protocol I on the use of new weapons, do they do anything in practice to prevent superfluous injuries and unnecessary suffering? How do you assess this at the weapons review stage?

The United States (US) is not a party to Additional Protocol I (AP I) and, therefore, there is no a legal obligation pursuant to the Protocol to conduct a weapons reviews. Nevertheless, we have been doing weapons reviews since 1974 for weapons, weapon systems and ammunition. A legal review is required by the Judge Advocate General of the proponent's service. So each individual service has an attorney who is doing the weapons reviews. We believe the US weapons reviews are consistent with what is in AP I as well and we have implemented all our policy requirements through our Department of Defense regulations. Each of the services has its own regulations on how the weapons review is going to be conducted.

Certainly, for the Army, in determining whether a particular weapon or ammunition is going to be legal, we give appropriate consideration to the legitimate military purpose of the ammunition, the military necessity for the weapon and then the humanitarian interest in protecting the victims of armed conflicts. For combatants this is the prohibition against the infliction of unnecessary suffering and superfluous injury, and for civilians the interest is protected by the prohibition against the employment of indiscriminate methods and means of warfare.

The United States is not a party to any treaty that defines what unnecessary suffering is, but we acknowledge that there is suffering to combatants and it is lawful and expected and may include severe injury or loss of life. Though there is no agreed definition, one of my predecessors, Hayes Parks, came up with a kind of guide in the 1990s that we still use today. I would like to read it out now:

A weapon or munition would be deemed to cause unnecessary suffering only if it inevitably or in its normal use has a particular effect and the injury caused is

considered by governments as disproportionate to the military necessity for it, that is, the military advantage to be gained from its use. This balancing test cannot be conducted in isolation. A weapon's or munition's effect must be weighed in light of comparable, lawful weapons or munitions in use on the modern battlefield. A weapon is not unlawful merely because it causes severe suffering or injury. The appropriate determination is whether a weapon's or munition's employment for its normal or expected use would be prohibited under some or all circumstances. The criteria as to whether the employment of a weapon for its normal or expected use inevitably would cause injury or suffering manifestly disproportionate to its military effectiveness.

So, therefore, it is essential that the reasonably anticipated effects of the weapon or munition are evaluated in the context of lawful weapons on the battlefield.

We do not take the view that we are required to foresee all possible uses or misuses of a weapon because it might be misused in ways that might be prohibited. As Major General Cathcart pointed out, the laws of targeting should be addressed at the time the weapon is employed to be determined by the on-scene commander. I think when we talk about the military necessity piece and unnecessary suffering we look at this in context of the weapon's use. We are currently looking at new ammunitions and procuring a new hand gun system. When the developers come to us with respect to the need for new ammunition for this system, the question we ask is: why? What is the military necessity for the new system? One of the arguments is that it needs a higher probability of incapacitation than existing ammunition, so you have a military necessity for the new munition. When you begin testing the actual ammunition you look at things like bullet weight, the mass of the bullet, the range to the target, the velocity upon impact, where the bullet would strike the body, the attack angle, how far the bullet would penetrate the body, tissue disruption. So, those are the things you would test and evaluate and look at the military necessity for that system and then whether it would cause unnecessary suffering.

Where does the proportionality test concerning unnecessary suffering come from?

We look at this as an application of the principle of humanity in the context of weapons. Again, international humanitarian law (IHL) principles prohibit weapons designed to increase the injury or suffering of persons that go beyond what is justified by military necessity. Again we look at whether the suffering caused by the weapon provides no military advantage or is otherwise clearly disproportionate to the military advantage reasonably expected by the use of the weapon. I understand the concern

about the balancing piece, but I think that is how you have to describe it. You have to look at what is the military necessity of the weapon, and then weigh that against whether it is disproportionate to the military advantage to be gained. That is the test that we use in the United States. Accordingly, I think it does involve a little bit of balance.

How can prohibition on widespread long-term and severe environmental damage possibly be assessed at the weapons review process?

Our legal review of weapons addresses three questions: whether the weapon's intended use in armed conflict is calculated to cause unnecessary suffering; whether the weapon can be controlled in a manner that can discriminate between civilian and military targets; and, whether there is a specific treaty or law that prohibits its use. Certainly the United States is not a party to AP I, which addresses damage to the environment and we do not agree with those specific principles in API. However, in the third question, we talk about whether there is any specific treaty or law that prohibits its use. We are a party to the ENMOD Convention so we would consider any restrictions under that Convention that would apply to a weapon. But, we also look to see whether or not the provisions would be prohibited only if they were clearly excessive in relation to the country directed to the military advantage anticipated. We do not consider though Article 35 or Article 55 on the protection of the environment as part of our weapons review process.

How does one address the whole question of weapons review in relation to new technologies of various kinds with particular reference to laws on lethal autonomous weapons?

The lethal autonomous weapons system in the United States has been discussed extensively over the last three years in the Convention on Certain Conventional Weapons (CCW). I was privileged to be the head of the US delegation for the last three years working on this issue. In the United States, we have a directive on autonomous weapon systems which we have used as a guide on how these systems should be developed. So looking at this, the review of an acquisition or procurement of a weapon for consistency with the US international humanitarian law (IHL) obligations, again we should consider the three questions I talked about earlier. If a weapon is not prohibited then we should consider whether there are the legal restrictions on the weapon's specific use and if those specific restrictions apply then the concept of employment of the weapon should be reviewed for consistency with those restrictions.

For lethal autonomous weapon systems obviously this goes back to our defense acquisition process, which looks at the weapon system holistically to ensure that weapons we develop are safe, predictable and can be used in compliance with IHL. It considers the entire life cycle of the weapon, which we divide into five phases. These phases consider the requirement for the weapon systems so should we decide to develop a lethal autonomous weapons system we would look for the requirement of the system. Then we would look at the analysis and evaluation of the technology performance, engineering and manufacturing. Then we would look at the production and operation and support. Safety is considered throughout each of the five phases of the acquisition system. Weapons that have critical safety functions in any aspect are subject to additional scrutiny through weapons review boards. These boards are comprised of experts to evaluate weapons systems against industry and government standards and to develop and apply best practices.

Obviously, weapon systems that have certain autonomous functions are subject to this defense acquisition process as well as additional reviews to ensure that the design allows for the exercise of an appropriate level of human judgment over the use of any autonomous weapon system. According to the Department of Defense Directive 3000.09, to establish the autonomy of weapon systems requires two separate reviews by senior officials, prior to any formal development or fielding of a weapon system with certain autonomous functions.

The first review occurs before the weapon system enters into formal development, and at this stage the senior officials must ensure that the system design that incorporates the necessary capabilities that will allow the commander and the operator to exercise appropriate levels of human judgment over the use of force. The system is designed to then complete engagements in a time frame consistent with commander and operator intentions, and if it is not able to do that then to determinate the engagement and seek additional input from the human operator before continuing. The system design then has to address and minimize the probability in consequences of failure that could lead to unintended engagements, or the loss of control over that system, which will include reviews of safeties; we look at anti tampering mechanisms, information security systems. Then you would have plans in place for verification and validation, we would do operational tests and evaluation to ensure that the system is reliable, effective and suitable under realistic conditions, including possible adversary actions, and they would be done to a sufficient standard consistent with the potential consequences of an unintentional

engagement or a loss of control over the system. Then we would write a preliminary legal review of that weapon system.

The second phase occurs right before the weapon system would be fielded. The senior officials will then get together again and ensure that the design requirements I mentioned above have been implemented to standard. The verification and validation, the operational testing and evaluation have adequately assessed the systems' performance, the capability, its reliability, its effectiveness and suitability under realistic conditions. And then you would look at the system capabilities, we would look at human-machine interface, our doctrine, our tactics, techniques and procedures, also known as TTPs, and then the training that we have implemented to allow our commanders and operators again to exercise the appropriate level of human judgment over the use of force. And then to operate the system with appropriate care and be able to use it in accordance with the law of war, any applicable treaty the United States is a party to, our weapons safety rules, and any applicable rules of engagement for that operation. We would obviously make sure that there was adequate training done by the operators of the systems, that training is periodically reviewed and is used and understood by the commander and the operators so they understand the functions of autonomous capabilities and also the limitations of the autonomy with the system. Then once the legal review is done it would be fielded.

So, under the Directive, our weapon systems with certain autonomous functions get two legal reviews instead of one. The legal reviews should then consider whether other measures should be taken to assist in assuring compliance with IHL obligations related to the type of weapon being acquired or procured. So with LAWS, we need to ensure that it is sufficiently predictable and reliable and we think that takes on particular significance because of the nature of the system. So, there needs to be appropriate system designs and safeties, rigorous hardware and software verification and validation and, most importantly, the realistic system development and operational testing to ensure they comply with IHL.

Speaking more broadly, we would note that IHL does not specifically prohibit or restrict the use of autonomy that aids in the operation of weapons. In fact, we have seen the use of autonomy enhance the way IHL principles are implemented in military operations today. For example, munitions that have homing functions that enable the user to strike the military objectives with greater discrimination and have less risk of incidental harm. So we think improving the performance of the weapon systems is one area which the interest of military effectiveness and humanitarian interests coincide.

Do weapons reviews under current technology ban fully autonomous systems?

I think in certain circumstances, like the offensive use of certain systems, technology might not be able to meet the requirements of IHL. We have many systems today, especially defensive systems, like AGIS, that have humans on the loop. So autonomy has been used with some effect now. I do think that technology is in its beginning phases in order to try to do some of this stuff. I think you have to look at the context, because it always matters. Is the system that you are trying to develop going to be used where there are only combatants? If it is out in the desert and nobody is around and no civilians – that is one level. If you start trying to use them in cities and populated areas then that becomes significantly harder. I do think you have to look at the context and what the system is designed to do and how it is going to be used.

In relation to new technology, and specifically autonomous systems, how can you know and assess in relation to what you don't know is going to happen?

I think that it is a valid concern and a struggle that you have to look at. When you do testing for M16s or other weapons, you test them for a certain amount of times. If you get into autonomous weapons systems that are computer generated, do you do 10 thousand or 10 million tests? You have to look and see what you are trying to do. Certainly engineers and other people are looking at those types of things to figure out how we will be able to properly test them. Through our Directive those are the questions that have to be answered: it has to be reliable and predictable. You would have to have all those questions answered before you could conduct your legal review.

It has often been said today that all of these reviews must be evidence based. One of the difficulties about not being able to have perhaps more transparency, because of all of the commercial and state secrecy about, is that it isn't usually possible to track down whether governments are using best evidence. Can you say something about that?

I'm not so sure about the best evidence piece but I would like at least to address a couple of points that Richard Moyes made and then come to your question on the rationale for weapons reviews. I would parrot what Colonel Batty said in that one of the reasons we do this is that we owe it to our commanders to ensure that they are confident that the weapons they have

are legal and the same goes for the operators and we owe it to our own civilian population.

With respect to some of the issues Moyes made about modifications and whether we look at existing systems at least for the United States – we do. One of the pieces of information we try to get for weapons reviews is a complete description of the intended use of the weapon or weapons systems and the tactical operational needs that it intends to fill. One of the things that we do look at is making a comparison with approved systems and approved weapons that are in our inventory. Any time there is a modification that changes the function of an existing system, you have to go back and then look at that weapon system. In this way, you have a pattern of use that I think we would look at and compare. So, I would have to disagree a little bit with Richard. It is not that once you do an initial weapons review then you are done and you never look at the weapon system again as they get better. Even on the autonomy of weapon systems you would sometimes go back and start looking at those different systems. With respect to cluster munitions effects, certainly the United States is not a party to the Convention on Cluster Munition (CCM). We have cluster munitions in our inventory, we still view those as lawful weapons and that they serve a legitimate military purpose. Obviously, we have taken steps to develop systems that have a 99% greater reliability rate. They have self-destruct and self-deactivation systems in them to make sure that they don't cause the harm of some of the older systems, I think others have talked about, used in the '70s. I think we do look at those. Also, when States enter into certain treaties they are accepting legal restrictions on the use of that particular system; it doesn't necessarily mean that the State has made a determination that that particular weapon is inherently indiscriminate or that it causes superfluous injury or unnecessary suffering. They have made a political decision to restrict or limit the use of a particular weapon. I don't think we can jump directly to the point that they are inherently indiscriminate or have those types of effects.

Imagine two weapons come up for review: one of them can be used at close range but definitely not at long range because at a longer range it causes injuries that are definitely superfluous, while the other weapon can be used in the open air but not in confined spaces. When carrying out a weapons review do you simply say “we know it is intended and designed for that so that's enough we'll just say it's lawful” or do you say “it's lawful for use only as intended by the manufacturer” or do you actually say “you must not use this at longer range and you must not use this in confined spaces”? Cathcart referred to the fact that you

can't predict what people do in the field, but you can as sure as hell shape it! If something is lawful in some circumstances and unlawful in others, do you actually issue a specific health warning: "do not do the following", because otherwise, I think weapons reviews would be much less effective?

Are you aware of any weapon that has been modified or abandoned as a result of weapons reviews? If not, isn't it a sort of a mild deterrent for manufacturers who know when coming up with an idea you've got to talk the talk and make sure that that is not intrinsically unlawful? So it's a small barrier for manufacturers to get over it. That doesn't mean it's useless but it just means it has got a deterrent effect rather than any other effect.

Regarding the second scenario, the way the US process works is that we would be doing a disservice to our clients and everyone else if we got to the point in the weapon review that it was determined unlawful after spending hundreds of millions of dollars. That's why we have the holistic process. We bring all the different people together to make sure that you don't get to an end result where you are going to have that sort of finding. You try to resolve all those issues before you would ever get there. About the question on the scenarios, I think as lawyers we would have to ask hard questions such as why would you develop something for that specific sort of purpose and try to get around those other systems for the two scenarios. When you do the legal review we talk about it, at least in the US process, even if we find it legal we would then look at whether there are certain tactics, techniques and procedures that need to be put in place, whether certain restrictions need to be put in place. So, we do that sort of function that you were addressing in your first scenario, so at least for us that is part of our process.

Therefore, you would direct the use of the weapon so it would not be used contrary to what the manufacturer intended?

You are correct. In the review we look at what the intended purpose of the weapon is, and at what it is designed to do. We look at the design and intent of that weapon and then if there are other sorts of restrictions or procedures that we need to put in place to make sure that it's used appropriately we would make those recommendations as part of the process.

Weapons reviews: current and future challenges

Richard MOYES

Managing Partner, Article 36, London

About reviews of Article 36 of Geneva Additional Protocol I on the use of new weapons, do they do anything in practice to prevent superfluous injuries and unnecessary suffering? How do you assess this at the weapons review stage?

How far has the ICRC and those who are involved in this issue consulted the WHO on the definition of unnecessary suffering?

There was a bit of a push in the late 1990s to think more in a more medical health based way, about how certain types of injury patterns could be considered in this context. So, health data was being brought into the debate. Bringing evidence from the field into this international consideration around weapons has been very important for developing the law. In that context they have been looking at particular patterns of wounding and perhaps at particular severities of wounding associated with certain weapon types. However, that type of approach has been rather overshadowed by an interpretation of the law, by some that always sees this wounding pattern in relation to the balance of military necessity. That approach makes it rather more difficult in a generalized sense to straightforwardly stipulate that this or that pattern of wounding is always unacceptable from a legal perspective.

Also thinking about the types of wounding that have been considered important, sometimes the inevitability of death has been seen particularly problematic, or the inevitability of permanent disability, blindness in the context of blinding laser weapons and, in particular, the untreatability of wound injuries you get with undetectable fragments. There have been some issues raised about that recently with certain types of explosive weapons that perhaps contain fine metal particles in the explosive fill creating a pattern of wounding that is particularly problematic.

But it definitely feels that in terms of the ongoing international discussions there hasn't been that much of a renewed focus on how these types of medical data can inform perspectives on this, rather because the locally contextualized orientation is predominating in terms of state legal interpretation.

Would you think that a little bit more attention to the kinds of medical criteria you have mentioned could be drawn up as criteria or principles or things to look at by every State?

I tend to find that the analytical and political dynamics of the unnecessary suffering and superfluous test seem rather tricky. In part it seems to be that the predictability of a very specific pattern of wounding is held to be problematic in a way almost to suggest that unpredictability of wounding would be considered as preferable in a legal analysis. This feels slightly awkward to me. And I'm not sure that there is much appetite at present for pursuing a criteria-based approach to weapons in general.

Rather we tend to see that this issue is coming up more in relation to specific weapon technologies that are already being associated with a particular pattern of wounding after they have already been brought into use. This perhaps relates to another issue about these review processes and leads to some wider consideration about the role of these processes, that they tend to be somewhat in the abstract in the initial phase because you are not testing them on humans and there is an extent to which certain patterns of harm from weapons have only really emerged over time as the result of their process of use. But these review systems are not particularly well set up to capture that. This is not to say that they are set up in the wrong way in terms of what the law necessarily demands. I think it is just that, as currently formulated, they are not set up to test patterns of harm. They are set up to straightforwardly test abstract legality as opposed to likely longer term patterns of actual harm.

Where does the proportionality test concerning unnecessary suffering come from?

Aside from the issue of unnecessary suffering, in relation to the prohibition of indiscriminate attacks, ruling out weapons that are completely incapable of being directed towards the target is a pretty simple test. But there is a very large grey area between "incapable of being directed" and "highly accurate". So I do wonder in terms of Article 36 and its requirement to assess legality in some or all circumstances. Whether that is interpreted in terms of some circumstances that are explicitly prescribed in law as being illegal for the use of that weapon, or whether that might imply some sort of contextual assessment regarding where a certain type of weapon should be used even if that is not explicitly articulated in the law. So, obviously with incendiary weapons, the prohibition of their use in concentrations of civilians is differently formulated for different types, but I wonder for weapons that are not explicitly subject to such treaty formulation whether the review process would still articulate some

guidance with respect to that. This is linked to the 'concept of use' - whether the proposed use of a specific weapon already provides contextualized information regarding where it might be expected to be used. I would be interested to know what sort of contextual descriptions are used in those kinds of processes, if they are used at all.

How can prohibition on widespread long-term and severe environmental damage possibly be assessed at the weapons review process?

It is obviously a pretty steep test, again, and I think that it is very challenging. It does put in mind the question of whether nuclear weapons would be considered to breach that test. I think it is hard to think that they wouldn't. I recognize, of course, that a number of States have got reservations in place regarding the applicability of these rules to nuclear weapons anyway but that's perhaps revealing in itself of the coherence of those weapons with the more generally established legal regime. So, it seems rather a steep test for most technologies that you can see being brought to bear.

On the other hand, there are perhaps positive developments in this area as well, away from that specific legal framework. The International Law Commission considers legal principles relating to the environment in the context of armed conflict. This is part of a wider movement, recognizing that wider legal frameworks continue to apply even in situations of armed conflict – which can produce positive developments, helping to pull back the exceptionalism of armed conflict. This, perhaps, builds a greater sense of direct respect and responsibility for the environment and civilian population in those areas. So, I suppose that also brings to mind how States relate to specific legal obligations in terms of the laws of war and how they might also bring to bear other policy considerations in relation to the assessment of weapons, for example the toxicity of materials that are used in weapons. There may not be explicit rules regarding that, but at the same time, it would seem quite reasonable and a positive development if States took such factors into account when weapons were being assessed.

In relation to new technology, and specifically autonomous systems, how can you know and assess in relation to what you don't know is going to happen?

There's a lot of material that could be covered in response to this question given that there's already been a lot of debate on the issue of lethal autonomous weapons internationally. I suppose a lot depends on how you conceptualize the problem of lethal autonomous weapons systems in the

first place. I agree with Meier that some functions that could be called autonomous have provided benefits to commanders in terms of allowing for more predictable and more constrained applications of force. I think our particular concern with respect to this technological development is more in the other direction - of the potential loss of control for human beings in terms of the application of force. This, of course, relates to issues of predictability and reliability. Reliability is a function of technology to an extent, but predictability is a function of technology and also the context of space in which the system will operate and the time over which the system will operate. I think a fundamental concern for us is that, as technologies develop, we will see weapons systems that are capable of operating over a wider area and over a longer period of time and so start to challenge what we consider to be an attack as a unit of legal decision making and of military operations. So, where military human commanders have obligations to undertake certain legal judgments in relation to an attack, there needs to be some conceptual and spatial boundaries to that notion of an attack if it isn't going to expand outwards to the point where the application of that human legal judgment and determination is effectively meaningless. This is slightly different from simply making assertions about whether technology can undertake processes analogous to determining a civilian or military object and the like. It is rather a concern that through a wider adoption of these systems we see a blurring, or an eroding, of certain key terms in the law we rely on for ensuring legal application at a sufficiently tight level.

In our perspective, strengthening the idea of human control, human judgment, as well as both coupled together - as I think you need both in reality - strengthening the idea that there needs to be a sufficient level of human control to enable the application of the law or to ensure compliance with the law is something that should be articulated collectively by States; because describing the nature of that human control is rather different from simply describing what the provisions of existing international law already say.

All that said, clearly whatever the future, how we review technologies as they start to be proposed for development, or as they come into development, will be a very significant aspect to this. I think this is almost edging towards the second question about what the function of these processes is. But national level Article 36 review processes do not have an external normative standard setting function because they almost inevitably involve a degree of secrecy and privacy that curtails their ability to build common international standards.

However, if you did have a more common international standard requiring a sufficient level of human judgment and control to be applied in certain technologies to allow for legal compliance then you could couple that with an obligation to review new technologies at a national level. In addition, you could draft some guidance for States collectively to provide them with a frame of reference for how that ongoing review process could be undertaken. That wouldn't necessarily need to be a strict and binding guidance. I think inevitably in the face of such variations of possible technology there needs to be some flexibility regarding how our instruments orientate to that process. But I think a coupling of an international standard with a strengthening of the obligation to undertake these sorts of reviews in relation to specific characteristics of human judgment and control would provide a workable framework for engaging with the issue of lethal autonomous weapons at this stage.

States have got to use weapons in accordance with international humanitarian law; there is a tiny number of States which actually have formal weapon review processes: are they really adding anything to the whole compliance with the international humanitarian law business? What is the point of it all?

It would be tempting from a civil society perspective to hope that national level weapons review processes were in some way going to provide a tool that shapes new progressive ways of curbing civilian harm from weapons, but I don't realistically think that is what is going on here and I don't think it's entirely unreasonable that that's not the case. Essentially I think we see the Article 36 review processes as a mechanism for ensuring that States are taking seriously the legal obligations that they have taken upon themselves, in particular, the obligations of specific weapons treaties, and checking that the weapons that they are acquiring and developing fall within that legal framework. But it is essentially a test of legality. It is not a test of what harm weapons might cause in a wider sense, it is not a test of whether these are going to be positive weapons to bring into the world in terms of their wider implications. I think we've seen that in terms of the history of developments in the law regarding weapons over the last twenty years. New developments in the law have not been driven out of national level Article 36 processes, rather they've been driven out of humanitarian actors, medical professionals in the field, non-governmental organisations and international organisations, gathering evidence and data of actual harm experienced and actual patterns of harm and bringing those back into the international and the multilateral frameworks. That has

underpinned a lot of developments with respect to weapons law in recent years. I tend to expect that to continue.

I think there are a number of challenges for Article 36 reviews in suggesting that they might fulfill that process. Essentially we know they are not going to be transparent and I think we can understand why that's the case. Of course, more transparency around such processes is to be encouraged, as is more undertaking of Article 36 reviews at a national level by States because assessing legality does have a purpose, but they are not going to generate wider international normative effects, or standard setting effects, or agreement around where the threshold of acceptability and unacceptability should lie.

They also have a bit of a challenge as they tend to reflect a sort of hypothetical concept of weapon use, and that means they are not looking at the patterns of actual use of weapons, the patterns of actual harm that have accrued over time because those patterns tend to occur subsequent to weapons being used, often by various actors. I think it would be interesting to think more about how data on actual patterns of civilian harm might be generated by States and fed back into their own thinking about these processes. I am reminded a little bit of an example on cluster munitions a national government explained in parliament that with cluster munitions, as with all weapons, you need to weigh the military utility against the risk to civilians - and they said they had undertaken a very careful weighing of these two elements and had decided that they should continue using these weapons. But when they were asked what data they had gathered on actual civilian harm in a number of contexts where they had used these weapons they hadn't actually undertaken any evidence gathering whatsoever.

So, there's a bit of an imbalance in terms of how experience from the field with respect to civilian experiences comes back into these processes other than in so far as that has been facilitated by humanitarian organisations and wider members of the international community in international discussions. This is rather a reflection of the fact that Article 36 reviews don't have any representation from key stakeholders who are likely to be put at risk - civilians in foreign countries. That's understandable given the structures that are operating here, but that does have a bearing on a system for assessing technologies. And I think more and more in the way that the law is developing and perhaps more and more in how we are seeing the engagement of victims of weapons in international multilateral discussions on these issues, we need to see a process of trying to bridge that gap and see some more proximity and accountability in relation to the actual populations that are affected.

So, those things might sound very critical of Article 36 reviews but in a way I'm not sure that processes are really set up to fulfill that function. Rather I think that's a function that the wider community needs to continue to undertake. However, I also think that means that simply asserting that implementing existing Article 36 processes will from now on resolve all of the issues related to the problematic impacts of weapons in the world is distinctly misguided - not just because new evidence will be developed and new technologies will be developed - but also because I think we should hope that as a community our expectations of civilian protection should also develop and change over time. We may hopefully come to evaluate certain weapons differently as our own social structures make us less accepting of civilian harm and more for promoting civilian protection.

**IV. Case study: law enforcement
by military personnel**

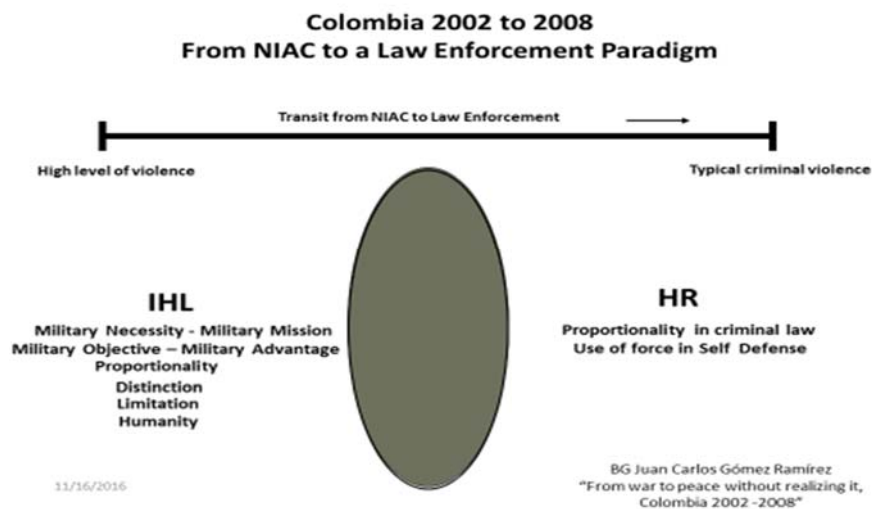
Discussion panel

Case study: law enforcement by military personnel

Juan Carlos GOMEZ RAMIREZ
Colombian Air Force, Bogotá

I will talk from my experience as a soldier who has been in the military forces for 33 years in a country that has been in a conflict for 52 years. I would like to explain and try to answer the question that Nils has given to us and that is; are the Military engaged in counter-insurgency operations conducting law enforcement or hostilities? I can tell you that after these 52 years I think we know pretty well the difference between these two paradigms. I would especially like to talk about the last 15 or 16 years.

If I recall well, in 2002 the guerrilla had about 30,000 men. Today, they have less than 7,000. The military forces and the Colombian Government have defeated the guerrillas in too many places and in some others, the Government and the military forces have weakened them. In this process we pass from a pretty clear NIAC (hostilities) to a law enforcement paradigm without realizing it and noticing the real difference.



At the beginning of this century, the guerrillas were very well armed, with military uniforms, in an important and robust military organization. They were living in the jungle, in the countryside, in camps and they acted in a mass military structure. But some time later, after have been affected

by the military forces with special operations including air strikes, they started to move in small groups from rural areas to urban areas wearing civilian clothes, carrying pistols, revolvers and allocated with their issues in the middle of the population. At the same time the institutions in Colombia like justice, local governments, health and education started to flourish again.

At that moment, Colombia moved from a clear NIAC with hostilities to a law enforcement paradigm, without any further notice, and there are some consequences that I want to share with you. Many civilians were killed, as well as many guerrilla members. About 6,000 members of the military forces and police were also killed in this period; more than 18,000 were injured; and about 9,000 of them, lost part of their integrity or their limbs. Legally and due to the improvement of the institutions justice grew up. Right now, there are around 5,000 military members under criminal investigation. 1,000 of them have already been sentenced from 20 to 50 years of jail. Colombian military forces really know the legal cost of not knowing in which paradigm they were involved in at that time (hostilities or law enforcement).

Now, I would like to talk not only about Colombia but also about Latin America. If you check the United Nations homepage you will find that America is the most violent region in the world. When you check the figures, you can see that per 100,000 inhabitants in America, there are 16 people violently killed. In the case of Europe there are 3, in Asia 2.9, in Africa 12, and in the whole world 6. If you analyze by countries, in the case of Colombia, there are 27 deaths per every 100,000 inhabitants. In Venezuela the number is 62; in El Salvador 64 and in Honduras 84 – which unfortunately, is the most violent country in the world right now. So, with this reality it is pretty understandable that governments try to use their military forces to confront the violent reality in any of these countries. The crimes that are present in America right now are very violent: narco-trafficking, illegal mining, extortion, human trafficking and some other crimes that are transnational.

The military forces are one of the most credible institutions in those countries. People find them capable of confronting criminal violence, and delinquents fear them. So, it is pretty easy to comprehend that governments try to involve the military forces in law enforcement operations.

Honestly, I believe that military forces can strongly support law enforcement authorities, but cannot replace them. What I want to share with you is how hostilities (NIAC) and law enforcement environment in some countries in America are overlapping. This violent reality makes it very

difficult for authorities, for institutions and for the population to see and understand differences.

In the case of Colombia, right now, after the military defeat of the FARC in so many places and their weakened position in some others, I can say that almost all the military operations that the military forces are performing belong to the law enforcement paradigm and not to the hostilities paradigm. The main reason for this to happen is because the FARC to date lost the military capability that it had at the beginning of the century. But, there is something else. As you may know we are ending the war against the FARC but we still have another guerrilla force that is the ELN. There is something that might be new for you and could be interesting for professors here. Last April, the Colombian Government through a guideline gave the military forces and to the Police the possibility to confront criminal bands under international humanitarian law rules. The reason for doing so, is because these criminal bands crossed the legal threshold of NIAC (hostilities) to be considered as armed groups. They are very well armed, they have a chain of command, they have positive control in some areas of the country and the level of violence they produce is higher than the riots and disorders, which are common in situations different from NIAC or IAC.

So, what I want to say is: that independently of the end of NIAC with the FARC and probably with the ELN in the future, the Colombian military forces and the police will still be allowed to use IHL rules to confront the criminal reality of the country. This is not only the case of Colombia (Directive 15 and 16 of the Colombian Ministry of Defense, 2016). Peru has also a law approved by Congress and revised by the constitutional tribunal of that country allowing the military forces to face illegal organizations under special circumstances by using IHL or rules for hostilities. The norm, legislative decree number 1095, allows the military forces to use international humanitarian law rules in southern parts of Peru because in those places there are groups that pass this level of violence and can be confronted under this legal paradigm.

To conclude the part of the issue of using military forces not only in a NIAC situation, but in law enforcement operations, I want to emphasize something that I believe is important: governments in Latin America will continue the tendency to use military forces to confront criminal situations inside the borders of each country. This is legal and produces a dissuasive effect on the criminals and a sense of security among the population. Common perception of security with military personnel patrolling streets in big cities is generally positive. Nowadays, as we can see in Colombia and Peru, it is possible to apply the rules of IHL (hostilities) independently of

the acceptance or the existence of a NIAC. This legal allowance to the military forces gives them a very good tool to be used in case of necessity. Also this reality generates a deterrence effect on those who want to subvert order in a democratic country.

Furthermore, as Professor Dinstein said, and I completely agree with him, the key to succeed against these very violent and criminal groups is intelligence along with advanced technology, interaction, joint operations and coordinated operations. In the case of Colombia, the police is under the Ministry of Defense, so we have a Police that by the way is very militarized. The police, the army, the navy and the air force are under the same umbrella. Right now it is absolutely normal to perform operations between the Military Forces and the Police. So, one day it is feasible to see a Black Hawk helicopter from the Colombian Air Force performing an attack and launching bombs against the FARC or the ELN in the middle of the jungle, and the day after, the same helicopter participating with the Colombian Police in a law enforcement operation against illegal mining. In these cases the crew knows very well because of their training and the rules of engagement, that they cannot use lethal force or any kind of force to conduct this type of operation. The only reason why they are there is to protect the police and to allow them to stop and capture those committing illegal activities. To achieve this level of proficiency, you have to have political will, legal tools and training, and a sound knowledge of the operational environment.

Case study: law enforcement by military personnel¹

Françoise HAMPSON

Essex University, United Kingdom; Member, IIHL

I would emphasize that from the scenario we are to assume we are in a non-international armed conflict. Occasionally, I shall make reference to other contexts.

I think the starting point is determining the law applicable. Which legal regime are you going to use? Is it LOAC, also known as IHL, or human rights law? It is more complicated than that. There's just LOAC, then there's a mixture of LOAC and human rights law, which does not mean a blending, but a mixture of bits of LOAC rules and bits of human rights rules (see Hassan). The third option is human rights law taking account the factual context of conflict – not taking into account LOAC but the fact of conflict - and then there is peacetime human rights law.

So, there are four options. In order to identify the regime applicable you first have to characterize the situation. In this case, we have been told it is a NIAC. The second question that in practice you have to ask is: does the State acknowledge that you are dealing with a NIAC? Because, numerically, the majority of NIACs globally are within national territory and the State denies the applicability of the law of armed conflict. In this case, they cannot be surprised if everything has to be evaluated in terms of human rights law. Then you need to look at the kind of NIAC because I suspect that the regime applicable will vary depending on whether it is only just across the border of Common Article 3 or whether you are dealing with a situation like Syria, which is a high-intensity non-international armed conflict, and by high-intensity I mean there are concerted and sustained military operations on both sides. There does not have to be control of territory by the non-state party but often there will be.

The next thing you have to consider to sort out the regime applicable is the situation in the particular place where the incident occurs, just because the general situation is one of non-international armed conflict does not mean that in the particular place where something occurs that armed conflict is going on. And then the key thing is the function that is being performed, not the label. Counterinsurgency *per se* is irrelevant, it matters that you know what you are doing there.

¹ Text not revised by the author.

There is a useful distinction between the conduct of hostilities and law enforcement. By law enforcement I would include things like manning check points, ordinary patrols, intelligence-led detention operations, and police in demonstrations. Such kinds of things which can occur in an armed conflict context, I see as law enforcement. I think the starting point when you are dealing with law enforcement functions as opposed to the conduct of hostilities, will be human rights law taking into account the fact of the armed conflict. Human rights law bodies or law enforcement monitoring bodies will recognize that a situation can shift very easily from law enforcement to a conflict paradigm. For example, if you are trying to engage in intelligence-led detention you move towards a compound and as you advance towards it you encounter fire not only from within the compound but from the general vicinity. There, clearly, you have suddenly found yourself in hostilities. So, there is no problem in shifting from one to the other.

The determination of the legal regime applicable affects the weapons that can be used, the circumstances in which you can open fire and the target against whom you can open fire. That is why I think it is essential to start by determining what the legal regime is because it then has significant knock on effects.

There is an oddity in human rights decisions, particularly where you are dealing with a court. That means you have to handle with care previous decisions because they do not address questions in a logical order. They are looking to see whether or not the State has violated some aspect of human rights law. If they know they are going to find a violation with regard to issue X they may not consider logically prior issue Y. For example, in the Isayeva case, it would be rash to assume that all States are free to open fire with air strikes against civilian convoys in NIACs just because the ECHR is focused on proportionality. Similarly, in the Moscow theatre siege case, just because the focus was on the medical care available at the scene and the information given to doctors, does not mean to say that it will always be legitimate to use fentanyl or a fentanyl derivative in a context where you cannot control the dosage. So, handle with care previous cases because they are not dealing with all issues. That is why you need strategically to identify the legal regime applicable and not just base it on previous case-law.

Human rights bodies are good, not very good but good enough at taking into account the context of a conflict. To find a violation they will need more or different things in that context than you would in peacetime. But you have got to go along with them, you have got to be able to show, if you are using human rights law, that you took account of different possible

outcomes in your operation, say intelligence-led detention, that you bore in mind that it might end up in a fire fight but your starting point was your attempt to detain. You bore that in mind and it effected the equipment that you took with you. It affected the ROE. If you can show that, and that means some form of paper record, nothing complicated, then there is likely to be an understanding as to what happened. You cannot simply assert it but you do need to be able to establish that you have thought about these things, you do need a record. That means you need monitoring at the time. States have got used to the idea of monitoring in the context of criminal proceedings but I am not certain that enough systematic monitoring is done at the time not just for lessons learned but to define whether or not the State's behaviour is compatible with the rules of state responsibility including both LOAC and human rights law.

So, you have got to translate how a human rights body examining the issue years after the event will analyse the situation and convert that into rules that can be applied now for your Armed Forces. This is going to mean a huge emphasis on training and ROE because they are going to need to be able to operate in two modes for ease of reference: a rules of engagement mode or a LOAC mode. And they need to know, particularly the officers commanding them, when you switch. This is not rocket science. Armed Forces are very used to doing it. For example, in Northern Ireland where the British military were assisting the civil power, they effectively just had ordinary law enforcement (ROE); in the case of Colombia, we have heard before about the red rules and the blue rules. So, it is not too complicated to switch between two paradigms but you do need to have everything that enables you to switch. So you need the right equipment, and under human rights law, in some respects, it is more open than the law of armed conflict. For example, in some circumstances, you will be required to use dum-dum bullets or hollow point ammunition. In some circumstances, human rights bodies will require you to use tear gas.

If you are going to use weapons that the military are not familiar with they need to be trained to use them and know when to use them. There needs to be very clear rules for weapon release and also for when the commander shifts from one to the other. There are some weapons I would be a bit surprised to see ratified by human rights bodies, analysing it in terms of human rights law. One could be a little surprised at air strikes and at the use of artillery if it is not conduct of hostilities. If what you are dealing with is conduct of hostilities in a high-intensity NIAC then I would suspect a human rights body would basically only find a violation of human rights law if there were a violation of LOAC. But that regards conduct of hostilities where you are supposed to be doing law enforcement even

though it can shift. You would not be expected to use those kinds of weapons.

I shall throw out one of the things I think could be controversial. I mentioned it can affect who you can target. I suspect that outside conduct of hostilities in a high-intensity conflict the idea that you can target members of organized armed groups, leave aside the exercising of continuous combat function because none of you out there believe in it except for the ICRC, if you are just trying to target by membership it is very, very unlikely a human rights body will buy that with a possible exception of conduct of hostilities in a high-intensity NIAC.

So, it is not just a weapons question, it is a question of: Who can you target? When can you open fire? I think generally speaking, there would not be a problem because self-defence means as soon as you come under fire you can start firing back. I think the problem could be who you can target and what weapons you might use.

How to behave when you are definitely not in a non-international armed conflict but you have the Armed Forces of the State wandering around, allegedly to reassure the population, armed to the teeth in airports, stations, etc.? Let us assume there is no armed conflict, in this case it is clear that a human rights body will only use human rights law, possibly interpreting it with a little flexibility. It should not be a problem with regard to opening fire because all being well you are only going to open fire in self-defence or in the defence of others. However, the equipment they have got could cause problems if it is of a nature to cause significant collateral casualties. So, you do need to bear in mind how you equip your Armed Forces wandering around airports in order to protect people.

Because if you have the police and the military in the same operation and that operation shifts from a law enforcement one to one subject to LOAC paradigm, where does that leave the police in terms of equipment, training and everything else?

I think the key issue is the choice of weapons. I think soft law is a one-way guide in peacetime. If you act consistently with the UN principles I don't see how, apart from failing to give medical support, you would be found to be in violation of human rights law. But if you are not acting in conformity with those principles, I don't think it necessarily means there's a violation and the more you are in a conflict situation, even without formally evoking LOAC, the more flexibly you have to handle the UN soft law. The key issue is the choice of weapons and where I think there is a very real problem is hollow-point ammunition not helped by the Kampala amendment. As far as law enforcement is concerned there are circumstances in which in order to reduce the risk of harm to those in the

vicinity, a human rights court would require you to use hollow-point ammunition simply because it causes less harm to others in the vicinity. Now, this is not just an NIAC issue. I understand that the special forces in the United Kingdom, i.e. part of the military, are equipped with hollow-point ammunition for certain operations where that is the appropriate thing to use. So, I imagine that sometimes they might be using it in international armed conflicts unless they have been trained not to. So, I think the issue of hollow-point ammunition is a problematic issue. I am reluctant to see the ban on their use in international armed conflicts shifted but I recognise that there may be circumstances where it is the least damaging thing to use.

Madame Landais mentioned that it could be practically problematic to equip forces with different forms of weaponry. I think, as a starting point, that ought to be the goal where you are sending Armed Forces in to do law enforcement in a situation where there is a real risk that significant fighting might arise, then I think you need, as a backup, equipment you couldn't use if it were merely law enforcement. Ideally, they need to have both available but that implies that there is going to be a shift that most of the time under law enforcement they won't use some of it, but if it changes to a different kind of situation they might use it. What's interesting there is that there is human rights case law that suggests that it is not just a matter of what you use and what you had available. A human rights court will not assume that all strikes can be carried out by precision-guided munitions - they are aware of budgetary issues but, nevertheless, if there is something fairly basic that you haven't supplied your forces with, I think there is going to be a problem.

On the question of training, one has to decipher all the things that are needed. Trainings differ between the Police, the Gendarmerie and the Armed Forces. The key element of the training is going to be the training of the officer who has the authority to shift the paradigm. That's the key point in addition to easier training for soldiers on the ground. Moreover, it is really important that in the planning of the operations you take into account the risk of a shift in either direction or both and what the implications are and partly because you want to generate the paper work which will cover your back subsequently. You also need to monitor how your operations are going to see whether you seem to be getting it generally right, so don't wait for litigation to perform the investigative function.

On the issue of less lethal weapons, as far as the law of enforcement paradigm is concerned, they are not interested in the label, they are interested in what happens to an individual. It's worth remembering as well that you can't be subject to inhuman treatment once you are dead, but your next of kin can be. So, what happens to the state of a body is of particular

interest to human rights law because of the right of the next of kin not to be subjected to inhuman treatment and the military sport of lopping off ears as souvenirs has been found to violate the prohibition of inhuman treatment with regard to the next of kin in the case of Akkum, Akan and Karakoç in Turkey.

I think the distinction between the two are important but that doesn't mean you have only got one answer in LOAC and only one answer in human rights law. Be careful with the cases against Russia, because Russia has not derogated, it has not evoked the law of armed conflict, so officially the European Court of Human Rights can't use LOAC, but it does take into account the factual situation. In the Isayeva case they did express surprise that you use airstrikes as part of law enforcement, but there was another ground on which they could find a violation which was proportionality. So, we don't know if another State that didn't have a proportionality problem would be allowed to do it. But it is clear that where there is a factual background of conflict they will apply the relevant provisions of the Convention in a different way from complete peacetime. That doesn't mean it is appropriate to have a complete elision between the law of armed conflict and human rights law. We are not going to get to the stage where it's quite O.k. for dealing with a demonstration to bomb it. That's why it is really important to keep the distinction that to be able to open fire, without it being necessarily responsive, you don't want that as part of law enforcement, but you do want it as part of LOAC. Certain forms of weaponry would be completely inappropriate to use in a law enforcement context, but it's obvious you need them in armed conflicts. Both areas are needed, but this doesn't mean that human rights law in time of armed conflicts is the same as in time of peace. Actually, even in LOAC there's flexibility because things like proportionality, the principle of necessity and so on, affect what you do even within the LOAC framework. There are obviously sliding scales within both, but keep them in different categories.

Case study: law enforcement by military personnel¹

Laurent GISEL

Legal Adviser, Legal Division, International Committee
of the Red Cross, Geneva

This presentation will discuss certain aspects raised by the two questions put forward by the Chair.² Addressing the first question, I will start by laying out the International Committee of the Red Cross's (ICRC) understanding of the interplay between the conduct of hostilities and law-enforcement paradigms. I will then discuss some specific situations that military forces may encounter in current armed conflicts. Turning to the second question, I will first address implementation, training and equipment in general. I will then end by discussing a number of important points with regard to specific types of weapons that military personnel may, should or indeed may not use when carrying out law enforcement operations in armed conflicts.

Let me turn first to the paradigms that govern the use of force in different situations.

The ICRC distinguishes between the conduct of hostilities paradigm and the law-enforcement paradigm.

The conduct of hostilities paradigm consists of the principles and rules which govern the employment of means and methods of warfare in armed conflict. This paradigm belongs to international humanitarian law (IHL) exclusively and, therefore, cannot be resorted to outside of armed conflict.

The law-enforcement paradigm governs the use of force in all other situations. It consists of rules mainly derived from international human rights law, and more specifically from the prohibition of arbitrary

¹ The views expressed in this presentation are those of the author alone and do not necessarily reflect the views of the ICRC. The author would like to thank Neil Davison for his useful comments on earlier drafts of this presentation.

² Question 1: *Armed forces are called upon to carry out law enforcement functions by resorting to military-type weapons and equipment. Can you explain to us the ICRC's approach in this respect, particularly also in light of the Challenges Report submitted to the last RC Conference?*

Question 2: *States basic obligations with regard to the equipment and training of personnel engaged in law enforcement operations and on the obligations of such personnel with regard to the choice of weapons during law enforcement operations. What is the ICRC's position in this respect?*

deprivation of life,³ which regulate the use of force by State authorities when maintaining or restoring public security, law and order. The law-enforcement paradigm, therefore, governs any use of force outside situations of armed conflict. It also governs any use of force within situations of armed conflict, when such a use of force does not amount to hostilities. IHL likewise contains a few rules related to the law-enforcement paradigm. This is the case in particular for the maintenance of public order and safety by an occupying power,⁴ and for the use of force in detention settings.⁵ More generally, the law-enforcement paradigm governs any use of force against a person who is not a lawful target under IHL at the time that force is used. The law of naval warfare also contains principles and rules on the use of force that might be considered akin to law enforcement, notably for enforcing blockades, but these are outside the scope of this presentation.⁶

The principles and rules governing the use of force within these two paradigms have important differences. Though some of the principles share the same name, such as the principle of “proportionality”, they nevertheless have distinct meanings and operate differently under each paradigm.⁷ It is,

³ Universal Declaration of Human Rights, Art. 3; International Covenant on Civil and Political Rights, Art. 6; American Convention on Human Rights, Art. 4; European Convention on Human Rights, Art. 2; African Charter on Human and Peoples’ Rights, Art. 4; Arab Charter on Human Rights, Art. 5.

⁴ According to Article 43 of the 1907 Hague Regulation: “*the authority of the legitimate power having in fact passed into the hands of the occupant, the latter shall take all the measures in his power to restore, and ensure, as far as possible, public order and safety, while respecting, unless absolutely prevented, the laws in force in the country.*” See notably ICRC, Expert Meeting Report, *Occupation and Other Forms of Administration of Foreign Territory, Third Meeting of Experts: The Use of Force in Occupied Territory*, prepared by Tristan Ferraro, ICRC, Geneva, Switzerland, April 2012, available at: www.icrc.org/eng/assets/files/publications/icrc-002-4094.pdf.

⁵ Article 42 of the Third 1949 Geneva Convention relative to the Treatment of Prisoners of War establishes that the use of weapons against those “*who are escaping or attempting to escape, shall constitute an extreme measure, which shall always be preceded by warnings appropriate to the circumstances.*”

⁶ See *San Remo Manual on International Law Applicable to Armed Conflicts at Sea*, June 1994, para.s 98, as well as 50 to 52 and 57, available at: www.icrc.org/ihl/INTRO/560?OpenDocument.

⁷ For a summary of some of these differences, see ICRC, *International Humanitarian Law and the Challenges of Contemporary Armed Conflicts*, Geneva, Switzerland, October 2011, (hereinafter *ICRC 2011 IHL Challenges Report*) p. 18-19, available at www.icrc.org/eng/assets/files/red-cross-crescent-movement/31st-international-conference/31-int-conference-ihl-challenges-report-11-5-1-2-en.pdf, and ICRC, *Expert Meeting: The use of force in armed conflicts, Interplay between the conduct of hostilities and law enforcement paradigms*, Report prepared by Gloria Gaggioli, ICRC, Geneva, November 2013 (hereinafter, *ICRC Use of Force Report*), pp. 8-9 available at: www.icrc.org/eng/assets/files/publications/icrc-002-4171.pdf.

therefore, crucial to identify which paradigm governs a particular use of force. Significantly, both paradigms can apply in parallel to the same situation - I will elaborate on this later - but even in these situations of parallel application, it is necessary to know which paradigm applies to every specific instance in which force is used.

The law enforcement paradigm operates as the default paradigm, while the conduct of hostilities paradigm operates as the *lex specialis*, in the way that IHL operates for armed conflicts in general.⁸ Accordingly, the most conducive way to identify which paradigm applies is to first determine when the rules governing the conduct of hostilities apply; any other situation is governed by the law-enforcement paradigm. Strategies or labels that have no legal bearing, such as “counter-insurgency” mentioned in the case study outline, do not influence the paradigm applicable as a matter of law - though obviously belligerents remain entitled to order their armed forces to follow more restrictive rules.

To determine whether the conduct of hostilities paradigm applies the first question is whether there is a situation of armed conflict. This is indeed the case for this panel case study, as our discussion is situated in the framework of a non-international armed conflict (NIAC). The second question is whether the use of force takes place within the scope of application of IHL. In a NIAC, IHL in general applies to the entire territory under the control of the parties to the conflict whether or not hostilities take place there - this stems from the wording of Common Article 3 as well as from the case-law of the ICTY.⁹ Only after these two initial questions have been addressed can we move to address the question of which paradigm should be applied to a specific instance of the use of force.

In January 2012, the ICRC organized an expert meeting to discuss precisely this question.¹⁰ The ICRC published its own view on some of these issues in its 2015 report entitled “International humanitarian law and

⁸ Nils Melzer and Gloria Gaggioli Gasteyer, ‘Conceptual Distinction and Overlaps Between Law Enforcement and the

Conduct of Hostilities’ in Terry D. Gill and Dieter Fleck (eds), *The Handbook of the International Law of Military Operations*, 2nd edition, Oxford University Press, 2015, para.s 4.04 (1 and 2) pp. 75f.

⁹ ICRC, *Commentary on the First Geneva Convention: Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field*, 2nd edition, ICRC/CUP, Geneva, 2016, para.s 457 to 459, and references therein (hereinafter ICRC, *Commentary on the First Geneva Convention*, 2016), available at: https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/Comment.xsp?action=openDocument&documentId=59F6CDFA490736C1C1257F7D004BA0EC#_Toc465169871.

¹⁰ ICRC *Use of Force Report*, note 7 above.

the challenges of contemporary armed conflicts”,¹¹ on which much of this presentation relies.

The ICRC, alongside the experts it consulted in 2012, holds that the defining criterion for determining which rules govern the use of force against a particular individual under IHL is whether such a person is a lawful target under the conduct of hostilities paradigm.

Conversely, if force needs to be used against persons who are protected against attack, this force will be governed by the law enforcement paradigm rather than by the conduct of hostilities paradigm. As noted above, this could be the case for the use of force against detainees, or the use of force in the face of a threat that has no nexus to the conflict and, therefore, does not amount to direct participation in hostilities.¹²

It is important to note that the relevant question is not who is using force, but against whom force is used. Indeed, the same rules apply whether it is the military, the police or other paramilitary or law-enforcement agencies using force.

In our view, whether the target is a military objective under IHL is the defining criteria which determines which use of force paradigm is applicable within the entire geographical scope of application of IHL in international armed conflicts (IAC).¹³

The situation is more complicated in NIACs, for a range of reasons, and therefore in NIACs the assessment of which paradigm applies requires a fact-specific analysis of the interplay between the relevant IHL and international human rights law (IHRL) rules.¹⁴ While IHL does not bar parties to a NIAC from using force under the conduct of hostilities paradigm against lawful targets in situations of hostilities, there is some debate with regard to the use of force against isolated fighters. This is in particular the case for isolated individuals who would normally be lawful targets under the rules of the conduct of hostilities, but in situations when such individuals are within the territory of the parties to the conflict¹⁵ but in an area removed from where the fighting is taking place.

¹¹ See ICRC, *International Humanitarian Law and the Challenges of Contemporary Armed Conflicts*, Geneva, Switzerland, October 2015 (hereinafter *ICRC 2015 IHL Challenges Report*), pp. 32ff, available at: www.icrc.org/en/download/file/15061/32ic-report-on-ihl-and-challenges-of-armed-conflicts.pdf.

¹² ICRC, *Commentary on the First Geneva Convention*, 2016, note 9 above, para. 460.

¹³ *ICRC 2015 IHL Challenges Report*, note 11 above, p. 35, and *ICRC 2011 IHL Challenges Report*, note 7 above, pp. 19-20.

¹⁴ *ICRC 2011 IHL Challenges Report*, note 7 above, p. 20.

¹⁵ The issue discussed here is therefore distinct from the debate about the targeting of individuals in the territory of non-belligerent States; on this latter issue, see e.g. *ICRC 2015 IHL Challenges Report*, note 11 above, pp. 12-16, as well as Jelena Pejic, ‘Extraterritorial

In this scenario, three positions may be said to exist:

- The first position holds that the rules on the conduct of hostilities apply to the use of force against lawful targets in NIAC with no restraints other than those found in specific IHL rules, even when these individual are in an area removed from the fighting.¹⁶ The ICRC does not share this view.
- The second view holds that the principles of military necessity and humanity require that the kind and degree of force used does not exceed what is necessary to accomplish a legitimate military objective. The ICRC submitted this position in Recommendation IX of its “Interpretive Guidance on the Notion of Direct Participation in Hostilities”.¹⁷ We are aware that this recommendation attracted criticism, notably for allegedly introducing IHRL standards within IHL.¹⁸ This latter criticism shows a misunderstanding of the recommendation, as the recommendation is drawn from the two main principles at the heart of the entire body of IHL - military necessity and humanity. It, therefore, does not introduce an IHRL standard within IHL,¹⁹ and on the contrary is “without prejudice to further restriction that may arise under other applicable branches of international law” - a reference notably to IHRL.²⁰
- The third view holds precisely that the use of force in such a situation would instead be governed by the law enforcement

targeting by means of armed drones: Some legal implications’, *International Review of the Red Cross* (2014), Vol. 96, No. 893, pp. 67-106, available at: www.icrc.org/en/download/file/11954/irrc-893-pejic.pdf.

¹⁶ See e.g. W. Hays Parks, ‘Part IX of the ICRC “Direct Participation in Hostilities” Study: No Mandate, No Expertise, and Legally Incorrect’, *N.Y.U. Journal of International Law and Politics*, Vol. 42, 2009-2010, pp 769-830, and Michael N. Schmitt, ‘The Interpretive Guidance on the Notion of Direct Participation in Hostilities: A Critical Analysis’, *Harvard National Security Journal*, Vol. 1, 2010, pp. 5-44, at pp. 39-43.

¹⁷ ICRC, *Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law*, ICRC, Geneva, 2009, (hereinafter *ICRC DPH Guidance*) pp. 77ff, available at: www.icrc.org/eng/assets/files/other/icrc-002-0990.pdf. In the ICRC’s view, this recommendation applies for IAC and NIAC.

¹⁸ See references in note 16 above. For a support of the position that “*LOAC forbids, in some circumstances, killing an enemy fighter when doing so is manifestly unnecessary - for instance, when capture is equally effective and does not endanger the attacking party’s armed forces,*” see Ryan Goodman, ‘The Power to Kill or Capture Enemy Combatants’, *The European Journal of International Law*, Vol. 24, No. 3, pp. 819-853, at p. 853.

¹⁹ Nils Melzer, ‘Keeping the balance between military necessity and humanity: a response to four critiques of the ICRC’s Interpretive Guidance on the Notion of Direct Participation in Hostilities’ *New York University Journal of International Law and Politics*, Vol. 42, 2010, pp 831 ff, at pp. 899-904.

²⁰ *ICRC DPH Guidance*, note 17 above, p. 82.

paradigm (which is by far more restrictive than Recommendation IX),²¹ in particular, when the operation takes place in territory under the firm and stable control of the government and in an area where there are no hostilities and no enemy re-enforcement is expected.²² The scenario proposed indeed begs the question of whether the use of force in such a situation amounts to “hostilities”, with “hostilities” being the collective resort by parties to an armed conflict to means and methods of warfare.²³

It can be further noted that in practice, reasons other than the law may lead a belligerent to capture an enemy rather than kill him when this is feasible such as, for example, the possibility of gathering intelligence through the interrogation of captured enemy personnel.

In today’s conflicts military forces also face situations where lawful targets and protected persons are simultaneously present in the same area. In these situations, soldiers may need to use force against both simultaneously. A civilian demonstration during an armed conflict may create such a situation, for example, if enemy fighters are present in the middle of a crowd. Significantly, the presence of enemy fighters does not change the crowd’s civilian character.²⁴ Violent forms of civil unrest will often aim to express dissatisfaction with the authorities, but this violence does not amount to direct participation in hostilities even if it is directly

²¹ Melzer, note 19 above, pp. 899-904.

²² See e.g. Marco Sassòli and Laura Olson, ‘The relationship between international humanitarian and human rights law where it matters: admissible killing and internment of fighters in non-international armed conflicts’, *International Review of the Red Cross*, Vol. 90, No. 871, September 2008, p. 614. Sassòli and Olson recommend a sliding scale approach, and conclude notably that “A government cannot simply argue that the presence of a solitary rebel or even a group of rebels on a stable part of its territory indicates that in fact it is not fully in control of the place, and therefore act under humanitarian law as *lex specialis*. The question is rather one of degree. If a government could effect an arrest (of individuals or groups) without being overly concerned about interference by other rebels in that operation, then it has sufficient control over the place to make human rights prevail as *lex specialis*.” See also David Kretzmer, Aviad Ben-Yehuda and Meirav Furth, “Thou shall not kill”: the use of lethal force in non-international armed conflicts’, *Israel Law Review*, Vol. 47, No. 2, 2014, pp. 191-224.

²³ The International Criminal Tribunal for the former Yugoslavia noted that “Although the Geneva Conventions are silent as to the geographical scope of international ‘armed conflicts,’ the provisions suggest that at least some of the provisions of the Conventions apply to the entire territory of the Parties to the conflict, not just to the vicinity of actual hostilities. *Certainly, some of the provisions are clearly bound up with the hostilities and the geographical scope of those provisions should be so limited*” (ICTY, *Prosecutor v. D. Tadić*, Appeals Chamber, Decision of 2 October 1995, case IT-94-1-AR72, para.s 68-69, emphasis added).

²⁴ Art. 50(3) AP I.

aimed at soldiers or law-enforcement officials.²⁵ The use of force to manage such a demonstration and face the threat that the crowd - or individual civilians within the crowd - might pose remains governed by the rules on law enforcement operations, which is usually called crowd control measures. This being said, if fighters are present in the middle of the crowd, IHL does not prohibit the application of conduct of hostilities rules to specifically target these fighters - provided that this targeting can be carried out in full respect of the conduct of hostilities requirements including the principles of proportionality and precautions, which require taking into account the risk of harming the civilians in the crowd. We refer to this as the “parallel approach”: namely the application of the hostilities and law-enforcement paradigms at the same time and place, but for distinct instances of the use of force depending on the person against whom the belligerents are using force.²⁶ However, if it were to prove too difficult to distinguish the violent civilians from the enemy fighters, it might be appropriate to deal with the entire situation under the law enforcement paradigm, and apply an escalation of force procedure with respect to all persons posing a threat.²⁷

The last situation I will discuss arises when it is not clear whether a person is a lawful target. This often occurs at check-points, many of which are manned by military forces during armed conflict. Manning check-points is normally governed by the law enforcement paradigm. When a person (or vehicle) approaches a check-point and does not slow down as instructed, or otherwise disregards signs or orders by the officials manning the check-point, it may not be immediately evident whether the person actually poses a threat, and if so whether the person is a lawful target. It is submitted that a lack of respect for a military order alone does not amount to direct participation in hostilities and is, therefore, not sufficient to permit the use of lethal or potentially lethal force. In case of doubt as to whether such a person is a lawful target, he or she must be presumed to be protected against attack.²⁸ An escalation of force procedure must, therefore, be applied - this is in fact how military forces manning check-points usually proceed, and indeed are required to proceed by their rules of engagement

²⁵ Violence may become direct participation in hostilities only when it exhibits the necessary belligerent nexus, namely it must be specifically designed to harm soldiers or law-enforcement officials *in support of a party to the conflict and to the detriment of the other*; see *ICRC DPH Guidance*, note 17 above, p. 63.

²⁶ *ICRC 2015 IHL Challenges Report*, note 11 above p. 35, *ICRC Use of Force Report*, note 7 above, p. 25ff.

²⁷ *ICRC 2015 IHL Challenges Report*, note 11 above, p. 36.

²⁸ Art. 50(1) AP I and *ICRC DPH Guidance*, note 17 above, Recommendation VIII, pp. 74ff.

(ROE).²⁹ Beyond ROE, the requirement to carry out an escalation of force procedure stems from the principle of necessity under IHRL. It should be noted, however, that the application of the IHL requirement to take all feasible precautions to verify that a target is a military objective would lead to a similar need for an escalation of measures until the status of the target has been ascertained.³⁰ If it can be ascertained that the person approaching the checkpoint is a lawful target under the rules on the conduct of hostilities, then this person may be directly targeted.

I will now turn to the Chair's second question. As mentioned at the outset of the presentation, I will first address national implementation, training and equipment generally, and then proceed to address some issues related to specific weapons.

IHL and IHRL require that the legal obligations imposed by the conduct of hostilities and law enforcement paradigms are integrated into domestic law. IHL notably requires that States enact legislation to provide penal sanctions for grave breaches,³¹ and more generally that they take numerous steps to implement IHL.³² Under IHRL, the right to life must be "protected by law", which means in particular that States have an obligation to establish an adequate legal and administrative framework limiting the use of force to the maximum extent possible.³³ This framework should extend

²⁹ See e.g. International Institute of Humanitarian Law, *San Remo Handbook on Rules of Engagement*, Appendix 5 to Annex A, Escalation of Force in *Self-defence*, para.s 5.4 (d): "5.4 General Considerations. There are a number of general considerations that should be taken into account in relation to EOF policy, options, and training: (...) (d) Force preparation should include scenario-based training in EOF situations that members of the Force are likely to encounter during the operation, such as checkpoint or access control operations" (available at: www.iihl.org/wp-content/uploads/2015/12/ROE-HANDBOOK-ENGLISH.pdf). For example, an April 2010 amendment of the ISAF standard operating procedure on escalation of force procedure "gave soldiers more options for warning drivers at a distance, (...). These include laser dazzlers, paint ball guns, and even chalk bullets", which reportedly led to a drop in civilian casualties (John Bohannon, 'Counting the Dead in Afghanistan', *Science* Vol. 331, No. 6022, March 2011, pp. 1256ff, at p. 1260).

³⁰ See ICRC *Use of Force Report*, note 7 above, p. 41; Art. 57(2)(a)(i) AP I; ICRC, *Customary International Humanitarian Law, Vol. I: Rules*, Jean-Marie Henckaerts and Louise Doswald-Beck (eds), Cambridge University Press, Cambridge, 2005 (hereinafter *ICRC Customary IHL Study*), Rule 16 (available at https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul_rule16).

³¹ Art.s 49 GC I, 50 GC II, 128 GC III, 145 GC IV and 84 AP I.

³² See ICRC, *Implementing International Humanitarian Law: from Law to Action*, Advisory services in IHL, 2002, available at www.icrc.org/en/document/implementing-international-humanitarian-law-law-action.

³³ See references in note 3 above; See also: *Basic Principles on the Use of Force and Firearms by Law Enforcement Officials* (Adopted by the Eighth United Nations Congress on the Prevention of Crime and the Treatment of Offenders, Havana, Cuba, 27 August to 7 September 1990, hereinafter *UN Basic Principles*), Principles 1 and 11; Human Rights

to ROE, which constitute a useful and necessary tool for regulating the use of force in armed conflict situations.³⁴ In particular, ROE applicable in NIAC should include not only rules on the use of force against lawful targets under IHL, but also rules on the force that may be used outside hostilities. As these rules differ, it is necessary that the legal and administrative framework in place - including ROE - identifies the situations in which each legal paradigm and set of rules of engagement apply. In addition (and as noted earlier), States may decide to adopt legal and administrative frameworks going beyond what is required under international law. Taking the example of check-points given earlier, States may decide to apply rules of engagement providing for an escalation of force as required by IHRL, irrespective of whether the person is a lawful target under the conduct of hostilities paradigm.

Appropriate training and equipment are necessary to put these rules into practice. Training is required both by IHL (implicit in the obligation to disseminate knowledge of IHL)³⁵ and IHRL,³⁶ and IHRL also requires that law enforcement operations are planned to avoid the use of force in the first place. This latter obligation implicitly requires the provision of self-defensive equipment, in order to reduce the need to use force of any kind, and “less-lethal” weapons (such as hand-held batons, rubber bullets, and/or riot control agents) in order to allow a differentiated use of force, often called an escalation of force procedure.³⁷ An obligation to provide armed forces with law enforcement means such as these can also be derived from IHL in some circumstances: for example, the duty to ensure law and order in the law of occupation,³⁸ or the quelling of riots in detention settings,³⁹ necessarily imply a duty to have appropriate law enforcement means. It is

Committee, General Comment No. 6, *The Right to Life (article 6)*, 30 April 1982, UN Doc. HRI/GEN/1/Rev.1, para. 3.

³⁴ See *ICRC Use of Force Report*, note 7 above, p. 45.

³⁵ See Art.s 47 GC I, 48 GC II, 127 GC III, 144 GC IV, 83 AP I and 19 AP II; *ICRC Customary IHL Study*, note 30 above, Rules 142 and 143. See also ICRC, *Commentary on the First Geneva Convention*, 2016, note 9 above para.s 2773 - 2776, available at https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/Comment.xsp?action=openDocument&documentId=E925A7160C083CC9C1257F15004A58D9#_Toc452053772.

³⁶ *UN Basic Principles*, note 33 above, Principles 18-21. See also ECtHR, *Hamiyet Kaplan and others v. Turkey*, 13 September 2005; HRC, *Rickly Burrell v. Jamaica*, 18 July 1996, UN Doc. CCPR/C/53/D/546/1993, para. 9.5; IACtHR, *Montero-Aranguren et al v. Venezuela*, 5 July 2006, para.s 77-78; IACtHR, *Zambrano Vélez et al. c. Ecuador*, 4 July 2007, para. 87.

³⁷ *UN Basic Principles*, note 33 above, Principles 2-4. See also ECtHR, *Güleç v. Turkey*, 27 July 1998; ECtHR, *Hamiyet Kaplan and others v. Turkey*, 13 September 2005.

³⁸ See *ICRC Use of Force Report*, note 7 above, p. 47.

³⁹ See Art. 42 GC III; ICRC, *Commentary on the Third Geneva Convention*, Jean Pictet (ed.) ICRC, Geneva, 1960, p. 246; *ICRC Use of Force Report*, note 7 above, pp. 33-34.

important to keep in mind, however, that despite their denomination, “less-lethal” (also sometimes referred to as “less-than-lethal”) weapons can cause serious injury, and even kill, depending on the specific weapon and the particular circumstances of its use (e.g. a plastic bullet at close range, or riot control agents in enclosed spaces) in the same way that a weapon described as “lethal” can have a non-fatal outcome in some circumstances (e.g. causing a non-fatal injury).

Traditionally, armed forces are trained and equipped to carry out hostilities. IHL rules governing the conduct of hostilities recognize that the use of lethal force is inherent to waging war, given that the ultimate aim of military operations is to prevail over the enemy’s Armed Forces,⁴⁰ and military forces are trained and equipped accordingly. Conversely, police forces are trained and equipped to refrain from the use of force to the maximum extent possible.

However, whether the State officials who use force are members of the Armed Forces or of the police is not relevant for identifying the applicable paradigm under international law, even though this may be an important consideration under domestic law. In practice, if Armed Forces use force against persons protected against direct attack, including against civilians who pose a threat that does not amount to direct participation in hostilities, the rules on the use of force in law enforcement operations apply. For example, the United Nations Code of Conduct for Law Enforcement Officials specifies that “[i]n countries where police powers are exercised by military authorities, whether uniformed or not, or by State security forces, the definition of law enforcement officials shall be regarded as including officers of such services.”⁴¹ Conversely, if police forces take a direct part in hostilities against lawful targets under IHL, they must respect the IHL rules on the conduct of hostilities.

Consequently, in situations in which military forces are reasonably expected to use force under the law enforcement paradigm, they must be able to do so in compliance with the law. There is no doubt, however, that this, in practice, is challenging. Because the mind-set, training, equipment and operating procedures of the two paradigms are so disparate, one approach - favoured notably by the Inter-American Court of Human Rights

⁴⁰ See e.g. the description of the principle of military necessity in United Kingdom, *The Joint Service Manual of the Law of Armed Conflict*, JSP 383, 2004, para. 2.2 (as amended in September 2010).

⁴¹ *Code of Conduct for Law Enforcement Officials*, adopted by General Assembly Resolution 34/169 of 17 December 1979, Commentary (b) on Art. 1.

(IACtHR)⁴² - could be to ensure that the officials tasked with carrying out law-enforcement operations are distinct from military forces tasked with carrying out hostilities. There are different manners of achieving this in practice: for example, by refraining from allowing military forces to conduct law enforcement operations alone and instead planning joint operations where military forces act in support of the police; or by setting up special units, such as the gendarmerie, carabinieri or military law enforcement forces, that are qualified and highly trained to conduct law-enforcement missions involving relevant crowd-control and de-escalation techniques.⁴³

Whatever the approach adopted, the level of training and equipment should be adapted to the situation and reflect the likelihood of having to use force under the law-enforcement paradigm. Whenever considering engaging in an operation against persons who are not lawful targets, military forces must respect the law-enforcement paradigm from the inception of the operation, namely by ensuring that troops are trained and equipped and that the operation is planned accordingly. Furthermore, whenever troops might reasonably be expected to encounter situations where they will be required to apply the law enforcement paradigm, including the use of force against protected civilians - a likely occurrence in current conflicts - soldiers must be appropriately trained in and equipped for law enforcement techniques, so as to be able to switch mind-set between the two paradigms.⁴⁴

Let me now address the final issue of this presentation, namely weapons that military forces may, should or indeed may not use when carrying out law enforcement operations in armed conflicts.

Law enforcement operations cover a very broad range of situations, from arresting a suspect who is otherwise a peaceful individual, to confronting a group of heavily-armed criminals. The choice of weapons, if any, must therefore always depend on the specificities of the situation; weapons that are appropriate in one situation may not be suitable in another. Contrary to IHL, IHRL does not expressly prohibit specific weapons, but with a couple of notable exceptions discussed below, the use

⁴² Inter-American Court of Human Rights (IACtHR), case of *Montero-Aranguren et al (Detention Center of Catia) v. Venezuela*, Judgment of July 5, 2006 (Preliminary Objections, Merits, Reparations and Costs), para. 78. See also ICRC, *Violence and the Use of Force*, Sept. 2015, p. 41, available at: <http://icrcdresourcecentre.org/wp-content/uploads/2016/03/icrc-002-0943-11.pdf>.

⁴³ *ICRC Use of Force Report*, note 7 above, p. 47.

⁴⁴ *ICRC 2015 IHL Challenges Report*, note 11 above, p. 37; see also *ICRC Use of Force Report*, note 7 above, pp. 47-8.

of weapons is governed by much more restrictive rules under the law-enforcement paradigm than under the conduct of hostilities paradigm.

To analyse the lawfulness of a weapon, it is important to look at the specific weapon system, namely both the weapon and the ammunition. The outcome of the use of any weapon will depend on a combination of factors, including, in particular, the technical characteristics of the weapon (its mechanism of injury), the context of its use and the vulnerability of the victim.⁴⁵

As the case-study at issue is about military forces in a NIAC, it is important to consider automatic weapons and explosive weapons, as these are the two categories of weapons most often used by military forces during armed conflicts. Let me first recall, however, that “[t]he use of firearms [by law-enforcement officials] is considered an extreme measure”.⁴⁶

Several judgements of the European Court of Human Rights (ECtHR) and IACtHR on situations that involved the use of explosive weapons or automatic weapons concluded that such use was illegal in the particular circumstance of the case.⁴⁷ In one of the few cases where the ECtHR has identified that a weapon was switched to automatic mode, it noted that the law-enforcement official “could not possibly have aimed with any reasonable degree of accuracy using automatic fire”.⁴⁸ However, I am not aware of any express statements from the ECtHR or the IACtHR which would stipulate in a definitive manner that the use of explosive weapons or of automatic weapons in full automatic mode would necessarily always be unlawful under IHRL. Some ECtHR judgments indeed leave open whether their use was illegal while finding a violation of the right to life for other reasons, such as because of inadequate investigation after the operation.⁴⁹ Furthermore, in one case in which mortar and grenades had been used, the ECtHR considered that the use of force “cannot be regarded as entailing a

⁴⁵ Neil Davison, ‘New Weapons: Legal and Policy Issues Associated with Weapons Described as ‘Non-lethal’’, in Dan Saxon (ed.), *International Humanitarian Law and the Changing Technology of War*, Martinus Nijhoff Publishers, Leiden Boston, 2013, pp 281-313, at 281.

⁴⁶ *Code of Conduct for Law Enforcement Officials*, note 41 above, Commentary (c) on Art. 3.

⁴⁷ ECtHR, *Gül v. Turkey*, Judgment 14 December 2000, para. 82; ECtHR, *Isayeva and others v. Russia*, Judgment 24 May 2005, para. 178; IACtHR, *Santo Domingo Massacre v. Colombia*, Judgment of November 30, 2012 (Preliminary objections, merits and reparations), para.s 221, 229, 230 and 282; IACtHR, *Neira Alegria et al v. Peru*, Judgment of 19 January 1995 (Merits), para. 74.

⁴⁸ ECtHR, *Nachova and others v. Bulgaria*, Applications no.s. 43577/98 and 43579/98, Judgment 6 July 2005, para. 108.

⁴⁹ ECtHR, *Cangöz and others v. Turkey*, Judgment 26 April 2016, para. 149.

disproportionate degree of force”.⁵⁰ It is worth noting though that some hold that ECtHR case-law has addressed situations in which IHL was arguably relevant, but wherein the Court did not consider IHL notably because the States concerned denied its applicability.⁵¹ This situation raises the question of whether these decisions can be considered to amount to conclusive statements on the appropriateness of the use of automatic weapons or explosive weapons under the law-enforcement paradigm in other situations.

While some national laws foresee the possibility of using automatic weapons and even some explosive weapons in very exceptional circumstances, a strong condemnation of the use of automatic rifles in law-enforcement operations can be found in the Marikana Commission of Inquiry’s final report.⁵² Amnesty International has also argued that fully automatic weapons, as well as any weapon designed to kill, (including explosive weapons), may only be used in extreme situations.⁵³

In any case, the use of any weapon must always be consistent with international legal standards on its use. Accordingly, it is submitted that any weapon whose effects cannot be strictly controlled so as to be necessary, proportionate to the seriousness of the offence and the legitimate law enforcement objective, and consistent with the obligations to limit damage and injury and to avoid risks to bystanders are, therefore, not suitable for use under the law-enforcement paradigm.

In light of these requirements, assault rifles in fully automatic mode (or multiple shot mode) and other fully automatic weapons,⁵⁴ as well as explosive weapons such as fragmentation grenades, mortars, rockets, bombs and missiles, will generally be inconsistent with international standards on the use of force in law enforcement. Fully automatic fire is

⁵⁰ ECtHR, *Ahmet Özkan and Others v. Turkey*, Judgement, Application No. 21689/93, 6 April 2004, para. 305.

⁵¹ Françoise Hampson, ‘The case-law of the European Court of Human Rights and the Use of Force’, Written Statement, in *ICRC Use of Force Report*, note 7 above, Appendix 3 pp. 69ff, at pp. 75f; Maya Brehm, *Protecting Civilians from the Effects of Explosive Weapons, An Analysis of International Legal and Policy Standards*, UNIDIR, 2012, pp. 115ff.

⁵² *Marikana Commission of Inquiry*, South Africa, 31 March 2015, p. 547, available at www.sahrc.org.za/home/21/files/marikana-report-1.pdf.

⁵³ Amnesty International, ‘Use of Force, Guidelines for Implementation of the UN Basic Principles on the Use of Force and Firearms by Law Enforcement Officials’, August 2015, pp. 35 and 121 (hereinafter *AI Use of Force Guidelines*).

⁵⁴ Automatic or multiple shot mode is understood here as weapons that fire two or more shots when the trigger is held down for a prolonged time. It must be distinguished from single shot or semi-automatic modes that require the repeated pulling of the trigger for each shot.

inaccurate and cannot be controlled to target the specific person posing a threat. For fragmentation explosive weapons, it is difficult to discern how they could satisfy the strict criteria for the use of force in law enforcement; it is indeed unlikely that such explosive weapons will be the lowest possible level of force necessary to achieve any given legitimate law enforcement aim.⁵⁵

Let me end by highlighting that the conduct of hostilities paradigm is more restrictive than the law-enforcement paradigm with regard to the use of two specific weapons, and by briefly recalling the reasons justifying such an exceptional situation.

The use of riot control agents, commonly referred to as ‘tear gas’, as a method of warfare, is prohibited during the conduct of hostilities.⁵⁶ Conversely, the use of riot control agents is permitted for law enforcement including domestic riot control purposes;⁵⁷ for example, the use of riot control agents instead of firearms in order to disperse a violent crowd might even be required under the law-enforcement paradigm, whether employed by police or military forces.⁵⁸ Let me recall in this regard the ICRC’s view that the use of toxic chemicals for law enforcement should be limited to riot control agents only, as defined in the Chemical Weapons Convention, and that international law leaves little room, if any, for the legitimate use of other toxic chemicals, including highly toxic anaesthetic and sedative chemicals.⁵⁹ While the prohibition of the use of a legitimate law-enforcement means as a method of warfare might be surprising at first

⁵⁵ Brehm, note 51 above, p. 110.

⁵⁶ *ICRC Customary IHL Study*, note 30 above, Rules 75; Art. I.5 of the 1993 Convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction (CWC).

⁵⁷ CWC Article II.9(d); for a critical discussion of this difference, see Kenneth Watkin ‘Chemical Agents and “expanding” bullets: Limited Law Enforcement Exceptions or Unwarranted Handcuffs’, in Anthony Helm (ed.), *The Law of War in the 21st Century: Weaponry and the Use of Force, International Law Studies*, Vol. 82, pp. 193ff.

⁵⁸ *UN Basic Principles*, note 33 above, Principles 13 and 14. Amnesty International underlines that “*In view of all these risks involved, when anticipating a situation in which firearms may have to be used, the command leadership in charge of policing the assembly should first consider all alternatives: less lethal weapons and devices may be a more appropriate response to the anticipated threats and carry a lower level of risk.*” (*AI Use of Force Guidelines* note 53 above, p. 159).

⁵⁹ *ICRC position on the use of toxic chemicals as weapons for law enforcement*, Statement, ICRC, Geneva, 6 February 2013, available at: www.icrc.org/eng/assets/files/2013/2013-02-toxic-chemicals-icrc-position-eng.pdf. For detailed explanations of the concerns raised by toxic chemicals other than riot control agents, see also ICRC, *Toxic chemicals as weapons for law enforcement: A threat to life and international law?*, 2012, available at www.icrc.org/en/download/file/7781/toxic-chemicals-for-law-enforcement-synthesis-icrc-09-2012.pdf, and Davison, note 45 above, pp. 301 - 307.

glance, it is worth recalling a major rationale for this prohibition, namely the risk of escalation that the use of riot control agents in warfare entails; indeed, the use of ‘lethal’ chemical weapons - including chlorine, phosgene and mustard gas - in World War I, in the Egypt-Yemen war of the 1960s and in the Iran-Iraq war of the 1980s all began with the use of tear gas.⁶⁰

Similarly, IHL prohibits the use of expanding bullets,⁶¹ whose design contributes to the increased size of the wound and severity of tissue damage caused when compared to non-expanding (full metal jacket) bullets, while a number of States consider that expanding bullets may be used by police for domestic law-enforcement purposes. This is seen as appropriate by law enforcement officials in particular when using force against suspects in the middle of a crowd, to avoid bullets passing through the body of the suspect and endangering bystanders, and to increase the chance that once hit, the suspect is rapidly incapacitated. However, due to the particular injury risks, expanding bullets must only be used when necessary, when other means are insufficient or inappropriate, and keeping in mind the obligation to limit damage and injury. It is important to note that expanding bullets fired by police forces are usually fired with weapons and ammunition that are far less powerful than military rifles and ammunition. The amount of energy that such bullets deposit in the body is, therefore, much lower than the energy deposited by a normal or expanding bullet fired from a military rifle. Police forces, therefore, do not normally use the type of expanding bullet that is prohibited for military rifles.⁶²

Authorities must, therefore, ensure that any riot control agents or expanding bullets used in law enforcement operations are not deployed and used in the conduct of hostilities. This is particularly relevant where military forces or law enforcement officials are involved in both types of operations and where law enforcement operations and hostilities occur in parallel.

⁶⁰ Davison, note 45 above, p. 299.

⁶¹ *ICRC Customary IHL Study*, note 30 above, Rule 77. The 2015 United States Department of Defense Law of War Manual holds the opposite view, see § 6.5.4.4, while the 2010 amendment to Art. 8 of the Rome Statute expanded to NIAC the war crime of using expanding bullets that already existed in IAC (see Art. 8(2)(b)(xviii) for IAC and amended Art. 8(2)(e)(xv) for NIAC). For a discussion of the legality of expanding bullets, see e.g. William Boothby, *Weapons and the Law of Armed Conflicts*, 2nd Edition, Oxford University Press, Oxford, para. 10.4, and Watkin note 57 above.

⁶² *ICRC Customary IHL Study*, note 30 above, p. 270. See also Robin Coupland and Dominique Loye, ‘The 1899 Hague Declaration concerning Expanding Bullets; A treaty effective for more than 100 years faces complex contemporary issues’, *International Review of the Red Cross*, Vol. 85, No. 849 (March 2003), pp. 135-142, at p. 141, and Melzer/Gaggioli Gasteyger, note 8 above, para. 4.05(3) p. 89.

Case study: law enforcement by military personnel

Claire LANDAIS

Head of Legal Services, French Ministry of Defence, Paris

Dans la pratique, comment se fait, dans vos pays respectifs, la distinction entre le cadre légal des opérations de maintien de l'ordre public et celui de la conduite des hostilités militaires, en particulier dans le contexte de la zone grise de la lutte contre le terrorisme et contre-insurrection? Mais aussi dans quelle mesure, les fonctions sont-elles partagées et réparties respectivement entre vos forces de police et vos forces armées nationales? Quel genre de retour d'expérience pourriez-vous partager avec nous?

La problématique assignée à notre table ronde sur l'équipement et les moyens à disposition des forces armées chargées du maintien de l'ordre public en situation de conflit armé non international me semble en réalité comporter deux sous-problématiques : la première insiste sur l'aspect organique des choses : quelles questions soulève l'implication d'un personnel militaire dans des fonctions de police ou de maintien de l'ordre (notions qui en français sont synonymes ou en tout cas recouvrent celle de « law enforcement » en anglais) ? Et la seconde insiste davantage sur le contexte de conflit armé international : les missions de police exercées en situation de conflit armé sont-elles régies par le DIDH eu égard à leur finalité ? Ou bien par le DCA eu égard au contexte général ?

S'agissant du premier point, et pour apporter un témoignage concret sur le cas français, je me permets de rappeler que le paysage français des forces de sécurité est composé d'un trio : des forces de police, sous l'autorité du ministère de l'intérieur, qui sont des personnels civils ; la gendarmerie, qui est une force armée au sens où les gendarmes sont des militaires soumis aux règles du statut des militaires (notamment en matière de droits civils et politiques, de droit d'association professionnelle ou de temps de travail), qui est passée en 2009 de l'autorité du ministère de la défense à celle du ministère de l'intérieur, et enfin les armées. On pourrait en faire une présentation simple – qui reste d'ailleurs assez largement vraie - qui consisterait à dire que la police et la gendarmerie – regroupées sous l'appellation de « forces de sécurité intérieure » sont chargées de la police ou du maintien de l'ordre public sur le territoire national quand les armées

« font la guerre » en OPEX. Mais la réalité, surtout depuis quelques mois, est en fait plus complexe :

- parce que les armées peuvent être envoyées en opération extérieure dans une zone où sévit un conflit armé mais avec un mandat (notamment du CSNU) qui est cantonné à la protection de la population civile ou à l'auto-protection et renvoie davantage à du maintien de l'ordre qu'à la conduite d'hostilités, y compris de façon offensive. C'est moins le cas aujourd'hui dans la mesure où les mandats onusiens ont été rendus plus « robustes » et du fait du choix de la France d'agir autant que possible sous commandement national (cf « à côté et en soutien de la MINUSMA au Mali ou de la MINUSCA en RCA)
- parce que même lorsqu'elles sont envoyées dans un pays ou une zone marquée par un conflit armé pour y conduire des hostilités, certaines des missions des forces armées peuvent s'apparenter davantage à des missions de police, notamment lorsque la situation oscille (dans le temps ou dans l'espace) entre une situation de troubles et tensions intérieures et une situation de conflit armé.

Cf le cas de la RCA : contexte d'Etat failli, objectif : s'interposer entre deux groupes armés organisés, mettre fin aux exactions contre les populations civiles, rétablir la sécurité publique. A comparer au cas malien : intervention pour « détruire » (termes employés par le président Hollande au moment du déclenchement de l'opération Serval) des groupes armés qui entendent occuper par la force des territoires au détriment du pouvoir des autorités légales (détruire ne signifiant pas tuer tous les membres des groupes armés organisés (GAO) bien sûr mais mettre hors d'état de nuire ces groupes en s'attaquant à leurs infrastructures, leurs équipements, leur logistique militaire, leurs chefs). Ainsi, dans des situations toutes deux qualifiables de conflit armé, les finalités de l'intervention peuvent être assez différentes. Et il est notamment clair qu'à Bangui, les forces armées ont eu à gérer des situations de contrôle de foule, de dissipation de rassemblement ou de lutte anti-émeute, qui sont des situations de maintien de l'ordre très différentes des opérations offensives qui ont pu être menées contre certaines Katibat d'Aqmi ou d'Ansar Dine au nord Mali.

On peut aussi penser à la variété des missions de la force barkhane en BSS : dans le cadre de l'opération Barkhane, les forces françaises peuvent être amenées à agir sous l'emprise du droit international humanitaire (DIH) contre des GAO liés au conflit malien opérant au Niger par exemple, et dans le même temps, ou presque, agir en soutien des forces locales en vertu d'accords de défense bilatéraux. C'est le cas notamment lorsqu'elles

participent à l'interception d'un convoi d'hommes en armes. Il peut en effet s'agir de membres d'un groupe armé terroriste (GAT) en route pour le Mali ou de trafiquants, connus pour être nombreux et dangereux dans ce secteur de l'Afrique et qui relèvent d'une opération de police en ce sens qu'elle a pour objet d'interrompre des activités criminelles :

- parce que les gendarmes ne sont pas cantonnés au sol national et que précisément ils peuvent être déployés lorsque les missions sont proches de celles qu'ils peuvent connaître sur le sol national (ex RCA ou Kosovo)
- enfin, parce que le déploiement récent de 10 000 militaires des armées sur notre sol national (opération sentinelle) après les attentats de janvier 2015 et alors même que nous considérons (en dépit des déclarations politiques recourant un peu trop largement au vocabulaire guerrier mais aussi en dépit de l'ampleur et de la régularité des attentats) qu'il n'y a pas, à ce jour en tout cas, de situation de conflit armé sur le sol français et qu'il s'agit donc bien d'une situation régie par le DIDH et clairement pas par le DIH, conduit évidemment à repenser le partage des rôles entre les 3 forces de sécurité dont dispose la France.

Je reviendrai, je pense, dans la suite de la table ronde sur les débats qu'a connus la France du fait de ce déploiement massif, sur le sol national, de militaires chargés de seconder les forces de sécurité intérieure et donc de missions de police et de maintien de l'ordre.

La seconde sous-question, qui est de savoir si le droit applicable doit dépendre de la nature de la mission - la guerre ou la police pour prendre des notions un peu caricaturales mais parlantes - ou plutôt de la qualification de la situation générale - situation de paix ou de conflit armé - est tout aussi complexe. Elle l'est d'autant plus que si la qualification de la situation générale comme étant une situation de conflit armé peut *a priori* suggérer un usage de la force plus permissif, en termes d'équipement ou d'armement, qui est la thématique précise de notre TR, certaines restrictions existent au contraire pour la conduite des hostilités alors qu'elles ne s'appliquent pas pour des missions de maintien de l'ordre.

Au risque de paraître esquiver la question, je crois que la doctrine française consiste en réalité à mêler les deux critères de finalité et de contexte. Cela revient à dire *de facto*, lorsque les armées françaises sont engagées dans des opérations de police ou de maintien de l'ordre alors qu'elles sont en opération dans un contexte de conflit armé, leurs règles d'engagement sont en fait très proches de celles qui s'appliqueraient pour le temps de paix. Pour dire les choses autrement les ROE, pour les missions

de maintien de l'ordre, reflètent une conception des trois grands principes que sont les principes de nécessité, de proportionnalité et de précaution, qui sont inspirés davantage du DIDH que du DIH:

- Contrairement à la situation de conflit armé qui impose une nécessité pour faire un usage de la force, y compris létale, le maintien de l'ordre en temps de paix repose sur le principe «d'absolue nécessité», lequel implique que la force soit utilisée en dernier recours et uniquement pour poursuivre un but légitime, comme la légitime défense, effectuer une arrestation régulière, ou réprimer une émeute.
- Le principe de proportionnalité est également appréhendé de manière différente en DIH et en DIDH. En DIH, ce principe protège les personnes civiles et biens civils contre les dommages qui seraient excessifs par rapport à l'avantage militaire direct attendu d'une attaque, mais non la cible légitime d'une attaque. En situation de maintien de l'ordre où sont appliquées, les règles du DIDH, le principe de proportionnalité exige la recherche d'un équilibre entre la menace représentée par l'individu et le risque potentiel pour cette personne ainsi que pour les tiers. Ainsi, la vie de l'individu posant une menace imminente est elle-même prise en compte, à la différence du DIH.
- Enfin le principe de précaution, revêt également une acception différente en situation de conflit armé et de maintien de l'ordre en temps de paix. En DIH, ce principe exige que les belligérants veillent constamment à épargner la population civile et les biens civils. Au contraire, en DIDH, toutes les précautions doivent être prises pour éviter, autant que possible, l'usage de la force en tant que telle, et non la mort civile simplement accidentelle ou une blessure ou des dommages causés aux biens civils. Il s'agit ici avant de respecter le « droit à la vie » qui n'est pas consacré comme tel en DIH.

Mais cette doctrine de l'usage de la force minimale pour les missions de maintien de l'ordre, force strictement nécessaire pour faire cesser un acte ou un comportement et dénué de tout caractère offensif, ne va pas jusqu'à conclure que la situation de conflit armé n'aurait aucune incidence. On reviendra je pense sur le sujet de l'armement mais en termes d'usage de la force également, nous considérons que la contrainte de la légitime défense ou de la nécessité absolue qui s'applique pour les opérations de police en temps de paix peut être desserrée pour ces opérations réalisées dans un contexte de conflit armé, du fait de la porosité des situations et des liens qui peuvent exister entre les activités des membres des groupes armés directement liées au conflit et les activités de trafic ou de violence de droit

commun que ces groupes pratiquent aussi. Tout dépendra en réalité des circonstances. Pour reprendre le cas de la RCA, la dissipation d'une manifestation de civils à Bangui peut facilement prendre une autre coloration si des membres des groupes armés se mêlent à la population civile et sont armés.

Un point en tout cas ne fait pas de doute à nos yeux : les armées, sauf exception rarissime, ne sont pas des acteurs de la police judiciaire = leur finalité n'est pas de poursuivre des criminels pour les arrêter et les insérer dans un circuit judiciaire (l'exception rarissime étant le cas de la traque des criminels de guerre qui avait été confiée aux armées en Bosnie). Contrairement aux policiers et aux gendarmes qui agissent sous les ordres de l'autorité judiciaire dès lors que leur mission n'est plus de la prévention mais de la répression d'une infraction qui a été commise, les forces armées sont placées sous la seule autorité du commandement militaire et donc du ministre de la défense. Cela signifie aussi que quand la France indique qu'elle engage ses militaires dans des opérations de contre-terrorisme, en tout cas au Mali ou sur le théâtre irako-syrien, il ne faut pas considérer qu'il s'agirait d'une opération de police engagée contre des criminels que les armées auraient pour mission d'arrêter car ils seraient des terroristes au sens du droit pénal français ou local. Il s'agit bien de conduite d'hostilités contre un ennemi. Cet ennemi utilise des méthodes qu'on peut qualifier de terroristes dans la mesure où nombre d'entre elles (prise d'otage, IED, attentats suicides, utilisation de la population civile comme bouclier humain) a pour objet de terroriser les populations et sont les armes classiques du faible au fort. Mais c'est à vrai dire le lot assez commun des conflits asymétriques. En revanche il est clair à nos yeux que s'agissant de la conduite des hostilités contre les organisations terroristes au Sahel ou contre Daech, c'est bien le DIH qui s'applique et non le droit international des droits de l'homme.

Je souhaite rendre compte ici des éléments du débat qui a eu lieu en France sur la question de l'équipement des soldats lors du déploiement massif de militaires des armées sur le sol national, dans une situation, je l'ai indiqué, qui n'est pas une situation de conflit armé.

Certains, y compris au sein de l'institution militaire, ont plaidé pour que l'équipement des militaires de Sentinelle soit adapté à la nature de la mission. La justification de cette adaptation de l'équipement résidait dans la volonté de pouvoir mieux respecter le principe de nécessité absolue pour l'usage de la force létale (article 2 CEDH) et de proportionnalité de la riposte qui est au cœur de l'excuse pénale de légitime défense. Il paraît en effet *a priori* compliqué de garantir cette proportionnalité avec des armes de guerre, sans compter les risques de dommages collatéraux.

Cette demande a été en partie entendue puisque les militaires de sentinelle sont dotés de bâtons télescopiques et de bombes lacrymogènes, alors que telle n'est pas la dotation classique en OPEX.

Il a en revanche été considéré que l'éventail des armes à disposition des militaires (FAMAS – dont la crosse peut elle-même être utilisée comme arme -, le bâton et la bombe lacrymogène donc) constituait un panel suffisant pour permettre d'adapter la réponse à l'agression. Et le choix a été fait de ne pas doter les militaires de sentinelle d'armes à létalité réduite de types flash ball ou taser. Demander à des soldats qui ont été formés et sont habitués au maniement du famas d'apprendre en peu de temps à se servir d'armes à létalité réduite aurait posé de très sérieuses difficultés et risquait en réalité de modifier les réflexes de militaires d'autant plus enclins à maîtriser l'usage de la force qu'ils savent que leur armement est meurtrier. L'introduction des flash balls dans la police en France avait d'ailleurs permis de mesurer que l'usage d'armes à létalité réduite pouvait avoir pour effet, au moins temporairement, de désinhiber l'usage de l'arme et de rendre les accidents et les blessures voire les décès plus fréquents.

Le choix de ne pas équiper les militaires des armées engagés sur le territoire national d'armes à létalité réduite répondait aussi à un objectif symbolique : ne pas banaliser la présence de militaires sur le sol national en créant une sorte d'armée de l'intérieur distincte de celle qui serait déployée en OPEX.

Enfin, Sentinelle est une opération conçue pour répondre à la militarisation de la menace terroriste sur notre sol ; il aurait ainsi été paradoxal que les soldats soient « démilitarisés ».

Ce qui est vrai pour l'opération Sentinelle l'est aussi, *a fortiori*, pour les missions de maintien de l'ordre en OPEX : en clair, ce n'est pas d'abord l'équipement qui doit être adapté à la nature de la mission mais bien les règles d'engagement et la façon dont l'équipement peut être utilisé (ex : tirs en rafale, tirs au coup par coup). J'ajoute que pour des militaires déployés en OPEX être dotés d'armes qui, parce qu'elles sont à létalité réduite, visent en réalité d'abord la population civile, est symboliquement et politiquement compliqué dès lors qu'ils ont d'abord en tête le principe fondamental en DIH de distinction entre les combattants (ou les membres des groupes armés organisés) et les civils à protéger. L'impact de l'utilisation de ces armes sur la « perception » de la Force dans le pays d'intervention (par exemple, la diffusion d'images montrant des éléments français en train de « tirer » sur des civils) peut d'ailleurs être dévastateur.

**V. Waging contemporary conflicts:
use of weapons by non-state armed groups**

The role of international organizations, including the UN in supporting compliance, including by establishing fact-finding procedures

Angela KANE

Senior Fellow, Vienna Centre for Disarmament
and Non-Proliferation

The UN was set up as an international organization that deals with Member States, and the aspect of dealing with non-state armed groups has only fairly recently come into focus. I have chosen to limit my remarks to the issue of weapons of mass destruction, as the topic is vast and exceeds my remit.

Several instruments adopted by the international community

In response to the attacks on the World Trade Center in New York on 11 September 2001, the Counter-Terrorism Committee (CTC) was set up on 28 September 2001 through Security Council resolution 1373¹

➤ CTC's mandate is to monitor the implementation of resolution 1373 – which requested countries to implement a number of measures intended to enhance their legal and institutional ability to counter terrorist activities at home.

These measures included taking steps to:

- criminalize the financing of terrorism
- freeze without delay any funds related to persons involved in acts of terrorism
- deny all forms of financial support for terrorist groups
- suppress the provision of safe haven, sustenance or support for terrorists
- share information with other governments on any groups practicing or planning terrorist acts
- cooperate with other governments in the investigation, detection, arrest, extradition and prosecution of those involved in such acts; and

¹ S/RES/1373 of 28 September 2001.

- criminalize active and passive assistance for terrorism in domestic law and bring violators to justice

Resolution 1737 was further strengthened by the adoption, in September 2005, by resolution 1624² on incitement to commit acts of terrorism, calling on UN Member States to prohibit it by law, prevent such conduct and deny safe haven to anyone “with respect to whom there is credible and relevant information giving serious reasons for considering that they have been guilty of such conduct³”. The resolution also called on States to continue international efforts to enhance dialogue and broaden understanding among civilizations.

This was followed, on 8 September 2006, by the adoption of the Global Counter-Terrorism Strategy³, when Member States reiterated their strong and unequivocal condemnation of terrorism in all its forms and manifestations, “by whomever, wherever, and for whatever purposes”.

The Strategy contains practical recommendations in four key areas:

- tackling the conditions conducive to the spread of terrorism
- measures to prevent and combat terrorism
- building countries’ capacity to prevent and combat terrorism and to strengthen the role of the United Nations system in that regard
- and ensuring respect for human rights for all and the rule of law while countering terrorism.

Countries are reporting to the CTC on compliance with this mandate, but there is nothing in either the mandate nor in the Global Counter-Terrorism Strategy that includes establishing fact-finding procedures. The General Assembly reviews the Strategy every two years (last in July 2016)⁴.

To strengthen this effort, the United Nations Counter-Terrorism Implementation Task Force (CTITF) was created in 2005. The Under-Secretary-General for Political Affairs is the Chair of CTITF and the Executive Director of the United Nations Counter-Terrorism Centre (UNCCT). CTITF’s mandate is to enhance coordination and coherence of counter-terrorism efforts of the United Nations system. The Task Force consists of 38 international entities which, by virtue of their work, have a

² Ibid., op. para. 1(c).

³ www.un.org/counterterrorism/ctitf/en/un-global-counter-terrorism-strategy.

⁴ See report of the Secretary-General on the implementation over the last decade, A/70/826. See also Plan of Action to Prevent Violent Extremism, A/70/674 and A/70/675, and General Assembly resolution A/RES/70/291 adopted on 19 July 2016.

stake in multilateral counter-terrorism efforts. Each entity makes contributions consistent with its own mandate.

While the primary responsibility for the implementation of the Global Strategy rests with Member States, CTITF ensures that the UN system is attuned to the needs of Member States, to provide them with the necessary support and spread in-depth knowledge of the Strategy and, wherever necessary, expedite delivery of technical assistance.

UN Security Council resolution 1540

The resolution was adopted in 2004⁵ - under Chapter VII of the UN Charter - and obliges States, *inter alia*, to refrain from supporting by any means non-State actors from developing, acquiring, manufacturing, possessing, transporting, transferring or using nuclear, chemical or biological weapons and their delivery systems. The resolution also requires all States to establish various types of domestic controls to prevent the proliferation of those weapons and their related materials. It also encourages enhanced international cooperation on such efforts.

While the mandate was extended until 2021, the year 2016 marks the year of the Committee's Comprehensive Review of the Status of Implementation of the resolution (which was mandated by Security Council resolution 1977 in 2011).

It should be noted that following the adoption of resolution 1540 in 2004, a number of States criticized the Security Council for adopting a resolution that takes on a legislative function and puts binding commitments on countries not members of the Security Council. Yet, by 2011, more than 120 States had reported to the 1540 Committee on their national framework for non-proliferation. What remains an issue, though, is that many States reported that they lacked the capacity to implement all measures required under 1540.

Yet another measure was taken in 2008 by the General Assembly: resolution 63/60, entitled Measures to prevent terrorists from acquiring weapons of mass destruction.

In its operative paragraph 5, the Assembly requested "*the Secretary-General to compile a report on measures already taken by international organizations on issues relating to the linkage between the fight against terrorism and the proliferation of weapons of mass destruction and to seek the views of Member States on additional relevant measures, including*

⁵ S/RES/1540 of 28 April 2004.

national measures, for tackling the global threat posed by the acquisition by terrorists of weapons of mass destruction and to report to the General Assembly at its sixty-fourth session”.

The first such report was issued a year later in 2009: only 12 States reported on their activities, as did five UN organizations and six other international organizations. While the reports were issued regularly, the latest report⁶ shows responses from 14 States and eight international organizations – a disappointing result.

The year 2005 brought another agreement to prevent nuclear terrorism: the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT). Based on an instrument originally proposed by the Russian Federation in 1998, the Convention provides

- a wide definition on materials and facilities covering both military and peaceful applications;
- it criminalizes the planning, threatening or carrying out acts of nuclear terrorism;
- it requires for States to take all practicable measures to prevent and counter preparations for offenses to take place inside or outside of their territories;
- it provides innovative provisions dealing with post-crisis situations concerning the handling of seized radioactive material, devices or nuclear facilities, as well as on modalities of return and storage thereof.

While ICSANT provides an important multilateral legal framework for countering terrorist threats, the Convention, as of May 2016, has 115 signatories and 104 States Parties and is thus not yet universal.

Secretary-General’s Mechanism

The Secretary-General’s Mechanism for Investigation of Alleged Use of Chemical and Bacteriological Weapons (SGM) is in fact the one instrument that focuses exclusively on investigating WMD use. It was adopted by the General Assembly⁷ and was later affirmed by the Security Council⁸. The investigations are to be conducted in accordance with guidelines and procedures⁹ that were endorsed by the General Assembly in 1990 and were

⁶ A/71/122 of 8 July 2016.

⁷ UN General Assembly resolution 42/37C.

⁸ UN Security Council resolution 620 (1988).

⁹ A/44/561, annex I.

later updated in 1997. Since then, lists of qualified experts and laboratories¹⁰ are compiled and maintained. The Guidelines and the roster of experts and laboratories constitute the key elements of the Mechanism. The procedures were again updated in 2006 to reflect relevant technical developments and experts have trained over the years to ensure readiness.

The UN did not, however, and I should say fortunately, have much experience in putting the SGM to use. Investigations according to the Mechanism were conducted in Mozambique and Azerbaijan in 1992; both were inconclusive.

When chemical weapons use was alleged in Syria, the SGM was activated in 2013, initially by the Government of Syria who requested the Secretary-General to investigate an incident in Khan al-Assal. It had been over twenty years since the SGM had been last activated; meanwhile, the Chemical Weapons Convention (CWC) was concluded and ratified by many Member States, leaving only a few outside the CWC – like Syria – to avail themselves of the SGM.

I will not dwell in detail on the findings, which were based on over 30 environmental samples and 80 interviews with victims, 34 of whom gave blood, urine and hair samples. These established definitive evidence of exposure to Sarin. The findings of the clinical assessments were consistent from both the interviews with clinicians and the review of medical records. I am sure many of you have read the report¹¹.

While the destruction of Syria's chemical stockpiles was progressing under resolution 2118¹², the use of chemical "barrel bombs" continued to affect the civilian population in Syria. The OPCW, already in April 2014, had established a Fact-Finding Mission (FFM) in response to persistent allegations of use of chlorine gas as a weapon in Syria. The FFM issued three reports over the course of a year, concluding in the second report, with a high degree of confidence, that chlorine had been regularly and systematically used as a weapon in the north of the Syrian Arab Republic.

These findings led to strong calls for accountability; calls that had been continuously made since the Ghouta report was first published. While the FFM reports were made available to the Security Council in February 2015, it was only in August that final accommodation was reached among the P-5 and a resolution adopted which established an OPCW-UN Joint

¹⁰ The experts on the roster can only be replaced or changed upon official notification from their respective governments.

¹¹ A/67/997 – S/2013/553 of 16 September 2013 and A/68/663 – S/2013/735 of 13 December 2013.

¹² S/RES/2118 of 27 September 2013.

Investigative Mechanism (JIM)¹³ with the aim to identify to the greatest extent feasible individuals, entities, groups, or governments who were perpetrators, organizers, sponsors or otherwise involved in the use of chemicals as weapons, including chlorine or any other toxic chemical, in the Syrian Arab Republic.

What is important to note is that the JIM, as stated in its first report to the Security Council¹⁴, is *not mandated to act and function as a judicial or quasi-judicial body*. Moreover, it does *not have any authority or jurisdiction, either directly or indirectly, to make a formal or binding judicial determination of criminal liability*. Accordingly, the Mechanism will function as a non-judicial investigative mechanism within its mandate, identifying “to the greatest extent feasible” individuals and other actors involved in the use of chemicals as weapons and the roles that they played.

The JIM team took at its starting point the 116 alleged incidents of CW use that were mentioned in the three OPCW Fact-Finding Mission reports. It narrowed them down to 23 incidents that lent credence to the view that toxic chemicals were used. They selected nine of these as potential cases.

Despite the difficulties (lack of access to the locations; investigations – in some cases - conducted more than two years after the incident; sources that were secondary or tertiary, difficulty of finding independent sources of information that could provide access to individuals and information material), the Mechanism, in its third report to the Security Council¹⁵, concluded in two cases (Talmenes and Sarmin) that the incidents were “caused by the Syrian Arab Republic helicopter dropping a device”, while it concluded in a third incident (Marea) that “there was sufficient information that the Islamic State in Iraq and the Levant (ISIL) was the only entity with the ability, capability, motive and means to use sulfur mustard”.

In its fourth report¹⁶, the Mechanism determined that a Syrian Armed Forces helicopter caused the release of a toxic substance in Qmenas, while another incident in Binnish remained inconclusive. This report was released after a short one-month extension of the mandate¹⁷.

Following consideration of the evidence before them, the Security Council authorized another one-year extension of the mandate of the JIM¹⁸, “with the possibility of further extension”.

¹³ S/RES/2235 of 7 August 2015.

¹⁴ S/2016/142 of 12 February 2016.

¹⁵ S/2016/738 of 16 August 2016.

¹⁶ S/2016/888 of 21 October 2016.

¹⁷ S/RES/2314 of 13 October 2016.

¹⁸ S/RES/2319 of 17 November 2016.

What is lacking in the resolution authorizing the extension is any mention of the critical question of the final determination of accountability. As noted, the JIM does not have any authority of jurisdiction, either directly or indirectly, to make a formal or binding judicial determination of criminal liability. So how would the issue of accountability be taken up?

It had been expected that the Security Council would address this question in some form, but in the difficult political environment in the Security Council, kicking the can down the road and mandating an extension was probably the only feasible solution. What will ultimately be the effective outcome is anybody's guess at this point, but after having been closely involved with the Syria dossier for the last three years, I, like so many others, am hoping for any steps that will bring us closer to a solution of this sad and painful chapter in world events.

The Nuclear Security Summits

The nuclear security summit initiative began with an April 2009 call by U.S. President Barack Obama to hold a global summit on nuclear security in 2010 as part of an effort to "secure all vulnerable nuclear material around the world within four years". The broad goal of the summit process is to address the threat of nuclear terrorism by minimizing and securing weapons-usable nuclear materials, enhancing international cooperation to prevent the illicit acquisition of nuclear material by non-state actors such as terrorist groups and smugglers, and taking steps to strengthen the global nuclear security system. I must add that the Summits addressed civilian nuclear materials – which amount to only some 15% of all nuclear materials

The summit process ended in 2016 at a fourth summit in Washington, DC March 31-April 1. The three previous summits were held in Washington D.C. in 2010, Seoul, South Korea in 2012, and The Hague, Netherlands in 2014.

Each summit has produced a consensus communique that reaffirmed the broad goals of the summits and encouraged States to take actions, such as ratifying key treaties or minimizing stockpiles of weapons-usable materials. These voluntary, caveated recommendations were enhanced by individual state-specific commitments made at each summit. These pledges, known as house gifts, included actions such as repatriating weapons-usable materials, holding trainings for nuclear security personnel, updating national laws and regulations, and taking steps to combat illicit trafficking. At each subsequent summit, States reported on the progress made toward fulfilling

these commitments. All 53 participating States made national pledges at at least one summit.

Among the summits' chief accomplishments is the recovery or elimination of more than 1,500 kilograms of highly-enriched uranium and separated plutonium, the establishment of dozens of new training and support centers, and updates to national laws on nuclear safety and security by most States.

The Global Initiative to Combat Nuclear Terrorism (GICNT) which was launched in 2006, is a voluntary international partnership of 86 nations and five international organizations that are committed to strengthening global capacity to prevent, detect, and respond to nuclear terrorism. The GICNT works toward this goal by conducting multilateral activities that strengthen the plans, policies, procedures, and interoperability of partner nations.

All partner nations have voluntarily committed to implementing the GICNT Statement of Principles (SOP), a set of broad nuclear security goals encompassing a range of deterrence, prevention, detection, and response objectives. The eight principles contained within the SOP aim to develop partnership capacity to combat nuclear terrorism, consistent with national legal authorities and obligations as well as relevant international legal frameworks such as the Convention for the Suppression of Acts of Nuclear Terrorism, the Convention on the Physical Protection of Nuclear Material, and United Nations Security Council resolutions 1373 and 1540.

The United States and Russia serve as Co-Chairs of the GICNT, while the Netherlands leads the Implementation and Assessment Group (IAG) under the guidance of the Co-Chairs. To date, the GICNT has conducted over 70 multilateral activities and nine senior-level meetings. The GICNT is open to nations that share in its common goals and are actively committed to combating nuclear terrorism on a determined and systematic basis.

Conclusion

The international community has taken a lead role in focusing on the use of weapons by non-state actors. I have outlined above the various instruments in the United Nations (Counter-Terrorism Committee and CTITF, resolution 1540, Secretary-General's Mechanism, Joint Investigative Mechanism) as well as other initiatives taken by the international community, and while no new initiatives are currently on the table, increased focus has been on drawing attention to what is seen to be

the increasing probability of non-state actors able to obtain and deploy such weapons.

The issue continues to have a high profile. The Security Council held a one-day meeting on 23 August 2016 devoted to the evolving threat of weapons of mass destruction falling into the hands of non-state actors and terrorist groups. The Secretary-General, while urging States to “refocus seriously on nuclear disarmament”, also questioned the international community’s ability to prevent or respond to a biological attack¹⁹. This concern was echoed by a number of speakers at the meeting, who cited new threats such as the use of unmanned aerial vehicles, 3-D printers and malicious software to launch a cyberattack on chemical, biological, radiological or nuclear facilities.

What remains to be seen is whether the currently-available tool box is sufficient. It clearly strengthens States’ efforts to put up barriers to access of WMD materials, but it will not guarantee that non-state actors will not gain access to illicit materials, and use them.

¹⁹ www.un.org/sg/en/content/sg/speeches/2016-08-23/remarks-security-council-open-debate-non-proliferation-weapons-mass.

Measures to bring accountability

Judge Chile EBOE-OSUJI

International Criminal Court, The Hague

1. The elementary considerations of humanity

The subject of this panel concerns legal accountability for non-state groups, with regards to their unlawful use of weapons. I propose to approach the subject from the perspective of a certain debate that is currently troubling the conception of crimes against humanity as defined in the Rome Statute.

In the taxonomy of international crimes a technical distinction now exists between war crimes and crimes against humanity, as a matter of their respective definitions. But that does not negate the importance of the occasional reminder that the normative regulation of war crimes derives context and orientation from the needs of international law to proscribe crimes against humanity. That is to say, basic considerations of humanity have always underlain the motives of international law in its directional growth in the area of international humanitarian law.

This is all too evident from the Declaration of St Petersburg (1868). It contains the following memorable attestations that:

- the progress of civilization should have the effect of alleviating as much as possible the calamities of war;
- the only legitimate object which States should endeavour to accomplish during war is to weaken the military forces of the enemy;
- for this purpose it is sufficient to disable the greatest possible number of men;
- this object would be exceeded by the employment of arms which uselessly aggravate the sufferings of disabled men, or render their death inevitable;
- the employment of such arms would, therefore, be contrary to the laws of humanity...

Notably, the Declaration ended with the stated aspiration of the parties to reach an understanding in future, as soon as ‘a precise proposition shall be drawn up in view of future improvements which science may effect in the armament of troops, in order to maintain the principles which they have established, and to conciliate the necessities of war with the laws of humanity.’

The concerns that animated the Declaration of St Petersburg were wholly echoed (half a century later) in the sentiments of President Woodrow Wilson, as he articulated them on behalf of the statesmen gathered in Paris in 1919 (after the First World War) to create the League of Nations. As he expressed the matter, the purpose of the League of Nations was to bring an end to a warring culture that had ravaged Europe through the years - and, in that regard, to craft a treaty they hoped would maintain peace permanently among nations.

The golden thread that ran through those purposes was the need to stop the real strains and burdens of war from being thrown back from the war front to 'where the heart of humanity beats.' Wilson's high hope in creating the League of Nations was that 'the watchful, continuous cooperation of men can see to it that science, as well as armed men, is kept within the harness of civilization.' No doubt, the 'harness of civilisation' that he and his colleagues contemplated at the Paris Peace Conference is one that typically protrudes from basic considerations of humanity.

The Martens Clause picks up that thread, in its repeated reiteration in international law instruments that regulate armed conflicts. We all recall the classic message of the Martens Clause: 'Until a more complete code of the laws of war is issued, the High Contracting Parties think it right to declare that in cases not included in the Regulations adopted by them, populations and belligerents remain under the protection and empire of the principles of international law, as they result from the usages established between civilized nations, from the laws of humanity and the requirements of the public conscience.'

For the sake of time, we can skip reading article 227 of the Versailles Treaty and the report of its antecedent negotiations, and the text of the Nuremberg Charter, for a similar theme. But I should note the continuation of that ubiquitous theme into one of the most dominant contemporary documents of our time - the Rome Statute - in the concern (as stated in its preamble) about a history of the world in which 'children, women and men have been victims of unimaginable atrocities that deeply shock the conscience of humanity.'

I could keep going in this vein, of course. But, I am sure that you do not need to be persuaded as to how the need of international law to proscribe crimes against humanity has served to give direction and content to international humanitarian law.

However, it is important to recall these things, as I engage the topic of accountability for non-state actors (in their unlawful use of weapons in contemporary armed conflicts) - and as I propose to do so from the

perspective of a certain debate that is currently troubling the conception of crimes against humanity as defined in the Rome Statute.

2. The theory of centrally directed aggregate complicity

Now, what is that debate? And why did it arise? I shall consider the last question first. Why did the debate arise? It arose from what is at best an awkward attempt to define the offence of ‘crimes against humanity’ in the Rome Statute. The drafters began by defining crimes against humanity under article 7(1) as certain acts and conducts ‘when committed as part of a widespread or systematic attack directed against any civilian population, with knowledge of the attack.’

Having done so, the drafters thought also to define - in article 7(2)(a) - the phrase ‘attack directed against any civilian population.’ And the definition runs thus: ‘Attack directed against any civilian population’ means a course of conduct involving the multiple commission of acts referred to in paragraph 1 against any civilian population, pursuant to or in furtherance of a State or organisational policy to commit such attack.’

With that, we come to the debate. That definition has resulted in a certain theory that should be of interest to us – the theory of centrally-directed aggregate complicity. The theory comes in two versions: (i) the basic or light version; and, (ii) the extended or extreme version.

Organisational Policy

The basic or light version is to this effect: at the ICC no accused may be convicted of a crime against humanity, if it cannot be shown that the acts of violence were committed ‘pursuant to an organisational policy.’ According to this theory, for every charge of crime against humanity, the Prosecutor must prove centrally-directed aggregate complicity in the attack against a civilian population. This is in the sense of: (a) the existence of an organisation; and, (b) that the organisation was complicit in the attack.

On a casual view, there may be the temptation to think that this manner of complicity is easily proved when you have an armed group alleged to have sponsored the attack. That may well be the case, when you have an armed group that had claimed responsibility for a particular attack.

But, even here, it is an interesting question how you prove in a court of law that the statements made in the media by someone claiming responsibility for, say, a terrorist attack, is a claim that must translate into the imputation of criminal responsibility against a particular accused person who pleaded not guilty to the resulting criminal charge. And the question of

legal accountability can get even more interesting when no armed group has claimed responsibility for the attack; in addition to the accused's profession of his own innocence in relation to any resulting criminal charge.

In those scenarios, it becomes very difficult to find the link in the fact pattern that readily connects the accused to an organisation, for purposes of establishing that centrally-directed aggregate complicity said to be a necessary element of crimes against humanity, by virtue of article 7(2)(a) of the Rome Statute.

But, beyond all that, there is the broader question, from the point of view of accountability, as to the wisdom - in the first place - of requiring proof of centrally-directed aggregate complicity in an attack that shocks the conscience of humanity.

'State-like' Organisation

Then there is the extended or extreme version of the theory of centrally-directed aggregate complicity. That theory is to the effect that it is not enough merely to prove that an aggregate entity was behind the attack and had directed it. But, just as crucially, it must be proved that the organisation in question has 'state-like' characteristics. The reason for this insistence is said to be that article 7(2)(a) speaks of 'state or organisational policy'. That asyndetic phrasal structure, it is argued, has a distinct substantive significance - in the sense (the argument goes) of signalling that the Rome Statute does not cover attacks by 'gangsters, motorcycle gangs, drug cartels, or even serial killers' or 'mafia-type groups' against a civilian population, whether or not they acted further to an organisational policy - regardless of the degree of widespread or systematic nature of the attack.

It is enough to say that the extreme version of the theory of centrally-directed aggregate complicity did not take into account that international criminal law got its start centuries ago, by criminalising pirates and slave traders as *hostis humani generis*. If one considered that those enemies of humanity were really no different from 'gangsters, motorcycle gangs, drug cartels, or even serial killers' or 'mafia-type groups', the tendency of the Rome Statute to cover those kinds of criminals may not be too far-fetched after all. It does so, not so much by looking at what the culprits are called as a criminal genre, or how they are organised, but by their actual infliction of widespread or systematic attack against a civilian population in any manner that shocks the conscience of humanity.

The Absurdity

At a fundamental level, the implication of these theories simply comes to this: for purposes of the Rome Statute, there is no international crime, in the order of crimes against humanity, unless centrally-directed aggregate complicity can be proved. The theory of centrally-directed aggregate complicity - in any of its versions - raises a myriad of very difficult questions that worry the theory's normative stability.

Complementarity

In order to appreciate that normative instability, we may begin by keeping in mind that the operative force of the Rome Statute is triggered only as a matter of last resort. In other words, the jurisdiction of the ICC is a complementary one. That means, as you will recall, that the Rome Statute system engages only when States with the closest sovereign connections to the situation in question have proved unable or unwilling to exercise national criminal jurisdiction genuinely.

This, then, is a critical prerequisite - and a threshold issue. It is a threshold matter in the sense that before we can get to the question of whether the material facts of the case would satisfy the elements of crime as set out and defined in the Rome Statute for purposes of its classification as an international crime, it must be shown that the States with the closest sovereign connections to the case have proved unwilling or unable to exercise national criminal jurisdiction at all or genuinely.

Now, this prerequisite immediately begins to drag in the following proposition: However deeply shocking to the conscience of humanity, and however widespread the massacre of a civilian population might be, no one implicated in, say, a massacre may be tried at the ICC for a crime against humanity, unless aggregate complicity can be shown to have driven the attack. And - here is the clincher - it is wholly irrelevant that the national authority with sovereign jurisdiction over the crime has been unwilling or unable to investigate or prosecute the crime genuinely. I do not know about you, but the proposition induces a very sinking feeling in my own heart. For it feels to me like a prescription for a miscarriage of accountability for a crime that shocks the conscience of humanity.

Comparative Factual Situations

The looming absurdity may further be viewed from the following illustrative angle (SLIDE). In Situation A, a widespread or systematic attack that left 1,000 victims dead amounts to a crime against humanity, because there is clear evidence of centrally-directed aggregate complicity. But there is no crime against humanity in Situation B, where a widespread

or systematic attack left 5,000 victims dead: this is simply because there is no clear evidence of centrally-directed aggregate complicity in the attack. Some may think it a far-fetched example, that 10,000 people could ever be subjected to a 'widespread or systematic attack' without centrally-directed aggregate complicity. But it requires only to consider that 'Little Boy' (the smaller of the two bombs dropped on Japan over 70 years ago) killed over 70,000 in Hiroshima.¹ It took one airplane to deliver that lethal payload.

Is it possible that a single individual may be able in the future to fly one airplane, and may be able to drop one bomb or two that could kill that many people - equalling the total population of an ethnic or national population? In contemplating the probabilities in that question, it may help to keep in mind that there are 30 countries around the world, the population of each of which is less than 70,000 inhabitants. It may also help to keep in mind that there are over 30 football stadiums around the world with occupant capacities ranging between 70,000 and 150,000 people. The May Day Stadium in Pyongyang, North Korea has a capacity of 150,000 people. There are 40 countries each of which has less than that number of inhabitants.

All that should give us some perspective on how many innocent civilians can be exposed to the atrocities of one incident alone or a few at most - thus making the aggregate complicity a pointless inquiry in the order of crimes that have the capacity to shock the conscience of humanity.

With the endless quest of science to shrink kinetic matter to the vanishing point, the conception of crimes against humanity can, thus, not depend on the practical ability of States - acting in good faith - to secure humanity against the ability of individuals to inflict casualty and destruction upon a very large number of people, with weapons of mass destruction that come in small sleeveings - regardless of the question whether they acted pursuant to centrally-directed aggregate complicity.

Indeed, harm from 'lone wolves' need not come in the dramatic manner of exploding bombs. Depending on the circumstances, the intentional release of injurious chemical or biological agents for civilian populations to ingest or inhale, may properly raise questions of an attack against the civilian population such as may amount to a crime against humanity.

The foregoing betray absurdities that may not readily be presumed as the intentment of the State Parties to the Rome Statute in relation to article 7(2)(a). Yet, that is the logic of the theory of centrally-directed aggregate

¹ See Hiroshima in *Encyclopædia Britannica* at www.britannica.com/place/Hiroshima-Japan.

complicity in a widespread or systematic attack against a civilian population.

It is, indeed, such views of the law that once caused Lord Reid to say: 'Sometimes the law has got out of step with common sense. We do not want to have people saying: "if the law says that the law is an ass".² It is possible to save the Rome Statute - and the international law that it helps to give shape - from that view. But that requires keeping in mind at all times that it is the protection of humanity that gave the Rome Statute its purpose.

Further Reading

A very large tome can be written on the difficult prospects of the theory of centrally-directed aggregate complicity as an element of crimes against humanity as defined in the Rome Statute. I do not have the time to engage more fully in that discussion. For those of you interested in further discussion of the matter, you can read the decision delivered on 5 April 2016, terminating the case against Ruto and Sang.

Implications for International Crimes in General

As I said earlier, the questions engaged by the theory of centrally-directed aggregate complicity render that theory normatively unstable, hence making the theory a difficult one to rely on in the actual administration of justice. Conversely, the acceptance of the theory may also in the long run render unstable other types of international crimes, such as war crimes and the crime of genocide. It is noted in this connection that the definitions of those crimes in the Rome Statute do not require on their face proof of centrally-directed aggregate complicity, as such.

And here comes one more signal of theoretical instability. Is it correct to insist that an incident cannot amount to an international crime, in the manner of a crime against humanity, unless centrally-directed aggregate complicity is proved? And this is so because of the form of words and phrases used to define crimes against humanity in article 7(2)(a) of the Rome Statute.

But what about the definitions of war crimes and genocide within the Rome Statute? There is no equivalent form of words and phrases in their own definitions that require centrally-directed aggregate complicity as an element of those crimes. Does it then mean that the absence of an equivalent form of words and phrases in their own definitions, does not trouble their status as international crimes? Or will we (sooner or later)

² Lord Reid, 'The Judge as Law Maker' (1972-73) 12 *Journal of Society of Public Teachers of Law* 22 at p. 25.

begin to see an evolution - consciously or subconsciously - in the manner of normative reorientation of theories concerning the elements of those other crimes; so that a subconscious view is taken of them as also requiring proof of centrally-directed aggregate complicity as well? After all, we all know of the jural kinship that exists between crimes against humanity, war crimes and the crime of genocide.

The solution

If it is accepted that the theory of centrally-directed aggregate complicity will lead to absurdity sooner or later, as I fear will be the case, notwithstanding the words and phrases appearing in article 7(2)(a) of the Rome Statute, the question arises as to what should be the solution, mindful of the actual words and phrases appearing in the provision.

In my view, we are not presented with an impossible legal problem. The solution is that article 7(2)(a) must follow the interpretation that Grotius and Vattel have offered in their time. Vattel had observed that '[t]here is not perhaps any language that does not also contain words which signify two or more different things, and phrases which are susceptible of more than one sense.'³ It is for that reason that '[e]very interpretation that leads to an absurdity, ought to be rejected; or, in other words, we should not give any piece a meaning from which any absurd consequences would follow, but must interpret it in such a manner as to avoid absurdity. As it is not to be presumed that any one means what is absurd, it cannot be supposed that the person speaking intended that his words should be understood in a manner from which an absurdity would follow... We call absurd not only what is physically impossible, but what is morally so...'⁴

Grotius, before him, had said much the same thing. According to him, consequences are a proper clue to correct interpretation. As he put it: 'Another source of interpretation is derived from the consequences, especially where a clause taken in its literal meaning would lead to consequences foreign or even repugnant to the intention of a treaty. For in an ambiguous meaning such an acceptance must be taken as will avoid leading to an absurdity or contradiction'.⁵

The absurdity to be avoided is that those who engage in attacks that shock the conscience of humanity - especially when directed against innocent civilians - by exploiting or harnessing (in abusive way) the lethal

³ Vattel, *The Law of Nations*, *supra*, p. 416.

⁴ *Ibid*, p. 418.

⁵ Hugo Grotius, *The Rights of War and Peace, including the Law of Nature and of Nations* (translated from the original Latin with notes and illustrations from political and legal writers, by A C Campbell) (1901) p. 179.

capacity of science to inflict maximum casualty (beyond strict military necessity), should escape accountability, due to some improbable legal theories that ignore the plight of humanity that so centrally preoccupies international law. That, in my view, should be a guiding consideration in measures to bring accountability to bear when non-state actors use unlawful weapons in armed conflicts of today and those of the future.

Role of civil society in supporting compliance

Katherine KRAMER

Programme Director for Asia, Geneva Call

To be clear, there are many civil society organisations (CSOs) that work to promote compliance of armed non-state actors (ANSAs) with regards to weapons-related issues in different ways and to different degrees. Today, I will focus my presentation on the efforts of one NGO, Geneva Call, which is unique in many ways, in engaging armed non-state actors to adhere to international humanitarian norms, including those related to weapons issues.

Geneva Call is an international humanitarian organization and as such, it operates under the principles of humanity, neutrality, impartiality, independence and transparency (meaning that Geneva Call informs the concerned government about its work). Its purpose is to enhance the protection of the civilian population during situations of armed violence /armed conflict. Geneva Call itself does not classify whether something is a non-international armed conflict (NIAC) or not. What is important is whether there is an armed non-State actor present, carrying out armed action with a humanitarian impact on the civilian population. Geneva Call engages ANSAs to respect the principles of international humanitarian law (IHL) and international human rights law (IHRL). It is also important to note that we are an advocacy organization, not an assistance organization (nor a peacebuilding one for that matter). Thus we often work in cooperation with local actors and specialized organizations.

As a quick recap, the majority of ANSAs use small arms and light weapons (SALW) as compared to heavy weaponry - although there are exceptions to be sure. But generally they are involved in asymmetrical warfare against States who are better resourced and equipped. Explosives - specifically IEDs - are a main component of most ANSA arsenals. Components are cheap and easily obtained.

Action on Armed Violence (AOAV) identified 59 different armed non-state actors using explosive weapons in 2015. The most prolific non-state actors in 2015 are ISIS, non-Kurdish Syrian rebels, Ukrainian separatists, Houthi rebels and the Afghan Taliban, which collectively account for 56% of all explosive weapons incidents. Non-state actors collectively caused at least 40% of civilian casualties over all for the period, although this figure is considered low as in some cases ANSAs do not claim responsibility and in others it is very difficult to attribute an incident to a specific actor. These

figures include lawful use (where civilian casualties could be considered acceptable collateral damage), as well as unlawful use of explosive weapons.

Geneva Call was launched in March 2000. Until 2010, its engagement of ANSAs was focussed solely on promoting the (victim-activated) anti-personnel mine ban. Geneva Call's innovative tool, the Deed of Commitment, allows ANSAs to both take ownership of the norms, but also be part of something bigger than themselves - to join their peers in expressing adherence to international humanitarian norms. All ANSAs sign the same document, which is then counter-signed by Geneva Call and the Government of the Republic and Canton of Geneva, who act as the custodians of the commitment.

To date, 49 ANSAs from around the world have signed the Deed of Commitment banning anti-personnel mines. It is currently engaging another 16 ANSAs on the APM ban, and promoting mine action as an interim step for those ANSAs not yet ready to sign. There are some ANSAs using victim-activated landmines/IEDs that we are not yet engaging.

However, it is not enough just to collect signatures. Geneva Call monitors and supports the ANSAs implementation of their commitments. Mine use has halted, stockpiles have been destroyed, mines have been marked and cleared, victims assisted, and communities informed of how to live safely in affected areas. As the bottom right picture shows, mine action efforts by ANSAs (and CSOs operating in their areas) is often not very professional nor up to international standards (of safety much less quality assurance). While they would welcome support in these endeavours, often support is not forthcoming, so they have to make do.

Despite the fact that many signatories (nearly half) were former AP mine users, compliance to the obligations runs high. There have only been a handful of allegations of violations, which Geneva Call then verified—both by collecting information from different sources, as well as through field visits and verification missions. There is one investigation ongoing—Geneva Call is awaiting government approval to undertake a verification mission. However, of the violations investigated to date, it was determined that only one ANSA had violated its commitment by using string-pulled devices, which if left unattended can function as a trip-wire (and thus victim-activated) device. After further discussion with the ANSA responsible, it decided to desist such use effective immediately.

That brings us to the internal cycle for compliance to international humanitarian norms by ANSAs. First, it is important that their internal rules and regulations are compliant to humanitarian norms. Their policies then must be disseminated to their members, who in turn need to put the policies

into practice. As with any other internal rules and regulations, the ANSAs have to monitor and enforce compliance. Nor is enforcing compliance just about sanctioning the person who broke the rule, but identifying what went wrong and addressing it. Sometimes this entails launching the cycle once again.

This brings us to Geneva Call's work to promote compliance to IHL more broadly through the promotion of 15 Rules for fighters in internal armed conflict (derived from over 140 rules applicable to NIAC as identified in the ICRC's 2005 study of customary international law). In 2010, Geneva Call formalized its trainings on IHL by developing a specific training package and material on the 15 Rules. Today, Geneva Call is conducting awareness raising and trainings on the 15 Rules to approximately 30 ANSAs, civil society and communities in around 10 countries.

In terms of weapons use, the rules 1 (distinction), 2 (proportionality), 3 (precautionary measures) and 4 (methods and means) are most relevant. In 2013, Geneva Call launched its «Fighter not Killer» video campaign. We have two videos thus far that address weapons related issues. In 2015, Geneva Call produced both illustrated booklets and posters to help with the dissemination of the norms to combatants. The same year, we also launched a mobile phone application to test combatants' knowledge of the 15 Rules (which includes a section on weapons use). I have used some of the scenarios in training and they are very popular.

In terms of the explosive weapons issue, with regards to ANSAs, Geneva Call:

- continues to conduct workshops and advocate for the respect of the AP mine ban
- conducts training on IHL.
- included a session on the humanitarian impact of the use of explosive weapons in populated areas for 35 ANSAs attending the 3rd Meeting of Signatories to the Deeds of Commitment in November 2014
- encourages ANSAs to refrain from using explosive weapons in densely populated areas (which is a commitment we made during the World Humanitarian Summit)
- plans to undertake a research project on explosive weapons use by ANSAs, funding permitting.

Geneva Call also contributes its experience in engaging ANSAs on explosive weapons-related issues to international fora aimed at trying to address the explosive weapons problem.

- We promote the engagement of ANSAs towards changing behaviour, as in our experience it works (at least with the majority of ANSAs we have engaged)
- We encourage the clearance and destruction of ERW in areas where ANSAs are ready and willing to cooperate. I remember a time when there was a window of opportunity to destroy a number of AP mines in Somalia, however, by the time assistance was mobilized, the window had closed and Al Shabbab had moved in. Later, when access was again possible, it was found that the explosive components had been salvaged and most likely used in IEDs.
- Local civil society and communities can play an instrumental role in encouraging most ANSAs to change their behaviour. As such, these organizations should be trained on IHL to aid in the dissemination and advocacy process.
- Supporting ANSAs in the implementation of their different humanitarian commitments can also aid to curb the diffusion of these devices and help create powerful advocates for positive change.
- Lastly, it is important to remember that ANSAs also become victims of explosive devices, becoming *hors de combat* and, therefore, should also receive medical care. Civilian victims in ANSA-controlled areas should also receive aid. All too often these victims receive much less assistance than those in government controlled areas.

Yes, Geneva Call has had positive results, but it is not without its challenges. It has faced roadblocks to access - restrictions placed by States or in some cases security challenges. It is difficult to show ANSAs the benefits of compliance, especially if the ANSA's policy or practice includes unlawful use of weapons. There is a dismal lack of technical assistance for clearance/EOD. States' unlawful use of weapons is also a challenge. Why should they comply if the States do not? And, lastly, changing behaviour takes time. Patience is a must; especially from donors who might expect an immediate change of behaviour of the groups we are engaging.

In conclusion, it is hard for governments and government organizations to directly engage in dialogue with ANSAs without it becoming politicized...this makes the work of civil society in supporting compliance by ANSAs essential. But, we can't do it without the support of governments namely, those concerned, who provide access; those who fund; those who mobilize to ensure clearance and EOD can take place; and those who work to ensure there is humanitarian space within which engagement can take place.

**VI. The use of explosive weapons
in populated areas in armed conflicts**

Un-/Acceptable Area Effects? Assessing Risk of Civilian Harm from the Use of Explosive Weapons in Populated Areas in Three Cases before the ICTY

Maya BREHM

Geneva Academy of International Humanitarian Law
and Human Rights

“Clearly, it is impossible to predict what happens to a particular munition; all that may be done is to describe the behavior, in a statistical sense, of the sample of impact points.”¹

*“The application of... precautions arises, first of all, from a moral perspective, namely how best to act responsibly and within the codes of accepted behavior and international law; and, secondly, on a much more pragmatic and military basis, in order to gain and maintain the support of the indigenous population... A consideration of such precautions was as relevant in 1995 as it is today, and will be tomorrow.”*²

Introduction

In recent years, humanitarian actors and international policy makers have raised growing concern about the harm caused to civilians by the use of explosive weapons, such as air-dropped bombs, artillery and mortars, rockets and cluster munitions. Across different conflicts, civilians make up over 90% of those directly injured or killed when explosive weapons are used in populated areas, such as in towns or cities.³ The use of explosive weapons that affect a wide area with blast and fragmentation is of particular

¹ M.R. Driels, *Weaponizing: Conventional Weapon System Effectiveness*, 2nd edn, American Institute of Aeronautics and Astronautics (AIAA), 2013, p 135. Consider also, No-Strike and The Collateral Damage Estimation Methodology, [United States of America] Joint Chiefs of Staff Instruction, CJCSI 3160.01A, 12 October 2012, D-2: *'The CDM does not predict the actual outcome of weapon employment'*.

² ICTY, *The Prosecutor v Ante Gotovina, Ivan Čermak and Mladen Markač*, IT-06-90-A, ‘Lt General Applegate’s Comments on Expert Witness Report’, Notice of the Filing of Public Redacted Version of Prosecution Response to Gotovina’s Second Rule 115 Motion, and Request for Change of Status in Corrigendum, 3 August 2012, Public Annex I, p 5663.

³ E.g. C. Hitchcock, *Patterns of Harm: Five Years of Explosive Violence, 2011-2015*, Action on Armed Violence, June 2016.

concern from a humanitarian perspective.⁴ The documented pattern of harm to civilians from the use of explosive weapons in populated areas calls into question the capacity of existing rules of international humanitarian law (IHL) governing the conduct of hostilities, as implemented in present practice, to effectively protect civilians against the effects of explosive weapons.⁵ The UN Secretary-General and other international and non-governmental actors are calling on states to review military practice and policy on explosive weapons. A number of states are taking steps to enhance the protection of civilians, including by way of a political commitment to refrain from the use of explosive weapons with wide area effects in populated areas.⁶

Several judgments of the International Criminal Tribunal for the former Yugoslavia (ICTY) deal with the legality of explosive weapon use in a populated area. This contribution examines how risk of civilian harm from such use is described in case materials and how such descriptions are translated into legal determinations in three cases: *Martić* (IT-95-11), *Galić* (IT-98-29) and *Gotovina et al.* (IT-06-90). Materials submitted by the prosecution and the defence indicate what legal professionals deem permissible use of explosive weapons in light of IHL rules for the protection of civilians. Testimonies and reports by expert witnesses afford insights into what military practitioners consider appropriate and acceptable in light of professional standards.

The case discussion shows that views diverge among legal and military practitioners about where the line against wide area effects of explosive weapons should be drawn. The ‘200m-Standard’ proposed by the Trial Chamber in *Gotovina* is controversial. The discussion also shows, however, that practitioners and judges routinely use a variety of measures, including metrics, to assess the acceptability, respectively, the permissibility, of risk of civilian harm from explosive weapons. Such metrics can support the articulation of a more widely shared and concrete, normative standard

⁴ Wide-area effects can result from the inaccurate delivery of a munition, a wide dispersal pattern of multiple munitions, a large blast or fragmentation radius of a munition or a combination of these factors.

⁵ For a more detailed treatment of the issue, see, e.g. M. Brehm, ‘Protecting Civilians from the Effects of Explosive Weapons in International Humanitarian Law’, in C. Harvey, J. Summers and N. D. White (eds), *Contemporary Challenges to the Laws of War: Essays in Honour of Professor Peter Rowe*, Cambridge University Press, October 2014, pp 235-267; ICRC, *Explosive Weapons in Populated Areas: Humanitarian, Legal, Technical and Military Aspects*, Expert Meeting, Chavannes-de-Bogis, Switzerland, 24 - 25 February 2015, June 2015.

⁶ For a compilation of relevant statements and further references, see International Network on Explosive Weapons (INEW), www.inew.org/acknowledgements.

against which practices of explosive violence can be judged with a view to enhancing the protection of civilians and increasing legal certainty.

Legal Framework

In ICTY case law, concern about the effects of explosive weapons on civilians tends to be framed in terms of the IHL prohibition to direct attacks against civilians and civilian objects, the prohibition on indiscriminate attacks, the prohibition on disproportionate attacks and the obligation to take precautionary measures in attack and against the effects of attack.⁷ As attackers seldom admit to having launched a direct attack on civilians, jurisprudence dealing with the use of explosive weapons in populated areas tends to revolve around the question whether an attack was indiscriminate or, more rarely, whether it was disproportionate or violated the attacker's precautionary obligations.⁸

Launching an indiscriminate attack or using an indiscriminate weapon is a serious violation of IHL but these acts are not listed among the crimes over which the ICTY has jurisdiction. It does have jurisdiction, however, over the war crime of attacking civilians.⁹ The ICTY has adopted the position that the 'indiscriminate character of an attack' can assist in determining whether the attack was directed against the civilian population, and that 'attacks which employ certain means of combat which cannot discriminate between civilians and civilian objects and military objectives are tantamount to direct targeting of civilians'. The war crime of directing an attack on civilians can, thus, be 'inferred from the indiscriminate character of the weapon used'.¹⁰

⁷ Arts 51(2-5), 52(2), 57 and 58, 1977 Additional Protocol I to the 1949 Geneva Conventions (API), reflecting customary IHL, applicable in non-international and international armed conflict.

⁸ E.g. Inter-American Court of Human Rights, *Caso Masacre de Santo Domingo v Colombia*, Judgment, Series C, no 259, 30 November 2012, §§228-229 (finding that launching a cluster munition in or near the urban area of Santo Domingo, was contrary to the precautionary principle, in light of the munition's lethality and limited accuracy). For a discussion of why proportionality does not occupy centre-stage, see, e.g., J. Dill, *Applying the Principle of Proportionality in Combat Operations*, Policy briefing, Oxford Institute for Ethics, Law and Armed Conflict, December 2010; J. D. Ohlin, 'Targeting and the Concept of Intent', 35 *Michigan Journal of International Law* (2013) 79-130.

⁹ Under Art 3 of the ICTY Statute, though not spelled out.

¹⁰ ICTY, *The Prosecutor v Stanislav Galić*, IT-98-29-A, Judgment (Appeals Chamber), 30 November 2006, §132. This inference is not automatic, however. For an accused to be held responsible for the 'wilful killing' of civilians as a war crime, the victim must be dead, the death must have been caused by an act or omission on the part of the accused (or a

There is insufficient consensus about what commonly used explosive weapons are deemed indiscriminate in certain or all contexts, absent a specific treaty prohibition, as exists, for example, for cluster munitions and anti-personnel landmines.¹¹ The criteria that are most frequently used to determine whether a weapon is of ‘indiscriminate character’ are those laid out in Art 51(4) of 1977 Additional Protocol I to the 1949 Geneva Conventions (API) relating to a user’s capacity to direct a weapon and limit its effects.¹² Consequently, the legality of explosive weapon use in a populated area depends on whether a weapon is dirigible enough and is in fact sufficiently directed and on whether its effects can be and are in fact sufficiently limited, so as not to ‘strike military objectives and civilians or civilian objects without distinction’.

Measures of Explosive Weapon Effects

Military practitioners tasked with determining what quantity and type of munition is required to effectively and efficiently achieve a defined level of damage to a target tend to frame issues of dirigibility and limits on the effects of weapons in terms of delivery accuracy (and precision) and area of effects.

Delivery Accuracy

The accuracy of delivery of unguided, indirect fire, surface-to-surface weapons discussed in the cases examined in this contribution is critically dependent on the user’s ability to predict the trajectory of a round and knowing the position of the target relative to the launcher. Delivery accuracy is a function of many factors, including delivery technique, hardware and software capabilities and various non-standard atmospheric conditions affecting the flight of the projectile, such as wind.

person for whom he or she was criminally responsible) and such act or omission must have been committed with intent to kill, or in the knowledge that death was a *probable* consequence. With regard to the latter (the *means rea*), it is insufficient that death was a *possible* consequence, but ‘indiscriminate intent to kill whoever is fatally injured as a result of [the perpetrator’s] action is sufficient’. (ICTY, *The Prosecutor v Milan Martić*, Case no IT-95-11-T, Judgment (Trial Chamber), 12 June 2007, §60.)

¹¹ Under the 2008 Convention on Cluster Munitions and the 1997 Antipersonnel Mine Ban Treaty, respectively.

¹² Art 51(4), API. See also, ICRC, Customary IHL Database, Rules 11 and 71.

All indirect fire, surface-to-surface explosive weapon systems experience two kinds of random errors: the mean-point-of-impact (MPI) error and the precision error. The MPI error (occasion to occasion error)¹³ relates to a weapon system's capability to place ordnance on the intended point of impact (on or next to a target). The precision error (round to round error) describes the closeness of impact points of a group of rounds to the mean point of impact, and is different for each round fired.¹⁴ The distribution of impact points around a desired point of impact reflects the effects of MPI error and precision error. A weapon that is precise but not accurate will hit close to the same point repeatedly, but that point may not be the desired point of impact. A weapon that is accurate but not precise will hit close to the desired point of impact, but not all shots will land close to each other, creating a dispersion pattern of impact points. If the weapon is both inaccurate and imprecise, the impact points are spread over a large area.

A common measure of the dispersion of impact points is the range error probable (REP, PE_r) and the deflection error probable (DEP, PE_d).¹⁵ The assumption in the analysis of delivery accuracy data is that the distribution of impact points is normal in the statistical sense (which does not hold in real life). The REP is, thus, defined as the distance from the desired point of impact to one of a pair of lines perpendicular to the range direction, equidistant from the desired point of impact, such that 50% of the impact points lie between them. Another commonly used measure is the circular error probable (CEP, CE_{50}), which is the radius of a circle, centred on the desired point of impact such that 50% of the impact points lie within it.¹⁶ The CEP, REP or DEP can be interpreted in two ways:

- the distance inside which 50% of the munitions are expected to impact, or

¹³ A series of rounds fired or a salvo would be one occasion (Driels, p 127). The terminology used is common for surface-to-surface weapon systems and may differ from that used in the context of air-to-surface and naval weaponry.

¹⁴ Driels, p 127, 212-213. MPI errors are the result of variations that affect all of the rounds on a given occasion the same way, e.g. due to variations in atmospheric conditions, variations in muzzle velocity of the projectile, calibration errors in the location system or firing technique. Precision errors result e.g. from manufacturing tolerances and round-to-round variations in launch velocity.

¹⁵ And height error, e.g. for time-fuzed rounds.

¹⁶ Driels, p 136. In many instances, the actual distribution of miss distances is not circular, however. The distribution pattern for mortars and gun or rocket artillery is elliptical.

- the distance inside which a single munition has a 50% chance of impacting.¹⁷

The other 50% of rounds fall outside of that perimeter, sometimes at a considerable distance from the desired impact point. In the case of unguided artillery or mortar rounds, rockets or cluster munitions, the dispersion pattern can represent an area of several hectares wide. These weapons are therefore often called ‘area weapons’, appropriate for use against ‘area targets’. A US field manual describes weapons with ‘a CEP greater than 50 meters’ as ‘area capabilities’,¹⁸ and a US procedure concerned with ‘mitigating collateral damage’ establishes a strong presumption against the use of unguided munitions to attack a target whose dimensions are below the ‘minimum target size value’ (MTS), that is, twice the area of 90% of impact points due to delivery error.¹⁹

Area of Effects

Another measure used to describe explosive weapon effects is the so-called ‘lethal area’ (or ‘lethal radius’, ‘damage criterion’, ‘damage function’ or ‘damage definition’), which is an effectiveness index defined for ‘a given degree of damage by a specific weapon to a particular target’.²⁰ The lethal area is a function of the weapon-munition-fuze combination and is dependent, among other factors, on the weight and velocity of fragments, detonation height, impact angle, the vulnerability of the target to blast and fragmentation and the specified level of damage to the target (such as ‘prevent standing enemy combatant from assault within 5 minutes’ or ‘cause irreparable damage to tank’). In the context of ‘collateral damage mitigation’, a related measure, the ‘warhead collateral effects radius’ (WCER) can be used to describe the distance between a target and the point at which the damage from the warhead can be expected to fall below a specified level.²¹

¹⁷ Driels, p 136.

¹⁸ Fire Support, US Department of the Army, FM 3-09, 3 November 2011, Sec 2-96.

¹⁹ CJCSI 3160.01A (2012), D-A-16; Driels, p 1027. $MTS = 2 \times DE_{90}$ where DE_{90} for surface-to-surface unguided munitions takes into account the MPI, precision error and target location error (at the 90% error probable).

²⁰ Driels, p 283. In weaponeering parlance ‘lethal’ and ‘kill’ do not necessarily mean death in the medical sense.

²¹ Driels, pp 535, 1021. From an effectiveness perspective, this range describes the ‘effective miss distance’ (EMD). Rounds impacting within the EMD range still damage the

Delivery error and area of effects measures are the basis for the calculation of minimum distances to avoid exposing own or friendly troops in the vicinity of a detonation to more than a specified level of risk. Similarly, with a view to minimizing incidental civilian harm, delivery error and weapon effects radius can be combined to calculate the ‘collateral effects radius’ (CER)²² and an area around a target where civilians and civilian objects are at a certain risk from explosive weapon effects (the ‘collateral hazard area’ (CHA) in US doctrine).²³ Based on the level of risk (e.g. a 10% or higher risk of serious or lethal injury from fragmentation to a 70kg-man wearing two layers of clothing akin to a summer uniform and standing in the open (a sports stadium, playground or open-air market) or a 1% or higher risk of structural damage to buildings in the area due to blast)²⁴ and population density data, the total number of civilians in the ‘collateral hazard area’ can be estimated,²⁵ and measures taken to reduce that number to a legally and otherwise acceptable level. Information about what ‘collateral damage threshold’ is deemed acceptable in any given situation, respectively, at what point risk of incidental civilian harm is reduced to an acceptable level is not publicly available.

Military practitioners commonly use such measures to assess the appropriateness of explosive weapon use in a given situation and manage the risk of harm to civilians or own/friendly forces in the vicinity of a target. Such measures are of interest to legal assessments about

target to a sufficient degree. From the perspective of civilian protection, the same measure can be used to describe the distance within which civilians remain at risk of harm.

²² A CER can be described as ‘a radius representing the largest collateral hazard distance for a given warhead, weapon, or weapon class considering predetermined, acceptable collateral damage thresholds that are established for each CDE level’. (CJCSI 3160.01A (2012), D-A-3.)

²³ CJCSI 3160.01A (2012), D-A-3. If the estimate is higher than a ‘predetermined, situation-specific threshold’ (the ‘non-combatant cut-off value’), additional measures need to be taken to limit weapon effects or delivery error before an attack can proceed. Ultimately, the decision to attack may have to be reviewed and authorized at a higher command level.

²⁴ Structural damage refers to the % of surface area (floors, walls) or of structural volume that is removed to prevent enemy military activity in or the ‘function’ of the building. At 1% structural damage, persons within the building are assumed to face a 10% risk of serious or lethal fragmentation injury. This method does not take into account the effects of blast-induced debris, which ‘has been operationally observed to be a significant hazard to noncombatant personnel’. (CJCSI 3160.01A (2012), D-A-2.)

²⁵ This data can reflect variations in density in function of time of day. It represents ‘the likelihood of civilians sustaining injuries if they are standing in the open near the target’. However, this method does not take into account ‘transient civilians’, that is, ‘random personnel walking by, or standing in close proximity to the intended target’. (Driels, p 1027; CJCSI 3160.01A (2012), D-5 and D-A-23.)

indiscriminate attacks, even if policy restrictions or requirements based on such measures are not explicitly required by IHL.²⁶ Conversely, even an elaborate procedure to estimate direct bodily harm to civilians is but one measure among others that those who plan or decide upon an attack are legally required to take in order to avoiding and minimizing civilian harm.²⁷ The next section discusses how technical and operational measures to manage risk of civilian harm from explosive weapon effects have been used to make legal determinations in three concrete cases before the ICTY.

Case Discussion

Martić

The *Martić* case deals with shelling on 2 and 3 May 1995 of the city of Zagreb, Croatia, by forces of the self-proclaimed Republic of Serb Krajina under the command of Milan Martić. M-87 Orkan Multiple Barrel Rocket Launchers (MBRL) were used to launch unguided rockets (the exact number was not confirmed) into Zagreb from a distance of 47-51km. Every rocket carried a warhead containing 288 shaped-charge and fragmentation submunitions, each containing 420 steel pellets (ball bearings) to be projected as primary fragments upon detonation.²⁸

Several experts considered that ‘due to its relatively large dispersion pattern’, the Orkan was ‘not a particularly suitable weapon for use (firing) against populated areas (particularly a large and densely populated area like Zagreb) as there is a high probability that major civilian casualties ... will result’.²⁹ According to one expert all impact points could be expected to lie within an elliptical area of dispersion of 972m by 1032m when the rockets are fired from a distance of 49km.³⁰

The Trial Chamber noted that the ‘dispersion error’ of the rocket

²⁶ According to the CJCSI 3160.01A (2012), D-4, the CDM ‘should not be construed as state practice with respect to customary international law’.

²⁷ Art 57, API. For instance, the method does not account for the risk of harm from marking or adjusting rounds of surface-to-surface unguided munitions. It is also unclear how indirect and longer-term, though foreseeable harm to civilians (as may result from damage to critical infrastructure or explosive remnants of war) is accounted for, and whether the models used adequately represent vulnerability to blast and fragmentation of members of the civilian population (including children and elderly persons).

²⁸ *Martić*, Judgment (Trial Chamber), 12 June 2007, §§462-463.

²⁹ *Martić*, Prosecution’s Submission of the Expert Report of Lieutenant Colonel Jožef Poje pursuant to rule 94bis, 28 February 2005, p 4145. See also the testimony of Major Ted Itani, Public Transcript of Rule 61 Hearing, 27 February 1996.

³⁰ *Martić*, Judgment (Trial Chamber), footnote 1248.

‘increases with the firing range and that, this error is about ‘1,000m in any direction’ when fired from the maximum range. It further noted that ‘The area of dispersion of the bomblets on the ground is about two hectares. Each pellet has a lethal range of ten metres’ and that ‘the weapon was fired from the extreme of its range’.³¹ The Trial Chamber characterized the weapon as ‘a non-guided high dispersion weapon’ and concluded that, ‘by virtue of its characteristics and the firing range in this specific instance, was incapable of hitting specific targets’. For these reasons, the Trial Chamber found that the M-87 Orkan is ‘an indiscriminate weapon, the use of which in densely populated civilian areas, such as Zagreb, will result in the infliction of severe casualties’.³²

With regard to the relationship between explosive weapon effects and the finding of indiscriminateness, several points are noteworthy:

- the ‘dispersal area’ referred to by the Trial Chamber is a measure for all rocket impact points and not one PE or CEP. Furthermore, in a footnote, the Trial Chamber pointed out that if a warhead opens along the edge of the dispersion ellipse, it is possible that part of the bomblets fall outside of the ellipse, by approximately 100m.³³
- In contrast, the Trial Chamber operates with the notion of a 10m ‘lethal area’, although one expert had testified that casualties can be produced up to 50m from the detonation point of a bomblet,³⁴ and another had mentioned that a ‘safe distance’ for own unconcealed personnel was 300m.³⁵
- What experts had also said, and which is not reflected in the Trial Chamber Judgment, is that they considered the use of the Orkan would only be appropriate for firing at targets of dimensions of 300x200m and above. The Trial Chamber noted that one of the alleged targets Zagreb, the Ministry of Defence complex, was 300x400m large,³⁶ but the Chamber considered, in light of ‘the nature of the M-87 Orkan’, that ‘the presence or otherwise of military targets in Zagreb is irrelevant’ and concluded that Martić

³¹ Ibid, §§462-463.

³² Ibid, §463.

³³ Ibid, footnote 1249.

³⁴ *Martić*, Testimony of Major Ted Itani, Public Transcript of Rule 61 Hearing, 27 February 1996.

³⁵ *Martić*, Prosecution’s Submission of the Expert Report of Lieutenant Colonel Jožef Poje pursuant to rule 94bis, 28 February 2005, p 4159.

³⁶ *Martić*, Judgment (Trial Chamber), footnote 1240.

had wilfully made the civilian population of Zagreb the object of attack.³⁷

The *Martić* case is often cited as an early judicial recognition that launching cluster munitions into a populated area is deeply problematic from a humanitarian standpoint. The weapon that was used is banned today under the 2008 Convention on Cluster Munitions. But what the Judgment means for the legality of long-range, unguided MBRL fire into a populated area remains ambiguous, not least because the Trial Chamber made reference to a variety of metrics, but it is at times unclear what these measures express exactly and how they relate to the Chamber's legal determinations.

Galić

The *Galić* case concerns the siege of Sarajevo, Bosnia and Herzegovina, by forces of the Bosnian-Serb Army under the command of Galić between September 1992 and August 1994. A variety of explosive weapons were fired into Sarajevo during that time, but the *Galić* case focuses on incidents involving 80mm and 120mm mortars. One such incident is the shelling of Markale market on 5 February 1994: Around mid-day, a 120mm mortar shell landed in the market (which occupied a space of ca. 41m x 23m). The shelling killed over 60 persons and injured over 140, including many children and elderly people.³⁸

In the *Galić* case, no claims were made that mortars are 'indiscriminate weapons' per se. The key question was what the (in)accuracy of delivery of mortars meant for legal determinations under IHL (and international criminal law (ICL)), specifically, whether civilians were directly targeted, whether they were the victims of an indiscriminate attack (from which intent to attack civilians may be inferred), or whether civilian casualties were incidental to a lawful attack.

³⁷ Ibid, §§461, 472. On appeal, the Defence challenged the characterization of the Orkan as an indiscriminate weapon and argued that the targets were large and that artillery fire is 'fraught with the possibility of [accidental or inevitable] errors', but the Appeals Chamber did not overturn the Trial Chamber's finding. (*Martić*, Judgment (Appeals Chamber), 8 October 2008, §240.)

³⁸ *Galić*, Judgment (Trial Chamber), 5 December 2003, §§438-439. The incident is sometimes referred to as Markale I. Another attack on the market (the Markale II incident) took place on 28 August 1995, shortly after Galić was replaced by Dragomir Milošević.

Expert witnesses held different views on the accuracy of mortar fire. One expert described mortars in several instances as accurate and as having a high probability of hitting a target. According to this expert, ‘The modern mortar is no longer the inaccurate weapon of the past, a proficient detachment with training can easily hit targets, throughout its ranges, to an accuracy of less than 40m’.³⁹ Regarding the Markale market shelling, he considered it ‘distinctly possible to hit the market with a single initially sighted round’, even more so if the target was pre-recorded.⁴⁰ This characterization contrasts with that of another expert who concluded with reference to technical limitations, challenges in accurately aiming mortars and weather influence, that mortars ‘are very inaccurate’. That expert considered it ‘entirely illegitimate... to be using artillery or mortars... in order to try and attack... targets consisting of one building or one vehicle... when the ability of artillery or mortar[s]... to hit that target are negligible and the chances of that artillery or mortars of hitting the surrounding civilian houses is 99.9 per cent.’⁴¹

The Majority of the Trial Chamber adopted the position that ‘a target, such as Markale market, can be hit from a great distance with one shot if the area is pre-recorded’ and concluded ‘that the mortar shell which struck Markale was fired deliberately at the market’. As the market was not a legitimate military objective in itself, the Majority found that the crime of attack on civilians had been committed.⁴²

The Appeals Chamber reached the same conclusion, but, interestingly, by a different route. Citing testimony to the effect that ‘an experienced mortar crew could reach to within 200 m or 300 m of their target on the very first shot’, and considering that ‘the closest military target to the market was 300 m away’, the Appeals Chamber concluded that ‘whether the SRK was aiming for the market itself or for some other target within the surrounding 300 m, it was aiming for a target within a civilian area’, and the shelling, thus, ‘deliberately targeted civilians’.⁴³

In other words, the Appeals Chamber treated a shell impact location that

³⁹ *Galić*, Confidential [Prosecutor’s] Submission of Expert Report [of Richard Higgs], 27 February 2002, pp 3258, 3249.

⁴⁰ *Ibid.*

⁴¹ *Galić*, Testimony of Pyers Tucker, 18 June 2002, pp 10028-10029. Consider also, *Galić*, Judgment (Trial Chamber), §457, referring to arguments by Defence experts to the effect that the party launching the shell ‘could not have intended to hit Markale market since the theory of probability predicts that the likelihood of hitting a target the size of the market [assumed to be ca. 36m x 30m] by firing a 120 mm mortar shell from a distance [of between 1400m to 6464m] is very low, even assuming ideal firing conditions’.

⁴² *Galić*, Judgment (Trial Chamber), §§494-495, 596.

⁴³ *Galić*, Judgment (Appeals Chamber), §335.

was 300m away from the closest identified target, within a civilian populated area, as *either* directed at civilians *or* as insufficiently directed and therefore indiscriminate in effect, foreshadowing the Trial Chamber's approach in *Gotovina*. Interestingly, it is the Defence that made the case that mortars have wide-area effects. On appeal, it argued that the Trial Chamber 'should have paid a specific attention to the real difficulties encountered by any Commander when a war is waged in urban conditions'. The Defence considered it 'clearly proven that the mortar... is designed as an area weapon, therefore relatively imprecise and that errors in firing could easily and frequently occur. The "danger radius" is equal to or more than 500 metres.'⁴⁴ In response, the Prosecution successfully argued that it was incumbent on the Defence to explain how errors and inaccuracy could possibly be acceptable in the context of IHL when these problems are known in advance.⁴⁵ The controversy is, thus, not so much about whether a mortar is or is not 'accurate', but rather, whether it is dirigible enough for use in a populated area, respectively what risk of civilian harm is deemed acceptable. This question is at the core of the *Gotovina*-case.

Gotovina et al.

The case deals with shelling in Knin, Croatia, on 4 – 5 August 1995. According to the Trial Chamber, Knin was in range of seven 122mm BM-21 Grad MBRLs (18-20km away) and of at least seven 130mm cannons (25-27 km away). The total number of munitions fired was not confirmed but the Trial Chamber could establish impact locations of 900 shells beyond reasonable doubt.⁴⁶

The Trial Chamber made one weapon specific remark. It considered 'that although MBRLs are generally less accurate than Howitzers or mortars, their use by the HV in respect of Knin on 4 and 5 August 1995

⁴⁴ *Galić*, Defence Appellant's Brief, 19 July 2004, §§207-208.

⁴⁵ *Galić*, Prosecution Response Brief, 6 September 2004, §15.13, and at §12.19: '... evidence that mortars are inherently inaccurate is of no assistance to Appellant. Assuming Appellant is correct, and his mortar crews were not capable of a high degree of accuracy, it was incumbent upon him to ensure that these uncertainties were factored into targeting decisions; i.e. when deciding which type of weaponry is appropriate to the target and associated risks... While this unpredictability was a relevant factor when determining whether particular weaponry was appropriate for firing into a mixed military/civilian environment, it is no excuse to blame factors of uncertainty which are within the knowledge of the decision-maker.'

⁴⁶ *Gotovina*, Judgment (Trial Chamber), 15 April 2011, §1241.

was not inherently indiscriminate.’⁴⁷ Like in *Martić*, the implication of this statement for the legality of firing MBRLs into a populated area remains ambiguous, especially as the Trial Chamber did not cite a REP/CEP or other relevant measure in support of its statement.

The Trial Chamber’s analysis focused on delivery accuracy even though experts had provided information about the fragment projection range of a 120mm round (1600m² to 2100m², depending on height of burst) and the ‘lethal area’ of a 155mm round (50m).⁴⁸ The Trial Chamber noted that if MRBL fire was directed using ‘300-metre-diameter circles’ drawn on a map, that would have ‘yield[ed] very inaccurate fire results on a specific target in Knin’, compared to other fire control methods.⁴⁹ After discussing various PE measures for different weapon systems submitted by expert witnesses, the Trial Chamber considered it ‘a reasonable interpretation of the evidence that those artillery projectiles which impacted within a distance of 200 metres of an identified artillery target were deliberately fired at that artillery target.’⁵⁰ By implication, shells landing further away were presumed to have been fired at civilians *or* to have been insufficiently directed, resulting in an indiscriminate attack, from which intent to attack civilians may be inferred.

Various objections to what became known as the ‘200m-Standard’ were raised on appeal (summarized in the table below).

	<i>200m-Standard</i>	<i>A metric standard</i>	<i>Acceptability/legality of explosive weapon use in Knin</i>
Trial Chamber	✓	✓	✗
Experts for the Defence	✗	✗	✓
Experts for the Prosecution	✗	(✗)	✗
Amici	✗	✓	✓
Appeals Chamber	✗	?	?

The 200m-Standard was rejected by expert witnesses from both sides (materials not admitted into evidence), but experts for the Defence considered that the fires were appropriate. They characterized them as ‘general support fires’ intended to achieve a neutralization or harassment

⁴⁷ Ibid, §1897.

⁴⁸ *Gotovina*, Prosecution Submission of Expert Report of Lt. Colonel Konings Pursuant to Rule 94bis, 18 Jan 2008, p 4779.

⁴⁹ *Gotovina*, Judgment (Trial Chamber), §1896.

⁵⁰ Ibid, §1898.

effect. Artillery weapons, they underlined, are ‘area weapons’ whose ‘fundamental effectiveness depends on this fact ... It can only achieve a significant destructive purpose if used in very considerable quantities’.⁵¹ Artillery, therefore, cannot be expected to comply with a 200m-Standard of accuracy, which they deemed ‘totally inconsistent with the science and practice of artillery and rocket fire.’⁵² These experts considered that the Trial Chamber had failed to recognize the many factors that can have increased delivery error in the case at hand, including long firing range, lack of accurate meteorological data, the techniques used for locating the target, the battery and for compensating for azimuth, the mixing of ammunition lots, the questionable quality of the materiel used, inadequate stability/grounding of the MBRLs, inexperienced gunners, and the fact that targets were not registered and fires were not observed. One expert observed in that regard:

All rounds at issue... were both unregistered and unobserved. Thus, tracking doctrine, all 900 rounds effectively were “first rounds,” since none of the rounds fired over two days could have been adjusted closer to the target than the initial rounds fired.⁵³

Consequently, these experts considered that there was

... absolutely no justification for concluding that rounds falling outside the 200 metre box were indicative of a deliberate attempt to fire on separate (and possibly inappropriate) targets.⁵⁴

Experts for the Prosecution agreed that the 200m-Standard was simplistic and failed to take into account the characteristics of artillery weapon systems. They recognized that a metric standard has some validity,⁵⁵ but considered that legal assessments should be made against a broader set of factors. In particular, they underlined the importance of

⁵¹ *Gotovina*, ‘Observations by General Sir Timothy Granville-Chapman...’, Notice of Filing of Public Redacted Version of Appellant Ante Gotovina’s Second Motion to Admit Additional Evidence Pursuant to Rule 115, 31 July 2012, Annex E, p 4670.

⁵² *Gotovina*, ‘Exhibit 21: Expert Report of Lieutenant General Wilson A. Shoffner, US Army (retired)’, Appellant Ante Gotovina’s Motion to Admit New Evidence Pursuant to Rule 115, 4 November 2011, p 3539.

⁵³ *Gotovina*, ‘Exhibit 20: Expert Report of Major General Robert Scales, US Army (retired)’, Appellant Ante Gotovina’s Motion to Admit New Evidence Pursuant to Rule 115, 4 November 2011, p 3544.

⁵⁴ *Gotovina*, ‘Observations by General Sir Timothy Granville-Chapman...’, p 4670.

⁵⁵ E.g. *Gotovina*, ‘Lt General Applegate’s Comments on Expert Witness Report’, p 5672.

tactics, techniques, procedures and rules of engagement in reducing risk of civilian harm. In their view, the fires were inappropriate without significant mitigating measures, specifically, because fire was directed into a civilian populated area. These include specific rules of engagement, accurate and up-to-date target lists, a detailed description of targets and their environs, the appropriate selection of weapons, fuses and aim-points based on a careful target analysis, the definition of restricted engagement areas, the use of observation and the registration of fires at the earliest possible opportunity, the calibration of weapons, and the use of appropriate adjustment techniques (e.g. smoke rounds, transfer fire). According to one expert, the attacker ‘at the very least, failed to exercise due care in the application of artillery fire’, evidenced, among other things, by the inappropriate selection of weapons, specifically, ‘the frequent and extended use of MRLs in urban areas’. In his view

... the nature of the fire – not least in the use of MRLs – was inconsistent with the engagement of only point or small area targets and careless in their consideration of the impact on the local population. ... If the HV did have observation, I would have expected artillery fire into Knin to have been adjusted and modulated in order to minimize civilian casualties... If they did not have observation, the widespread and extended use of artillery fire was even more indiscriminate and careless of the lives of those within the town.⁵⁶

A group of lawyers who submitted an amicus brief (denied by the Appeals Chamber) called the measure of 200m ‘an unrealistic operational’ and ‘impossible standard’. Remarkably, though, these lawyers did not object to the articulation of a metric standard as such. They acknowledged that ‘assessing legality of attack effects requires some benchmark of acceptable error’ and invited the Appeals Chamber to consider ‘the consistency between a 400-meter standard and the realities of operational artillery employment’.⁵⁷

On appeal, the Majority rejected the 200m-Standard but did not articulate an alternative standard, which led to the collapse of the case and the acquittal of the accused. Two judges filed strongly worded dissenting opinions. Judge Pocar pointed out that the Majority had failed to determine

⁵⁶ *Gotovina*, ‘Lt General Applegate’s Comments on Expert Witness Report’, pp 5684-5683. See also *Gotovina*, ‘Comments by Lieutenant General (Retired) C C Brown...’, Notice of the Filing of Public Redacted Version of Prosecution Response to Gotovina’s Second Rule 115 Motion, and Request for Change of Status in Corrigendum, 3 August 2012, Public Annex II, pp 5636, 5631, 5625.

⁵⁷ *Gotovina*, Amicus brief, 12 January 2012, §§16-7. See also, ‘Lt General Applegate’s Comments on Expert Witness Report’, p 5684.

whether the artillery attacks on Knin and other towns were lawful or not in light of IHL, and raised several critical questions:

Does the Majority consider that the correct legal standard was a 400-metre standard? A 100-metre standard? A 0-metre standard?... the Majority also fails to clarify on which basis the correct legal standard should have been established. Does the Majority consider that a legal standard can be established on a margin of error of artillery weapons? Does the Majority consider that a trial chamber is entitled in law to establish a presumption of legality to assess the evidence of the shelling attacks and the artillery impacts in order to establish the lawfulness of the attack?....⁵⁸

Concluding Remarks and Outlook: Toward a Metric Standard to Judge Wide-Area Effects?

To this day, Judge Pocar's questions remain unanswered. This is problematic from the perspective of civilian protection and with a view to legal certainty. The International Criminal Court's (ICC) confrontation with these issues is on the horizon. For instance, in its request for authorization of an investigation into the situation of Georgia, the Prosecution describes Grad MLRS and cluster munitions as 'weapons that cannot be accurately used against military targets in civilian areas' and argued that '[b]y their nature, the use of Grad MLRS in urban areas renders them incapable of striking solely military objectives or of avoiding extensive damage to civilian property within the radius of 100-150m from the intended target'.⁵⁹ And in the case of *Laurent Gbagbo*, Pre-Trial Chamber I concluded in relation to the shelling of Abobo market, Abidjan, on 17 March 2011, that 'the area falling within the radius of action' of the 120mm mortar was 'densely populated' and that 'mortar shells have a highly destructive impact

⁵⁸ *Gotovina*, Dissenting Opinion of Judge Pocar to the Judgment (Appeals Chamber), §13.

⁵⁹ ICC, *Situation in Georgia*, Corrected Version of Request for Authorisation of an Investigation Pursuant to Article 15, ICC-01/15-4-Corr, 16 October 2015, §§196, 201. The Prosecution notes that the decision of whether to charge with the commission of the war crime of intentional attack on civilians or civilian objects under 8(2)(b)(i)-(ii) or of launching a disproportionate attack under 8(2)(b)(iv) requires an 'assessment of the exact nature and scale of the used weapons and their effects, the known area of 'spread' of sub-munitions, the character of the targeted area and the physical proximity of residential civilian areas to military objectives, or the availability of alternative weapons'.

and are inherently inaccurate, as the exact distance ... and the precise trajectory depend on a series of circumstances beyond human control'.⁶⁰

Although what can be gleaned from the analysis of ICTY cases above is limited in several regards,⁶¹ judgments and court records can help identify the boundaries of acceptable behavior and indicate how the protection of civilians can be enhanced, including, if necessary, by means of additional normative restrictions on the use of explosive weapons with wide-area effects.

Some key points that emerge from the case discussion include:

- The ICTY does not follow one single method for characterizing and assessing the effects of explosive weapon use in populated areas on civilians for the purpose of making legal determinations under IHL and ICL. Often, it is not apparent from a judgment how operational measures and restrictions used to manage risk of harm to civilians or own/friendly forces are translated into legal findings.
- The ICTY's jurisprudence recognizes wide-area effects of explosive weapons as a key concern for the protection of civilians in populated areas. In the cases discussed, the Tribunal tends to express this concern in terms of dispersion area and delivery accuracy.⁶²
- Although the ICTY assesses the legality of a weapon's use in light of the circumstances of an individual attack (or even a 'single-round-incident'), its jurisprudence reflects more categorical determinations about a weapon's legality (per se) in *the circumstances* of a populated area. *Martić*, for example, can be read as a categorical

⁶⁰ ICC, *The Prosecutor v Laurent Gbagbo*, Decision on the Confirmation of Charges against Laurent Gbagbo, ICC-02/11-01/11, 12 June 2014, §63.

⁶¹ ICTY jurisprudence dealing in detail with doctrines and practices of explosive weapon use is scarce. The three selected cases concern indirect-fire, surface-to-surface explosive weapons to the exclusion of other delivery methods and types. The framing of harm from explosive violence in case materials is subject to prosecutorial choices and defence strategies and the strict evidentiary standards of a criminal procedure. The cases focus on a few attacks or even single-round-incidents and do not adequately reflect the human suffering caused during the wars in the Balkans by explosive and other forms of violence. Any normative finding in an ICL framework is highly context-dependent.

⁶² Cf ICTY, *The Prosecutor v Dragomir Milošević*, IT-98-29/1, Judgement (Trial Chamber), 12 December 2007, which addresses concerns raised by explosive weapon use, irrespective of delivery accuracy. The Trial Chamber found that the modified air-bomb is an 'indiscriminate weapon', both, due to its inaccuracy, which meant it could only be 'directed at a general area' (against targets of 'hundreds of square meters') and its 'extremely high explosive force', a reference to its blast and fragmentation effects. (Ibid, §§95, 97, 912; See also *D. Milošević*, Prosecution's Notice of Filing of English Language Version of Expert Report of Berko Zečević, 16 April 2007, pp 4128-4126.) In the same case, intent to terrorize civilians was inferred from the use of mortars, described as *accurate*, and from the use of modified air bombs, described as *inaccurate*.

rejection of non-guided, high-dispersion explosive weapons in densely populated civilian areas.

- Where and how a categorical line against the use of explosive weapons with wide-area effects should be drawn is disputed. Clearly, though, when explosive weapons are used in a civilian populated area, there is a point at which the effects are such that the question of whether the (risk of) harm to civilians was intended or incidental takes second place. The risk of civilian harm is so high (and foreseeably so) that it is no longer plausible to justify civilian harm by reference to it being an unintended, tragic side-effect.
- Even though experienced military experts share a common understanding of the purpose and effects of artillery (and other explosive weapons), views diverge significantly on what constitutes acceptable effects and risk of civilian harm in a populated area. As the Appeals Chamber Judgment in *Gotovina* illustrates, this translates into controversy and uncertainty about the legal limits of explosive weapon use in populated areas.
- Metrics are commonly used in military doctrine and practice to manage risk of harm to civilians and to own forces from explosive weapons. Such measures can be expressed in absolute terms or relative to a target's dimensions. They can form the basis for restrictions or procedural requirements and can take into account, both, delivery accuracy and area of effects. In the cases discussed, when expert witnesses characterize risk of civilian harm, they tend to have regard to the total area of impact locations in the statistical sense, rather than the area where 50% of rounds can be expected to fall.
- Even before the Trial Chamber Judgment in *Gotovina*, the ICTY used metrics to judge the legality of explosive weapon use in populated areas. In spite of criticism of the 200m-Standard, expert testimony and legal opinion suggest that a metric measure has some validity and there is scope for using such a measure to draw a clear line against impermissibly high risk of civilian harm from wide-area effects.⁶³

⁶³ Greater attention to delivery accuracy and area of effects in individual attacks or single-round incidents should, however, not detract from consideration of the wider pattern of civilian harm resulting from the use of explosive weapons in populated areas. To effectively enhance the protection of civilians, the indirect, though foreseeable, civilian harm, including damage to critical infrastructures, explosive remnants of war and reverberating effects, must also be reduced. See, e.g., I. Robinson, 'The Obligation to Take into Account Reverberating Effects: Proportionality and Precautions in Attack', in ICRC,

An open conversation among military-technical and legal professionals about how elements of existing military policy and practice aimed at reducing harm to civilians can be translated into legal assessments would further the articulation of a more widely shared, normative standard against which practices of explosive violence can be judged. Judicial bodies can contribute to the elaboration of more specific guidance to explosive weapon users about what is expected of them in terms of measures aimed at avoiding, and at any rate, minimizing harm to civilians by situating legal assessments more explicitly vis-à-vis technical and operational standards.

Explosive Weapons in Populated Areas: Humanitarian, Legal, Technical and Military Aspects, Expert Meeting, Chavannes-de-Bogis, Switzerland, 24 - 25 February 2015, June 2015, pp 21-23; C. Wille, *The Implications of the Reverberating Effects of Explosive Weapons Use in Populated Areas for Implementing the Sustainable Development Goals*, UNIDIR, 2016; M. Zeitoun, 'The Effects of the Use of Explosive Weapons on Urban Services', in *Urban Warfare*, 16th Bruges Colloquium, 15-16 October 2015, 46 *Collegium* (2016) 147-149.

Good practices on restricting use of explosive weapons in populated areas

Sahr MUHAMMEDALLY

Senior Program Manager MENA & South Asia,
Center for Civilians in Conflict (CIVIC), New York

There are limited military policies that are publicly known that limit the use of explosive weapons in populated areas. Reporting by civil society, ICRC, media shows growing civilian harm in populated areas with the use of explosive weapons. A survey of known practices by militaries suggests that interpretation of IHL obligations supplemented by policy restrictions govern the use of explosive weapons in populated areas.

The first example is AMISOM (African Union Mission in Somalia, regional peacekeeping mission operated by the African Union with approval from UN Security Council) deployed to fight Al-Shabaab. Al-Shabab Mogadishu were launching attacks at AMISOM. AMISOM responded indirect fire including artillery which resulted in civilian harm in Mogadishu a populated area. AMISOM was under much criticism for causing civilian casualties. My organization CIVIC (Center for Civilians in Conflict) along with a retired major general from the UK undertook an assessment of the gaps in AMISOM policies on the use of certain weapons. We developed an indirect fire policy and AMISOM implemented it. This policy had a three-step process: avoid, attribute and amend. AMISOM should avoid the use of indirect fire. Where allegations occur AMISOM would attribute responsibility by investigating & assessing incidents, making amends to those who have been injured, acknowledging civilian harm, and providing financial assistance

One of the concerns in using indirect fire was inaccuracy problems and lack of proper training. It took leadership on AMISOM's part to recognize that and to implement a policy to remedy the problems. AMISOM started conducting collateral damage estimates before using certain weapons; in-theatre training on the use of certain weapons; conducting after action reviews to take into account civilian harm; and created a civilian casualty tracking analyses cell (CCTARC). The CCTARC is the tool that allows military to assess the impact of operations on civilians, to gather the information to cross check with the external sources and identify what causes civilian harm, to recognize if additional training and new guidance is needed for forces in order to minimize civilian harm in a future situation. This cell was also supported by two UN Security Council resolutions.

CIVIC helped AMISOM create this tracking in 2015. The implementation of the AMISOM indirect fire policy resulted in a reduction in civilian harm.

Meanwhile in ISAF (International Security Assistance Force, a NATO-led security mission in Afghanistan), as the *tempo* of the conflict was increasing in 2006-2007-2008, there were a lot of concerns of civilian casualties caused by air strikes which eventually led to several changes in policies and training. Tactical directives were issued by a successive ISAF commander from 2008-2011, specifically trying to address and give commanders guidance on minimizing civilian harm and protecting civilians, but also suggesting additional restraints on the use of certain kind of weapons in certain areas. For example, there were restriction on the use of air strikes on residential compounds, cluster bombs were prohibited in 2007; the use of indirect fire was also limited as it couldn't be used on a moving target or in populated areas, Suggestions were made on using alternatives instead of indirect fire, such as snipers. Forces started to get a lot of increased training on the use of indirect fire to increase their proficiency. Some of these changes came about as ISAF was receiving better information from all the various regional commands and crosschecking it with external organizations to see what was the cause of civilian harm and how ISAF could change it. ISAF also began using tools to reduce civilian harm, such as positive identification determination (PID) prior to engagement, collateral damage estimates, battle damage assessments taking into account civilian harm, and scenario-based trainings both in theatre and pre-deployment on civilian casualty mitigation. A civilian casualty mitigation team was set up to track analyse the causes of civilian harm and to make recommendations in training and guidance. The documentation by external organizations on civilian casualties in Afghanistan is robust and by the end of ISAF mission one saw a reduction in civilian harm as a result of these policies.

Looking at some other countries, the UK manual of the law of armed conflicts also recognizes that using the artillery in populated areas can cause incidental harm. The UK also conducts collateral damage estimates and battle damage assessments after operations. At the expert working group meeting on explosive weapons that the ICRC hosted in December 2015, Ugandan officials discussed their policies on artillery and reported that it is only approved by the highest commander and they used military safe distances (MSDs) to determine how close explosive weapons should be used in relation to friendly fires.

There is a lot of information that the US military puts out publicly in terms of their joint doctrines on urban operations, joint targeting manual, and a protection of civilians manual. We can learn a lot about US doctrinal

guidance on use of lethal force in populated areas. For example, US guidance on explosive weapons include: Indirect fire training to increase proficiency including with those who will call for the fire and forces laying and firing the guns; avoiding pre-emptive battery without knowledge of absence of civilians; use of precision or low collateral damage munitions; increasing safety zone and time that assets monitor area prior to fires during registration; avoiding using indirect fires on moving targets. The US military also conducts battle damage assessments, pattern of life, and positive identification determination.

In 2015 the US issued a protection of civilians doctrine which sets out larger principles on the protection of civilians and recommends alternative methods to limit civilian harm, specifically, “(d)uring actions on contact, use fire and maneuver rather than indirect fires and airstrikes as the default response, and raise the authority for fire clearance to higher command levels.”

Policies are only good in as far as they are implemented. Leadership within the military and commanders’ guidance on prioritizing civilian protection is also essential As is the recognition that protecting civilians is as important as defeating the enemy. This is not only about legal obligations to minimize civilian harm but also operational imperative to succeed in order to keep the peace by reducing civilian harm.

Humanitarian consequences and challenges to IHL

Thomas DE SAINT MAURICE

Legal Advisor, International Committee of the Red Cross, Geneva

This issue is part of the broader topic of urban warfare, which is not a new phenomenon. Cities have always been the object of battles and of strategic importance in wars.

But it is mainly over the last decades that correlations are made between the types of weapons used, the populated environment in which they are used and the extent of humanitarian consequences.

In addition, with the convergence of the growing urbanization and the pattern from some fighters to mingle with civilians, and other factors such as the willingness to not expose troops to risks, the use of EWPA became more and more a common feature of armed conflicts.

The ICRC itself is in the forefront in conflict situations, directly witnessing the devastating impacts on civilians of the use of explosive weapons having wide area effects in populated areas.

In summary, what I would like to show today is that the use in populated areas of explosive weapons having a wide impact area, even when aiming at a legitimate military target, raise concerns due to the extent of incidental civilian casualties and damages.

Before entering the main part of my presentation, I would like to share some elements of definitions. “Explosive weapons” are activated by the detonation of a high explosive substance creating blast and fragmentation effects. The latter can have “wide area effects” because of the large destructive radius of the munition, the inaccuracy of the delivery system or the delivery of multiple munitions over a certain area almost simultaneously. These include large bombs and missiles, indirect fire weapons such as unguided mortars, artillery and rockets, as well as multi-barrel rocket launchers and certain improvised explosive devices.

“Populated areas” is not an easy concept to define. This is why we often refer to the term “concentration of civilians” as it is somehow defined in IHL treaties, in particular, Additional Protocol I of 1977 and Protocol III to the CCW on incendiary weapons. The latter defines the phrase as “any concentration of civilians, be it permanent or temporary, such as in inhabited parts of cities, or inhabited towns or villages, or as in camps or columns of refugees or evacuees, or groups of nomads”.

The title of my intervention is « Humanitarian consequences and challenges in IHL », so I will focus on the humanitarian and legal aspects.

The impact on civilians of using explosive weapons with wide area effects in populated areas can be very diverse. Of course you have the potential direct effects around the point of impact. The most obvious effects of such weapons are death and physical injury close to the impact point. Death or physical injury can be caused by the blast wave; by fragments from the weapon or secondary fragments; by collapsed buildings; or by burns.

Medical studies show that the lethality of injuries caused by explosive weapons is between 15 and 25% of those injured. And victims who survive are often left with life-long disabilities such as a lost limb or brain trauma.

Less visible is the tremendous impact of explosive weapons on mental health. It is well known that some weapons we are talking about are known for their psychological effects on the enemy. The effects on soldiers at the receiving end of sustained artillery shelling for instance are known and documented, sometimes called “shell shock”, they can also be post-traumatic stress disorders (PTSD). If these are possible effects on well-trained soldiers, they are certainly not less for civilians, in particular children living that ordeal in their own homes.

Then, beyond the direct effects, and especially in a city where services are interconnected and there is a high density of population, some domino effects will cause more victims than the direct effects around the point of impact.

There is notably the impact on health care services. Not only because a hospital may be directly hit by a shell, but also because electricity and water supplies may be cut off; because health-care staff may be killed, injured or unable to get to work, etc. So the capacity of health-care facilities is weakened just when they are the most needed to face multiple patients, often with multiple injuries from the shelling.

Urban services in general will be severely affected when explosive weapons with wide area effects are used in populated areas, leading to further diseases, death and displacements. Urban services are vulnerable to the use of explosive weapons in populated areas notably because of their interdependence. For instance, a damaged electrical transformer can immediately shut down the water supply to an entire neighborhood or hospital, which will in turn negatively impact public health. The skills required to address such interconnectivity and do the repair is often beyond the scope of humanitarian organizations. And if the only staff able to put the service back died in a bombing, were injured by rockets or have fled the shelling, or if they simply do not have safe access because of continued

fighting or because the area is still contaminated with UXO from explosive munitions that failed to function, the service won't be back on its feet.

In addition, the combination of various direct and indirect impacts over time are cumulative, making them more and more difficult to address with time passing. The more weakened essential services become, the worse life becomes for residents.

If services deteriorate beyond a certain point, classic interventions will not prevent a slide into a condition that is too difficult or expensive to reverse. The classic humanitarian response (say, water-trucking, or *ad hoc* borehole drilling) is often too focused on immediate needs to incorporate such medium or long-term considerations.

We submit that parties to armed conflicts should be more aware and pay more attention, notably in their choice of means and methods of warfare, to the vulnerabilities of services essential for civilians living in populated areas.

This infographic video [showed on screen - www.youtube.com/watch?v=eqg52WgTkEc] summarizes in a simplified way the potential domino or cascading effects on civilians the use of explosive weapons having a wide impact area can have in populated areas.

The extent of these humanitarian consequences has led the ICRC to state that “due to the significant likelihood of indiscriminate effects, and despite the absence of an express legal prohibition for specific types of weapons, the ICRC considers that explosive weapons with a wide impact area should be avoided in densely-populated areas”.

In other words, we consider that using explosive weapons that have a wide-area effect against an objective located in a concentration of civilians entails a high risk of violating the rules of international humanitarian law regulating the conduct of hostilities, in particular, the rules prohibiting indiscriminate and disproportionate attacks. I will develop a little bit more on these two rules.

It is important to remember at this stage that IHL in itself strikes a careful balance between considerations of military necessity and humanity and that the overarching objective of the rules regulating the conduct of hostilities is that “the civilian population and individual civilians shall enjoy general protection against dangers arising from military operations” (art. 51 of AP I).

A critical principle of IHL is that the parties to the conflict are not entitled to an unlimited choice of methods and means of warfare, and by “means of warfare”, we mean “weapons”. The choice of weapons is, therefore, constrained by the general rules of IHL even when no specific rules exist concerning a specific type of weapon. In this framework,

choosing a weapon that would lead to an indiscriminate or disproportionate attack would be unlawful.

The prohibition of indiscriminate attacks is found in AP I. Most relevant for the use of EWPA are: the prohibition of attacks that use weapons which cannot be directed at a specific military objective, or the effects of which cannot be limited as required by IHL and are consequently attacks of a nature to strike military objectives and civilians or civilian objects without distinction, i.e. indiscriminately.

One of the issues to be discussed is the designed effects of what is often called “area weapons”, meaning designed to create effects over a certain area, notably by using multiple munitions, for instance unguided mortars or artillery rockets. Their intended use is not to be delivered accurately or precisely to a specific point target. The questions are the following:

- in an urban setting, can this type of weapons be directed at a specific military objective as required by the law?
- are these area weapons able not to strike military objectives and civilians without distinction when used in a densely-populated area?

This is an example of a legal and operational question we would like to work on further: what is the level of accuracy of a weapon that would be acceptable to comply with this provision of the law? The treaty rule gives two “examples” of an indiscriminate attack. One is area bombardments are prohibited and defined by the Additional Protocol I as an “attack by bombardment by any methods or means which treats as a single military objective a number of clearly separated and distinct military objectives located in a city, town, village or other area containing a similar concentration of civilians or civilian objects”. This provision is quite important in relation to the use of explosive weapons in populated areas. Indeed, it says that the mere fact that there are several military objectives in a city does not allow parties to the conflict to consider an entire area as a legitimate target of attack. Area bombardments of cities, under the sole pretext that the enemy has several military assets in that city, is prohibited by law.

The other example of an indiscriminate attack given by the API is the disproportionate attack, i.e. “attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.”

To be noted, in particular, that the law defines that the military advantage to be put in the equation must be “direct” and “concrete”. It is

important to note that there are no such qualifiers in the rule to specify the types of incidental harm that must be put in the equation.

And indeed, it is widely recognized that the incidental harm that must be taken into account by the military includes not only the direct effects of the attack (death, injuries and destructions around the impact point), but also the “indirect effects”, or what we often call the “reverberating effects” of the attack on civilians.

This point is particularly relevant in the discussion about the use of explosive weapons in populated areas. Indeed, and as mentioned earlier in the description of humanitarian consequences, urban areas are more prone to suffer from indirect effects of an attack than open areas. In the vicinity of the military target, maybe there is a power facility. If this facility is damaged and the power is cut, it is likely to interrupt the good functioning of a health facility in the neighborhood, and it is likely to deprive thousands of people of drinkable water. Those are possible indirect effects of the attack on a military objective located in a populated area.

In the view of the ICRC and many experts, these indirect effects must to be taken into account in the proportionality assessment to the extent they are foreseeable. Of course, all the consequences of an attack cannot be known in advance. But we consider that some “reverberating effects” are foreseeable and must, therefore, be considered in the equation. And this is another challenge of IHL, not only in legal terms but operationally: it is quite unclear whether or not and to what extent military processes take into account this aspect when they assess the proportionality of an attack before carrying it out.

To take all feasible precautions in the choice of weapons and methods of attack with a view to mitigate civilian harm is one of the precautionary measures foreseen in the API. In that matter, not only is the choice of the weapon to be used for the attack critical but also the manner in which it will be used. Choosing specific types and sizes of warheads for instance, the quantity of explosive substances, the kind of fuse (impact, delay, proximity), the delivery system, the distance from which to launch the munitions, the angle and the timing of the attack... are some of the measures that can minimize incidental harm, notably by reducing the size of the impact area of an explosive weapon.

But in certain circumstances, with the weapon available, because it still has wide-area effects whatever the precautions taken beforehand and because of the environment surrounding the target, excessive incidental harm are to be expected and the attack would fall foul of IHL. It does not matter if there is no alternative at disposal: you cannot attack, according to the law.

Fighting an enemy in a populated area often means fighting an enemy who mingles with the civilian population, sometimes deliberately in order to shield its military activities and in violation of its obligations under IHL.

Also, too often, parties controlling the populated area subjected to attacks do not sufficiently respect the rules on precautions against the effects of attack. To reduce the harm caused by the use of explosive weapons in populated areas certain precautionary measures have to be taken by parties to armed conflict to the maximum extent feasible. This includes notably the basic requirement to not place military objectives in or near densely populated areas. This is also valid for States: avoid building your military headquarters in the middle of a city.

We have discussed other factors which render a populated area a complex environment, for example, density of civilians, complexity (interconnectedness) of urban services. According to the law these difficulties and notably the behavior of the enemy do not suspend the obligation to respect IHL when attacking military objectives in populated areas.

But it is also because it is cognizant of all such challenges, both operational and legal, and most of all because it is alarmed by the humanitarian consequences of the use of explosive weapons with a wide impact area in populated areas that the ICRC will continue to work on this issue as far as possible with concerned armed actors, governmental and non-governmental experts.

A lot of Armed Forces appear to lack specific guidance on urban warfare, notably on the choice of methods and means of warfare against military objectives located in densely-populated areas. With warfare increasingly moving into cities, it is urgent for armed forces to adapt their policies and practices applying to their choice of weapons and tactics in such environments. This is to ensure a better protection of civilians against the dangers of military operations taking place in populated areas.

VII. Challenges from specific weapons (pt. 1)

Chemical weapons: old and new concerns about their use in non-international conflicts

Veronika STROMSIKOVA

Director, Office for Strategy and Policy, Organization for the Prohibition of Chemical Weapons, The Hague

We have all seen horrific images of the battles that raged around in Ieper, Belgium, 100 years ago during World War I. Here, chemical weapons were used in so-called modern warfare for the first time with devastating human effect. Sadly, we still see such images today from Syria and Iraq, where the very same chemicals are being used as weapons – chlorine and sulphur mustard. So, you may be wondering, has anything really changed?

The short answer is yes. For one thing, the global security landscape has changed. It continues to evolve even as we speak. As I shall outline a little later, much has been accomplished to reduce the threat that chemical weapons be used by a State as a means of war against another State.

However, with allegations of use of chemical weapons by non-state actors in the context of non-international armed conflicts reported in the daily news, it is clear the user of a chemical weapon has enlarged beyond States. A few years ago, the question of chemical weapons used by non-state actors was discussed in the abstract or in singular events, such as the Tokyo Sarin subway attack. However, the use of chemical weapons by non-state actors or “chemical terrorism” is now a stark reality.

The additional challenge for us is that national security agencies (NSAs) do not consider themselves to be bound by international law and, indeed, openly flouts accepted norms to instil fear and terror. This especially applies to the use of weapons that have been stigmatised by States.

Most importantly from a humanitarian perspective, the concept of the battlefield has changed. War was waged in trenches during the First World War with members of the military comprising mostly of the victims of chemical weapons. We have seen that “battles” are now fought in populated cities, villages and even in road-side cafés. Civilians are no longer “collateral damage,” they are often the main target.

So, here lies the challenge for us all. There is much to be done if we are to protect future generations from the inhumane consequences of toxic chemicals used as a weapon, particularly when used in non-international armed conflicts or to terrorise peaceful civilian populations. As an

organisation, the OPCW is at an important juncture in its relatively short history. The global prohibition regime stands at a pivot point between tangible disarmament achievements and the demanding task of making such gains permanent.

Today, I would like to underscore the importance of the Chemical Weapons Convention (CWC), as a legal instrument in protecting individuals against chemical weapons use. It has been a crucial baseline for the OPCW's efforts so far and will continue to be so in the future.

I will also outline some of the unique features underpinning our achievements in global chemical weapons disarmament and what we consider new and emerging challenges, on the one hand, and "unfinished business" on the other namely, coming to terms with the complex challenge of dealing with non-state actors, and bringing on board States not yet party to the CWC. Neither should be permitted to flout rules-based norms, nor harbour any strategic prerogatives in relation to the use toxic chemicals for hostile purposes.

Finally, I'll leave you with a few thoughts about what might lie ahead. Let me begin by speaking about the CWC and its relationships with international humanitarian law (IHL), and its role in international law. There is a clear link between the CWC and international humanitarian law. The Preamble to the CWC reaffirms the principles and objectives of, and obligations assumed under the Geneva Protocol of 1925 and the Convention on Biological and Toxin Weapons of 1972. The Preamble also recognizes that the use of chemical weapons by individuals is specifically prohibited as a method of warfare under international law. The law of international armed conflict has a long and detailed foundation in this regard, including the two treaties I just mentioned, as well as The Hague Declaration concerning Asphyxiating Gases (1899).

A number of non-binding instruments purport to prohibit the use of chemical weapons in non-international armed conflicts. The International Committee of the Red Cross (ICRC), in its Study on Customary International Humanitarian Law, expressed the view that State practice establishes the prohibition of the use of chemical weapons as a norm of customary international law applicable in both international and non-international armed conflicts. It is also notable that the use of chemical weapons is included in the list of war crimes over which the International Criminal Court may exercise jurisdiction both in the case of international armed conflict and non-international armed conflict.

In terms of the CWC in its role in international law, the CWC, which was adopted in 1993 and entered into force in 1997, has the objective of excluding completely the possibility of the use of chemical weapons. It

does this by prohibiting States Parties from developing, producing, otherwise acquiring, stockpiling or retaining, transferring or using chemical weapons. States Parties are also prohibited from assisting, encouraging or inducing, in any way, anyone to engage in these activities. Unlike the rules in IHL, all of these prohibitions in the CWC apply in all circumstances – peace-time, states of emergency, non-international armed conflict, or international war. Further, States Parties cannot use riot control agents as a method of warfare.

States Parties are required to criminalise these prohibitions in their national law, so that non-state actors – natural and legal persons – are likewise bound by these rules as a matter of each State Party's national law. Criminalizing activities such as stockpiling, developing, acquiring a chemical weapon is an effective means to prevent the use of a chemical weapon in the first instance.

The 192 States that are party to the CWC have condemned any use of toxic chemicals as a weapon by anyone, anywhere, in any circumstances, as a violation of international law. Over the years, the CWC regime has built an unshakeable foundation of trust between states that declared possession of chemical weapons in their mutually held obligations being met in a comprehensive, transparent and equitable way. But the baseline for this success was, at all times, the CWC and the international community's determination to enforce it.

The CWC provides a detailed regime that has allowed the international community to eliminate a major chemical arsenal in Syria. In 2013, investigation of an alleged use of chemical weapons in Syria was requested by UN membership from the Secretary General and it was performed with OPCW expertise and resources. When Syria subsequently acceded to the Convention, the Syrian chemical weapons programme was destroyed in less than a year under OPCW verification.

In terms of our past and future concerns, let me start with what the CWC has accomplished in 20 years with regard to international and non-international armed conflict.

The Convention is, first and foremost, an instrument for global security. As mentioned earlier, OPCW worked very hard to reduce the threat of chemical weapons use by a State. It did this not only by ensuring the elimination of declared chemical weapons stockpiles, but also by establishing a global norm against the use of chemical weapons. The norm is truly global as it reflects the Convention's near universal membership of 192 States Parties. We saw strong evidence of this norm in 2013 as the crisis in Syria began to unfold. Today, the mention of chemicals used as a

weapon raises anxiety, it brings feelings of anger and outrage and it brings calls for accountability.

93% of all declared chemical weapons from State military programmes have been destroyed. This amounts to more than 66,000 metric tonnes – overwhelmingly of chemicals used for mixing lethal nerve agent. To put this figure into perspective, a single drop of the nerve agent sarin can kill an adult male in seconds. The tragic effect of this agent was seen in August 2013, when Sarin was used in the Syrian township of Ghouta claiming hundreds of lives.

Most of the States Parties of the CWC declaring possession of chemical weapons have eliminated their stockpiles. Those with the lion's share – Russia and the United States – are scheduled to complete destruction of their remaining stocks by the end of 2020 and 2023. This means we now stand at the threshold of the complete elimination of an entire category of weapons of mass destruction, covering more than 98% of the world's territory and population. However, while much has been achieved with the Convention, much remains to be done.

Egypt, Israel, North Korea and South Sudan have not yet joined the Chemical Weapons Convention. To remove any doubts about these countries intentions *vis-à-vis* chemical weapons, it is imperative that they accede at the earliest opportunity. This is especially important in the face of widely held suspicions that North Korea possesses a large stockpile and production capability.

There are also concerns with chemical weapons abandoned by States on the territory of other States, as was the case with retreating Japanese forces on the territory of China at the end of World War II. There are also old chemical weapons dating back to World War I that continue to turn up in farmers' fields as remnants of war. Working with our Member States, the OPCW will continue to address these issues, as required under the CWC.

Also, still within the realm of a state-controlled activity, are those chemicals used as riot control agents – not just toxic chemicals that act as irritants but also those that can incapacitate and even result in death. We heard earlier this morning about questions surrounding this issue. It is an issue that continues to be studied and discussed at the OPCW amongst our States Parties, with the Australian-Swiss-led initiative on central nervous-acting agents in the forefront of these debates.

So, it seems a world free of chemical weapons is not a reality yet, nor is it one that we can afford not to be vigilant about.

I shall now turn to the future and its challenges. The use of chemical weapons by non-state actors is, as I have mentioned, not a threat but a nascent reality. The internet has provided terrorist groups greater access

than ever before to knowledge and information about toxic chemicals, their properties, and how to deploy them.

It is worth noting that a chemical weapon, as defined in the Convention, includes any “toxic chemical” when used as a weapon to harm or to kill and is not limited to only the warfare agents possessed by States’ military programmes. Sarin, Mustard Gas, VX, are warfare agents that were mass produced and stockpiled by States Parties along with their delivery systems, and clearly the OPCW’s focus. Thankfully, nerve agents have so far been beyond the reach of terrorist groups’ capabilities, but this has not prevented them from resorting to less sophisticated options.

Chlorine was not only used 100 years ago, but also used recently in Syria and Iraq. In fact, other toxic industrial chemicals could represent a real threat and, when used for purposes prohibited by the Convention, are considered to be a chemical weapon under the OPCW’s purview.

The fact that toxic chemicals are ubiquitous is a challenge. . We know that new chemicals are developed every day. We also know that the chemical industry is expanding to regions of the world that previously did not have such an industry. Without adequate security measures, toxic chemicals can be readily acquired by individuals with hostile intentions. Moreover, industry could be subject to attack by conventional means to cause a chemical weapons-like effect.

However, it is also important to recognize that a thriving chemical industry is a strong foundation for economic and technological development. Chemicals bring many benefits to human-kind – in medicine, in agriculture, in consumer production. Therefore, chemistry for peaceful purposes has, and will continue to have, a key role in society.

For the future, the CWC will serve as a fundamental tool to counter the use of chemical weapons by non-state actors. As I noted earlier, the Convention requires all 192 States Parties to criminalise the use of chemical weapons, as well as the development, stockpiling, acquisition, or transfer of chemical weapons. Such a legal framework is critical for global security and to protect citizens from harm. However, even after 20 years of the CWC being in force, more than 70 States Parties still do not have adequate national legislation against CWC prohibited activities. This is a key concern of the OPCW and one that it has been actively addressing, through our training and assistance activities to States Parties and, most recently, through the establishment of the Sub-Working Group on Non-State Actors of the OPCW Executive Council’s Open-Ended Working Group on Terrorism.

In closing, the OPCW has had a tangible track record in the area of chemical weapons disarmament and non-proliferation.

In the context of the Sub-Working Group, we have been examining how the OPCW can contribute further to global efforts to counter terrorism. We have been looking primarily at what can be done in the areas of legal accountability of non-state actors, measures to prevent the hostile use of toxic chemicals by non-state actors and what could be done to ensure an effective response to a chemical terrorist attack. We have sought to broaden our reach by working with our Member States to ensure that their domestic law not only reflects CWC prohibitions but also has the means to enforce them.

While we have made progress in identifying concrete activities that the OPCW could undertake, in this context of this panel, I would like to highlight that States Parties of CWC have affirmed the significance of the customary international humanitarian law rules prohibiting the use of chemical weapons in both international and non-international armed conflict. Whether such a prohibition exists as a matter of customary international law in peacetime, or whether there is an international crime of using chemical weapons in all circumstances remains a point of discussion. Here the convergence of IHL and other regimes of international law can shed light on these emerging areas of law.

The prohibition of using chemical weapons during armed conflict is well established in IHL. Through the implementation of the provisions of the CWC, the international community has done much to reduce the risk that anyone could access and use such weapons. But the fact that allegations of use of chemical weapons continue to make headlines is a stark reminder that international law is only as strong as its implementation, its enforcement and its ability to respond to evolving threats.

Outer space militarization: when late is too late

Xavier PASCO

University of Paris-Sorbonne; Foundation for Strategic Research,
Paris

Since the end of the Cold War and U.S.-Soviet military competition, military space activity has experienced a new dynamic resulting from two major changes:

Firstly, the Cold War-era has transformed into a new geopolitical context that has had direct effects on the nature and the structure of the military space programmes. Additionally, the “space club” countries, and among them especially the United States, have come to see space activities as a powerful tool that can provide political, economic and military benefits in this new geopolitical environment. For example, a number of information technology related applications have rapidly emerged and have become key assets in the transformation of space into a new strategic arena.

Secondly, the technology itself has evolved, resulting in more affordable and efficient space systems. Although it remains difficult for newcomers to invest in the space domain, the diffusion of new space technologies worldwide, including improved equipment and training for their use, is an enduring trend. A number of emerging countries are planning to increase their investment in space technologies and make them an important element of their national planning.

These trends mainly define a new era in space with enduring consequences on current and future military developments.

1. A bit of history: from “strategic space” to “controlled space”

In order to provide useful perspectives on these ongoing evolutions, it is worth recalling a few structuring features of the recent history of space activities. Historically, relationships between space and security have been determined by military strategies and their historical and legal contexts.

In the first place, space activities have initially been structured by their link with the nascent nuclear-related strategic issues. This initial link can be described as representing the essence of what can be called the “strategic space age”. Space was born from the nuclear induced “military revolution”. This “strategic space age” has remained alive over the years and has

remained an unsurpassable basis for structuring the space systems and their use. The primary objective then was for the U.S. and for the Soviet Union to avoid the “threat of the surprise attack”, as stated by a famous report produced in 1955 for President Eisenhower. A key link had quickly been established between the advent of the ballistic missile technology and the invention of the nuclear warhead. A new “Pearl Harbor” with such weapons would be fatally destructive this time. Everything would have to be done to prevent any surprise of this sort. Satellites quickly appeared as presenting good characteristics to play a central role as “sentinels” for this new era. They would help to detect ballistic missile launches; to detect nuclear tests; and to monitor nuclear and ballistic-related infrastructures and silos. They might also help, as it was believed in those first days, to prevent more directly any ballistic attack by providing new tools destined to intercept incoming missiles.

Obviously, space law has conformed to the emerging strategic space built by the nuclear era. Basically, the law that exists today for space activities was built in those years. The very acceptance of satellite overflying sovereign States has also been linked to this necessity. In this respect, the first Sputnik has initiated a general allowance that has helped shape this strategic role for space. The so-called “Outer Space Treaty” signed in January 1967 can also be defined as a “pragmatic” legal tool perfectly compatible with this strategic necessity of developing “useful” military space applications such as monitoring, early warning, communications. The Anti-Ballistic Missile Treaty (ABM) itself, signed between the U.S. and the U.S.S.R. in May 1972, has made the “national technical means” (the infamous NTMs, i.e. the satellites) a cornerstone and a prime contributor to the strategic balance.

It is worth noting at this stage that these initial perceptions have quickly convinced both superpowers that space systems shall be protected and space” sanctuarized” in a sense as they were viewed as a key element of a mutual “life insurance”. Space would be militarized, but it would not have to be “weaponized”. In other terms, space systems could serve military systems on Earth while both camps would avoid taking space weapons *per se* into orbit at the risk of an unuseful destabilization of the whole strategic balance. The “military” use of space was a primary condition for the mutual deterrence to ever exist. Space weapons would contradict these simple but efficient postures. It is worth keeping this basic principle in mind and relating to this specific context. This may be about to change as other contexts have emerged since then, adding their own logic to those founding principles.

Indeed, a major evolution has logically occurred with the demise of the Cold War as a structuring feature of international relations. The early nineties marked a profound change in the perception by the U.S. of their own role as the “sole” remaining superpower. The concept of fighting “major theater wars” has rapidly emerged as the next key building step that would be used to redefine the military and security tools for the U.S. to use to assert and confirm their new role as sole international leader. The first Gulf war can be seen in this respect as a landmark in this adaptation process, at least in the military domain, if not in political and strategic thinking. In order to implement this new power posture, space, among other tools, would play a critical role, allowing the U.S. military forces to strongly differentiate from their counterparts by providing unique efficiency and military outreach. The first Gulf war can be considered in this respect as a test of what had to be adapted to make space more responsive to the needs of the combat level and not only confine the systems in a major strategic intelligence role. This has been the time when satellites have had to become operational at so-called “operative” and “tactical” levels, in addition to their strategic use. This conversion has represented a key driver along the two last decades. From now on, space systems shall be viewed as a “force multiplier” on the battlefield. This would answer to new requirements and needs for more data and information communicated on near-real time to the lowest level of the combating units. In addition, this was the time when the precision-guided weapons had been introduced, making the U.S. space-based Global Positioning System (widely known under its acronym GPS) very much emblematic of the use of space systems in combat systems. This era has been defined as the “operative/tactical” space age, that has not replaced the “strategic space age” but that has added new functions and new uses to military space.

Rapidly, a third “space age” has emerged from this transformation, as technological changes induced by the more operational uses of space systems would make them more versatile and better fitted to enlarged security uses, beyond the sole military operative/tactical uses. Improvements brought to space technologies in the nineties have quickly put space sensors and communication systems at the heart of modern intelligence and information systems. In other terms, space applications have become an indistinct element of global security and defense architectures. This has been the time of “systems of systems” intended to be part of comprehensive information systems answering a wide range of needs including: military security but also environmental security, “Homeland defense” needs (or security of the citizen), as well as economic

and industrial security. Space systems would then become a critical infrastructure in the sense that it would provide a bonus to nations that are the most advanced technologically, the most powerful from an economic standpoint and the most influent on the political scene. A natural synergy between military and civilian applications has tended to develop quickly, sometimes dubbed as being “dual-use” space technologies. Indeed, the merger was certainly much more profound with global information systems serving both military and civilian interests, but also more and more often designed for interacting with existing modern information infrastructures.

This evolution, mixing military and civilian technologies and process into strategic information architectures, has definitely allowed space applications to gain a greater visibility. By doing so it has also made space systems a more likely key vulnerability. For strategist and military, any vulnerability might be considered as a likely target. Such vulnerabilities have to be dealt with. Space would have to be protected against any attack. Again, the U.S., being the first user of space systems by far, would be the first to elaborate a so-called “space control” policy. This is the age we have now reached, the age of “controlled space”. It is about not only protecting military space systems, but more largely any space object with major economic and societal role, involving human security directly or indirectly. As soon as in 1999, space was declared by the U.S. Secretary of Defense as representing a “national vital interest”, implicitly suggesting that it would be legitimate for any sovereign State (in this case the U.S.) to protect its space systems by any mean.

2. A new need to “control” space as a coming new source of conflicts?

This has had direct consequences on the re-emergence of concepts of space weapons, showing a significant difference with the context of the Cold War when space systems had to be protected and space “sanctuarized” for the mutual benefit. In the post-Cold war era, space systems could unfortunately be seen as desirable targets, precisely because they could be used in military operations in a much more efficient manner. Possible adversaries would then have to develop ways to destroy or incapacitate them.

Whatever the level of technical developments in this domain, the change of context has given birth to new policy and law initiatives starting from the late 2000s. At the time when China proceeded with its first anti-satellite test in January 2007, a number of diplomatic initiatives were proposed to de-conflict this area. In 2008, the European Union proposed the international

adoption of a “Code of Conduct” for space that, while it would not be legally binding, would act as a regulation regime allowing better transparency. Different versions of the text have been proposed but it has not reached yet the critical mass of supporting countries and this initiative has remained in a limbo. Russia and China are supporting the adoption of a legally-binding treaty asking for a “prevention of the deployment of weapons in outer space”. This treaty has been opposed in the recent years mainly by the U.S. and partly by the European countries as it does not address the issue of ground-based space weapons (precisely the one used by China in 2007) and on the ground that such a treaty would hardly be verifiable. Other concurrent initiatives have been pushed at the United Nations level in order to deal more largely with the safety of the use of space (including the collective management of space debris) as well as the need for guaranteeing the “development of sustainable space activities”. While these issues continue to be addressed by specialized U.N. committees, progress remains slow and does not address the whole range of risks and threats.

Nowadays, the “controlled space” age has led to the involvement of an increasing number of actors, with heavy political issues at stake, in a debate traditionally confined to military and strategy specialists. Curbing the cause of satellite destructions (whether it comes from debris or from international activities), managing orbital positions and traffic or managing radio interferences have become key issues addressed by a broader collective security debate. It is high time to address those issues in the relevant international forums and it must not be held hostage from possible nascent conflicts in space in new “controlled space age”.

Nuclear weapons: IHL considerations revisited, 20 years after the ICJ Advisory Opinion

Camille GRAND

Director of the Foundation for Strategic Research, Paris

Even if it were a non-binding, not completely conclusive and opened to different interpretations the Advisory Opinion of the ICJ in 1996 was an important milestone in the international debate regarding the legality of the use of nuclear weapons as it set some major principles regarding such use even under extreme circumstances. It was followed by a number of UNGA resolutions as well as multiple references in the disarmament fora such as the NPT Review Conferences.

This debate has recently rebounded with the campaign focused on the humanitarian impact of nuclear weapons leading to revisit IHL considerations before morphing into something different since the 2015 NPT Conference with the work of the Open Ended Working Group (OEWG) focusing on promoting a ban treaty.

The “Humanitarian Impact of Nuclear Weapons” debate

Started by the ICRC in 2010 and promoted by several governments and NGO, the debate over the humanitarian impact of nuclear weapons (HINW) gained traction in international fora and became for a couple of years a prominent issue in the global discussion on nuclear weapons and nuclear disarmament.

Addressing this humanitarian dimension opened a debate on the serious (some say catastrophic) consequences of the use of nuclear weapons in a context in which nuclear weapons have not been used since 1945.

This legitimate debate has moved from a parallel like-minded initiative sponsored by the governments of Norway, Mexico, and Austria with the conferences held in Oslo (March 2013), Nayarit (February 2014) and Vienna (December 2014) to a major issue in the debates of the 2015 NPT Review Conference. A large number of countries have participated in those like-minded events and have endorsed statements expressing concern about the potential humanitarian consequences of any use of nuclear weapons. Going one step beyond, Austria introduced a “Pledge” presented at the Vienna Conference on the Humanitarian Impact of Nuclear Weapons which has been endorsed by *circa* 100 States to date, but not by any Nuclear

Weapons States (according to the NPT), nuclear capable States, or any State under a nuclear umbrella.

As the debate unfolds, this food-for-thought paper tries to frame it by listing the associated questions (and answers when available), possible next steps and ultimate goals of the debate which remain unclear in the aftermath of the NPT Review Conference.

Questions associated with humanitarian consequences debate

The current debate tends to mix several sub-issues which need to be differentiated in order to address the concerns associated with humanitarian impact. Data used in the debate come from multiple sources

- Consequences of the Hiroshima and Nagasaki bombings (only actual uses to date);
- Available data about the history of nuclear testing;
- Historical data about incidents/accidents involving nuclear weapons;
- Facts associated with major civilian nuclear accidents (Chernobyl and Fukushima in particular);
- Modeling about the local, regional and global consequences of a limited or major nuclear use.

Before going into the debate, it is worthwhile noting that a lot of the factual elements put forward date back to the Cold War era and tend to leave aside progresses regarding safety of NW, the end of atmospheric testing, the significant decrease in the global stockpile of nuclear weapons. Modelings of nuclear use and nuclear accidents are themselves open to debate but do raise important issues and help understand potential consequences of a nuclear use or accident.

Promoters of the HINW debates often point “new” evidences which justify raising the profile of the issue. This point is questionable as humanitarian debates - *inter alia* – about a nuclear winter, campaigns to stop nuclear testing and efforts to prevent a nuclear war or accidents based have been constant features of the nuclear debate for decades. The most recent studies follow a long list of studies conducted by academics, NGOs, international organizations, on the potentially dramatic consequences of a nuclear use but do not radically transform the terms of the debate.

1. Would a major nuclear war have major humanitarian consequences?

In spite of the reduction in the stockpiles of nuclear weapons (NWs) and of the lower average yield of modern NW, it is not contested that a major nuclear war or any significant exchange of nuclear weapons in a regional context would have major consequences, in terms of fatalities and casualties, and lead to long term health and environmental damage. The examples of Hiroshima and Nagasaki have given a clear example of the massive consequences of the use of rudimentary fission devices in urban areas. Most recent studies suggest that such devastating consequences would be repeated or worse in the event of a nuclear conflict.

Nuclear weapons States (NWS) themselves do not contest this point; they emphasize the fact that it is precisely the devastating and terrifying nature of a nuclear war that is at the very foundation of nuclear deterrence. It has also led to establish a strong taboo on the use of nuclear weapons and the development of policies that emphasize the non-use of nuclear weapons (except under extreme circumstances). In a nutshell, and from this perspective, if nuclear weapons did not imply such grave consequences, they would probably have been used in conflict since 1945, when leaders and scholars alike immediately understood the different nature of nuclear weapons and progressively established policies of restraint.

Moreover, modern targeting policies (at least of the most advanced NWs, i.e. P5) have evolved from counter-cities targeting to more precise targeting (counterforce or targeting decision-making) which partially mitigate the humanitarian consequences on civilians of nuclear attacks. But this does only marginally alter the two previous points.

Lastly, proponents of nuclear deterrence argue that conventional war can also lead to vast destruction and massive casualties (including of civilians), as both World Wars and several “regional” conflicts have demonstrated. Hiroshima and Nagasaki only accounted for a fraction of the fatalities of World War 2, and conventional air bombing raids conducted by Germany against Britain, by the Allies against Germany, by the US against Japan also led to massive civilian casualties (Dresden and Tokyo bombings remain the worse examples of those). From that perspective, proponents of deterrence argue that nuclear weapons have, since 1945, played a role in preventing major conventional wars amongst major powers.

2. Would any use of nuclear weapons have humanitarian consequences? Can the consequences of a nuclear use be mitigated?

The draft final document of the 2015 NPT revcon noted “its deep concern at the catastrophic humanitarian consequences of any use of nuclear weapons”. The use of word “any” has been debated amongst State Parties. It can indeed be argued that any use of a single nuclear device can have significant humanitarian consequences, especially in the event of a nuclear explosion in an urban or densely-populated area.

There are, however, some scenarios in which a nuclear use would have only limited humanitarian consequences. Under certain circumstances, asingle shot of a low-yield device in a deserted area (or at sea) on military targets or the use of a nuclear weapon to provoke an electro-magnetic pulse (EMP) could have limited humanitarian consequences if any. The environmental damage would however have to be precisely assessed.

It is clear that any use of a nuclear weapon would have massive political consequences and it is quite absurd to envisage a limited nuclear war as easily manageable. The humanitarian consequences of “any” use ar, however, not as clear.

3. Are nuclear weapons stockpiles safe and reliable? Is there a serious risk of a nuclear accident?

A third axis of the debate revolves around the risks associated with an accidental detonation following a mismanagement of a device.

This concern is based on a number of incidents involving nuclear weapons, including some serious accidents. At this stage, while acknowledging that risk zero does not exist, it is interesting to note that none of the recorded accidents or incidents has involved a nuclear detonation. There have been a handful of recorded radioactive leaks or pollution associated with the mismanagement of nuclear weapons, but none qualify as provoking humanitarian consequences. The promoters of HINW campaign usually point at “near-misses” to argue that NWS involved have been “lucky”. Without underestimating the seriousness of past declassified accidents, it could also be argued that given the massive amounts of nuclear weapons operated during the Cold War, the safety of the stockpile has been historically quite robust.

Moreover, the overwhelming majority of recorded events have taken place during the Cold War and in the early decades of the nuclear age. Since then, safety and reliability of nuclear weapons have been constantly

improved by the introduction of multiple safety and security systems and procedures aimed at preventing unintended uses or accidental detonations. In such a context, it can be argued that the combination of security improvements and of the massive reduction of the number of weapons have reduced the risk of accidents at least for the most advanced NWS which have made significant progress towards much safer arsenals. This might not be the case for newcomers such as North Korea.

As the security of nuclear weapons remain – for good reasons – a mostly classified matter and in the absence of a clear benchmarking, it remains difficult to assess with high certainty whether the claim that nuclear weapons are fail-safe under all circumstances is correct for all NWS.

4. Did nuclear weapon tests have a humanitarian impact?

Nuclear testing has had very significant humanitarian consequences in the past, especially atmospheric testing. Populations were displaced by all NWS, in different numbers. Environmental consequences were also locally massive and in many cases probably irreversible.

The impact of the Soviet era testing in Semipalatinsk is well documented. They have had significant impact on the health of a large population in the area. It is estimated that more than one million inhabitants have been affected, including more than 30.000 with severe consequences. Moreover, the health consequences of testing in Semipalatinsk have impacted the next generation with newborns being affected of deformities beyond average rates, and multiple recorded occurrences of diverse diseases that can also be identified as consequences of exposure to radiations.

All NWS also face cases of personnel involved in testing affected in the long term with diverse health issues.

Fully implemented with the last atmospheric test by China in 1980, the end of atmospheric testing (which was also motivated by humanitarian, and environmental concerns at the time of the signature of the PTBT) and the prohibition of nuclear testing under the CTBT (in spite of the lack of entry into force) have considerably reduced the humanitarian impact of testing. Even non-signatories of the CTBT (Pakistan, India, DPRK) which have conducted nuclear tests have only conducted underground tests. As long as all NWS (except DPRK) observe a moratorium on testing, the issue of testing appears mostly as an historical problem (with on-going consequences in some specific cases such as Semipalatinsk or Bikini).

5. Can the taboo on nuclear use be preserved in the long term?

The strongest argument put forward by the advocates of the humanitarian approach is the concern that the taboo on nuclear use might not be sustainable in the long term. Therefore, there would be a serious risk of use in the 21st century, because of an accident or of a regional conflict escalating to a nuclear exchange with severe humanitarian consequences. In order to make this point, the scenario of a conflict in South Asia is often used to model the consequences of a nuclear exchange.

This is, of course, a serious issue for consideration\ as the hypothesis of a nuclear exchange cannot be ruled out entirely. Developments in the field of proliferation with new actors such as the DPRK, evolving defense policies putting more emphasis on nuclear weapons on the part of several NWS such as Russia, high alert postures, all suggest that nuclear stability and non-use cannot be taken for granted in the 21st century.

As this challenge goes well beyond the humanitarian issue *per se*, the debate should focus on the role of the humanitarian approach (if any) in preventing a nuclear conflict. Nuclear realists would argue that deterrence remains the safest way to prevent nuclear escalation (and preserve peace amongst major powers) as it has done in the last 70 years, when proponents of the humanitarian approach seek to establish a new norm banning the use of nuclear weapons based on humanitarian concerns and see it as the most efficient way to avoid nuclear use. The fact that this approach has not been endorsed by any NWS limits, at least in the short term, the prospects of achieving success.

The humanitarian approach: key debates

Although some analysts argue that the humanitarian approach campaign has reached its limits and cannot achieve much more under the current circumstances, it is interesting to examine how the debate could unfold in the future and what are the key points to be addressed to make the best possible use of the debate.

1. Is the humanitarian approach applicable to nuclear disarmament?

The countries and NGOs promoting the humanitarian impact debate put forward a dual approach using two precedents.

On the one hand, they argue that NW should be prohibited on humanitarian grounds just as chemical weapons and biological weapons were prohibited in the past through the 1925 Geneva Protocol, the 1972 BTWC and the 1993 the CWC, which have progressively established a regime evolving from prohibition of use to complete elimination of CW and BW, with success as the number of uses since WWI has been limited to a handful. It is interesting to note that key possessing States were actively involved in the negotiations of these international treaties.

On the other hand, and using the models of the Ottawa process on landmines and of the Oslo process on cluster munitions, others argue that an approach involving like-minded countries and the civil society can establish a new norm that will gradually spread.

These two points are valid for the weapons concerned, but is it true for nuclear weapons?

The most difficult problem to tackle is the deterrent role of NW that no other weapon perform (even other WMD) which makes them unique. NWS give them a specific role in their defense posture which cannot easily be replaced, when there were military substitutes for landmines, cluster bombs.

In the absence of endorsement by NWS (in spite of the participation of the US and the UK in the latest conference in Vienna), the efforts to negotiate an international instrument outside the UN framework seem unlikely to achieve success in the foreseeable future. Many analysts and governments (including NWS) question the value of such an instrument in the absence of a serious engagement of all (or at least some) NWS.

2. Is the humanitarian approach about eliminating nuclear weapons?

Until 2015, there was an unresolved debate amongst the proponents of the humanitarian approach between those (Austria, ICAN) who were seeking elimination of nuclear weapons through a new path, and those (ICRC, Switzerland) who chose a more focused humanitarian approach on mitigating the risks and consequences of a nuclear event by establishing a set of norms and principles.

The debates of the open ended workshop (OEWG) have resolved that dilemma as a majority of participants have chosen a path towards a nuclear weapon convention aimed at prohibiting nuclear weapons altogether. Amongst participants in the OEWG, the proponents of a step by step approach focused on the humanitarian consequences have been put in a minority position.

3. Could the humanitarian approach improve safety and security of existing nuclear stockpiles?

This is a central point in the debate. Given past incidents involving nuclear weapons, there is a legitimate concern about the safety and security of nuclear weapons. It should be possible for NWS to increase transparency on the security measures they implement, in order to provide assurances about their efforts to limit risks. Forms of benchmarking and peer review could be useful additions. There are, of course, national security concerns associated with transparency regarding nuclear weapons safety, but this could be manageable.

A further effort to limit or eliminate weapon systems on hair-trigger alert could also reduce risks of accidental launch.

Lastly, an international effort to work on consequence management of a nuclear event could be pursued as it is clear that even a major accident or a limited use could require an international response to address the immediate and longterm consequences.

The work of the OEWG seems to have left aside these issues to focus on the promotion of a NW ban.

4. Legality and legitimacy of nuclear weapons use

One of the key features of the HINW campaign is to reopen the debate about the legality of the use of nuclear weapons. The 1996 ICJ Advisory Opinion accepted the logic of use under extreme circumstances, but already set some limits. I quote the central element of the opinion : “It follows from the above-mentioned requirements that the threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law; However, in view of the current state of international law, and of the elements of fact at its disposal, the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of a State would be at stake.”.

The legal approach raises important issues related to internal law, international humanitarian law and laws of war in the event of a nuclear war such as:

- The non-discriminatory nature of NW with the difficulty to distinguish combatants and civilians;

- The impossibility to guarantee the protection of neutral countries in the conflict;
- The difficulty to insure a criteria of proportionality when using or threatening to use NW;
- Potentially unacceptable environmental damages;
- The serious risk to create excessive and disproportionate human suffering.

While the debate partially ignores evolutions of nuclear planning and nuclear technology, it is a legitimate debate from a political and a legal standpoint. It needs to be better informed from a strategic, legal and scientific standpoint as, once again, it conflicts with the legitimacy of deterrence. If NWS can argue (as they did successfully in 1996) that the use of NW could be acceptable under some extreme circumstances, it is clear that this does not offer a general principle of legality under any circumstances.

This debate has gained importance as some NW possessors have clearly signaled their intention to lower the nuclear threshold in a manner that could be inconsistent with the ICJ recommendations of 1996.

The political and legal debates are intertwined as admitting that the use of NW is in essence inhumane or would have unacceptable humanitarian consequences is paving the way to weaken the case for the legality of use and potentially makes the weapons themselves illegal on humanitarian grounds. This is, of course, politically unacceptable for NWS.

5. Nuclear weapons use versus nuclear deterrence

A more fundamental issue is at stake in the HINW debate. Raising the humanitarian issue aims at undermining in the long term the legitimacy of nuclear deterrence which is not about use.

Since 2000, attacks on the logic of deterrence have been a constant feature of the international nuclear debate. While this is a legitimate debate, it is a matter of priority. Should the disarmament community focus on reducing nuclear stockpiles and work towards their ultimate elimination, or should it seek to delegitimize deterrence leaving aside concrete steps towards nuclear reductions?

The latter seems to the proponent of the humanitarian approach a more promising approach as they view the efforts of NWS too slow and limited, and note that all NWS are engaged in long term modernization processes which suggest that they intend to retain nuclear weapons for decades. It

does, however, raise a serious issue as such an approach (if successful) could lead to a world with nuclear weapons but without nuclear deterrence which would not be safer.

This is a fundamental element of the debate that seems to be lacking. Opening such a debate on to exercise deterrence while taking into account humanitarian concerns could be an important addition to a divisive debate.

Nuclear weapons: IHL considerations revisited, 20 years after the ICJ Advisory Opinion

Gro NYSTUEN

Senior Partner, International Law and Policy Institute, Oslo

I have been asked to talk about nuclear weapons and IHL, with a special focus on the ICJ Advisory Opinion. The focus of my presentation is: The confusion and possible conflation between *ad bellum* and *in bello* in the Advisory Opinion.

The Advisory Opinion and its implications have been subject to extensive debate in these past 20 years. There have been very different opinions as to whether the Advisory Opinion clarified or confused questions pertaining to IHL and nuclear weapons, and whether it had any bearing on international customary law.

Let me say at the outset that I think perhaps the Advisory Opinion has been given too much weight in the international law debate pertaining to nuclear weapons - it is just an Advisory Opinion, not some kind of international *lex superior*.

Already before the ICJ delivered its opinion, some commentators were very cautious as to whether it was a good idea to pose the famous question about the legality of nuclear weapons to the ICJ. One reason was the uncertainty about the outcome. But many States and civil society organisations alike were convinced that the Court could not reasonably come to any other conclusion than that the use of nuclear weapons must be forbidden under international law. The result, as we know, was not as crystal clear as many had hoped.

This lack of clarity one might suggest, was partly linked to the question that was posed to the ICJ by the General Assembly, which was: 'Is the threat or use of nuclear weapons in any circumstance permitted under international law?'

I will address some of the IHL implications of the Advisory Opinion – not all of them. What I will focus on is the blurring of the lines in the Advisory Opinion between *jus ad bellum* (when is it lawful to resort to the use or threat of armed force) and *jus in bello* (what means and methods can lawfully be used in war, regardless of the war's justification, and why this is potentially very unfortunate for the protection of IHL).

There are particularly two features in the Advisory Opinion that contribute to this blurring - the first is the very famous sentence on extreme circumstances of self-defence, and the second is the implication by the

Court that threats are in general regulated by international humanitarian law.

The first aspect of the Advisory Opinion that I will discuss is the famous sentence in para. 105 2 E (in the dispositif of the Advisory Opinion):

The Court stated that it could not ‘conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of the State would be at stake.’

This sentence could be seen as leaving open the question of whether a State could lawfully justify its use of nuclear weapons – even when such use violated *jus in bello* – by reference to ‘extreme’ self-defence.

Of course, the court didn’t say that such an extreme circumstance would allow for *jus ad bellum* considerations to override *in bello* – it just said that it could not conclude on the matter. Possibly, because of this “disclaimer”, the Court did not enter into a legal discussion on the relationship between *jus ad bellum* and *jus in bello*.

Many scholars have argued that the unfortunate implication of this famous paragraph could be seen to indicate that *jus ad bellum* considerations can override *jus in bello* obligations.

Other scholars have commented that the Court’s opinion recognizes that the rules of *jus ad bellum* and *jus in bello* are ‘cumulative, not alternative’, and that ‘[T]here is, therefore, no need to read the second part of... the paragraph as setting up the *jus ad bellum* in opposition to the *jus in bello*.’ In other words, one could read the sentence as if it says: one cannot exclude that the use of nuclear weapons would be lawful in extreme circumstances of self-defence - but only when the conditions of IHL were satisfied

Several commentators have argued against this interpretation; because the preceding sentence in para. 105 states that the threat or use of nuclear weapons would generally be contrary to the rules of IHL. The inference is that this does not always (only generally) apply - and this is underlined by the sentence that follows which refers to extreme circumstances of self-defence, in other words - exceptional circumstances.

I do not have the authoritative answer to how this wording was meant, but it did cause a great deal of concern. It goes without saying that only a situation of armed conflict triggers IHL, and that most situations of armed conflict arguably could be seen as ‘extreme circumstances of self-defence’. If it is the seriousness of the *ad bellum* situation that determines whether or not nuclear weapons can be used, then by implication, IHL is effectively set aside. Application of IHL cannot depend on *ad bellum* considerations: (It would lead to arguments along the following lines: we don’t have to protect your civilians because you started this war in violation of the UN Charter).

The body of law that constitutes IHL is in itself an emergency regime and, therefore, it does not contain any basis for derogation in times of crisis. It cannot be modified or set aside because of alleged or actual deficiencies in the legal basis for an armed conflict or because of the seriousness of an armed conflict. This standpoint is often characterized as the ‘separation principle’, and departure from the separation principle thus means departure from established legal norms.

Some of the scholars who challenge the ‘separation principle’ premise their argument on the ‘just war’ model, and the reasoning often stems more from a moral and philosophical standpoint rather than a legal one. This position is known as the ‘conflationist’ position. It is of course not clear that the Court actually meant to express such a position.

The second aspect of the ICJ Advisory Opinion that I find unfortunate with regard to blurring of the lines between IHL and *ad bellum*, has not been subject to the same amount of public debate as the sentence in para 105. This aspect pertains to how the ICJ, on several occasions in the Advisory Opinion, mixed these two bodies of law together, possibly without intending to do so.

The Court stated several times that the threat of use of nuclear weapons would be a violation of not only *jus ad bellum* as reflected in the UN Charter, but also of international humanitarian law.

The ICJ had described its task as ‘clear’ in that it was to ‘determine the legality or illegality of the threat or use of nuclear weapons.’ The Court, in applying article 38 of its Statute with regard to the relevant legal sources to be relied on, stated that the ‘[M]ost relevant applicable law....is that relating to the use of force enshrined in the United Nations Charter and the law applicable in armed conflict which regulates the conduct of hostilities...’

It is thus clear that the Court, as a point of departure, did recognize the two distinct and separate legal regimes. These two legal regimes are, however, not sufficiently separated throughout the Advisory Opinion. The concept of ‘threat of use of force’ is treated throughout the Advisory Opinion as if it were also generally regulated by international humanitarian law. The Court even stated explicitly that if the use of nuclear weapons were prohibited *in bello*, then the threat of use of nuclear weapons would also be prohibited under the same rules. I will come back to this in a minute.

At the outset, the Court noted that both threats and use of force was prohibited *ad bellum*: “The notions of ‘threat’ and ‘use’ of force under Article 2, para. 4, of the Charter stand together in the sense that if the use of

force itself in a given case is illegal – for whatever reason – the threat to use such force will likewise be illegal.”

This approach seems to be consistent with the so-called ‘Brownlie Formula’ often cited in discussions about the use of force: ‘[if] the promise is to resort to force in conditions in which no justification for the use of force exists, the threat is itself illegal.’

This formula is a statement that specifically pertained to *jus ad bellum*. Why it was extended into *jus in bello* by the ICJ is unclear. IHL, by and large, does not regulate threats.

In its analysis of existing treaty law pertaining to other weapons, such as poisonous weapons or gas and other weapons of mass destruction, the Court limited its discussions to use and did not bring up the question of threats. The reason for not discussing threats in this context was probably that none of the other arms treaties regulate threats. Also, when the Court looked at various other treaties relevant to nuclear weapons, such as treaties on nuclear weapons free zones, its discussions were limited to use or deployment, probably for the same reason: these instruments do not regulate threats.

In its discussion of IHL and nuclear weapons, the Court referred to the St. Petersburg Declaration and its prohibition against the use of ‘weapons which uselessly aggravate the suffering of disabled men or make their death inevitable’. The Court then outlined a synopsis of IHL and its core rules and principles, emphasizing that ‘States do not have unlimited freedom of choice of means in the weapons they use.’

After summing up the core content of IHL and the underlying rationale for these rules, the Court stated (somewhat surprisingly): ‘If an envisaged use of weapons did not meet the requirements of humanitarian law, a threat to engage in such use would also be contrary to that law.’

Thus, the Court gave an explicit statement of law, expressing the view that threats of using weapons in violation of IHL must be equally illegal as the actual use. The Court did not, however, explain how it came to this conclusion.

If one considers the body of law that pertains to the conduct of hostilities, the operative word is “conduct”, not “threats of conduct”.

The two specific provisions that pertain to threats under the rules of IHL are laid down in AP I to the Geneva Conventions. These two provisions pertain to the prohibition that no quarter will be given (article 40 in AP I), and to threats of terror against the civilian population (article 51 (2) of AP I.) (This prohibition is also to be found in AP II, article 13.)

Clearly, threatening the use of nuclear weapons could constitute violations of both of these provisions, given that the legal requirements

were fulfilled. The question is whether threatening the use of nuclear weapons will always violate these rules.

Let me take the first of these provisions on threats under IHL: threatening denial of quarter. Article 40 of AP I states that: 'It is prohibited to order that there shall be no survivors, to threaten an adversary therewith or to conduct hostilities on this basis.'

In its Written Statement to the ICJ in connection with the proceedings, the Solomon Islands argued that threats of use of nuclear weapons would violate the rule on quarter. The Solomon Islands stated: 'Given the inevitability of the lethal effects of nuclear weapons, threatening their use must surely also violate the rights of potential victims as set forth in article 40 of the First Additional Protocol...'

The question in this context is whether it could be argued that any use of nuclear weapons would always and inevitably lead to a situation where there would be no survivors?

Despite limited experience with the use of nuclear weapons in hostilities, there seem to exist ways of using nuclear weapons that would not necessarily have such an effect. Even in Hiroshima and Nagasaki there were survivors.

The ICRC Commentary to article 40 of AP I notes that article 40 does not imply that the Parties to the conflict abandon the use of a particular weapon, but that they forgo using it in such a way that it would amount to a refusal to give quarter.

One should also note that other provisions more specifically aimed at means of warfare, such as article 51 (4) of AP I on indiscriminate attacks, have not been interpreted to constitute prohibitions of specific weapons. It seems difficult to sustain the point of view that while article 51(4) (b) does not constitute a *de facto* prohibition against the use of, for example, biological or chemical weapons, it nevertheless would constitute a ban on nuclear weapons.

The other provision in AP I that explicitly deals with threats is article 51 (2), which states that: "Acts or threats of violence the primary purpose of which is to spread terror among the civilian population are prohibited."

So the same question arises: Are threats of the use of nuclear weapons *per se* a violation of this rule?

According to the ICRC Commentary to this provision, the second sentence of article 51(2) applies to acts or threats of terror that go beyond ordinary acts of war. Notwithstanding that ordinary acts of war in most circumstances are terrifying to those who might be at the receiving end or in the vicinity of such acts, the prohibition against acts or threats of

violence against civilians requires that the primary purpose is to spread terror.

According to the Commentary, this provision is intended to prohibit acts of violence the primary purpose of which is to spread terror among the civilian population without offering substantial military advantage or threatening to carry out such acts.

The fact that there are two explicit provisions on threats in AP I suggests that there is no general prohibition on threats of violating provisions in AP I, as the Court suggests that there is. My view is that there is no general prohibition on threats to violate IHL. The main purpose of IHL is to regulate the conduct of hostilities and to do this in a way that separates combatants from civilians and thus makes it possible to protect civilians from the effects of hostilities.

The issue of to what extent IHL actually deals with threats, (and hence, whether the Brownlie formula can be extended to IHL) might not seem very important. The reason I have for picking on this relatively narrow element of the ICJ Advisory Opinion is that it reinforces the blurring of the lines between *jus ad bellum* and *jus in bello*. And, as I have already stressed, if *jus ad bellum* considerations are used to determine to what extent IHL applies, then the legal regime for protecting those affected by armed conflict will disintegrate.

All of the legal regimes dealing with specific weapons, such as chemical weapons, blinding laser weapons, landmines and cluster munitions, only regulate the use, not threats of use. In other words, they address the humanitarian impacts of weapons. But in the discussions on nuclear weapons, because of the ICJ Advisory Opinion, the concept of threats of use has been prominent.

This issue might become one of the issues that will come up in connection with the forthcoming discussions on a treaty prohibiting nuclear weapons in the first committee in a few weeks time.

VIII. Challenges from specific weapons (pt. 2)

To what degree do the difficulties in tracing the author of the attack and assessing the extent of the effects remain a challenge for addressing the legal issues raised by “cyber-weapons”?

Marco ROSCINI

Professor of International Law, University of Westminster, London

As the US Department of Defense has noted, there is no internationally agreed definition of what a ‘cyber weapon’ is.¹ There is agreement, however, that at least certain cyber capabilities can constitute a weapon. Certain states have expressly qualified cyber capabilities as weapons and many also have active operational cyber weapons development programs in place.² In April 2013, for instance, the US Air Force upgraded six cyber capabilities to ‘weapon’ status,³ and the new US Law of War Manual expressly provides for a legal review of weapons that employ cyber capabilities, although it cautions that not all cyber capabilities are necessarily weapons or weapon systems.⁴

For the purposes of this paper, I will consider cyber capabilities as weapons when they are designed, intended or used to cause injury or damage to an adverse party in an armed conflict.⁵ Cyber weapons include a

¹ US Department of Defense, ‘Cyberspace Policy Report’, November 2011, p. 2.

² Marco Roscini, *Cyber Operations and the Use of Force in International Law* (Oxford: Oxford University Press, 2014), p. 170.

³ Andrea Shalal-Esa, ‘Six U.S. Air Force cyber capabilities designated “weapons”’, Reuters, 8 April 2013, www.reuters.com/article/net-us-cyber-airforce-weapons-idUSBRE93801B20130409.

⁴ US Department of Defense, Law of War Manual, June 2015, p. 1008. See also US Air Force Instruction 51-402, as updated in July 2011, which requires a legal review of cyber capabilities used in cyber operations. The review includes establishing at a minimum: ‘3.1.1. Whether there is a specific rule of law, whether by treaty obligation of the United States or accepted by the United States as customary international law, prohibiting or restricting the use of the weapon or cyber capability in question. 3.1.2. If there is no express prohibition, the following questions are considered: 3.1.2.1. Whether the weapon or cyber capability is calculated to cause superfluous injury, in violation of Article 23(e) of the Annex to Hague Convention IV; and 3.1.2.2. Whether the weapon or cyber capability is capable of being directed against a specific military objective and, if not, is of a nature to cause an effect on military objectives and civilians or civilian objects without distinction’ (‘Legal Reviews of Weapons and Cyber Capabilities’, US Air Force Instruction 51-402, 27 July 2011, p. 3 <http://nsarchive.gwu.edu/NSAEBB/NSAEBB424/docs/Cyber-053.pdf>).

⁵ See William H. Boothby, ‘Methods and Means of Cyber Warfare’, 89 *International Law Studies* (2013), p. 390.

delivery system, a navigation system and a payload.⁶ The delivery system could go from e-mails to malicious links in websites, hacking, counterfeit hardware and software. System vulnerabilities are the main navigation systems that provide entry points for the payload by enabling unauthorized access to the system. The payload is the component that causes damage: if the code, however sophisticated, is designed solely for the purpose of infiltrating a computer and stealing information, as in the cases of Duqu and Flame, it would not be a 'weapon', as it is neither intended nor capable of causing damage.⁷

The problems with attributing the use of cyber weapons are proverbial. Anonymity is in fact one of the greatest advantages of cyberspace. This has important consequences for the application of the law of armed conflict. If we cannot identify and attribute the cyber attacks with sufficient certainty to states, for instance, we will not be able to apply the law of *international* armed conflict to them. A belligerent may also be encouraged to use cyber weapons in a way not consistent with the law of armed conflict because there is a good chance that it will be able to hide under the invisibility cloak of plausible deniability.

Two situations must be distinguished: the *identification* of the source of the attack, which is essentially a technical matter, and the *attribution* of the attack to a state or non-state actor, which is a legal exercise. The two situations are different and should not be confused. The identification problem is not unique to cyberspace, it is only more difficult. An IP address identifies the origin and the destination of the data: with the cooperation of the Internet Service Provider (ISP) through which the system corresponding to the IP address is connected to the internet, it could be associated with a person, group or state. The IP address, however, can be 'spoofed', or the corresponding computer system could only be a 'stepping stone' for an attacker located elsewhere.⁸ Hiding behind botnets (i.e. hijacked computers) is also a good way of anonymizing cyber operations.

If the assumption is that the origin of cyber attacks can never be identified, the law of armed conflict (and any other international law) clearly becomes very difficult to apply. But the case for identification is not as hopeless as is too frequently described: sufficient evidence can be found

⁶ Fred Schreier, 'On Cyber Warfare', DCAF Horizon 2015 Working Paper no. 7, pp. 66-67, www.dcaf.ch/Publications/On-Cyberwarfare.

⁷ Thomas Rid and Peter McBurney, 'Cyber-Weapons', *RUSI Journal* 157 (February/March 2012), p. 11.

⁸ Scott J. Shackelford and Richard B. Andres, 'State Responsibility for Cyber Attacks: Competing Standards for a Growing Problem', 42 *Georgetown Journal of International Law* (2011), p. 982.

thanks to technical means, e.g. traceback tools, together with information from other sources, such as human sources and communications intercepts.⁹ Furthermore, as has been observed, ‘international law does not require States to be correct; it only requires them to be reasonable when arriving at, and acting on, their conclusions’.¹⁰ Further developments in computer technology and internet regulations are also likely to make identification easier in the future.¹¹ I should caution that advocating for reducing or removing anonymity in cyberspace, and on the internet in particular, is a double-edged sword: it would lead to identifying not only the authors of malicious cyber attacks, but also, say, pro-democratic hacktivists who use social media to protest against autocratic regimes.

Assuming that the authors of a cyber operation are eventually identified, the problem arises as to whether their conduct can be attributed to a state under the law of state responsibility: it is one thing to say that the hack came from IPs in Russia and another is to say that Russia is responsible for it. As already noted, if identification is essentially a technical matter, attribution is a legal exercise. Although it is not entirely implausible that a special regime of international responsibility could develop as a consequence of the peculiar features of cyber operations, in the present lack of any indications in that sense such conclusion would certainly be premature.¹² The applicable rules are, therefore, those contained in Chapter II of Part One of the 2001 International Law Commission (ILC)’s Articles on the Responsibility of States for Internationally Wrongful Acts, which substantially reflect customary international law. I cannot see any insurmountable problems with applying these rules in cyberspace that require the rethinking of these rules. With cyber weapons, the real problem

⁹ Michael Schmitt, ‘Normative Voids and Asymmetry in Cyberspace’, *Just Security*, 29 December 2014, www.justsecurity.org/18685/normative-voids-asymmetry-cyberspace/; William A. Owens, Kenneth W. Dam, and Herbert S. Lin, *Technology, Policy, Law, and Ethics Regarding U.S. Acquisition and Use of Cyberattack Capabilities* (Washington: The National Academies Press, 2009), pp. 138-141.

¹⁰ Schmitt, ‘Normative Voids’.

¹¹ In a previous Round Table, Nils Melzer observed that, ‘in the early days of air warfare, hostile airplanes could be detected only once they were near enough to be visible and audible. But then the radar was invented and solved the problem – until the stealth fighter came along’ (Nils Melzer, ‘Towards a Code of Conduct for Cyber Space’, in Wolff Heintschel von Heinegg (ed.), *International Humanitarian Law and New Weapons Technologies* (Milano: FrancoAngeli, 2012), p. 172).

¹² Article 55 of the ILC Articles provides that ‘[t]hese articles do not apply where and to the extent that the conditions for the existence of an internationally wrongful act or the content or implementation of the international responsibility of a State are governed by special rules of international law’. Read the text of the Articles in *Yearbook of the International Law Commission*, 2001, vol. II, Part Two, pp. 26-30.

is one of finding sufficient evidence, not of changing and even less lowering, the standards of attribution under the law of state responsibility. As the ICJ in the *Nicaragua* Judgment highlighted well before the advent of cyber technologies, ‘the problem is not... the legal process of imputing the act to a particular State... but the prior process of tracing material proof of the identity of the perpetrator.’¹³

There are increasing calls to deal with this cyber attribution problem by making a state responsible for all cyber attacks that emerge from within its borders, even if the attacks are not sponsored by that state. This view is inconsistent with the current law of state responsibility: the ILC Articles on state responsibility provide that a state is responsible for the conduct of individuals or groups that are not organs only when they are ‘in fact acting on the instructions of, or under the direction or control of, that State in carrying out the conduct’ (Article 8). At least one commentator has suggested that, due to the inherently clandestine nature of cyber activities and the technical difficulty of identifying the authors, the looser *Tadić* test should be preferred to the *Nicaragua* test to attribute the use of cyber weapons under the law of state responsibility.¹⁴ This view is untenable: indeed, it is exactly because of the identification problems characterizing cyber weapons and the potential for a false flag that the ‘effective control’ test is preferable, as it would prevent states from being frivolously or maliciously accused of cyber operations. Clear support for the application of the effective control test to cyber operations can be found in the speech given by the then US State Department’s Legal Advisor, Harold Koh, at the US CYBERCOM in 2012, where he claims that states are internationally responsible for cyber acts undertaken through ‘proxy actors’ when they ‘act on the State’s instructions or under its direction or control.’¹⁵ Azerbaijan also denounced cyber attacks conducted by a group of hackers called the ‘Armenian Cyber Army’ under the ‘direction and control’ of Armenia.¹⁶

Let us now move to the problem of assessing the effects of cyber weapons. First, while it is true that cyber weapons can produce effects practically immediately, operationally they are much slower: targets need to be identified, access to the target system needs to be gained and

¹³ *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. US)*, Merits, Judgment, 27 June 1986, ICJ Reports 1986, para. 57.

¹⁴ Scott J. Shackelford, ‘From Nuclear War to Net War: Analogizing Cyber Attacks in International Law’, 27 *Berkeley Journal of International Law* (2009), p. 235.

¹⁵ CarrieLyn D Guymon (ed.), *Digest of United States Practice in International Law*, 2012, p. 596.

¹⁶ Letter dated 6 September 2012 from the Chargé d’affaires a.i. of the Permanent Mission of Azerbaijan to the United Nations addressed to the Secretary-General, 7 September 2012, UN Doc A/66/897–S/2012/687, p. 1.

vulnerabilities identified, the payload has to be developed and deployed.¹⁷ The belligerents, then, have plenty of opportunities to assess the possible effects, consult a military lawyer and consider the legality of the operation. In fact, it is believed that several planned cyber attacks (like those by NATO on Serbia's air defences and by the United States on Libya's air defence system) were cancelled because of the concerns about their collateral effects.¹⁸ Speed of effects, then, could hamper retaliation, but does not necessarily prevent compliance with the law of armed conflict by the attacker.

It has also been said that, because malware may spread uncontrollably, its effects are difficult to assess and, therefore, cyber weapons are by definition inconsistent with the principle of distinction. But this is not necessarily true. It all depends on how the malware is designed and on the characteristics of the targeted system. Malware can be designed to spread indiscriminately: for instance, malware that disrupts the air traffic control system may not be able to distinguish between civilian and military aircraft. But malware could also be introduced into a closed military network,¹⁹ or be written so as to negatively affect exclusively certain systems, as was the case of Stuxnet. The same considerations apply to the principle of proportionality: proportionate cyber attacks are possible if the software is written with this purpose in mind and the targeted system is sufficiently known. While Stuxnet was promiscuous, for instance, it made itself inert if the specific Siemens software used at Iran's Natanz uranium enrichment plant was not found on infected computers, and contained safeguards to prevent each infected computer from spreading the worm to more than three others, before self-destructing on 24 June 2012.²⁰ In addition, it caused no more than inconvenience to infected computers other than the Natanz operating system, as the worm did not self-replicate indefinitely so as to slow down computer functions.²¹

¹⁷ Herbert S. Lin, 'The Technology of Offensive Cyber Operations', in *Technological Challenges to the Humanitarian Legal Framework*, 11th Bruges Colloquium, 21-22 October 2010, p. 38, www.coleurope.eu/sites/default/files/uploads/page/collegium_41_0.pdf.

¹⁸ Jeffrey T.G. Kelsey, 'Hacking into International Humanitarian Law: The Principles of Distinction and Neutrality in the Age of Cyber Warfare', 106 *Michigan Law Review* (2007-08), pp. 1434-1435; Rid and McBurney, 'Cyber-Weapons', p. 6.

¹⁹ Commentary to Rule 43, in *Tallinn Manual on the International Law Applicable to Cyber Warfare* (Cambridge: Cambridge University Press, 2013), p. 146.

²⁰ Jeremy Richmond, 'Evolving Battlefields: Does Stuxnet Demonstrate a Need for Modifications to the Law of Armed Conflict?', 35 *Fordham International Law Journal* (2011-2012), p. 856.

²¹ Richmond, 'Evolving Battlefields', p. 861.

Of course, targeteers will almost inevitably have to be assisted by cyber engineers when assessing the possible effects of cyber weapons and making decisions with regard to a cyber attack, unless they are trained cyber experts themselves.²² Collecting information about the architecture of the attacked network (network mapping) or operating system (footprinting) through cyber exploitation or traditional intelligence gathering will be of decisive importance in this context, as the effects of a cyber weapon greatly depend on the characteristics of the targeted systems. It should also be recalled that the duty to take precautions in attack and against the effects of an attack extends to cyberspace.²³

My conclusion is that the difficulties related to the attribution of the use of cyber weapons and their effects are not an impossible challenge for existing rules of the law of armed conflict. At the same time, I do not want to give the impression that I am downplaying the problems – that indeed exist – arising from the application in the cyber context of rules adopted well before the Information Age. These provisions need now to be re-interpreted in an evolutionary way so as to take into account the dependency of today's societies on computers, computer systems and networks. As recalled by the former President of the Israeli Supreme Court, Aharon Barak, in another context, 'new reality at times requires new interpretation. Rules developed against the background of a reality which has changed must take on a dynamic interpretation which adapts them, in the framework of accepted interpretational rules, to the new reality.'²⁴ The arguments in favour of evolutionary interpretation apply even more strongly to the law of armed conflict: the forward-looking character of this law is demonstrated by the inclusion in Additional Protocol I of Article 36 on the study, development, acquisition or adoption of a new weapon, means, or method of warfare, and of the Martens Clause. The debate on how the existing law of armed conflict applies in cyberspace, then, needs to continue.

²² Heather Harrison Dinniss, *Cyber Warfare and the Laws of War* (Cambridge: Cambridge University Press, 2012), pp. 206-207.

²³ US Law of War Manual, p. 1006. See Roscini, *Cyber Operations*, pp. 232-239.

²⁴ *Public Committee Against Torture in Israel et al. v. The Government of Israel et al.*, Israel's Supreme Court, HCJ 769/02, 11 December 2005, para. 28 (Barak). Vice President Rivlin also stated that 'international law must adapt itself to the era in which we are living' (ibid., para. 2 (Rivlin)).

Unmanned maritime systems: does the increasing use of naval weapons systems present a challenge for IHL?

Wolff HEINTSCHEL VON HEINEGG

Chair of Public Law, especially International Law, European Law
and Foreign Constitutional Law, Viadrina University,
Frankfurt (Oder); Council Member, IIHL

1. Systems and Vehicles

Naval mines and torpedoes could well qualify as unmanned maritime systems. Still, they are excluded here because

- they are regulated by the 1907 Hague Convention VIII and
- because they are normally recoverable or designed to return (you do not want a torpedo or a naval mine to return to its origin).

The terms ‘unmanned maritime systems’ (UMS) and ‘unmanned maritime/seagoing vehicles’ (UMVs/USVs) seem to indicate that the former consist of various components and are far more complex than the latter. Indeed, ‘system’ means a ‘complex whole’ or a ‘set of things working together as a mechanism or interconnecting network’.¹ According to the U.S. DoD,

UMS comprise unmanned maritime vehicles (UMVs), which include both unmanned surface vehicles (USVs) and unmanned undersea vehicles (UUVs), all necessary support components, and the fully integrated sensors and payloads necessary to accomplish the required missions.²

Although those definitions seem to suggest that UMVs/USVs are but components of UMS it would not be correct to hold that UMVs/USVs do not qualify as ‘systems’ because they are composed of various subsystems.³

¹ Concise Oxford English Dictionary, p. 1462 (12th ed., 2011).

² U.S. Department of Defense, *Unmanned Systems Integrated Roadmap FY2013-2038*, p. 8.

³ For example, the major UUV’s subsystems are: the pressure hull, the hydrodynamic hull, ballasting, power and energy, electrical-power distribution, propulsion, navigation and positioning, obstacle avoidance, masts, maneuver control, communications, locator and emergency equipment, payloads. See National Defense Research Institute, *A Survey of Missions for Unmanned Undersea Vehicles*, p. 46 *et seq.* (RAND Corp. 2009).

Since a distinction between ‘systems’ and ‘vehicles’ does not prove helpful it seems to be correct to consider the terms ‘UMS’ and ‘UMV’ as widely synonymous.

Accordingly, UMS are self-propelled or remotely-navigated craft that are normally recoverable and designed to perform certain functions at sea by operating on the surface, semi-submerged or undersea. UMS are remotely operated, remotely controlled/supervised or they perform some or all of their functions independently from a human controller or operator.

2. Missions/Tasks of UMS

UMS can perform a wide variety of missions or tasks. While the focus of this paper is on military uses it is important to bear in mind that UMS, in particular UUVs, are today used for the performance of the following important civilian/non-military tasks:

- (1) offshore oil and gas missions;
- (2) undersea cable deployment and inspection;
- (3) commercial salvage;
- (4) aquaculture; and
- (5) science missions, such as oceanography and marine archaeology.⁴

According to the DoD Roadmap, current military missions performed by UMS (USVs and UUVs) include ‘mine warfare, mine neutralization, reconnaissance, surveillance, hydrographic surveying, environmental analysis, special operations, and oceanographic research’.⁵ Similarly, the *UUV Master Plan* identifies nine specific mission categories and prioritizes them as follows:⁶ (1) Intelligence, surveillance, and reconnaissance (ISR); (2) mine countermeasures (MCM); (3) anti-submarine Warfare (ASW); (4) inspection/identification; (5) oceanography; (6) communication/navigation network node (CN3); (7) payload delivery; (8) information operations (IO); and (9) time-critical strike (TCS).⁷

⁴ RAND (*supra* note #), p. 41 *et seq.*

⁵ DoD Roadmap (*supra* note #), p. 109.

⁶ U.S. Department of the Navy, *The Navy Unmanned Undersea Vehicle (UUV) Master Plan*, p. 16 (November 2004).

⁷ For a detailed description of those missions/tasks see RAND Report (*supra* note #), p. 13 *et seq.*

3. Legal Status and Navigational Rights in General

Although UMS navigate in sea areas they cannot without difficulty be considered ships. The international law of the sea lacks a uniform definition of the term ‘ship’. UNCLOS⁸ uses the terms ‘vessel’ and ‘ship’ interchangeably, without providing a definition of either term. In other treaties a ‘ship’ is defined as either (1) ‘any sea-going vessel of any type whatsoever, including floating craft, whether self-propelled or towed by another vessel, making a sea voyage’⁹; (2) ‘a vessel of any type whatsoever operating in the marine environment [...] includ[ing] hydrofoil boats, air-cushion vehicles, submersibles, floating craft and fixed or floating platforms’¹⁰; (3) ‘every description of water craft, including non-displacement craft and seaplanes used or capable of being used as a means of transportation on water’¹¹; or (4) ‘any self-propelled sea-going vessel used in international seaborne trade for the transport of goods, passengers, or both’¹². While those treaties do not prohibit treating UMS as vessels or ships, in particular, UNCLOS is designed for manned systems. In view of these difficulties UMS are not characterized as ships or vessels but rather as ‘craft’.¹³ It is quite probable that a considerable number of States is not prepared to either recognize as or to assimilate UMS to ships/vessels. Still, for the purposes of the present manual UMS could be considered as vessels. This should be accompanied by a recommendation to governments to agree on a joint statement to that effect. That would render a formal modification or amendment of the existing international law unnecessary. Moreover, it would be possible to characterize UMS as warships, if they are operated by the armed forces of a State for exclusively non-commercial governmental purposes.

⁸ United Nations Convention on the Law of the Sea of 10 December 1982, 1833 UNTS 3, 397.

⁹ 1962 Amendments to the 1952 Convention for Prevention of Pollution of the Sea by Oil, 11 April 1962, Annex, Article 1(1), 600 UNTS 332.

¹⁰ International Convention for Prevention of Pollution from Ships of 1973, as amended by the 1978 Protocol of 17 February 1978, 1340 UNTS 61, 184.

¹¹ Convention on the International Regulations for Preventing Collisions at Sea.

¹² United Nations Convention on Conditions for Registration of Ships (not in force), Article 2(4).

¹³ U.S. Navy/U.S. Marine Corps/U.S. Coast Guard, *The Commander’s Handbook on the Law of Naval Operations (NWP 1-14M)*, paras. 2.3.4-2.3.6 (Edition July 2007).

3.1. Sovereign Immunity

If UMS are operated by the armed forces or any other government agency of a State, they may not necessarily qualify as warships or State ships, but in view of the fact that they either constitute State property or serve exclusively non-commercial governmental functions, they do enjoy sovereign immunity and may be interfered with by other States in very exceptional circumstances (e.g. in an international armed conflict) only. Accordingly, it is correct to hold: ‘USVs and UUVs engaged exclusively in government, non-commercial service, are sovereign immune craft.’¹⁴

It is important to note that an independent legal status of sovereign immunity applies to UMS operating independently from another platform. Therefore, it is correct to hold that ‘USV/UUV status is not dependent on the status of its launch platform.’¹⁵ If the UMS is tethered to a controlling platform, it is difficult to attach to it an independent legal status. However, in view of the distinction between ROVs and AUVs becoming increasingly obsolete, the legal status of UMS should not necessarily be based on the controlling platform.

3.2. Navigational Rights

According to NWP 1-14M, ‘USVs and UUVs retain independent navigation rights’ and they, thus, are considered as enjoying the same navigation rights as surface vessels and submarines. Other States have not (yet) given statements to that effect although they in fact make use of UMS for governmental, scientific and commercial purposes. Hence, it is safe to conclude that UMS enjoy the right of freedom of navigation in the high seas and in the EEZ as well as the rights of innocent passage, transit passage and archipelagic sea lanes passage.

4. UMS and IHL

4.1. Exercise of Belligerent Rights

Although it may be unsettled whether UMS qualify as, or are assimilated to, warships State practice seems to suggest that they are, and

¹⁴ NWP 1-14M (*supra* note #), para. 2.3.6.

¹⁵ *Ibid.*

will be, used not only for attack purposes but also for the exercise of other belligerent rights, such as inspection of vessels. Since the exercise of those belligerent rights will predominantly occur in high seas areas, there is a need for transparency because not only enemy vessels may be affected but also neutral vessels. Therefore, in times of international armed conflict UMS should be identifiable as belonging to the armed forces of a belligerent. Moreover, those controlling or pre-programming them should be under regular armed forces discipline in order to ensure compliance with the law of armed conflict.

4.2. UMS as Means of Warfare

Whereas many UMS are used for ISR or oceanography, some are designed for attack purposes, such as those employed for ASW, MCM or mine-laying. If and to the extent UMS are employed for the purposes of attack, they qualify as means of warfare¹⁶ and their employment is subject to weapons law and targeting law.

a) Weapons Law

According to Article 35(2) AP I, it is prohibited to employ means or methods of warfare of a nature to cause superfluous injury or unnecessary suffering. According to Article 35(3) AP I, it is prohibited to employ methods and means of warfare which are intended or may be expected to cause widespread, long-term and severe damage to the natural environment. According to Article 51(4) lit. b) and c) AP I, it is prohibited to employ a means of combat which cannot be directed at a specific military objective or whose effects cannot be limited as required by AP I. Those prohibitions are customary in nature¹⁷ but not equally relevant for the employment of current UMS as means of warfare.

As regards the capability of being directed at a specific military objective, it must be borne in mind that UMS are equipped with weapons that use the same or similar technologies as, for instance, modern naval mines or torpedoes. They carry weapons that home into targets that have been identified by magnetic, electromagnetic or other signatures allowing for a sufficiently reliable identification as lawful military objectives.

Regularly, the effects of current naval weapons systems will not be excessive in relation to the military advantage anticipated. In this context it

¹⁶ As defined in Rule 1 (t) AMW Manual.

¹⁷ See Rules 5, 88, 89 AMW Manual.

is important to take into consideration the environment in which they are employed, in particular the characteristics of saline waters, and the fact that they will in most cases be used against targets which are not surrounded by civilian or specially protected objects. Apart from that, such considerations are not relevant under weapons law but rather under the law of targeting. The same holds true with regard to the protection of the marine environment. No naval weapons system in existence is to be expected to inflict to the marine environment the kind of damage prohibited by Article 35(3) AP I.

It is, therefore, safe to conclude that UMS are lawful means of warfare, whether they are remotely operated/controlled or whether they operate with a certain degree of autonomy. However, UMS that operate with some autonomy must be capable of employment in accordance with the targeting law rules referred to in the next sub-section, and these will include the precautions in attack obligations set forth there.

b) Targeting Law

If UMS are employed for attack purposes, the same rules apply as in the case of the use of manned platforms qualifying as means of warfare. The target must be a lawful military objective, collateral damage may not be expected to be excessive in relation to the military advantage anticipated and, finally, the required precautions in attack must be taken.

With regard to the latter it may be asked whether at sea different standards apply. According to Article 57(4) AP I, military operations at sea are subject to ‘all reasonable precautions’. Irrespective of the question whether the difference between the standards of feasibility and reasonableness is to be considered a ‘tenuous nuance’¹⁸, it follows from the wording of Article 57(4) AP I that the standard of reasonableness only applies to naval operations that may have an effect on the civilian population or civilian objects on land without being directed against targets on land. Sea-to-sea, as sea-to-air and air-to sea, operations, whose effects may not extend to land, continue to be governed by the customary obligation to take precautions in attack, which include the feasibility standard.¹⁹

Accordingly, and without prejudice to the duty of constant care²⁰, the employment of UMS for purposes of attack must be in accordance with the following requirements:

¹⁸ ICRC Commentary, MN 2230.

¹⁹ San Remo Manual, para. 46; AMW Manual, Rules 30 to 39.

²⁰ Article 57(1) AP I.

- The system and/or operator target must be able to verify the legality of the target²¹
- The system and/or operator must be capable of determining the probability of collateral damage²²
- If collateral damage is expected to be excessive in relation to the military advantage anticipated, the attack may not be executed²³
- If not excessive but still to be expected, there is an obligation to minimize or avoid collateral damage by all feasible precautions²⁴
- Unless circumstances do not permit, an advanced effective warning must be given.²⁵

The obligation to avoid or minimize collateral damage by the choice of a different weapon ('weaponeering') will regularly have no effect because of the feasibility standard, because UMS do not, and probably will not, carry more than one type of weapon. The obligation to give an advanced warning will come into effect, if UMS are employed for mine-laying purposes, in particular within the EEZ of a neutral State.

c) Law of Neutrality

In times of an international armed conflict, the employment of UMS is subject to the law of maritime neutrality (unless the use of force has been authorized by a Chapter VII decision of the UN Security Council²⁶). It is important to emphasize that it the law of neutrality applies to all military UMS whether they are used for attack purposes or not.

Accordingly, UMS may not engage in hostile actions in neutral waters or use neutral waters as a sanctuary or base of operations.²⁷ In the EEZ of a neutral State, they must be employed with due regard for the rights and duties of the coastal State.²⁸ The due regard rule also applies to the hostile use of UMS on the high seas.²⁹

Belligerent UMS have the rights of transit passage and archipelagic sea lanes passage.³⁰ Accordingly, neutral States may not suspend, hamper, or

²¹ Article 57(2) lit. (a)(i) AP I; San Remo Manual, para. 46(b).

²² San Remo Manual, para. 46(a).

²³ Article 57(2) lit. (a)(iii) AP I; San Remo Manual, para. 46(d).

²⁴ Article 57(2) lit. (a)(ii) AP I; San Remo Manual, para. 46(c).

²⁵ Article 57(2) lit. (c) AP I.

²⁶ San Remo Manual, para. 7; AMW Manual, Rule 165.

²⁷ San Remo Manual, para.s 14-16.

²⁸ San Remo Manual, para. 34.

²⁹ San Remo Manual, para. 36.

³⁰ San Remo Manual, para. 28.

otherwise impede those rights.³¹ Belligerent UMS enjoy the right of innocent passage, unless the neutral coastal State has, on a non-discriminatory basis, conditioned, restricted or prohibited passage through its territorial sea.³² The right of non-suspendable innocent passage may not be suspended.³³

The parties to an international armed conflict must respect the sovereign immunity of neutral UMS, which are employed for non-commercial governmental purposes. Neutral civilian UMS may only be interfered with, if they qualify as lawful military objectives. It needs to be stressed that the capture of neutral civilian UMS under prize law will, if at all, apply in very exceptional situations only. Usually, UMS are not used for the transport of cargo that could constitute contraband.

5. Concluding Remarks

The fact that UMS are already in use for a variety of purposes and that it is highly probable that they will be increasingly used in the future, does not seem to pose a challenge to IHL. If UMS qualify as means of warfare, i.e. if designed or used for attack purposes, they are subject to weapons law and targeting law. They are not unlawful *per se*, and employment for attack purposes will regularly be in accordance with targeting law.

The only unresolved issue pertains to their status as warships, as defined by international law, and their entitlement to the exercise of belligerent and navigational rights.

³¹ San Remo Manual, para. 29.

³² San Remo Manual, para. 19.

³³ San Remo Manual, para. 33.

IX. The Red Cross and Red Crescent Conference: what next?

Compliance measures

Valentin ZELLWEGER

Permanent Representative of Switzerland to the United Nations
and the other international organizations in Geneva

I was asked to provide you a short assessment of the outcome of the 32nd International Conference of the Red Cross and Red Crescent with regard to the process on strengthening respect for international humanitarian law (IHL) and on the way forward.

The regular participants of the Sanremo Roundtable are very well aware of the background of this resolution as we had the opportunity to present this important process already one year ago. Let me briefly recall the process that led us to the 32nd International Conference.

I hope that all of those present agree with me that in legal terms, international humanitarian law is in good shape. It has come to age, but in essence it remains an appropriate framework to regulate the conduct of parties to armed conflicts and to provide protection to the persons affected. There may be some areas that require strengthening the legal/normative framework – notably with regard to the protection of persons deprived of their liberty in non-international armed conflicts – but IHL in general gives the adequate responses to the challenges we observe in contemporary warfare. You will also agree with me, that, on the other hand, we observe today a blatant lack of respect for the existing rules. It is with regard to the implementation that we need to redouble efforts (at the national and multilateral levels) if we want to increase protection for the persons affected by armed conflicts.

This is exactly the preoccupation of the process that led us to the 32nd International Conference. On the basis of a mandate of the 31st International Conference of the Red Cross and Red Crescent in 2011, Switzerland and the ICRC undertook an important consultation process open to all States Parties to the Geneva Conventions aimed at identifying options for improving the application of IHL. We consulted States on the possibilities of reinvigorating the existing mechanisms and looked at how a new mechanism to facilitate the implementation of IHL could be designed.

Early in these discussions, States observed that what is lacking the most is an institutional space for them to regularly assess the state of IHL implementation and the current challenges (including the diverging interpretations of this body of law). Contrary to most other multilateral treaties, the Geneva Conventions of 1949 do not provide States an

opportunity to discuss challenges and means to address them on a regular basis. You are very well aware that, given the very obvious need to strengthen the implementation of IHL, other mechanisms have filled this vacuum. However, they rarely do so from an IHL angle properly speaking. It is only normal for the UN Human Rights Council to look at situations of armed conflicts from a human rights perspective and for the UN Security Council to do so from the perspective of international peace and security. While these discussions are tremendously helpful to raise awareness of the challenges or to develop solutions with regard to specific issues – such as the protection of the medical mission [UN Security Council Resolution 2286], this is not enough.

It is not enough because IHL still does not receive the attention it deserves on the multilateral policy agenda. It is not enough because these bodies do not necessarily bring together the right people: we need to discuss IHL implementation among those who are responsible at the national level to implement the law, notably from the Ministries of Defence and armed forces as well as from the justice sector. And it is not enough because these bodies often address IHL in situations of a perceived urgency. We need a space for States to discuss and cooperate expertly, calmly and systematically. We still lack such a forum.

Our proposal was thus for the 32nd International Conference to recommend to States the establishment of a forum of States on IHL. We also included in the draft resolution a “blueprint” of this new mechanism, including the functions that could be attached to it and other modalities (such as, participation of observers, budgetary issues, institutional structure, its non-contextual and non-politicized nature). The draft resolution was based on the outcome of the consultation process and reflected what we thought could be a compromise position among the variety of views expressed by States. The proposals that were included in the draft resolution thus enjoyed the broad support of the States that were involved in these consultations (over 140 States in a total of nine meetings).

As we did not have a proper negotiation mandate in the consultation process, the 32nd International Conference was the moment for States to put their cards on the table. I spare you the details of the lengthy negotiations which took place day and night between December 8 and 10. Some of you who participated in this exercise can testify to the hard work we did at the International Conference. But I would like to underline some aspects that I think came out very clearly from this Conference:

- First, as compared to the 31st International Conference of the Red Cross and Red Crescent in 2011, we observed that the broader geopolitical environment is today more strained. IHL is today more

relevant for a larger number of States, especially those engaged in armed conflicts, which automatically increases the attention that States pay to a discussion such as ours.

- Second, institution building has become a hard task. Resources are scarce and the work load is high for many diplomatic services. States are also wary not to set up new mechanisms hastily, fearing that they will evolve into some sort of “Frankenstein’s son” that would grow out of their control ten or twenty years down the road.

In the very last hours of the International Conference, we arrived at a compromise with those States that had the most serious concerns. In short, all States agreed at the International Conference to enter into an intergovernmental process 1) “to find agreement on features and functions of a potential forum of States” on IHL and 2) “to find ways to enhance the implementation of IHL using the potential of the International Conference [of the Red Cross and Red Crescent] and IHL regional forums”.

We – along with the ICRC and so many other States – had honestly hoped for a more expeditious and more courageous decision at the 32nd International Conference. But we have now received a mandate that is more focused than the previous mandate. It allows us to concentrate discussions on the specifics of the features and functions of the forum of States and will thus – as we expect – also reassure States that fear the establishment of a heavy, bureaucratic, intrusive and burdensome institution. What we want and what so many States agree would be a useful addition to the current compliance system is a nimble and effective forum for States to exchange experiences and share best practices with a view of increasing their respective capacities to uphold the norms they have signed on.

We are aware that the road may be long and windy. There are a few challenges ahead of us:

- The first challenge is to ensure that States feel responsible for this new phase of the process as well as its final outcome. While Switzerland and the ICRC will continue to co-facilitate this process, States need to take more ownership. Inviting more States to work alongside us in our facilitation efforts will also multiply outreach effects.
- The second challenge is to ensure that the discussions remain relevant. We are determined – as co-facilitators of the process – to bring this process to a successful outcome. We do want to establish a mechanism that is useful, although modest: it is impossible to find the silver bullet for all challenges in the implementation of IHL that we observe in contemporary armed conflicts. But increasing

awareness of their roots, causes and consequences, while developing collectively answers to overcome these implementation challenges, is a first step to gradually create an environment in which respect for the law becomes the norm and not the contrary.

In the coming months we will, together with all interested States, set up the organizational issues and the work plan of this process. We had a first collective brainstorming in June and will organize a second exchange of views this coming October. The goal is for us to develop a process that is effective and efficient and that is in full accordance with the guiding principles of the process. We were encouraged by the constructive contributions made by many States in these first exchanges. The purpose is for States to decide at the end of November on the procedural matters including a work plan so as to take up the substantive discussions swiftly in the beginning of next year.

Rest assured that Switzerland remains deeply committed to this process. We have worked hard in the past four years and look forward to working even harder in the years to come. Our preoccupation is obvious, as is the need for real efforts and real results.

Strengthening IHL protecting persons deprived of their liberty: main achievements and next steps¹

Helen DURHAM

Director of International Law and Policy,
International Committee of the Red Cross, Geneva

As you know, protecting detainees is one of the key activities of the ICRC and currently of great operational importance. Between 2011 and 2015, the number of detainees visited by the ICRC rose from around 500.000 to over 900000. During their daily visits to detainees, ICRC delegates witness severe humanitarian issues. They range from ill-treatment and disappearances, over grave shortcomings in conditions of detention such as the provision of inadequate infrastructure or insufficient basic goods and services, to lack of protection for vulnerable groups, such as women, children and the elderly. Another important issue is arbitrary detention without necessary judicial guarantees.

Reasons for this grave situation are multi-faceted and complex: in some cases, authorities disrespect applicable law and standards; in other cases, they lack sufficient means to provide for elementary needs of detainees. Especially in the context of non-international armed conflicts (NIAC), a reaffirmation and clarification of applicable norms could provide important safeguards for the life, health and dignity of detainees.

Concretely, during consultations with States over the past four years, we have continuously heard that there is very little legal or policy guidance on deprivation of liberty close to the battlefield, in particular, on questions such as to whom the fact of detention should be notified, or when a detainee must be allowed to contact his or her family.

Moreover, closely linked to humanitarian concerns such as disappearances, ill-treatment or the overcrowding of prisons is also the question of grounds and procedures for internment. In our operational dialogue with States, armed groups, and multinational operations, we frequently see internment regimes that permit internment based on very broad and sometimes arbitrary grounds, for very long periods, often without independent and impartial review. Such regimes easily lead to arbitrary or prolonged detention, which detainees unfortunately often spend

¹ The views expressed in this presentation are those of the author alone and do not necessarily reflect the views of the ICRC.

in harsh conditions and which leaves their families in uncertainty on the fate of their beloved ones.

Against this background, the process to strengthen IHL protecting persons deprived of their liberty is of utmost importance. While the 32nd International Conference made very clear that no new treaty will be negotiated, the ICRC is convinced that even a legally non-binding outcome can strengthen the protection of detainees. Such an outcome will need to reiterate and clarify fundamental protections for detainees and apply in all NIACs – meaning internal and extraterritorial ones – and to all parties to NIACs. It should provide parties to conflicts with concrete and operationally relevant guidance on how to better protect detainees.

Background

This process goes back to an internal ICRC Study which highlighted that - whereas IHL applicable in international armed conflicts contains robust and detailed provisions on most aspects of deprivation of liberty in relation to these conflicts - IHL applicable in non-international armed conflicts contains only very basic rules.

Against this background, the 31st International Conference in 2011 invited the ICRC to pursue further research, consultation and discussion in cooperation with States and to propose a range of options and the ICRC's recommendations for strengthening the law protecting detainees in armed conflict.

Based on this mandate, the ICRC facilitated four regional consultations of government experts in 2012 and 2013; two thematic consultations of government experts in 2014; one all-State meeting in 2015; and numerous informal bilateral and multilateral consultations.

In terms of substance, these meetings have shown that most States believe that detention in non-international armed conflict is the area of law in most urgent need of attention. More specifically, States have largely supported the ICRC's proposal to focus on four areas of humanitarian concern in such conflicts:

- o conditions of detention;
- o particularly vulnerable detainees;
- o grounds and procedures for internment; and
- o detainee transfers.

Resolution 1 of the 32nd International Conference

The 2012-2015 consultations led to the adoption of Resolution 1 at the 32nd International Conference last December. This Resolution shifts this process from ICRC-led consultations to state-led work towards concrete and implementable outcomes. Indeed, Resolution 1 recommends further in-depth work with the goal of producing concrete and implementable outcomes even if of a legally non-binding nature. As you may note, this is a compromise formula that leaves open which kind of outcomes States envisage. In the ICRC's view, any meaningful outcome of this process needs to strengthen the protection of detainees in the hands of state or non-state parties to armed conflicts.

The resolution further recommends that this work shall be undertaken by States in close cooperation with the ICRC. In fact, the Resolution invites the ICRC to facilitate the work of States and to contribute its humanitarian and legal expertise. At the outset of this work, however, States and the ICRC will need to collaborate in determining the modalities of further work in order to ensure its state-led, collaborative and non-politicized nature.

Next Steps

In line with Resolution 1, the ICRC intends to proceed in two steps:

- First, States and the ICRC need to determine the modalities of further work. This includes important procedural questions, including:
 - o How a state-led but ICRC-facilitated process shall be organized; and
 - o What should the next steps be?

Nevertheless, it is key to maintain the momentum of the initiative and to avoid a situation where discussions regarding modalities end up blocking forward movement. Therefore, this month, the ICRC organizes a number of bilateral meetings and exchanges of views among States in regional groupings in order to hear States' views on how to continue the process. These discussions will then continue in a more formal setting later this year.

Substantial discussions will only continue as a second step once and if modalities have been agreed upon.

Sexual and gender-based violence: joint action on prevention and response¹

Helen DURHAM

Director of International Law and Policy,
International Committee of the Red Cross, Geneva

Let me now turn to the resolution on sexual and gender-based violence (SGBV), which was jointly submitted by the ICRC and the International Federation.

Much has been done in the past years by States, the UN and others to put the matter of SGBV on the international agenda. Aspects of it were also addressed at previous International Conferences, and the Red Cross and Red Crescent Movement has been working on various elements of SGBV².

However, sexual violence in situations such as armed conflicts remains an appalling reality and there is increasing evidence of SGBV in disasters and other emergencies. The ICRC and the International Federation, therefore, thought it timely to submit a draft resolution specifically dedicated to SGBV to the 32nd International Conference.

The comments we received from States and National Societies during consultations on the resolution showed a strong shared concern about matters of SGBV even though, for example, the degree may have differed to which they encouraged addressing situations outside armed conflict or gender-based violence apart from sexual violence. Against this background, we think that the consensual adoption of the resolution by the members of the 32nd International Conference can be seen as a considerable success³.

The resolution adopted contains important language such as its condemnation, in the strongest possible terms, of sexual and gender-based violence, in all circumstances, and particularly in armed conflict, disasters and other emergencies. Other important aspects in our view are, for example, the explicit recognition that, while women and girls are disproportionately affected, men and boys can also be victims/survivors of

¹ The views expressed in this presentation are those of the author alone and do not necessarily reflect the views of the ICRC.

² The ICRC, for example, committed in 2013 to expand and enhance its activities addressing sexual violence in situations such as armed conflicts over the following four years.

³ In addition, the very active participation in the two thematic Commissions on SGBV at the International Conference and the significant number of pledges by States and National Societies on this topic further attest to the success of the Conference.

SGBV, a point that is often overlooked. Significant for everyone working on preventing and responding to SGBV is also the clear recognition that, despite its prevalence, SGBV is often invisible and that it is, therefore, essential to be proactive.

As regards sexual violence in armed conflict, the resolution recalls all existing IHL provisions that prohibit acts of sexual violence, binding upon State and non-state parties to armed conflict; underlines the need for States to comply with their obligations to put an end to impunity; and calls upon States to disseminate the existing prohibitions of sexual violence under IHL and to fully integrate them in the activities of their armed and security forces and detention authorities. The importance of protection, access to justice, appropriate investigation and prosecution and of access to non-discriminatory and comprehensive multidisciplinary care for victims/survivors is also underlined.

In addition – and this emphasizes the added value of a resolution adopted by the International Conference – the resolution strongly encourages the work of components of the Movement on SGBV, in line with their mandates and institutional focuses.

In view of that, and in continuation of its previous work, the ICRC runs both specific programs on sexual violence in situations such as armed conflicts and integrates sexual violence matters into existing activities.

For example, we strive to integrate both medical and psychological support in our health activities for victims of sexual violence. We may provide economic support to victims to assist them in rebuilding their lives. In consultation with local communities, as part of our risk reduction and community-based approach, we work to raise awareness, identify risk factors and develop protection strategies against sexual violence.

The ICRC also builds the capacity of its staff to work on matters of sexual violence. The issue is continuously included in internal training courses, and participation in in-depth external training for middle/senior managers at field-level is offered.

Furthermore, our Advisory Service on IHL currently works on producing a checklist to assist States in ensuring that appropriate normative frameworks, policies and regulations are in place, capable of effectively preventing and responding to sexual violence in armed conflict and other contexts. The topic is also included in various events on IHL, such as the recent 16th Annual Regional Seminar on IHL in Pretoria.

Finally, we support the Movement in mobilizing around the topic of sexual violence. For example, the ICRC, together with the International Federation and National Societies, is organizing a series of working groups at the regional level on SGBV in order to both co-produce Movement-wide

training material and exchange information and best practice. Over the coming months, there will be regional working group meetings in Beirut, Bogota and Nairobi, addressing various issues related to SGBV.

In conclusion, the ICRC is convinced that sexual violence in situations such as armed conflict is not inevitable but can and must be eliminated. We are committed to joining forces with States, other components of the Movement and other stakeholders to achieve this imperative goal.

Closing remarks

Helen DURHAM

Director of International Law and Policy,
International Committee of the Red Cross, Geneva

Over the last few days we have explored together a number of themes, all related to questions about weapons and international law. We have heard much about the need for balance, the important role played by evidence, the relationship between the law enforcement paradigm and the laws of war as well as the tension between the ‘whacky future’ and what we see as feasible today. We reflected on the fact that international law regulating weapons is the most expanding area of normative developments and the interface between specific treaty law and ‘softer’ regulation. It is also evident from many of our discussions that ‘technology is a good servant but a terrible master’.

The Round Table started with powerful speeches, including a message from the UN Secretary-General, Ban Ki Moon, who notably reminded us all that the overarching objective of our discussions is to enhance the protection of civilians during armed conflicts.

We heard from many speakers that the law applicable to weapons issues is dynamic and adaptable, as shown by the number of treaties adopted over the last few decades, and as demonstrated by the vivid debates taking place nowadays on the current challenges, notably linked to technological developments.

This Round Table also reminded us all how much political considerations often contaminate discussions on some weapons issues (nuclear, outer space, and other areas).

The importance of weapon reviews was stressed by the participants to ensure that military uses weapons in compliance with IHL. Focus on the role of national implementation identified that it should be further encouraged in light of low level of compliance with Art. 36. Speakers identified some incentives for those who have not yet put in place such mechanism: interest of the commander to know that the weapons used in the battlefield are not unlawful; public interest to know that new weapons being developed are not unlawful; interest of partners in alliances to know that allies have reviewed legality of the weapons used.

Transparency of legal review mechanisms was also discussed and viewed as a way to address possible divergent interpretation of the law,

create confidence-building and develop standards and information exchanges on reviewing new technologies.

We heard the different experiences of how States manage to adequately face the challenge of soldiers having to carry out law enforcement operations, in essence requiring proper identification of the applicability of different legal regimes.

The debate on the use of explosive weapons with a wide impact area in populated areas showed the extent to which this issue is a concern both for humanitarian actors who witness their devastating effects but also for some military who explained the importance of keeping some of these weapons in their arsenal. We also heard that the same military had already adopted some measures limiting in certain circumstances the use of certain kinds of explosive weapons.

Challenges for the future are huge and difficult as shown by discussions about compliance and accountability, including how to engage non-state armed actors in their use of weapons, future technologies, autonomous weapons, outer space but also how armed actors will deal with the issue of today's weapons such as explosive weapons in populated areas.

It is clear that to continue to advance these complex issues more exchanges and discussions between humanitarians, practitioners, lawyers, military, academics and government are needed. This year's Sanremo Round Table was a unique place to explore these issues with a diverse audience, learning from each other's experience and specific points of view. I wish you a safe journey home, I would like to thank all those who have made this event a success and I hope to see you next year to continue our work together.

Closing remarks

Fausto POCAR

President, International Institute of Humanitarian Law, Sanremo

After the concluding remarks made by Helen Durham on a number of issues, I will not try to make a comprehensive summing up of the questions dealt with in this rich and thought-provoking Round Table. Without repeating the comments she has offered, which I largely share, I would like to add a couple of comments on some other issues that might be of some interest.

Firstly, I wish to underline that the debate on the review of weapons has been particularly interesting and has addressed in a concrete manner the standards to be applied for effective reviews suitable to satisfy requirements for compliance with IHL and its prohibition or restriction in the use of weapons. Of course, discussions have shown that the debate may continue and that there are some basic issues that remain on the table, including whether the general obligation to determine the illegality of new weapons is a result obligation or poses the obligation to adopt specific procedures. In such a case, the question inevitably arises of the extent to which States are under the obligation to disclose how they conduct their review and the degree of transparency which has to be ensured under article 84 of Additional Protocol I, particularly in light of the military and other constraints in these delicate matters. Promoting international co-operation regarding IHL best practices is critical for the application of these international provisions.

Another issue which deserves to be touched upon is accountability. Accountability is a basic issue in IHL and has been dealt here particularly with respect to non-state actors. It appeared to be a matter of debate and concern that the Statute of the International Criminal Court adopted a restricted notion of crimes against humanity by referring to the perpetrator's acts as being part of a state or organizational policy. This approach restricts the notion as it exists under customary international law as assessed by international case law so far; in particular, in cases before the ICTY it has been discussed and explicitly concluded that the existence of an organizational policy is not a requirement for crimes against humanity. How can that situation be remedied? It has been suggested that the Rome Statute be revised in order to bring it in line with customary international law, but of course this is a long exercise and perhaps it is not desirable to open the issue of a revision of such Statute. I believe that the Court itself should resolve the problem by not sticking to a too strict

interpretation of the Statute and referring rather to customary international law to that effect. So far, the Court has been hesitant to proceed in this way, although it is entitled to do so under article 21 of the Statute that allows for the application of customary international law either directly or for interpreting the Statute's provisions. In the last judgment rendered by the Court, in the Bemba Gombo case, there is an indication that customary international law could be used as a means of interpretation of the Statute. The judgment didn't eventually do so but explained that it can use that tool. I believe that the Court should be encouraged to make more use of customary international law to interpret the Statute. This approach is legitimate and has been largely used by the ICTY in its early days, proving to be extremely important in the assessment and the development of international criminal law and of IHL.

My next point refers to the last session concerning the debate on the Swiss-ICRC Initiative and on the last Red Cross and Red Crescent Conference. It is encouraging to hear from Ambassador Zellweger that the failure of the Conference on this topic has not been taken as a reason to abandon the exercise. I believe that in light of the current world situation one could easily expect some difficulties to arise at the Conference. Setting aside the initiative would not be the right response. The challenge is rather to put the initiative on the right track, that is, to find a way that the Conference in 2019 will take it up again and make a step forward. In my view, a step forward would be a step, and I think I share the views expressed by Ambassador Zellwegert to pursue the initiative at a pace consistent with the goals that it aims to achieve, i.e. not too slowly and in a realistic way. In that respect, I share what has been said here by other members of the Institute. The Institute is ready to help with the modalities that we may discuss together. As it has supported the initiative in past years, it is ready to contribute to its success in the future.

One last word on a point that has largely been reported today and came up in discussion in the past days although mostly incidentally: the problem of sexual and gender-based violence. As a judge who had the opportunity to substantially contribute to identify and shape the elements of sex crimes under international criminal law in the ICTY and the ICTR, I am particularly sensitive to this issue and I believe that the resolution of the Red Cross and Red Crescent Conference on this issue should be taken up and followed up also here in Sanremo, and that we should leave adequate space to this burning problem in the future work of the Institute also with the next edition of the Round Table in mind.

Let me conclude by warmly thanking the co-ordinators of the Round Table and all speakers, panelists and those who have intervened in the

debate and attended the sessions in these two days. We have had a productive debate on all the issues we have taken up and I am most grateful to everybody for their participation. My warm thanks to all members of the staff of the Institute and external staff who have also co-operated in the success of the Round Table.

Acronyms

ABM	Anti-Ballistic Missile
AC	Appeals Chamber
AMISOM	African Union Mission in Somalia
ANSA	Armed Non-State Actors
AOAV	Action on Armed Violence
API	Additional Protocol I to the 1949 Geneva Conventions
APII	Additional Protocol II to the 1949 Geneva Conventions
APM	Anti-Personnel Mine
APMBT	Anti-Personnel Mine Ban Treaty
ASW	Anti-Submarine Warfare
AUV	Autonomous Underwater Vehicle
BSS	<i>Bande sahélo-saharienne</i>
BTWC	Biological and Toxin Weapons Convention
BW	Biological Weapons
BWC	Biological Weapons Convention
CCM	Convention on Cluster Munitions
CCTARC	Civilian Casualty Tracking Analysis Cell
CCW	Convention on Certain Conventional Weapons
CEDH	<i>Cour Européenne des Droits de l'Homme</i>
CEP	Circular Error Probable

CER	Collateral Effect Radius
CHOD	Chief of Defense
CIVIC	Center for Civilians in Conflict
CN3	Communication/Navigation Network Node
CSNU	<i>Commandement spatial des Nations Unies</i>
CSO	Civil Society Organization
CTBT	Comprehensive Nuclear-Test-Ban Treaty
CTC	Counter-Terrorism Committee
CTITF	United Nations Counter-Terrorism Implementation Task Force
CW	Chemical Weapons
CWC	Chemical Weapons Convention
DCA	<i>Droit des conflits armés</i>
DCDC	Development, Concepts and Doctrine Centre
DEP	Deflection Error Probable
DOD	Department of Defence
DPRK	Democratic People's Republic of Korea
DRC	Democratic Republic of Congo
ECHR	European Court of Human Rights
EEZ	Exclusive Economic Zone
ELN	<i>Ejército de liberación nacional</i>
EMP	Electro-Magnetic Pulse

ENMOD	Environmental Modification Convention
EOD	Explosive Ordnance Disposal
ERW	Explosive Remnants of War
EU	European Union
EWIPA/EWPA	Explosive Weapons in Populated Areas
FAB 100/250	Russian general-purpose bomb
FAE	Fuel-Air Explosive
FAMAS	<i>Fusil d'assaut de la manufacture d'armes de Saint-Etienne</i>
FARC	<i>Fuerzas armadas revolucionarias de Colombia</i>
FFM	Fact-Finding Mission
GAO	<i>Groupes armés organisés</i>
GAT	<i>Groupe armé terroriste</i>
GGE	Groups of Governmental Experts
GICNT	Global Initiative to Combat Nuclear Terrorism
HINW	Humanitarian Impact of Nuclear Weapons
HPCR	Humanitarian Policy and Conflict Research Program at Harvard University
HR	Human Rights
HV	<i>Hrvatska Vojska</i> (the Croatian Army)
IAC	International Armed Conflict
IAG	Implementation and Assessment Group
ICAN	International Campaign to Abolish Nuclear Weapons

ICC	International Criminal Court
ICJ	International Court of Justice
ICL	International Constitutional Law
ICRC	International Committee of the Red Cross
ICSANT	International Convention for the Suppression of Acts of Nuclear Terrorism
ICTR	International Criminal Tribunal for Rwanda
ICTY	International Criminal Tribunal for the former Yugoslavia
IED	Improvised Explosive Device
IHL	International Humanitarian Law
IIHL	International Institute of Humanitarian Law
IL	International Law
ILC	International Law Commission
IO	Information Operations
ISAF	International Security Assistance Force
ISIL	Islamic State of Iraq and the Levant
ISP	Internet Service Provider
ISR	Intelligence, Surveillance and Reconnaissance
JIM	Joint Investigative Mechanism
KUR	Key User Requirements
LOAC	Law of Armed Conflict
MBRL	Multiple Ballistic Rocket Launchers

MCM	Mine Countermeasures
MINUSCA	<i>Mission multidimensionnelle intégrée des Nations Unies pour la stabilisation en Centrafrique</i>
MINUSMA	<i>Mission multidimensionnelle intégrée des Nations Unies pour la stabilisation en Mali</i>
MoD	Ministry of Defence
MPI	Mean Point of Impact
MRLS	Multiple Rocket Launching System
MSD	Military Safe Distances
MTCR	Missile Technology Control Regime
NATO	North Atlantic Treaty Organisation
NGOs	Non-Governmental Organisations
NIAC	Non-International Armed Conflict
NNWS	Non-Nuclear-Weapon States
NPT	Nuclear Non-Proliferation Treaty
NSA	National Security Agency
NTM	National Technical Means
NW	Nuclear Weapons
NWP	Naval Warfare Publication
NWS	Nuclear Weapon States
OEWG	Open-Ended Working Group
OPCW	Organisation for the Prohibition of Chemical Weapons

OPEX	<i>Opérations extérieures</i>
PID	Positive Identification Determination
PTBT	Partial Nuclear Test Ban Treaty
PTSD	Post-Traumatic Stress Disorders
RCA	<i>République centrafricaine</i>
REP	Range Error Probable
ROE	Rules of Engagement
ROV	Remotely Operated Vehicle
SALW	Small Arms and Light Weapons
SGBV	Sexual and Gender-Based Violence
SGM	Secretary-General Mechanism
SO1	Staff Officer of the first class
SOP	Statement of Principles
TC	Trial Chamber
TCS	Time-Critical Strike
TNT	Trinitrotoluene
UK	United Kingdom
UMS	Unmanned Maritime Systems
UMV	Unmanned Maritime Vehicle
UN	United Nations
UNCCT	United Nations Counter-Terrorism Center

UNGA	United Nations General Assembly
UNCLOS	United Nations Convention on the Law of the Sea
UNMISS	United Nations Mission in the Republic of South Sudan
UNSC	United Nations Security Council
UNSCR	United Nations Security Council Resolution
US	United States
USSR	Union of the Soviet Socialist Republics
USV	Unmanned Surface Vehicle
UUV	Unmanned Undersea Vehicle
UXO	Unexploded Ordnance
WHS	World Humanitarian Summit
WMD	Weapons of Mass Destruction
WWI	World War I

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QATAR RED CRESCENT

Weapons and the International Rule of Law

The 39th Round Table on current issues of International Humanitarian Law (IHL), held in Sanremo, gathered together international experts, representatives of governments and international organizations, academics and military officers to engage in open and fruitful discussions on the complex issues of weapons and international rule of law.

The Round Table provided an important opportunity to address the crucial topic of the protection of civilians which, now more than ever, constitutes a critical and delicate issue in today's international and non-international armed conflicts.

Non-state actors, urban warfare, weapons smuggling and autonomous armaments are some of the issues currently at stake. Considering the multiple transformations characterising the contemporary international scenario, it is an extremely difficult task for all the actors to implement IHL in this specific area.

The proceedings of this Round Table, in line with the Sanremo Institute's tradition, aim to further develop and contribute to the ongoing debate on these issues.

The **International Institute of Humanitarian Law** is an independent, non-profit humanitarian organization founded in 1970. Its headquarters are situated in Villa Ormond, Sanremo (Italy). Its main objective is the promotion and dissemination of international humanitarian law, human rights, refugee law and migration law. Thanks to its longstanding experience and its internationally acknowledged academic standards, the International Institute of Humanitarian Law is considered to be a centre of excellence and has developed close co-operation with the most important international organizations.