

**INTERNATIONAL EXPERT MEETING
22–23 JUNE 2016 – QUEBEC**

THE PRINCIPLE OF PROPORTIONALITY IN THE RULES GOVERNING THE CONDUCT OF HOSTILITIES UNDER INTERNATIONAL HUMANITARIAN LAW



This meeting was supported by the Social Sciences and Humanities Research Council of Canada



Social Sciences and Humanities
Research Council of Canada

Conseil de recherches en
sciences humaines du Canada

Canada 

**INTERNATIONAL EXPERT MEETING
22–23 JUNE 2016 – QUEBEC**

**THE PRINCIPLE
OF PROPORTIONALITY
IN THE RULES GOVERNING
THE CONDUCT OF HOSTILITIES
UNDER INTERNATIONAL
HUMANITARIAN LAW**

**Report prepared and edited by Laurent Gisel
Legal adviser, ICRC**

TABLE OF CONTENTS

FOREWORD	5
ACKNOWLEDGMENTS	7
INTRODUCTION	8
The principle of proportionality	8
Challenges in the application of the principle of proportionality	8
Purpose of the meeting and scope of the discussions	9
The importance of policies for the protection of civilians during armed conflicts	10
Background document, agenda of the meeting and structure of the report	10
PART I: MILITARY ADVANTAGE	11
Session 1: Defining the relevant advantage for the principle of proportionality: concrete, direct and military	11
a) Background information	11
b) Experts' comments and discussion	15
Session 2: Relevance of force protection and protection of civilians considerations for the principle of proportionality	23
a) Background information	23
b) Experts' comments and discussion	25
PART II: INCIDENTAL HARM	32
Session 3: Relevant types of incidental harm	32
Background information	32
A. Illness and mental harm	33
a) Background information	33
b) Experts' comments and discussion	35
B. Harm to civilian use of 'dual-use objects'	37
a) Background information	37
b) Experts' comments and discussion	38
C. Economic losses and displacement	41
a) Background information	41
b) Experts' comments and discussion	42
Session 4: Reverberating effects	43
a) Background information	43
b) Experts' comments and discussion	46
PART III: THE REASONABLE MILITARY COMMANDER ASSESSMENT OF EXCESSIVENESS	52
a) Background information	52
b) Experts' comments and discussion	57
I. The reasonable military commander standard	57
II. Contextual factors	60
III. Assessing excessiveness	62
ANNEX 1: LIST OF PARTICIPANTS	66
ANNEX 2: AGENDA	68

FOREWORD

Armed conflicts in the 21st century continue to cause tremendous human suffering. Civilians are killed, taken away from their loved ones forever. Some of these killings stem from blatant disregard for international humanitarian law (IHL) by belligerents that directly attack civilians. Others are euphemistically referred to as ‘collateral damage’ and plunge families into mourning. Suffering in war does not depend on whether the conduct giving rise to it was lawful or unlawful, but it is important to clarify when it is unlawful because parties to armed conflicts are required to conduct their military operations in accordance with the law and because compliance with IHL will reduce such suffering.

Incidental civilian harm may be lawful or unlawful. It may be lawful – albeit regrettable – where all feasible precautions had been taken to avoid or at least minimize the harm and where this harm was not expected to be excessive compared to the concrete and direct military advantage anticipated. It can only be lawful if these two conditions are fulfilled. Doubts do, however, arise regularly as to whether this has been the case for specific attacks. Determining whether civilian harm caused by a particular attack constitutes a violation of international humanitarian law is rarely a straightforward matter. It is rarely straightforward because the facts known to the commander at the time of the attack are not made public and because the rules governing the conduct of hostilities are formulated in a general and often flexible way to adapt to all situations. These rules encompass and rely on concepts that remain partly undefined and that may therefore be subject to divergent understandings.

The object and purpose of the rules governing the conduct of hostilities under international humanitarian law is to protect civilians and civilian objects by establishing an appropriate balance between the principles of military necessity and considerations of humanity. While striking this balance is always difficult, the tension between these complementary, but also competing, principles is possibly nowhere more evident and challenging than in the principle of proportionality.

The principle of proportionality prohibits attacks 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. Put otherwise, it requires belligerents to refrain, due to humanitarian considerations, from attacks against military objectives expected to cause disproportionate incidental civilian harm even if they may be seen as militarily beneficial. The principle of proportionality is relevant in many combat situations and is applied daily by commanders. As fighting increasingly takes place in populated areas, where incidental harm is likely to occur due to the co-location and intermingling of lawful targets and protected persons and objects, the principle of proportionality is becoming ever more crucial in current armed conflicts.

Recently, academic, military and other experts have discussed the principle of proportionality in books, articles, conferences and blogs. While the existence of the principle of proportionality is undisputed, each of the key concepts on which it relies – military advantage, incidental harm and excessiveness – has been the subject of debate and controversy. All of them would benefit from further clarification.

In view of the above, the International Committee of the Red Cross (ICRC) and Université Laval reached the conclusion that it was crucial to endeavour to clarify this principle and its application in current armed conflicts. In order to shed light on the issues involved, they jointly organized a two-day meeting, gathering around 20 international experts on the conduct of hostilities with a military, academic and/or government background and expertise in the field from 16 different countries. The experts participated in a personal capacity, and the debates were governed by the Chatham House Rule.¹

The objective of this report is to provide an account of the stimulating in-depth debates that took place during the meeting. It does not purport to provide the ICRC's legal positions on these issues.

The ICRC and Université Laval hope that this report will make a concrete contribution to a better understanding of the principle of proportionality and its application in armed conflicts today and help to shape the debate on the legal and policy considerations that restrain attacks that may affect the civilian population in armed conflicts.

Dr Knut Dörmann
Chief Legal Officer
and Head of the Legal Division, ICRC

Prof. Julia Grignon
Faculty of Law
Université Laval

¹ The Chatham House Rule reads as follows: “When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.” (at <https://www.chathamhouse.org/about/Chatham-house-rule>).

ACKNOWLEDGMENTS

The present report is the outcome of an expert meeting which took place in June 2016 on the principle of proportionality in the rules governing the conduct of hostilities under international humanitarian law.

The conceptualization, drafting and publication of the report would not have been possible without the commitment and contributions of many individuals.

Our gratitude goes, first of all, to the experts who participated in a personal capacity and whose expertise, knowledge and contributions were essential for the success of this meeting. They shed light on the various concepts encompassed in the principle of proportionality, the debates surrounding their meaning and, crucially, the challenges raised by their practical application in contemporary armed conflicts.

We would also like to express our gratitude to Laurent Gisel, Legal Adviser in the ICRC Legal Division, who was in charge of organizing the meeting, prepared the background document and drafted this report. We would like to extend our thanks to Katherine Weir, Legal Adviser, ICRC Legal Division, who prepared the background document together with Laurent Gisel, as well as Sasa Glusac, Justine Levasseur and Anabelle Nadeau, Université Laval, Maria Giovanna Pietropaolo and Abby Zeith, Legal Advisers, ICRC Legal Division, and Öykü Irmakkesen and Clementine Rendle, Associates, ICRC Legal Division, who assisted in the preparation of the background document or this report.

Finally, we would like to sincerely thank all our other colleagues at the ICRC, in particular Jean-François Quéguiner, Head of the Thematic Legal Advice Unit, Legal Division, and at Université Laval who contributed to the drafting of the report through their comments, provided valuable support in the organization and follow-up of the expert meeting or helped with the publication of the report.

Dr Knut Dörmann
Chief Legal Officer
and Head of the Legal Division, ICRC

Prof. Julia Grignon
Faculty of Law
Université Laval

INTRODUCTION

THE PRINCIPLE OF PROPORTIONALITY

The principle of proportionality is codified in Article 51(5)(b) of Protocol I of 8 June 1977 additional to the Geneva Conventions (AP I). It prohibits attacks “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”. It has been identified by the ICRC Study as a rule of customary international humanitarian law (IHL) applicable in international and non-international armed conflicts,² and parties to an armed conflict must take all feasible precautions to refrain from disproportionate attacks.³ Violation of the principle of proportionality – although with a small but significant difference in its formulation – also constitutes a war crime in international armed conflicts under the Rome Statute of the International Criminal Court (ICC).⁴

The principle of proportionality is applicable when military objectives are attacked. In essence, it recognizes that, in the conduct of hostilities, causing incidental harm to civilians and civilian objects is often unavoidable.⁵ However, it places a limit on the extent of incidental civilian harm that is permissible by spelling out how military necessity and considerations of humanity must be balanced in such situations.

CHALLENGES IN THE APPLICATION OF THE PRINCIPLE OF PROPORTIONALITY

The existence of the principle of proportionality as a norm is undisputed, and it is applied every day by military commanders in armed conflicts around the world. However, as the principle of proportionality is formulated in general terms, it has also been noted that it is challenging to apply the principle to “a particular set of circumstances because the comparison is between unlike quantities and values”.⁶ It has been further expressed that “there is no set formula according to which it is possible to weigh civilian damage against the expected military benefits from the offensive; but it is a question of degree”.⁷ Commentators have pointed to the lack of precision in the principle, arguing that the application of the principle by military commanders who are planning for and conducting attacks will vary greatly.⁸ While the ICRC 1987 Commentary on AP I acknowledges that analysing the disproportion between losses and damage and the military advantage anticipated “raises a delicate problem”, it also emphasized that “in some situations there will be no room for doubt, while in other situations there may be a reason for hesitation. In such situations the interests of the civilian population should prevail.”⁹ In the same vein, the International Criminal Tribunal for the former Yugoslavia (ICTY) stated in the *Galic* case that “[t]he basic obligation to spare civilians and civilian objects as much as possible must guide the attacking party when considering the proportionality of an attack”.¹⁰

-
- 2 Jean-Marie Henckaerts and Louise Doswald-Beck, *Customary International Humanitarian Law*, ICRC, Cambridge University Press, 2005 (hereinafter “ICRC Customary IHL Study”), Rule 14.
 - 3 Articles 57(2)(a)(iii) and 57(2)(b) of AP I; Rules 18 and 19, ICRC Customary IHL Study.
 - 4 Article 8(2)(b)(iv) of the Rome Statute of the ICC: “[i]ntentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated”.
 - 5 M.N. Schmitt, “Targeting in Operational Law”, in T. Gill and D. Fleck (eds), *The Handbook of the International Law of Military Operations*, 2nd ed., Oxford University Press, Oxford, 2015, p. 283, para. 16.06(2).
 - 6 ICTY, *Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia*, 13 June 2000 (hereinafter “ICTY, Final Report to the Prosecutor Reviewing the NATO Bombing Campaign in the FRY”), para. 48.
 - 7 Israel, *Rules of Warfare on the Battlefield*, Military Advocate-General’s Corps Command, IDF School of Military Law, 2nd ed., 2006, p. 27, quoted in the ICRC Customary IHL Study, Rule 14, State practice, https://www.icrc.org/customary-ihl/eng/docs/v2_cou_il_rule14_sectionb.
 - 8 For example, see F. Kalshoven and L. Zegveld, *Constraints on the Waging of War: An Introduction to International Humanitarian Law*, 3rd ed., ICRC, Geneva, 2001, p. 46.
 - 9 Y. Sandoz, C. Swinarski and B. Zimmermann (eds), *Commentary on the Additional Protocols*, ICRC, Geneva, 1987 (hereinafter “ICRC 1987 Commentary on AP I”), para. 1979.
 - 10 ICTY, *Prosecutor v. Galic*, IT-98-29-T, Trial Judgement, 5 December 2003 (hereinafter “ICTY, *Galic* case, TC”), para. 58.

It is important to emphasize at the outset that, as for all the rules governing the conduct of hostilities, military commanders and others responsible for planning, deciding upon or executing attacks have to reach their decisions on the principle of proportionality on the basis of their assessment of the information which is reasonably available to them from all sources at the relevant time and not with the benefit of hindsight.¹¹

PURPOSE OF THE MEETING AND SCOPE OF THE DISCUSSIONS

The purpose of the meeting was to explore the various concepts encompassed in the principle of proportionality so as to work towards reaching a better understanding of this principle and its application in armed conflicts today. This report, like the meeting, is divided into three parts:

- Part I explores the concept of ‘concrete and direct military advantage’. The notion of military advantage is central to the principle of proportionality. However, the notion of military advantage and the qualifiers ‘concrete’ and ‘direct’ are not defined in IHL. The assessment of the concrete and direct military advantage is particularly relevant, as it affects the permissible level of incidental harm and determines whether an attack is disproportionate and therefore prohibited under IHL. As such, it is important to explore the contours of this notion in order to bring further precision to the principle of proportionality. During session 1, the experts looked at the qualifiers ‘direct’, ‘concrete’ and ‘military’, while during session 2, they discussed the relevance of force protection considerations, in particular for troops under enemy fire.
- Part II addresses the concept of ‘incidental harm’. According to the principle of proportionality, the anticipated ‘concrete and direct military advantage’ must be compared with the expected ‘incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof’. During session 3, the experts discussed different types of incidental harm whose relevance for the proportionality principle might be controversial, in particular incidental illness and mental harm, harm to so-called ‘dual-use objects’, and economic losses and displacement. During session 4, the experts focused on reverberating effects and the extent to which harm can be considered to be ‘expected’ and thus form part of the analysis of incidental harm.
- Part III looks at the reasonable commander standard and the key concept of excessiveness that the reasonable commander must assess. Making a determination as to what amounts to ‘excessive’ harm may appear to be the least defined concept within the principle, but it is required and applied by commanders. During this last part of the meeting, the experts discussed the manner in which these determinations are made and the tools available to commanders to support them.

The scope of the discussions was limited to the principle of proportionality under IHL. A number of other IHL principles and rules protect the civilian population against the dangers of military operations, in particular the principles of distinction and precaution. Except for the specific precautionary measures required for the application of the principle of proportionality, they were outside the scope of this meeting. In addition, the principle of proportionality in the context of *jus in bello* must be kept distinct from the principle of proportionality as understood in the *jus ad bellum* context, the latter being outside the scope of this meeting. Finally, the use of force in law enforcement operations is also governed by a principle of proportionality. This principle has a distinct meaning in that context, operating differently from the principle of proportionality under IHL, and was also outside the scope of this meeting.

¹¹ See ICTY, *Galic case*, TC, para. 58, in particular footnote 109. This was also pointed out by a number of States; see declarations upon ratification by Algeria, Australia, Belgium, Canada, Germany, France, Ireland, Italy, the Netherlands, New Zealand, Spain and the UK. For example, “*In relation to Articles 51 to 58 inclusive it is the understanding of Australia that military commanders and others responsible for planning, deciding upon, or executing attacks, necessarily have to reach their decisions on the basis of their assessment of the information from all sources, which is available to them at the relevant time.*” (emphasis added, available at <https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/vwTreatiesByCountry.xsp>).

THE IMPORTANCE OF POLICIES FOR THE PROTECTION OF CIVILIANS DURING ARMED CONFLICTS

Several experts stressed that policies might be more important for and effective in protecting civilians than just international law. While policies must respect the international and domestic legal orders and therefore cannot offer protection to civilians that is weaker than what IHL requires, they can go further. Policy considerations could also be turned into obligations through the domestic legal order, rules of engagement and other orders binding on military forces. These experts therefore cautioned against attempts at assessing situations or analysing belligerents' decisions from a purely IHL 'hard law' perspective.

While agreeing that policies could indeed be highly beneficial, other experts noted that policy can be changed, while the principle of proportionality as a norm of IHL remains binding on all belligerents in all armed conflicts. This highlighted, in their view, the importance of clarifying the various notions encompassed in the principle of proportionality. In this respect, while noting the difficulty in defining excessiveness, several experts underlined the importance of better defining at least what is included and excluded on both sides of the balance of the principle.

BACKGROUND DOCUMENT, AGENDA OF THE MEETING AND STRUCTURE OF THE REPORT

A background document was submitted to the experts in advance of the meeting. It outlined the topics to be discussed, the potential challenges they raise and the different perspectives identified by IHL scholars and practitioners on how to address these challenges. Each chapter of this report is introduced by slightly adapted extracts from the background document submitted to the experts before the meeting (entitled 'background information'). The main part of each chapter consists of a summary of the experts' comments and discussion.

Neither the background information nor the summary of the experts' comments and discussion necessarily represents the view of the ICRC.

A number of questions were suggested with a view to highlighting the issues involved and guiding the discussions. Some hypothetical scenarios were also included to further stimulate discussions. A draft agenda had been shared with the experts in advance of the meeting. The experts provided detailed and substantial comments and made numerous suggestions with regard to the guiding questions, many of which were included in the final agenda. The wealth of questions identified and the substantive character of the discussions on various issues precluded in-depth consideration of some of the points included on the agenda. A list of the meeting participants and the final agenda are provided in Annexes 1 and 2. The present report was also submitted to experts for comments prior to its publication.

PART I: MILITARY ADVANTAGE

SESSION 1: DEFINING THE RELEVANT ADVANTAGE FOR THE PRINCIPLE OF PROPORTIONALITY: CONCRETE, DIRECT AND MILITARY

A) BACKGROUND INFORMATION

Under the principle of proportionality, incidental damage must not be excessive in relation to the “concrete and direct military advantage anticipated”. Australia and New Zealand issued declarations upon ratification of AP I according to which “‘concrete and direct military advantage anticipated’, used in Articles 51 and 57, means a *bona fide* expectation that the attack will make a relevant and proportional contribution to the objective of the military attack involved”.¹²

What is a ‘military’ advantage

With respect to the concept of military advantage, the requirement that the advantage be ‘military’ has been deemed “the most significant restriction in the legal framework governing targeting”.¹³ The ICRC 1987 Commentary on AP I stated that “military advantage can only consist in ground gained and in annihilating or weakening the enemy armed forces”.¹⁴ Similarly, it has been stated that a military advantage should be of a tactical nature.¹⁵

However, it has been argued elsewhere that “[a] better approach is to understand military advantage as any consequence of an attack which directly enhances friendly military operations or hinders those of the enemy”.¹⁶ It has also been suggested that “[t]here must be a good faith expectation that the attack will make a relevant and proportional contribution to the goal of the military attack involved. Such goals may include: (1) denying the enemy the ability to benefit from the object’s effective contribution to its military action (e.g., using this object in its military operations); (2) improving the security of the attacking force; and (3) diverting enemy forces’ resources and attention.”¹⁷ Likewise, it has been suggested that “‘military advantage’

12 Declarations made by Australia and New Zealand upon ratification of AP I, available at https://www.icrc.org/applic/ihl/ihl.nsf/States.xsp?xp_viewStates=XPages_NORMStatesParties&xp_treatySelected=470.

13 K. Watkin, “Military Advantage: A Matter of ‘Value’, Strategy and Tactics”, *Yearbook of International Humanitarian Law*, Vol. 17, 2014, pp. 289 and 331. See also K. Dörmann, “The Principle of Distinction in Modern Warfare: Targeting, Weapons, and Precautions in Attack”, in L. Maybee and K.C. Sowmya (eds), *30 years of the 1977 Additional Protocols to Geneva Conventions of 1949*, ICRC, New Delhi, 2008, p. 70.

14 ICRC 1987 Commentary on AP I, para. 2218.

15 Germany, BGH (Federal Court of Justice), Investigation proceedings against Colonel (*Oberst*) Klein and Staff Sergeant (*Hauptfeldwebel*) W. based on the suspicion of a criminal offence having been committed in violation of the Code of Crimes Against International Law (*Völkerstrafgesetzbuch*, VStGB) along with other offences, 16 April 2010, section D(III)(3)(b)(cc)(2). See also A. Cohen and Y. Shany, “Contextualizing Proportionality Analysis? A Response to Schmitt and Merriam on Israel’s Targeting Practices”, *Just Security*, 7 May 2015, available at <https://www.justsecurity.org/22786/contextualizing-proportionality-analysis-response-schmitt-merriam/>.

16 HPCR, *Manual on International Law Applicable to Air and Missile Warfare*, produced by the Program on Humanitarian Policy and Conflict Research at Harvard University (hereinafter “HPCR Manual”), Commentary on Rule 1(w), para. 3.

17 United States, Department of Defense, *Law of War Manual*, 2015 (updated December 2016) (hereinafter “US DoD Law of War Manual”), para. 5.12.2. See also the identical statements upon ratification of AP I by Australia and New Zealand (see text in relation to note 12 above).

is not restricted to tactical gains but is linked to the full context of a war strategy¹⁸ or that military advantage may include operational and, occasionally, even strategic effects.¹⁹ For example, the disruption of command and control communications has been said to offer a military advantage²⁰ as it will impact the military operations of the opposing forces and, in conjunction with other operations, possibly also have strategic effects.²¹ Finally, it has been emphasized that the military advantage has to be understood in light of the context at the time.²²

Because of the requirement that the advantage be a military one, it has been noted that advantages which are solely political, psychological, economic, financial, social or moral must be excluded from the equation.²³ It is also generally agreed that neither disrupting government propaganda nor undermining the morale of the population offers a concrete and direct military advantage.²⁴ It is said that “even forcing the enemy to the negotiating table is not a ‘military’ advantage in the sense of this rule”.²⁵ Likewise, the larger historical or political context of the war should not be taken into consideration in an assessment of the military advantage.²⁶ For one author, the key factor is that a “military advantage is that which exhibits a direct nexus to military operations”.²⁷

‘Concrete and direct’

Turning to the terms ‘concrete and direct’, the ICRC 1987 Commentary on AP I explains that they are “intended to show that the advantage concerned should be substantial and relatively close, and that advantages which are hardly perceptible and those which appear only in the long term should be disregarded”.²⁸ In a similar vein, a military manual stipulates that “‘concrete and direct’ means that the advantage to be gained is identifiable and quantifiable and one that flows directly from the attack, not some pious hope that it might improve the military situation in the long term”.²⁹ Support for this interpretation can also be found in the abovementioned declarations by Australia and New Zealand with regard to Articles 51 and 57 of AP I.³⁰

The *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations* also emphasizes that the “term ‘concrete and direct’ removes mere speculation from the equation of military advantage” and “obliges decision makers to anticipate a real and quantifiable benefit”.³¹ This raises a question as to the manner in which one takes into consideration the likelihood that the attack will actually achieve the military advantage sought.³² When the probability of achieving the intended military advantage is too low, it can hardly be

18 United States, Department of Defense, *Conduct of the Persian Gulf War: Final Report to Congress*, 10 April 1992, Appendix O, The Role of the Law of War, *ILM*, Vol. 31, 1992, p. 613, para. 2. For a discussion of the influence of the strategic context for the interpretation and application of the law, see, for example, M.N. Schmitt and J.J. Merriam, “The Tyranny of Context: Israeli Targeting Practices in Legal Perspective”, *University of Pennsylvania Journal of International Law*, Vol. 37, 2015, pp. 53–139.

19 M.N. Schmitt, “The Relationship between Context and Proportionality: a Reply to Cohen and Shany”, *Just Security*, 11 May 2015, available at <https://www.justsecurity.org/22948/response-cohen-shany/>.

20 HPCR Manual, Commentary on Rule 14, p. 99, para. 10.

21 Schmitt, note 19 above.

22 HPCR Manual, Commentary on Rule 1(w), para. 5.

23 HPCR Manual, Commentary on Rule 1(w), para. 4.

24 ICTY, Final Report to the Prosecutor Reviewing the NATO Bombing Campaign in the FRY, paras 71–79, in particular para. 76. The HPCR Manual Commentary similarly excludes the weakening of the morale of the enemy civilian population from the relevant military advantage; see Commentary on Rule 14, para. 10.

25 Schmitt, note 5 above, p. 279.

26 Cohen and Shany, note 15 above.

27 Schmitt, note 5 above, p. 279. In the same vein, see J. Dill, *Legitimate Targets? Social Construction, International Law and US Bombing*, Cambridge University Press, 2015, pp. 88 ff.

28 ICRC 1987 Commentary on AP I, para. 2209.

29 UK Ministry of Defence, *The Joint Service Manual of the Law of Armed Conflict*, JSP 383, 2004 edition (hereinafter “UK 2004 Military Manual”), para. 5.33.3.

30 See text in relation to note 12 above.

31 *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations*, 2nd ed., prepared by the International Group of Experts at the invitation of the NATO Cooperative Cyber Defence Centre of Excellence, Cambridge University Press, Cambridge, 2017 (hereinafter “*Tallinn Manual 2.0*”), Commentary on Rule 11, p. 473, para. 9.

32 On this issue, see J. Dill, “Interpretive Complexity and the International Humanitarian Law Principle of Proportionality?” *Proceedings of the Annual Meeting (American Society of International Law)*, Vol. 108, 2014, p. 87; R.D. Sloane, “Puzzles of Proportion and the ‘Reasonable Military Commander’: Reflections on the Law, Ethics, and Geopolitics of Proportionality”, *Harvard National Security Journal*, Vol. 6, Issue 2, 2015, p. 315.

considered ‘anticipated’. More generally, the Prosecutor’s Brief in the ICTY *Gotovina* trial stated that “the ‘concrete and direct advantage anticipated’ is not the value of the target wholly in the abstract but rather its abstract value relative to the likelihood of in fact neutralizing or destroying the object”.³³

The ICRC 1987 Commentary on Article 51(5)(b) of AP I states that the use of ‘concrete and direct’ imposes stricter conditions on the attacker than ‘definite’, which qualifies the notion of military advantage in Article 52 of AP I,³⁴ a view also reflected in an ICTY Prosecutor’s Brief and in a report by the Inter-American Commission on Human Rights.³⁵ While commentators see the word ‘concrete’ to be roughly equivalent to the adjective ‘definite’, the addition of the adjective ‘direct’ – meaning “without intervening condition or agency” – arguably raises the standard compared to the one imposed by Article 52 of AP I.³⁶ In any case, it is generally agreed that both phrases introduce a high standard that is not merely hypothetical. Such a military advantage must be capable of being clearly articulated by those planning and carrying out the attack.³⁷

The notion of ‘the attack as a whole’

In ratifying AP I, a number of States added interpretive statements which explain that they consider the military advantage from an attack to refer to the “advantage anticipated from the attack as a whole and not only from isolated or particular parts of an attack”.³⁸ The ICRC 1987 Commentary on AP I states that these statements appear to be redundant given that “an attack carried out in a concerted manner in numerous places can only be judged in its entirety”.³⁹ Diversion attacks, such as in the *Pas de Calais* in 1944,⁴⁰ and ruses are often given as examples in this regard: in isolation, they bring only a minimal military advantage but, when seen in the context of the attack as a whole, the military advantage may be significant.⁴¹ However, the outer limits of such an interpretation of the notion of ‘attack as a whole’ are not always clear. It has been claimed that the relevant advantage is “the advantage anticipated from the military campaign, of which the attack is part, as a whole”,⁴² while others have stressed that the analysis cannot extend to the ‘armed conflict as a whole’ but must remain “a finite operation with defined limits”.⁴³ Taking into account an operational context that is too wide would risk rendering the constraints provided by the qualifiers ‘concrete and direct’

³³ ICTY, *Prosecutor v. Ante Gotovina et al.*, IT-06-90-T, Prosecution’s Public Redacted Final Trial Brief, 2 August 2010, para. 549.

³⁴ ICRC 1987 Commentary on AP I, para. 2218. Art. 52(2) AP I: “In so far as objects are concerned, military objectives are limited to those objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage.”

³⁵ See Inter-American Commission on Human Rights, *Third Report on the Human Rights Situation in Colombia*, OEA/Ser.L/V/II.102, Doc. 9 rev. 1, 26 February 1999, Chapter IV, para. 78; and ICTY, *Prosecutor v. Ante Gotovina et al.*, IT-06-90-T, Prosecution’s Public Redacted Final Trial Brief, 2 August 2010, para. 547. In the same vein, see A. Boivin, “The Legal Regime Applicable to Targeting Military Objectives in the Context of Contemporary Warfare”, Research Paper Series, University Centre for International Humanitarian Law, 2006, p. 21.

³⁶ M. Bothe, K. Partsch and W. Solf, *New Rules for Victims of Armed Conflicts*, 2nd ed., Martinus Nijhoff Publishers, Leiden/Boston, 2013, p. 407, para. 2.7.2.

³⁷ See Boivin, note 35 above, p. 21, and Watkin, note 13 above, p. 287.

³⁸ Australia, Belgium, Canada, France, Germany, Italy, the Netherlands, New Zealand, Spain and the United Kingdom, available at https://www.icrc.org/applic/ihl/ihl.nsf/States.xsp?xp_viewStates=XPages_NORMStatesParties&xp_treatySelected=470. See also US DoD Law of War Manual, note 17 above, para. 5.12.2.1.

³⁹ ICRC 1987 Commentary on AP I, para. 2218.

⁴⁰ As explained in Bothe, Partsch and Solf (note 36 above, p. 366, para. 2.4.4 on Art. 52): “Thus, prior to the 1944 cross channel operation, the Allies attacked a large number of bridges, fuel dumps, airfields and other targets in the Pas de Calais. These targets made an effective contribution to German military action in that area. The primary military advantage of these attacks anticipated by the Allies, however, was not to reduce German military strength in that area, but to deceive the Germans into believing that the Allied amphibious assault would occur in the Pas de Calais instead of the beaches of Normandy.”

⁴¹ US DoD Law of War Manual, note 17 above, para. 5.6.7.3; Bothe, Partsch and Solf, note 36 above, p. 366, para. 2.4.4 on Art. 52; Schmitt, note 19 above; HPCR Manual, Commentary on Rule 1(w), para. 6.

⁴² N. Neuman, “Applying the rule of proportionality: force protection and cumulative assessment in international law and morality”, in *Yearbook of International Humanitarian Law*, 2004, p. 100.

⁴³ K. Dörmann, “Obligations of International Humanitarian Law”, *Military and Strategic Affairs*, Vol. 4, No. 2, September 2012, p. 15; Y. Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict*, 2nd ed., Cambridge University Press, Cambridge, 2010, p. 94, para. 232; Watkin, note 13 above, p. 339.

meaningless.⁴⁴ In contrast to the ‘attack as a whole’ view, the ICTY Prosecution argued in the *Galic* case in favour of the tribunal analysing the ‘concrete and direct military advantage’ at the level of each shelling and sniping incident.⁴⁵ The Trial Chamber followed the Prosecution at least with regard to Scheduled Shelling Incident 1 (shelling of Dobrinja during a football tournament).⁴⁶

The frames of reference in which the military advantage might be looked at, from the tactical level to ‘the attack as a whole’, might also impact the level (tactical, operational or possibly even strategic) at which it should be assessed. With regard to precautionary measures, including those related to proportionality, AP I specifies that the obligations bear upon “those who plan or decide upon an attack” (Article 57(2)(a) AP I). In this vein, Switzerland and Austria made various declarations during the Diplomatic Conference or upon ratification that these precautionary measures do not fully bear upon junior commanders, who notably could not be expected to take all precautions required under the principle of proportionality, although Switzerland withdrew its reservation on 17 June 2005.⁴⁷ In this vein, it has been argued that, during a coordinated operation, it is not possible for each individual to assess the proportionality of the attack based only on the part of the operation in which they are involved. Discipline and swift action are required in such circumstances, and the proportionality should be judged in light of the attack as a whole, not the component parts.⁴⁸ However, the ICRC 1987 Commentary on AP I recalls that a very large majority of delegations wanted the provision to cover a wide range of combat scenarios “including those which may arise during close combat where commanding officers, even those of subordinate rank, may have to take very serious decisions regarding the fate of the civilian population and civilian objects”.⁴⁹ It has therefore been understood as applying at “whatever level the regulated functions are being performed”,⁵⁰ and it has been suggested that the appropriate level in the military hierarchy is subject to change depending on the circumstances.⁵¹ It has also been submitted, more generally, that “the military advantage as well as the expected collateral damage must be estimated on all levels and thus on the strategic, operational, and tactical levels”.⁵²

While discussions on military advantage generally focus on the advantage pursued by the attack, a question may be raised as to the manner in which one should account for the possible military disadvantages caused by the same attack. For example, in certain types of conflicts, such as counter-insurgency operations, it has been recognized that causing incidental civilian casualties may reduce the chances of succeeding in the campaign.⁵³ At a tactical level also, it might impact, for example, on the amount or quality of intelligence that the population would be ready to share about enemy forces and operations.⁵⁴

44 Y. Arai-Takahashi, “A Battle over Elasticity: Interpreting the Concept of ‘Concrete And Direct Military Advantage Anticipated’ under International Humanitarian Law”, in *The Realisation of Human Rights: When Theory Meets Practice: Studies in honour of Leo Zwaak*, Cambridge, Intersentia, 2014, p. 357.

45 ICTY, *Galic case*, TC, para. 37. In the same vein, see J. Gardam, “Proportionality and force in international law”, *American Journal of International Law*, Vol. 87, 1993, p. 407.

46 ICTY, *Galic case*, TC, paras 372–387: “Although the number of soldiers present at the game was significant, an attack on a crowd of approximately 200 people, including numerous children, would clearly be expected to cause incidental loss of life and injuries to civilians excessive in relation to the direct and concrete military advantage anticipated. In light of its finding regarding the source and direction of fire, and taking account of the evidence that the neighbourhood of Dobrinja, including the area of the parking lot, was frequently shelled from SRK positions, the Majority finds that the first scheduled shelling incident constitutes an example of indiscriminate shelling by the SRK on a civilian area.”, para. 387 (emphasis added).

47 See references quoted in the ICRC Customary IHL Study, p. 54. See also the US DoD Law of War Manual, note 17 above, para. 5.10.2; and Z. Boher and M. Osiel, “Proportionality in Military Force and War’s Multiple Levels: Averting Civilian Casualties vs. Safeguarding Soldiers”, *Vanderbilt Journal of Transnational Law*, Vol. 46, p. 788.

48 J.F. Quéguiner, “Precautions under the law governing the conduct of hostilities”, *International Review of the Red Cross*, Vol. 88, No. 864, December 2006, p. 804.

49 ICRC 1987 Commentary on AP I, para. 2197.

50 Bothe, Partsch and Solf, note 36 above, para. 2.4.3 on Art. 57, p. 405. See also on this subject the declaration of the UK upon ratification, quoted in the ICRC Customary IHL Study, p. 54.

51 Sloane, note 32 above, p. 315.

52 Jeroen van den Boogaard, “Proportionality and Autonomous Weapons Systems”, Amsterdam Law School Legal Studies Research Paper No. 2016–17, p. 28. See also Watkin, note 13 above, pp. 320 ff.

53 US Department of Defense Joint Publication 3–24, *Counterinsurgency*, 2013, p. III-13; for a specific country example, see the NATO statement on the policy of courageous restraint: NATO, “Honoring Courageous Restraint”, *Afghanistan International Security Assistance Force (NATO) COIN Analysis/News*, 30 April 2010.

54 See, for example, L.N. Condra and J. Shapiro, “Who takes the Blame? The Strategic Effects of Collateral Damage”, *American Journal of Political Science*, Vol. 56(1), 2012, pp. 167–187, p. 184.

Turning to international criminal law, the Rome Statute of the International Criminal Court refers to the notion of “concrete and direct *overall* military advantage” (emphasis added) in its definition of the war crime of disproportionate attacks.⁵⁵ The Elements of Crimes specify that ‘concrete and direct overall military advantage’ refers to a “military advantage that is foreseeable by the perpetrator at the relevant time. Such advantage may or may not be temporally or geographically related to the object of the attack.”⁵⁶ It has been argued that the inclusion of the word ‘overall’ in the Statute widens the scope of the military advantage that can be considered in the proportionality analysis and reflects the interpretation under customary international law, as indicated by the declarations made by a number of States in relation to Articles 51 and 57 of AP I.⁵⁷ In a similar light, it has also been stated that, with the introduction of the term ‘overall’, “the Statute clearly permits looking at the larger operational picture, as distinct from focusing on the particular point under attack”.⁵⁸ For its part, the ICRC stated at the Rome Conference on the Statute of the International Criminal Court that the addition of the word ‘overall’ to the definition of the crime could not be interpreted as changing existing law.⁵⁹ The risk that it “may (...) invite abusive interpretations of the concept of ‘concrete and direct military advantage’” under IHL has, however, been noted in the literature,⁶⁰ and the importance of maintaining the standard under IHL distinct from the possibly more rigorous standards for individual criminal responsibility has been underlined.⁶¹

B) EXPERTS' COMMENTS AND DISCUSSION

Guiding questions

The following questions were submitted to the experts to guide the discussion:⁶²

- What do ‘concrete’, ‘direct’ and ‘military’ mean?
- How do the tactical, operational, strategic and political levels influence the assessment of the relevant military advantage?
- What are the meaning and limits of the notion of ‘the attack as a whole’ (as per the declaration of NATO States)?
- Are military disadvantages that are anticipated to be caused by the attack relevant when assessing the military advantage of an attack?
- What is the meaning of ‘anticipated’ and how should uncertainty be dealt with?
- Is there a difference between ‘concrete and direct military advantage’ and ‘definite military advantage’ (as per the definition of military objective) and, if so, how do these concepts differ?

Importance of the military context

The discussion during this first session focused on the identification of the relevant military advantage and the factors to be considered by a military commander. There was agreement that the military context in which the attack or operation is taking place matters greatly. The same attack might offer a different military advantage depending on the military context, that is, the military strategies of the belligerents, the operational plan the attack is part of, the intent of the commander, whether the attack is an offensive or defensive action, etc.

⁵⁵ ICC Statute, Art. 8 (2)(b)(iv).

⁵⁶ ICC, *Elements of Crimes*, footnote 36 on the elements of crimes of Art. 8(2)(b)(iv), p. 19.

⁵⁷ M.A. Newton, “Charging war crimes: policy and prognosis from a military perspective”, in C. Stahn, *The law and practice of the International Criminal Court*, Oxford University Press, Oxford, 2015, pp. 747–748.

⁵⁸ Y. Dinstein, “The principle of proportionality”, in K.M. Larsen, C. Guldahl Cooper and G. Nysten (eds), *Searching for a “principle of humanity” in international humanitarian law*, Cambridge University Press, Cambridge, 2013, p. 76.

⁵⁹ ICRC, Paper submitted to the Working Group on Elements of Crimes by the Preparatory Commission for the International Criminal Court, annexed to UN Doc. PCNICC/1999/WGEC/INF.2/Add.1, 30 July 1999, p. 29.

⁶⁰ K. Dörmann, *Elements of War Crimes under the Rome Statute of the International Criminal Court*, Cambridge University Press, Cambridge, 2002, p. 163.

⁶¹ Y. Arai, “Excessive collateral civilian casualties and military necessity: Awkward crossroads in international humanitarian law between State responsibility and individual criminal liability”, in Chinkin and Baetens (eds), *Sovereignty, Statehood and State Responsibility*, Cambridge University Press, 2015, pp. 325 ff., p. 339.

⁶² The questions were developed with sub-questions; see Annex 2, Agenda.

The experts agreed that it was the factual situation of the conflict that mattered, not its legal classification as an international armed conflict (IAC) or a non-international armed conflict (NIAC).⁶³ While current NIACs are often highly asymmetric, this can also be the case for IACs. For example, one expert suggested that the Iraqi forces in Baghdad in 2003 might have considered that conflict to be asymmetric. While the legal classification of the conflict as an IAC or NIAC does not matter, asymmetry in the belligerents' military strengths and capabilities forms part of the environment in which the effects of the operations must be assessed; the military advantage offered by a specific operation (e.g. killing an enemy commander or capturing a specific enemy location) may differ because it depends upon the battlefield environment in which the operation is taking place, as illustrated in parts of the discussion below.

An advantage that is 'military'

The experts agreed that the relevant advantage had to be 'military' and thus correspond to the logic of hostilities, namely defeating the enemy in the military realm (or a more specific military aim defined in a particular conflict by a belligerent, such as neutralizing a particular military capacity of the enemy or (re)gaining control over a specific area by military means). The advantage has to contribute to achieving this military aim. It was noted in particular that – despite the fact that the use of military force is often a means for a political end – the military advantage has to be articulated separately from the political or economic context of the conflict. The advantage cannot indeed be considered military if it materializes only at the political level – for example, one expert excluded the possibility that making the enemy negotiate could be a relevant military advantage. However, a proper military advantage can obviously also have benefits in the political realm.

The experts recalled that the ICRC 1987 Commentary on AP I refers to military advantage as gaining ground and defeating the enemy⁶⁴ and noted that the military advantage has to be understood broadly in current conflicts. Commanders consider generally whether an attack can improve their military situation on the ground. Examples of military advantages that were mentioned include preserving one's own forces and protecting civilians (see discussion in session 2 below), diverting enemy rockets, causing the enemy to expose itself or disrupting enemy operations.

The experts notably addressed the extent to which the availability of a defence system would affect the advantage expected from an attack against an enemy's missile launch pads.⁶⁵ It was argued that destroying the offensive capabilities of the enemy offers a military advantage, even when the harmful effects of these capabilities have been lessened thanks to defensive systems. While the reduced lethality of enemy capabilities might be taken into account when evaluating this military advantage, in most cases it would not affect the legality of the attack because this enemy threat would have to be defeated despite its reduced lethality. It was also noted that, since IHL requires belligerents to protect civilians under their control, it would be incoherent if IHL substantially restricted the offensive options available to a belligerent on the grounds that this belligerent had taken measures to protect civilians under its control through defence systems, as it might constitute a disincentive to taking such protective measures. The reasoning was deemed similar for both active defence systems and for passive ones, such as shelters.

One expert underlined that the term 'military advantage' should be understood in a similar manner wherever it appears in the rules on the conduct of hostilities, that is to say in the definition of a military objective,⁶⁶ in the principle of proportionality and in the rule on the choice of targets.⁶⁷ This does not, however, prevent a military advantage from being qualified differently depending on the rule (see the discussion on the qualifiers 'concrete' and 'direct' below).

⁶³ See Annex 2, Agenda, Session 1, question 1(c).

⁶⁴ See text in relation to note 14 above.

⁶⁵ See Annex 2, Agenda, Session 1, question 1(d).

⁶⁶ Art. 52(2) AP I: "In so far as objects are concerned, military objectives are limited to those objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage." See also the ICRC Customary IHL Study, Rule 8.

⁶⁷ Art. 57(3) AP I: "When a choice is possible between several military objectives for obtaining a similar military advantage, the objective to be selected shall be that the attack on which may be expected to cause the least danger to civilian lives and to civilian objects." See also the ICRC Customary IHL Study, Rule 21.

Frame of reference in which to assess the military advantage

The frame of reference in which the military advantage has to be assessed was considered from two inter-related perspectives.

First, the experts agreed that military advantages could be considered at tactical, operational and strategic levels, when relevant. In this sense, the strategic level is not akin to the political level; it has to do with wide-spread or systemic military effects, which are those that weaken the enemy's ability to fight at theatre level. It was noted that tactical operations are frequently carried out against strategic-level objectives. Even if the target is not a strategic-level objective, the assessment of the military advantage is informed by the overall campaign plan across all levels. Conversely, a tactical operation can have negative effects at the strategic level.⁶⁸ In some cases, a higher commander, at theatre level, might be better placed to identify and evaluate a strategic military advantage than a lower-level commander, by having access to more information, greater experience and a better understanding and analysis of the unfolding of the conflict at theatre level.⁶⁹

Second, it was recalled that, when ratifying the Additional Protocols, a number of States issued interpretive statements according to which they consider 'military advantage' to refer to the advantage anticipated from the attack as a whole and not just from an isolated part of the attack.⁷⁰ The experts observed, however, that although the notion of 'attack as a whole' was not defined, it had to remain a finite operation with defined limits. It was suggested that the relevant military advantage to be taken into account is the one that is offered by the specific attack, assessed in light of the attack as a whole. One expert gave the example of a belligerent who wants to obtain aerial supremacy. Attacking all enemy aircraft and aircraft support infrastructure (airfields, radars, etc.) offers a much higher military advantage than attacking some of them because aerial supremacy widely broadens the available military options and has a strategic-level effect.

As noted above, to be 'military', the advantage sought must contribute to defeating the enemy in the military realm (or to the more specific military aim defined in a particular conflict by a belligerent). Some experts highlighted that the military advantage of an attack must be identified in relation to how that particular attack contributes to achieving military victory, and not simply the advantage offered by military victory itself, as such a general consideration would be likely to be perceived as outweighing any incidental harm. Furthermore, these experts warned against collapsing *jus ad bellum* considerations (such as acting in self-defence or expelling occupying forces from occupied territories) into the principle of proportionality under *jus in bello*. For example, the experts rejected the idea that an *ad bellum* proportionality assessment or a general assessment of the damage caused throughout the campaign or armed conflict could affect the assessment of the *in bello* proportionality of a particular attack or of an 'attack as a whole'.

Concreteness and likelihood

The experts remarked that the *travaux préparatoires* do not help much in understanding the qualifiers 'concrete' and 'direct', as there was no shared understanding among State delegations at the Diplomatic Conference of 1974–1977 as to their meaning or, for example, on whether 'concrete' differed from 'definite'. Textual, contextual and logical perspectives could, however, help in interpreting them. One expert viewed the context of the words and the purpose of the treaty as requiring a strict interpretation of these terms.

There was agreement among the experts that for the advantage to be 'concrete', it must be real or tangible, definable and quantifiable and that mere hope, speculation and hypothetical advantages could not be considered. It requires the military commander to be sufficiently certain that the attack will offer the anticipated military advantage, and one expert submitted that 'concrete' requires the military commander to have some evidence that the anticipated military harm will be achieved.

⁶⁸ See text in relation to note 53 above. Some experts considered it more appropriate to refer to positive and negative effects than to military advantages and disadvantages. The analysis and evaluation of the positive and negative effects allow the commander to define whether or not a particular attack offers a military advantage.

⁶⁹ On the benefits in terms of assessing the strategic advantages of pushing the decision to attack up the chain of command, see Part III, p. 68, below.

⁷⁰ See text in relation to note 38 above.

Most experts viewed the term ‘concrete’ as also being related to the likelihood of obtaining the anticipated military advantage. In this regard, the experts emphasized that, in armed conflicts, the degree of certainty of achieving the anticipated military advantage is unlikely to be 100 per cent, due to insufficient information, potential enemy counter-measures or the fog of war. Some experts expressed the view that the relevant military advantage therefore depended on the combination of the magnitude of the anticipated military advantage and the likelihood of obtaining it. Put otherwise, the uncertainty of obtaining the anticipated military advantage diminishes the concreteness of the advantage to be taken into consideration. For example, if an attack is launched against a military objective, and there is a 50 per cent chance that an enemy commander will be present in the building at the time of the strike, this possibility would increase the military advantage anticipated (and thus the magnitude of incidental civilian harm that would not be excessive in relation to it), but to a lesser extent than if the presence of this commander was confirmed.⁷¹ Nonetheless, it was suggested that while probability and magnitude could compensate for each other to some extent, one could not replace the other below a certain threshold of likelihood. For instance, a huge possible military advantage that is incredibly unlikely to materialize could not be considered a relevant military advantage at all.

It was finally noted that neither ‘concrete’ nor ‘definite’ (in the definition of a military objective) requires the military advantage to be ‘significant’. Even a small military advantage could render the attack lawful where only minimal incidental harm to property was expected, but there will certainly be cases in which the expected incidental civilian harm would require the military advantage to be significant in order for this harm not to be excessive in relation to it.

Analysing the requirement for the military advantage to be ‘direct’

The discussion on directness focused on the causal link between the attack and the anticipated military advantage.

Drawing an analogy from the ICRC *Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law*,⁷² one expert suggested that the qualifier ‘direct’ should be understood as requiring the advantage to be offered by the attack in ‘one causal step’. In this regard, the expert stressed the importance of distinguishing the causal link (directness) from the frame of reference of the analysis (the attack as a whole). It was not suggested that the military advantage has to materialize in one causal step from every delivery of firepower; the ‘one causal step’ could be assessed from the attack as a whole and/or at the strategic level. This expert felt that such an approach would help make the notion clearer without necessarily making it more restrictive than as currently applied by militaries. Another expert considered this approach as the best way to ensure the operability of proportionality but suggested that militaries could be more inclined to accept a given number (to be determined) of causal steps.

Several other experts rejected, however, the suggestion of ‘one causal step’ as a criterion for implementing the qualifier ‘direct’. They held that reducing the proportionality analysis to an exercise in metrics would show a misunderstanding of the nature of military advantage in operations that are conducted today and would face strong pushback from militaries. They expressed the view that commanders are casting a wide net and looking at the entire situation. Any military advantage that could be identified as being offered by the attack is considered sufficiently ‘concrete and direct’ to meet the requirement of the principle of proportionality. Additionally, one expert stated that militaries do not have a specific test to qualify a military advantage as ‘direct’. Under this view, ‘direct’ essentially requires the advantage to be brought about by the attack itself and not just by external sources or intervening causes. It was recalled that attacks are meant to take place in the framework of an operational plan, defined by the commander with a view to achieving the lawful aim for which military force is resorted to and reflecting his or her intent. These experts submitted that, in their experience, an attack would not be carried out in the first place if it did not offer a concrete and direct military advantage towards fulfilling this operational plan. Indeed, such an attack would otherwise be a waste of resources and go against the principle of economy of force.

⁷¹ Experts expressed the view that the same reasoning applied on the other side of the equation with regard to the likelihood of the presence of civilians in the building.

⁷² *Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law* (hereinafter “ICRC DPH Guidance”), p. 53.

While some experts suggested that a 'clear causal relation' standard could be more appropriate, others considered that the qualifier 'direct' required the advantage to be 'relatively close' or 'in close relation' to the attack in terms of causality.

One expert underlined that the words 'concrete and direct' had to be given a meaning and that this meaning should qualify the military advantage differently than incidental harm, as the latter does not include these qualifiers. In this regard, some experts supported the view expressed in the ICRC 1987 Commentary that the qualifiers 'direct and concrete' in the principle of proportionality, taken together, were narrower than 'definite' in the definition of military objective.⁷³ It was also noted by several experts that if a broad approach was adopted in understanding the relevant military advantage, it was all the more justified with regard to the scope of incidental harm to be taken into account in the balancing.

Geographical and temporal proximity

One expert considered that 'direct' means that the military advantage has to appear in the relevant area and has to manifest itself in the short run. Another expert suggested that the closer the military advantage is, geographically or temporally, to the attacks, the higher the factual presumption that the advantage is 'direct'. Under this view, the longer-term military advantages offered by the attack should be treated with caution. Indeed, the more remote these advantages become, the less direct the causal relation between the attack and the military advantage is. Advantages which appear only in the long term should therefore be disregarded or at least considered cautiously.

Several other experts, however, considered that long-term effects, in terms of eroding the military strength of the enemy, are relevant when directly caused by the attack. For example, destroying an enemy military asset (e.g. weapons) offers a direct military advantage even if the enemy is only expected to use this weapon at a later stage in the conflict and not immediately (e.g. when left with no other choice); the military advantage remains 'direct' in the sense of being the immediate result of the attack in terms of causality.

With regard to geographical proximity, several experts considered that even if the distance of the objective from the front line could affect the assessment of the military advantage, it does not necessarily preclude the possibility that the attack offers a military advantage. This is the case, in particular, for enemy headquarters, whose destruction can offer a military advantage at least as important as the advantage offered by the destruction of an objective in the vicinity of the battlefield, even if these headquarters are located hundreds of kilometres beyond the front line in enemy territory.

Relevance of psychological impacts

The experts generally agreed that advantages brought about by the psychological impact of attacks on the civilian population or even on the enemy government or administration (or the political and administrative branches of non-State parties to the conflict) have to be disregarded. Some experts disregarded them for not being military. Others thought that the advantage that a psychological impact might have, be it positive or negative, can be of a military nature but considered that it is not concrete or direct enough to be properly assessed. For example, the hope that power cuts in enemy cities will decrease the morale of the civilian population, undermine its contribution to the war effort and create a military advantage in the long run cannot be considered a 'direct and concrete' military advantage (if considered relevant, this would have increased the military advantage of destroying an electricity power plant, assuming that it was otherwise a military objective). Referring to the discussion on directness, one expert viewed this as an example of an advantage that would not be offered by the attack in one causal step.

Psychological impacts on enemy armed forces were assessed differently. One expert held the view that, as long as it is not designed to terrorize the population, affecting the enemy's soldiers will to fight, whether by striking the military leadership or resorting to 'shock and awe' approaches, is a lawful objective. A psychological impact on enemy forces can therefore constitute a relevant military advantage. Another expert cautioned, however, that the psychological impact of an attack is a very dangerous notion, since history has shown that expectations in terms of psychological impact often do not materialize.

⁷³ See text in relation to notes 34 to 36 above.

Other experts held the view that the psychological impact on enemy forces could only be sufficiently evident to be relevant at the tactical level and provided that the resulting military advantage was brought about in one causal step. For example, the fact that a commander reasonably believes that an attack will cause an enemy unit to surrender constitutes a relevant military advantage of this attack.

The experts considered deterrence in the same manner.⁷⁴ It was cautioned that deterrence is an open-ended concept, much of which has nothing to do with a concrete and direct military advantage and thus cannot generally be considered under the principle of proportionality. It was suggested, however, that the effects obtained through deterrence can possibly be considered a relevant military advantage at the tactical level, in particular when the following two criteria are fulfilled: there is reasonable certainty that an attack will cause the enemy to refrain from a certain operational activity; and preventing this activity can be achieved by attacks against military objectives contributing to it. This could be the case, for example, in an attack directed against an enemy sniper in a residential building that would also deter snipers in adjacent buildings. Looking at it from the perspective of the advantage sought by the attack, one expert noted that it might be a suppression mission aimed at creating a denial effect.

For further discussion on the relevance of psychological impacts, see scenario 3 below (p. 23).

Discussion on scenario 1

Scenario 1 – summary⁷⁵

An enemy operational command post is located within a densely populated area in the centre of the city, and launching a direct attack against it would lead to excessive incidental civilian harm. However, there is a power station on the outskirts of the city that provides electricity to this command post. It is also providing electricity to the civilian population and local hospitals. Destroying the power station would cut off the power supply to the command post.

Various hypotheses were suggested, namely that the enemy had or might have generators to overcome power cuts, that there were active hostilities in the area, that other command posts could take over the functions of the command post considered for attack if it was inoperative or that attacking that command post was part of an operation aimed at taking control of the city.

With regard to the ability of the enemy to provide electricity using generators, one expert noted that well-organized armies have contingency planning in case of the destruction of infrastructure. While knowing or assuming that the command post has generators would diminish the anticipated advantage, it would not eliminate it. Another expert more categorically rejected the idea that an attack against the power station would provide a concrete and direct military advantage if the enemy could provide electricity for the command post from generators. Indeed, the command post would continue to function after the attack, and the attacking commander would therefore have to take further steps to be able to neutralize it. One expert went even further, considering that the attack seemed to offer little concrete and direct military advantage even if the post had no generators and that taking out an entire power station on the chance of disrupting the capability of the command centre seemed disproportionate.

The experts considered that the mere disruption of a command post's activities could bring an advantage in the case of active hostilities, while the absence of hostilities would reduce any advantage offered by disrupting its operation. The availability of replacement command posts was also said to diminish the advantage, except if the attack was part of an overall plan to take down all such command posts (in which case the cumulative harm to the civilian population caused by all these attacks would have to be considered).

⁷⁴ See Annex 2, Agenda, question 1(c) of session 1.

⁷⁵ For the full scenario, see Annex 2, Agenda, Scenario 1.

Looking at the hypothesis that this attack is part of an operation aimed at taking control of the city, it was remarked that while there are conflicts today where gaining ground might not be realistic for one party in many conflicts belligerents do aim to gain (and hold) ground. This would be factored into the analysis of the military advantage offered by the neutralization of the command post, which should therefore be analysed in light of the operational plan of the belligerent. For example, in a situation where the attack is part of an operation aimed at taking control of the city, the advantage offered by the neutralization of the command post is not to be assessed in the abstract, but will depend on the contribution that such neutralization offers towards achieving the military aim of the operation.

Discussion on scenario 2

Scenario 2 – summary⁷⁶

An enemy commander is travelling in a local taxi alongside the taxi driver and four other civilian passengers, who would all be killed in an attack against the commander. The forces considering this attack anticipate that the commander's death would disrupt enemy military operations in the main town in this area.

A common feature of this conflict is that when an enemy commander is killed, enemy forces intensify their operations and take revenge against civilians. Furthermore, in cases of incidental civilian casualties, the civilian population becomes more reluctant to provide information to the belligerent that caused the casualties, negatively impacting its ability to gather intelligence on enemy forces. Furthermore, family members of civilians killed choose to join enemy forces or become sympathizers.

The experts noted that the military advantage in this scenario will depend, among other things, on the importance of the town as well as on the rank of the commander; if he or she were a mere infantry soldier, the balance would be tilted heavily against the strike. With regard to the commander, the military force planning the strike will look at the size of the command, at how many such commanders there are in the area and whether he or she would be easily replaceable.

Another aspect for consideration is the type of conflict in which the operation is taking place. If the aim of the conflict is to defeat an enemy militarily, the assessment of the situation in terms of the advantage will be different than in a counter-insurgency scenario. In the latter case, the negative impact on the support of the population for the forces involved in counter-insurgency operations will factor more heavily in the attacking commander's mind. The experts considered that negative impacts, such as reduced intelligence, would definitely matter operationally speaking. They were hesitant, however, to conclude that such considerations would also matter legally speaking. It was also suggested that longer-term negative repercussions at the strategic level – such as decreasing the general support of the population in the theatre of operations – are relevant as a matter of policy only. In this regard, it was noted that any temporal proximity requirement would apply in the same manner to both positive and negative impacts when assessing the military advantage offered by an operation. Finally, one expert considered that negative effects would generally materialize only through an intervening action by the enemy or civilians and thus cannot be considered in the legal analysis because they are not direct effects.

With regard to the effect of increasing enemy attacks, some experts noted that, depending on the situation, this can actually be an advantage or even the aim of the operation; if the enemy is hiding, it might be advantageous to provoke it into coming out into the open so as to target it more easily or simply to examine what its response would be.

⁷⁶ For the full scenario, see Annex 2, Agenda, Scenario 2.

Discussion on scenario 3

Scenario 3 – summary⁷⁷

An attack is planned against a historically renowned fort located in the rear area, far from the front line, and currently used as a resting place for 30–40 enemy soldiers on standby. Taking over the fort is expected to kill an unknown number of enemy soldiers and result in a dozen civilian casualties. Even though the attacking party does not expect to be able to hold the fort for long after having captured it, it is expected that such an operation would be seen as a prestigious success which would boost the morale of the party's fighters and increase its recruitment, while decreasing the morale of the enemy and the support it enjoys from the population.

One expert considered that the operation, as presented in the scenario, did not seem to offer any military advantage, in particular because of the inability to hold the fort. For this expert, even the ability to hold it would hardly offer a military advantage *per se* unless it was part of larger plan. Some experts underlined that it was important not to forget to consider the military advantage from the perspective of insurgents. In the case of an insurgency, the benefits gained by capturing a position held by a stronger enemy force, holding it for a period and demonstrating the group's ability to strike, thereby undermining the confidence of the enemy force, are relevant considerations despite the group's inability to defend the position in the long run. In this scenario, the military advantage for the attacker may be deemed significant, although the balance of the proportionality assessment remains relatively tight in view of the expected incidental harm suggested.

Another expert took a middle road, highlighting that while there was some military advantage, it was apparently a rather small one. Among the advantages that could be considered were the disruption caused by denying the use of the fort as a resting and training place for soldiers on standby and killing some of these soldiers in the attack. However, these advantages were undermined by the inability to hold the fort and the ability of the enemy to find a new resting place for its soldiers. Furthermore, the fact that the fort was a culturally important object, with a museum, had to be considered when assessing the expected incidental harm. This expert concluded that, unless this attack actively contributed to disorganizing the enemy, it would be difficult to consider it as respecting the principle of proportionality. It was noted that in many recent conflicts, operational planning had considered civilian support as a centre of gravity for an operation. Therefore, in this scenario, even assuming the killing of all 40 enemy soldiers, 12 incidental civilian casualties could be considered excessive and contrary to the course of operations and the commander's intent in such a context. Other experts opposed this last conclusion regarding the excessiveness of the attack on the grounds that negative impacts were, in their view, relevant as a matter of policy only, not law (see the discussion on scenario 2 above). In any case, the expert taking the middle road noted that additional assessments (for example, patterns of life analysis) should be recommended in order to better anticipate the risk, since there did not seem to be any vital urgency, in relation to the conduct of hostilities, in targeting that objective immediately.

The experts held various views on the psychological impact offered by the prestige gained by conducting the operation but mainly concluded that this prestige, as such, could not be considered as a concrete and direct military advantage. One of them considered that it was sufficiently direct but largely immaterial and difficult to evaluate and therefore insufficiently concrete. Conversely, another expert considered that the military advantage that could be derived from the psychological impact, such as impacts on the morale of the enemy, on the morale of the attacker's own forces or on recruitment, was too indirect to be considered. Another expert dismissed outright all these psychological effects as too hypothetical and doubted that they would be relevant at all.

⁷⁷ For the full scenario, see Annex 2, Agenda, Scenario 1.

SESSION 2: RELEVANCE OF FORCE PROTECTION AND PROTECTION OF CIVILIANS CONSIDERATIONS FOR THE PRINCIPLE OF PROPORTIONALITY

A) BACKGROUND INFORMATION

‘Force protection’ is understood in this report to refer to those endeavours made by a party to a conflict to prevent its own or allied forces from being lost (permanently, as in the case of casualties, or temporarily, as in the case of capture) in the conduct of military operations. While it is legitimate for a military to endeavour to preserve its own forces, it is also clear that “[m]ilitary necessity cannot always override humanity. In taking care to protect civilians, soldiers must accept some element of risk to themselves.”⁷⁸

Is ‘force protection’ to be considered within the principle of proportionality?

One of the questions debated is the extent to which ‘force protection’ can influence the proportionality analysis. Like all the rules on the conduct of hostilities, the principle of proportionality applies in all situations, including when troops are receiving enemy fire. Force protection cannot be used as a justification for not respecting the principle. Furthermore, the general objective of protecting civilians expressed in Articles 48 and 51(1) of AP I must be considered when interpreting the rule of proportionality.⁷⁹ Therefore, taking into account the protection of one’s own forces as a military advantage cannot be a reason for undermining the protection that IHL affords to civilians.

While the principle of proportionality in itself does not require an attacker to accept increased risk, it is generally recognized that taking risks for one’s own forces may be necessary to proceed with a particular attack if an alternative course of action that would place one’s own soldiers at lesser risk is expected to cause excessive collateral damage.⁸⁰ This highlights the fact that ‘force protection’ cannot be used to justify a disproportionate attack.

The more challenging question from a legal perspective is, however, whether the risk to one’s own forces may be considered *within* the principle of proportionality. The fact that the military advantage may include the security of the attacking forces has been expressed in some declarations made by States upon AP I ratification⁸¹ and in military manuals.⁸² However, these statements do not give details as to how and to what extent these States consider that the security of their own troops is to be factored into the military advantage anticipated.

78 A.P.V. Rogers, “Conduct of combat and risks run by the civilian population”, *Military Law & Law of War Review*, 1982, p. 310. See also, for the particular case of counter-insurgency warfare: US, *Insurgencies and Countering Insurgencies*, FM 3-24/MCWP 3-33.5, C1, 2014, pp. 1–37, available at <https://fas.org/irp/doddir/army/fm3-24.pdf>.

79 ICRC 1987 Commentary on AP I, para. 1979.

80 The UK 2004 Military Manual, para. 2.7.1; the assertion of the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia that the method of warfare chosen for force protection concerns has to enable compliance with the principle of distinction (see para. 56) is also valid for the principle of proportionality.

81 See, for example, the declarations of Australia and New Zealand that “the term ‘military advantage’ involves a variety of considerations, including the security of attacking forces”, available at https://www.icrc.org/applic/ihl/ihl.nsf/States.xsp?xp_viewStates=XPages_NORMStatesParties&xp_treatySelected=470.

82 See, for example, the Canadian *Joint Doctrine Manual, Law of Armed Conflict at the Operational and Tactical Levels*, B-GJ-005-104/FP-021, 2001 (hereinafter “Canada 2001 Military Manual”), para. 415(2) (in relation to the principle of proportionality), and the US *The Commander’s Handbook on the Law of Naval Operations*, NWP 1-14M, 2017, para. 8.2 (in relation to the definition of military objective).

Opinions on how to consider ‘force protection’ within the principle of proportionality

It is clear from Article 51(5)(b) of AP I that the risk to attacking forces and endeavours to reduce such risk may only be considered to the extent that it amounts to a ‘concrete and direct military advantage’. There is however a broad spectrum of opinions on the issue of whether ‘force protection’ can be taken into consideration in the assessment of military advantage and, if so, how and to what extent. Some commentators emphasize that “[m]ilitary casualties incurred by the attacking side are not a part of the [proportionality] equation”.⁸³ This is based on the idea that the protection of one’s own forces should not come at the expense of the civilian population. It is argued that this would lead to a sliding scale that would inevitably reduce the protection afforded to the civilian population and civilian objects in the conduct of hostilities.⁸⁴

Others insist that, on the contrary, the security of the attacking forces is a valid concern that can be factored into the military advantage of an attack. They argue that it is self-evident that an attack in which military personnel or equipment are lost provides less military advantage than one where harm to one’s own forces is avoided or minimized.⁸⁵ A “reasonable ‘allocation of risk’ between the attacker’s military personnel and the enemy civilians” is suggested.⁸⁶

A third approach underlines that ‘force protection’ may be taken into consideration in the analysis of military advantage for the purposes of the proportionality assessment only when it amounts to a ‘direct and concrete military advantage’.⁸⁷ In this regard, it is suggested that a differentiation should be made between instances where attacking forces are directly under threat from an imminent or ongoing attack and those where the risk to attacking forces is more hypothetical. To illustrate the latter, let us consider a decision that is being made to adopt a method or means of attack that is anticipated to be more protective for the attacking forces than another alternative method or means but is also expected to result in greater collateral damage than the alternative. Under this third view, the difference in terms of ‘force protection’ between the two means or methods of attack cannot be factored into the assessment of the anticipated military advantage of using means and methods less secure for the forces. This is because this advantage becomes apparent only when the method of attack that is safer for one’s own troops is compared to a hypothetical less secure course of action that might never be carried out. As such, the advantage is too remote or hypothetical to qualify as a ‘direct and concrete military advantage’.⁸⁸

⁸³ W.J. Fenrick, “Attacking the Enemy Civilian as a Punishable Offence”, *Duke Journal of Comparative and International Law*, Vol. 7, 1997, p. 549. Looking at a particular situation, the majority of the International Group of Experts that drafted the *Tallinn Manual 2.0* rejected that the maintenance of one’s own armed forces and capabilities is appropriate for inclusion in the calculation of military advantage (see *Tallinn Manual 2.0*, Commentary on Rule 113, para. 15, p. 476).

⁸⁴ See, for example, G.D. Solis, *The Law of Armed Conflict: International Humanitarian Law in War*, Cambridge University Press, Cambridge, 2010, pp. 284–285; S. Oeter, “Collateral Damages – Military Necessity and the Right to Life”, in C. Tomuschat, E. Lagrange and S. Oeter (eds), *The Right to Life*, Martinus Nijhoff Publishers, Leiden, 2010, p. 185.

⁸⁵ Neuman, note 42 above, p. 91; M.N. Schmitt, “Precision attack and international humanitarian law”, *International Review of the Red Cross*, Vol. 87, No. 859, September 2005, p. 462. See also I. Henderson, *The Contemporary Law of Targeting: Military Objectives, Proportionality and Precautions in Attack under Additional Protocol I*, Martinus Nijhoff Publishers, Leiden, 2009, p. 204.

⁸⁶ Dinstein, note 43 above, p. 141.

⁸⁷ R. Geiss, “The Principle of Proportionality: ‘Force Protection’ as a Military Advantage”, *Israel Law Review*, Vol. 45, 2012, pp. 77–79.

⁸⁸ *Ibid.*, pp. 79–88.

B) EXPERTS' COMMENTS AND DISCUSSION

Guiding questions

The following questions were submitted to the experts to guide the discussion:

- *What is the relevance of force protection considerations for the principle of proportionality in situations involving 'troops in contact' operations?*
- *Should one distinguish between the military advantage anticipated from attacks carried out by troops under fire in their own defence and the military advantage anticipated from attacks conducted by friendly forces – not themselves under fire – in support of these troops?*
- *What is the relevance of force protection considerations for the principle of proportionality in situations that do not involve 'troops in contact' operations?*
- *Is the military advantage of neutralizing an enemy's military capacity different when this capacity is used to target civilians instead of, or in addition to, targeting lawful targets?*

Introductory remarks

Terminology-wise, some experts recommended avoiding talking about force protection in relation to the issue under consideration and talking instead about force preservation or self-preservation. According to these experts, 'force protection' is a wider notion that has to be understood as encompassing all measures taken to minimize risks faced by soldiers, including, for example, static measures to protect bases (sandbags, reinforced walls, etc.).⁸⁹

All the experts agreed that force preservation was a very important military consideration, as the purpose of war is to overcome the enemy and a belligerent needs to preserve its own forces to achieve this. It was noted that it is undoubtedly a relevant military consideration when evaluating the feasibility of taking precautions.⁹⁰ However, the fact that it is an important military consideration does not necessarily make it a concrete and direct military advantage. While most of the experts agreed that force preservation could be a concrete and direct military advantage relevant to the analysis of the principle of proportionality in some circumstances, as discussed below, they held diverging views on the type of situations and the manner in which it could be taken into consideration.

In this context, looking at situations in which troops are under enemy fire, some experts noted that soldiers would rather think in terms of 'self-defence'. They underlined, in this regard, that reliance on the notion of self-defence in rules of engagement (ROE) is aimed at controlling and restraining the use of force.

Distinction between troops under enemy fire and other situations

Most experts distinguished between various types of operations. In particular, they made a distinction between pre-planned operations and the use of force by troops under enemy fire (sometimes also referred to as 'troops in contact'), although they did not necessarily agree upon the consequences of the distinction for either scenario.

⁸⁹ See US Department of Defense Dictionary of Military and Associated Terms, Joint publication JP 1-02, 8 November 2010, as amended through 15 February 2016: "force protection – Preventive measures taken to mitigate hostile actions against Department of Defense personnel (to include family members), resources, facilities, and critical information."

⁹⁰ According to various interpretations given by States and the definitions given in Protocols II and III to the 1980 Convention prohibiting Certain Conventional Weapons, feasible precautions are "those precautions which are practicable or practically possible taking into account all circumstances ruling at the time, including humanitarian and military considerations" (emphasis added); Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (Protocol II), 1980, Art. 3(4); Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III), 1980, Art. 1(5); Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices as amended on 3 May 1996 (Protocol II to the 1980 CCW Convention), Art. 3(10). For State practice, see the ICRC Customary IHL Study, p. 54.

The experts generally considered that force preservation is a relevant military advantage when the aim of the attack is to defend oneself or to provide supporting fire to one's own or friendly troops under enemy fire. This means that destroying a tank that is about to shoot at a belligerent's own soldiers offers a greater military advantage (and could therefore justify more incidental civilian harm) than destroying the same tank when it is not about to shoot. One expert noted that force preservation is also a relevant military advantage when the aim of the attack is to (preventively) defend a particular unit or base against an enemy operation, even if such an operation has not started yet (as opposed to operations where the tactical operative goal is not the preservation of the belligerent's own forces but, for example, to gain territory or take over an enemy position). This expert added that, in such a case, not only the preservation of one's own soldiers, but also the preservation of military material and preventing it from falling into enemy hands, constitute a concrete and direct military advantage.

Many experts considered, conversely, that force preservation is not a relevant consideration for the principle of proportionality in pre-planned operations.⁹¹ Indeed, the military advantage of preserving one's own troops would be achieved if the operation was not carried out in the first place, so it cannot be an advantage offered by the operation itself. It was also noted that if it was a relevant military advantage, it could be manipulated in the sense that the more soldiers are sent in and put at risk of harm, the more civilian harm could be accepted without it being considered excessive. However, some of the experts holding this view would consider making an exception for States which are not party to AP I and also for Australia and New Zealand, which made declarations when ratifying AP I that "the term 'military advantage' involves a variety of considerations including the security of attacking forces".⁹²

Contrary to the above views of those distinguishing between situations, a few experts considered that the preservation of one's own forces is a relevant military advantage when assessing the proportionality of any attack, whether defensive or offensive and whether or not troops are under enemy fire. However, the weight to be given to the advantage of preserving one's own forces would depend on the context of the attack and on the value of the forces preserved for the belligerent's own operations. One of the experts holding this view nevertheless described a scenario in which force preservation could not be considered in the proportionality assessment. Using the example of NATO's decision to fly at a high altitude during the 1999 Kosovo campaign, this expert put forward the following rationale: assuming that the belligerent conducting the air operation considers that the military advantage offered by the destruction of a particular military objective would justify not more than five incidental civilian deaths and assuming further that this belligerent expects that to attack while flying at a lower altitude would cause five incidental civilian deaths and would endanger the pilot, whereas flying at a high altitude would cause seven incidental civilian deaths but ensure the pilot's preservation, the belligerent cannot attack while flying at a high altitude and justify the incidental killing of seven civilians by adding the preservation of the pilot to the military advantage gained by the destruction of the military objective.

Conversely, one expert considered that while the preservation of one's own forces is an important consideration for commanders' decisions, it cannot be a relevant military advantage for the principle of proportionality. This expert noted that soldiers are lawful targets because of their status (and not their conduct). State agents face risks that are inherently associated with discharging State obligations during armed conflicts, and this burden cannot be shifted onto civilians.

⁹¹ As noted above, force preservation is a relevant military advantage for the principle of precautions in attack (see text in relation to previous note), including in pre-planned operations, but the principle of precaution was outside the scope of this expert meeting.

⁹² See: https://www.icrc.org/applic/ihl/ihl.nsf/States.xsp?xp_viewStates=XPages_NORMStatesParties&xp_treatySelected=470.

Relevance of the notion of ‘self-defence’ for troops under enemy fire

The experts expressed various views on how troops under enemy fire ought to analyse the principle of proportionality and on the relevance of self-defence considerations in such situations.

A number of experts explained that, while fire support for one’s own or friendly forces under enemy fire must be subjected to a proportionality analysis in an IHL sense, including the assessment and evaluation of incidental civilian harm,⁹³ soldiers who are themselves under fire do not think in terms of IHL proportionality, but rather in terms of self-defence.⁹⁴ This was held to be the case for defensive fire in the case of a surprise enemy attack, but also when coming under fire in a pre-planned offensive operation, such as in scenario 5 (see below). In the latter case, the IHL proportionality analysis is made in advance, when the decision to carry out the operation is taken; once that decision has been taken, what matters is not reassessing the principle of proportionality but controlling and restraining the use of force by soldiers when they come under enemy fire. Indeed, every expert who mentioned self-defence underlined that this concept is used by the military to tone down and control the use of force in order to minimize incidental harm to civilians. One expert recalled the example of the ‘courageous restraint’ guidance by International Security Assistance Force (ISAF)/United States Forces Afghanistan (USFOR-A) commanders in Afghanistan, which actually required troops to accept casualties to their own forces in order to minimize the number of civilian incidental casualties, considering the wider goal of the campaign, while noting that this guidance faced criticism from other military commanders. Other experts underlined the policy considerations that underpinned this guidance.

A few of these experts further explained that with regard to the use of force in self-defence, as allowed in rules of engagement, some military forces were currently thinking in terms of public authority – akin to the responsibility of police officers to protect civilians and defend others as well as defend themselves.⁹⁵ They considered that the public authority approach emphasizes the constraints governing the use of force more clearly than looking at it solely from the perspective of the individual right of self-defence. In this respect, one expert pointed out that an individual resorting to the use of force in self-defence may elevate their own self-preservation above any other concerns. Using the public authority approach would, in the view of those experts, mitigate the risk of soldiers considering that their individual right of self-defence could trump any other consideration, such as the risk of causing incidental harm to others when resorting to force in self-defence. Indeed, rules of engagement based on public authority underline the need to avoid incidental civilian casualties and, under such an approach, it might not be permitted to cause *any* such incidental harm. These experts also considered the public authority approach more responsible because it encompasses the right to defend others (such as civilians) against unlawful attacks, which is not necessarily the case for the right to use force in individual self-defence, as defined in military rules of engagement.⁹⁶

Several experts, however, rejected the relevance of self-defence considerations with regard to operations governed by IHL rules on the conduct of hostilities. They pointed to the fact that, in situations where IHL applies, the concept of self-defence is irrelevant with regard to the force used against a lawful target. Enemy fighters can indeed be targeted based on their combatant status or function, while civilians taking a direct part in hostilities can be targeted based on their conduct. Both status/function-based and conduct-based

⁹³ See also p. 62 below.

⁹⁴ Some of these experts noted the importance of using the right terminology. Indeed, the notion of self-defence appearing in some national ROEs sometimes addresses situations during the conduct of hostilities which, under IHL, would tend to be analysed as counter-fire or attacks in defence against enemy fire. This self-defence is different from self-defence as grounds for excluding responsibility in criminal law or self-defence as understood in the rules governing the use of force in law enforcement operations (such as Principle 9 of the United Nations *Basic Principles on the Use of Force and Firearms by Law Enforcement Officials*, available at <http://www.ohchr.org/EN/ProfessionalInterest/Pages/UseOfForceAndFirearms.aspx>).

⁹⁵ For an argument in favour of reframing ROE rules on self-defence under a public authority approach and how it would impact the rules on the use of force, see, for example, G. Corn, “Should the Best Offense Ever Be a Good Defense? The Public Authority to Use Force in Military Operations: Recalibrating the Use of Force Rules in the Standing Rules of Engagement”, *Vanderbilt Journal of Transnational Law*, Col. 49, 2016.

⁹⁶ It may be noted that in many, if not most, domestic legal systems, defence of others constitutes grounds for excluding criminal responsibility for the use of force (in self-defence); see L. Cameron and V. Chetail, *Privatizing war: private military and security companies under public international law*, Cambridge University Press, Cambridge, 2013.

targeting authorities are broader than self-defence, which therefore seems irrelevant. Furthermore, these experts noted that the concept of self-defence, whether individual self-defence or defence of others, as normally interpreted in the context of law enforcement and/or criminal law, was not useful with regard to incidental harm either. They recalled that the use of force in self-defence was also governed by a principle of proportionality, albeit one that had a distinct meaning and operated differently than IHL proportionality.⁹⁷ The question of whether the rules governing the use of force in self-defence would allow any incidental harm to someone who is not a threat (such as a civilian in the proximity of an enemy posing an imminent threat to the soldier's life if the use of force had to be governed by the rules on self-defence in such a situation) was therefore very controversial, and it was observed that if it were allowed, it would certainly be in a much more restrictive manner than incidental civilian harm according to the principle of proportionality under IHL. This is reinforced by the fact that soldiers, unlike civilians, are expected to accept some risks as part of their function, as noted above. Finally, IHL rules on the conduct of hostilities address belligerents in a symmetrical manner, whereas self-defence exists only against an illegal use of force. Therefore, according to this view, self-defence does not exist under IHL as a separate basis for the use of force against a lawful target. Instead, the situation must be analysed in terms of military advantage. Some experts found that using the concept of self-defence for these situations is actually confusing.⁹⁸ These experts considered self-defence – whether seen as an individual right or as a 'public authority' power – to be a concept relevant only with regard to the force used to counter threats that have no nexus to the conflict or that do not otherwise amount to direct participation in hostilities. Indeed, IHL does not apply to measures to counter threats posed by criminals with no nexus to the conflict. Other experts, however, noted that self-defence as a defence under domestic criminal law is not necessarily restricted to peacetime situations, even though it might not be well suited to address instances of use of force in armed conflict.

Among these experts, a few cautioned against the idea that self-defence could be based on a notion of 'public authority' in conflicts. Public authority was said to be based on a social contract between the State and the people, which does not necessarily exist in armed conflicts. Thus, at least in extra-territorial armed conflicts, the basis of 'public authority self-defence' was seen as being dubious, except possibly in situations of occupation where, under IHL, the occupying power has an obligation to ensure public order and safety.⁹⁹ Another concern raised by these experts with regard to 'public authority self-defence' was the risk of importing human rights considerations into the rules governing the conduct of hostilities. This tendency was already evident with regard to the obligation of States to protect the right to life of their own soldiers. To prevent such considerations from destabilizing or unbalancing IHL rules on the conduct of hostilities, one expert recommended the IHL community to clearly assert that international human rights law (IHRL) has no role to play in relation to the use of force against lawful targets under IHL.

Finally, one expert viewed self-defence in rules of engagement as a terminological concept referring only to some aspects of the mission of military forces, without prejudice to applicable law.

There were diverging analyses regarding the hypothetical situation in which the only way for a soldier to avoid being killed is to carry out an attack that is disproportionate in an IHL sense. Some experts argued that IHL requires soldiers to refrain from launching a disproportionate attack even in such extreme cases. Under this view, self-defence considerations could not render the attack lawful. To find otherwise would indeed amount to an exception of military necessity, and it is well-established that no such exception exists for IHL, except when expressly stated by the rule, which is not the case for the principle of proportionality.¹⁰⁰

⁹⁷ See, for example, Principle 5(a) of the United Nations *Basic Principles on the Use of Force and Firearms by Law Enforcement Officials*.

⁹⁸ See note 94 above.

⁹⁹ Regulations annexed to the 1907 Hague Convention (IV) respecting the Laws and Customs of War on Land, Art. 43.

¹⁰⁰ Compare, for example, with Art. 23(g) of the 1907 Hague Regulations.

Whether or not self-defence considerations could be grounds for excluding criminal responsibility in subsequent criminal proceedings was deemed another issue,¹⁰¹ and the experts held diverging views on whether their national criminal law would accept such an excuse. Other experts dismissed the view that, in such a scenario, IHL would formally require the soldier to accept his or her death. They considered it unrealistic and contrary to disciplined action: while soldiers are required to take risks, IHL cannot require soldiers to accept death without defending themselves. When soldiers are shot at, they certainly do return fire to try to save their lives. These experts believed that as self-defence is a ground for excluding responsibility, it is appropriate to take it into consideration as appropriate in military doctrines, rules of engagement or other rules regulating the use of force by the military and to rely on it as a basis for instructing soldiers on how to use force in such situations. One expert concluded that the discussion showed that the manner in which armed forces use the concept of self-defence, in particular when in contact with the enemy, might require further study.

Relevance of the protection of civilians as a military advantage for the principle of proportionality

Several experts considered that the protection of civilians, such as foiling attacks directed at civilians or indiscriminate attacks by the enemy, is a relevant consideration for the evaluation of the military advantage under the principle of proportionality. First of all, it may be that the main – and sometimes even the only – purpose of the entire military campaign or of a specific military operation is to protect civilians against direct attacks by the enemy. Similarly, the mandate given by the UN Security Council to some forces specifically includes the obligation to protect the civilian population. It would thus be contradictory not to consider it a relevant military advantage. One expert recalled in this regard that the ICRC DPH Guidance considers that attacking civilians can satisfy the threshold of harm necessary to constitute direct participation in hostilities.¹⁰² This expert argued, therefore, that preventing such harm must logically be considered as offering a military advantage. In addition, in some situations, the military value of a lone enemy fighter might be very low, in particular in asymmetric conflicts where this fighter might not be expected to be able to achieve much militarily speaking. If the threat the fighter poses to civilians was not included in the military advantage, an attack on the fighter might become illegal as soon as incidental civilian harm is expected. This was deemed particularly problematic where one party is systematically directing attacks against civilians. Indeed, in such a case it could be difficult to articulate an advantage in purely military terms, disconnected from the protection of the civilian population. For example, if the protection of the civilian population against direct attacks could not be taken into account, an attack against a low-level fighter who is about to carry out a devastating attack against civilians, such as on 11 September 2001, could be deemed disproportionate even if the expected incidental civilian harm caused by the attack on the fighter would be much lower than the risk that this fighter might represent for civilians, a conclusion that these experts rejected. According to these experts, the weight of the military advantage will depend on the significance of the attack's contribution to the objectives of the campaign strategy; if the priority is to protect civilians, the military advantage of doing so will be deemed higher than if the main aim is to gain ground against the enemy, for example. Finally, it was also argued that, from an ethical perspective, it would be hard to defend the view that incidentally harming civilians could be justified by the military advantage offered by killing enemy fighters but not by saving civilians' lives when the latter would be significantly more numerous than those expected to be incidentally harmed.

On the contrary, a few experts expressed doubts about considering the protection of civilians on the military advantage side of the assessment. They found it difficult to reconcile this with the requirement that the advantage to be gained had to be 'military'. This led one expert to reject the idea that protecting civilians could be considered a 'military' advantage, while others among these experts did not exclude the possibility

¹⁰¹ For international law, see, for example, the Rome Statute of the International Criminal Court, Art. 31(1)(c) "*Grounds for excluding criminal responsibility: 1. In addition to other grounds for excluding criminal responsibility provided for in this Statute, a person shall not be criminally responsible if, at the time of that person's conduct: (...) (c) The person acts reasonably to defend himself or herself or another person or, in the case of war crimes, property which is essential for the survival of the person or another person or property which is essential for accomplishing a military mission, against an imminent and unlawful use of force in a manner proportionate to the degree of danger to the person or the other person or property protected. The fact that the person was involved in a defensive operation conducted by forces shall not in itself constitute a ground for excluding criminal responsibility under this subparagraph.*"

¹⁰² ICRC DPH Guidance, note 72 above, p. 47, available at <https://www.icrc.org/eng/assets/files/other/icrc-002-0990.pdf>.

but found it difficult to articulate a rationale properly and wondered how to evaluate it. It was, for example, deemed inconceivable that 3,000–4,000 incidental civilian casualties could be envisaged when targeting fighters planning an attack similar to that of 11 September 2001. Caution was also raised against pitting ‘enemy civilians’ against the belligerent’s ‘own civilians’ because IHL rules on the conduct of hostilities make no distinction among civilians.

One expert considered that the ability to hold ground in order to protect civilians can be decisive in assessing the proportionality of a particular attack. In the view of this expert, in a conflict scenario where the enemy retaliates against civilians whenever one of its own commanders is killed, the belligerent that considers attacking an enemy commander would have to take into account whether it would be able, after the operation, to hold the ground where the operation took place. In relation to such a conflict scenario that this expert had in mind, on many occasions military forces had indeed refrained from attacks against enemy commanders where they could not hold the ground to avoid the risk of such retaliations. In such situations, this expert considered it important for commanders to evaluate the military advantage within the larger picture and not to consider only the concrete and direct advantage of killing the enemy commander in isolation from any other consideration, including the likely response of the enemy. A couple of experts however cautioned against including enemy retaliation against civilians in the legal assessment of proportionality, considering that it belonged rather to the realm of policy. This would indeed amount to transferring responsibility for possible IHL violations by the enemy to their opponent and risk incentivizing unlawful behaviour by the enemy.

Several experts highlighted that it remained unclear, in their view, how such an advantage should be evaluated given that the purpose is not really ‘military’ but rather akin to preventing an unlawful act – at least in the case of preventing direct attacks on civilians. In this regard, one expert suggested that the use of force for purposes other than defeating the enemy in the military realm, such as protecting civilians from violence, was more closely associated with the law enforcement realm than the military one. It was suggested that while the potential to protect civilians from violence might possibly be taken into account when considering an otherwise militarily advantageous attack against the enemy, it was not part of the assessment of military advantage itself under IHL. These experts considered generally that the relevance of the protection of civilians on the ‘military advantage’ side of the balance under the principle of proportionality is a key question for current armed conflicts which requires much more attention and thought than it has received to date.

Discussion on scenario 4

Scenario 4 – summary¹⁰³

Four fighters receive fire, which they identify as coming from two enemy snipers. The two snipers are surrounded by civilians. The fighters expect to kill between one and six civilians when returning fire.

A few variances were suggested, notably that the four fighters could take cover or that the snipers were targeting civilians in addition to, or instead of, the four fighters.

Along the lines of the discussion above, a few experts argued that, assuming the attack against the sniper was deemed disproportionate, the four fighters would have to take cover, if possible, but could not fire back. One expert noted that, in most situations, it would not be difficult to conclude that there was a legal obligation to take cover. Other experts noted that, in practice, the four fighters could conceivably carry out a proportionality assessment if they were not under effective fire from the enemy snipers, but if they were under effective fire, they could fire back without undertaking a proper proportionality assessment if it was not feasible for them to do so. Their legal accountability would be subject to the scope of self-defence as grounds for excluding their criminal responsibility under national law.

¹⁰³ For the full scenario, see Annex 2, Agenda, Scenario 4.

One expert cautioned against reading the military advantage of killing the snipers too narrowly – it was a matter of not only saving the four fighters, but also of reducing the enemy’s military strength by killing two snipers who could otherwise cause many more casualties among the four fighters’ own troops. Another expert considered that if, in this conflict, enemy snipers were directly targeting civilians, the four soldiers might have an obligation to attack the snipers in order to prevent them from causing more civilian deaths.

Discussion on scenario 5

Scenario 5 – summary¹⁰⁴

It has been confirmed that an enemy commander who has proven to be an elusive target will be present for a short time in a command post staffed with half a dozen junior and non-commissioned officers and 10–15 infantry soldiers on duty. This command post is located on the ground floor of a civilian building, where it is estimated that 20–30 civilians are currently present. The use of precision-guided explosive weapons (PGMs) has been excluded because the expected incidental harm was considered excessive. A ground operation by special operation troops has been ordered instead, counting on the element of surprise for its success and minimizing the risks for the troops. In the course of the operation, however, the special operations troops realize that the enemy is aware of the ongoing operation, which would substantially increase the expected casualties among the special operations troops in the course of their mission.

The experts were asked whether the heightened danger faced by the special operations troops changes the assessment of the military advantage of using PGMs and thereby the proportionality analysis.

Several experts offered the view that if the use of PGMs had been deemed disproportionate before launching the attack, the evolution of the situation during the attack contemplated in scenario 5 would not affect this conclusion. It was submitted that the advantage of preserving the special forces would not be attained by the launch of the PGM strike but by aborting the ground operation, irrespective of whether a PGM strike was launched. Therefore, the analysis of the disproportionate character of the PGM attack would remain unchanged. No expert expressed a contrary view. The risk for the special forces should have been considered when deciding whether carrying out this ground operation was worthwhile.

One expert specifically endorsed the initial decision not to use PGMs in view of the expected incidental harm, while another suggested that, in reality, some armed forces today have the capability to direct PGMs at the very apartment used by the enemy without destroying the rest of the building, in which case the attack might not have been disproportionate in the first place.

A few experts cautioned against too readily assuming that ground forces operations would be expected to cause less incidental harm than other operations. Precise and smart weapons can often be expected to cause less incidental civilian harm than cross-fire ensuing from a ground operation that could result in civilians getting killed. It was noted that force preservation considerations and avoiding incidental civilian harm are not mutually exclusive. On the contrary, when forces are safer they are less likely to react in a way that incidentally harms civilians. Some experts therefore doubted the appropriateness of the decision to conduct a ground operation in this situation once the PGM strike had been ruled out because it was expected to cause excessive incidental civilian harm.

¹⁰⁴ For the full scenario, see Annex 2, Agenda, Scenario 5.

PART II: INCIDENTAL HARM

SESSION 3: RELEVANT TYPES OF INCIDENTAL HARM

BACKGROUND INFORMATION

Three types of harm are specifically listed in the principle of proportionality in AP I, namely “loss of civilian life, injury to civilians and damage to civilian objects”. In this report, ‘incidental harm’ is used as a catch-all term to cover harm to both persons and objects. While many military manuals repeat the wording of AP I,¹⁰⁵ a number of them have referred to the notion of incidental harm in differing ways. Some manuals give definitions that include all protected persons and objects in the notion of incidental harm¹⁰⁶ or use broad terms such as “adverse effect”,¹⁰⁷ “possible harmful effects”¹⁰⁸ or “suffering and destruction”.¹⁰⁹ In the framework of the Convention on Certain Conventional Weapons (CCW) discussions on explosive remnants of war, Norway expressed the view that the commander should take into account “the humanitarian consequences caused by the attack” and the “more long-term humanitarian problems”.¹¹⁰ One manual specifies that “[m]ere inconveniences or temporary disruptions to civilian life need not be considered in applying” the principle of proportionality.¹¹¹

Session 3 focused on three specific types of harm to persons and objects about which there is some controversy as to the extent to which such harm, if caused incidentally, is relevant to the principle of proportionality: (a) illness and mental harm, (b) harm to the civilian use of ‘dual-use objects’, and (c) economic losses and displacement.

For at least some of the types of harm discussed below, in particular illness, mental harm resulting from the spreading of terror, displacement and economic losses, and attacks with the specific purpose of causing these types of harm to civilians would be prohibited under the principle of distinction and/or other rules of IHL. This raises the more general question of whether the notion of incidental harm under the principle of proportionality should be understood as encompassing any type of harm or action that would be protected under the principle of distinction or another rule of IHL.

¹⁰⁵ See the ICRC Customary IHL Study, practice related to Rule 14, available at https://www.icrc.org/customary-ihl/eng/docs/v2_rul_rule14.

¹⁰⁶ Australia: Royal Australian Air Force, *Operations Law for RAAF Commanders*, 2004, pp. 50–51; Australian Defence Headquarters, *Law of Armed Conflict*, Australian Defence Doctrine Publication 06.4, 11 May 2006 (hereinafter “Australia 2006 Military Manual”), para. 2.8 and Glossary (although see also para. 5.2). Canada: Canada 2001 Military Manual, para. 204(5), p. 2–2. New Zealand: *Interim Law of Armed Conflict Manual*, DM 112, New Zealand Defence Force, Headquarters, Directorate of Legal Services, Wellington, November 1992, para. 207. Philippines: *Air Power Manual*, Philippine Air Force, Headquarters, Office of Special Studies, May 2000, paras 1–6.4. United States: *Department of Defense Dictionary of Military and Associated Terms*, Joint Publication 1–02, as amended through 15 February 2016, p. 35 – see definition of ‘collateral damage’; *Joint Targeting*, Joint Publication 3–60, 3 January 2013, pp. III–1 and GL–4; *No-Strike and the Collateral Damage Estimation Methodology*, CJCSI 3160.01, 13 February 2009, Glossary, GL–4. *San Remo Manual*, Rule 13(c) and “Explanations”, para. 13.9, p. 87; HPCR Manual, Rule 1(l). See also Final Report to the Prosecutor Reviewing the NATO Bombing Campaign in the FRY, paras 49–50.

¹⁰⁷ Canada 2001 Military Manual, para. 204(5), p. 2–2.

¹⁰⁸ *Ibid.*; Australia 2006 Military Manual, para. 5.9.

¹⁰⁹ Burundi, *Règlement n° 98 sur le droit international humanitaire*, Ministère de la Défense Nationale et des Anciens Combattants, Moralization project (BDI/B–05), August 2007, Part I bis, p. 33; see also Part I bis, pp. 3, 17, 23, 26, 40, 54, 63, 86 and 93.

¹¹⁰ “Response from Norway to document CCW/GGE/X/WG.1/WP.2”, CCW/GGE/XI/WG.1/WP.5, 29 July 2005, paras 18–19.

¹¹¹ US DoD Law of War Manual, para. 5.12.1.2; see also para. 16.5.1.1.

A. ILLNESS AND MENTAL HARM

A) BACKGROUND INFORMATION

Article 51(5)(b) of AP I refers to “injury to civilians”. However, AP I provides no definition as to what amounts to injury. This raises the question of whether the term ‘injury’ encompasses all harm to the health of civilians or excludes some types of harm, in particular illness and mental harm.

In the *Concise Oxford English Dictionary*, injury is defined as “harm or damage”.¹¹² When discussing what injury is relevant for an operation to be considered an attack, the *Tallinn Manual* considers that “it is (...) reasonable to extend the definition to serious illness and severe mental suffering that are tantamount to injury”.¹¹³

Illness

Looking first at illness, there are a number of ways in which the civilian population might incidentally fall ill because of an attack. For example, exposure to chemical products might be the result of an attack which incidentally hits an industrial factory that uses such products. Illness could also be caused by exposure to toxic substances employed as a means of warfare (such as depleted uranium). Waterborne diseases may also result from the destruction of essential infrastructure, such as water and sanitation facilities, or damage to the electrical grid.¹¹⁴

In some instances, illnesses may lead to death. Given that loss of civilian life is specifically included in incidental harm in AP I, incidental civilian deaths as a consequence of illness caused by an attack are relevant for the purposes of the proportionality assessment, provided they are expected (see session 4 below). For example, the US Collateral Damage Estimation Methodology states that “[s]pecial consideration must be given to the secondary and tertiary effects of engaging” environmental hazard targets, nothing that they “present the significant danger of widespread and long-term lethal effects on civilians and noncombatants from ground water contamination, flooding, uncontrollable fire, and spread of disease.”¹¹⁵

Beyond deaths caused by illnesses, should expected incidental illness, as such, be taken into consideration? Illnesses may indeed be as detrimental to health as injuries. The fact that IHL requires parties to an armed conflict to respect and protect the wounded and sick in an equal manner could also be viewed as an argument in favour of including illnesses in the notion of injury for the principle of proportionality. In addition, discussions on reverberating effects do not seem to make any distinction, for example, with regard to the consequences of damage to the electricity network during the 1990–1991 Gulf War.¹¹⁶

Mental harm

Turning to mental harm, it may be noted that IHL prohibits “acts or threats of violence the primary purpose of which is to spread terror among the civilian population”.¹¹⁷ When discussing this prohibition as a war crime, the ICTY Appeals Chamber in *Galic* noted that the crime was a case of “extensive trauma and psychological damage being caused by attacks [which] were designed to keep the inhabitants in a constant state of

¹¹² *Concise Oxford English Dictionary*, 12th ed., Oxford University Press, Oxford, 2011, p. 732.

¹¹³ *Tallinn Manual 2.0*, Commentary on Rule 92, para. 8, p. 417. Rule 92 reads: “A cyber attack is a cyber operation, whether offensive or defensive, that is reasonably expected to cause injury or death to persons or damage or destruction to objects.” As this definition does not use the wording of Art. 49 AP I but defines attack based on harm identical to the harm that is relevant for proportionality, the reasoning would seem equally valid for the notion of injury in the proportionality rule.

¹¹⁴ See, for example, ICRC, *Urban services during protracted armed conflict: a call for a better approach to assisting affected people*, Geneva, 2015, in particular, pp. 31 ff., available at <https://www.icrc.org/en/explosive-weapons-populated-areas>; Boothby also points out the effects of interruption in the supply for hospitals and a wide variety of other facilities and utilities in W. Boothby, *The Law of Targeting*, Oxford, University Press, Oxford, 2012, p. 502.

¹¹⁵ US Chairman of the Joint Chiefs of Staff Instruction, *No-Strike and the Collateral Damage Estimation Methodology*, CJCSI 3160.01, 2009, p. D-A-33.

¹¹⁶ For example, C. Greenwood simply speaks of the “very serious effects for public health” (“Customary International Law and the First Geneva Protocol of 1977 in the Gulf Conflict”, in P. Rowe (ed.), *The Gulf War 1990–91 in International and English Law*, Routledge, New York/Sweet & Maxwell, London, 1993, p. 79).

¹¹⁷ Art. 51(2) of AP I and Rule 2 in the ICRC Customary IHL Study.

terror”.¹¹⁸ This highlights that IHL is concerned with protecting civilians against at least some forms of mental harm. The fact that this prohibition only addresses acts “the primary purpose of which” is to terrorize the civilian population has been invoked both in favour of and against the relevance of incidental mental harm for the principle of proportionality.¹¹⁹

While the *Tallinn Manual* on cyber operations considers that the notion of injury includes “severe mental suffering that [is] tantamount to injury”,¹²⁰ as mentioned above, it also states that “inconvenience, irritation, stress or fear” do not qualify as incidental harm.¹²¹ Similarly, it submits that “a decline in civilian morale is not to be considered collateral damage in the context of (...) the rule of proportionality”.¹²²

There is, however, an increasing awareness of the psychological effects of armed conflict. Notably, reports by international bodies and academic institutions on the impacts of armed conflicts on the civilian population often comment on the ‘psychological trauma’ or ‘psychological toll’ of a conflict.¹²³ There is a general recognition that serious and well-documented forms of mental harm, such as post-traumatic stress disorder (PTSD), do have significant and long-term impacts on individuals and are increasingly deemed problematic.¹²⁴

To date, international jurisprudence has not considered the role of mental harm in the assessment of incidental injury to the civilian population. The issue of mental harm has, however, been considered in relation to crimes of genocide, torture and crimes against humanity. In this framework, mental harm has been understood to be more than a “minor or temporary impairment of mental faculties”,¹²⁵ but it does not necessarily have to be permanent and irremediable.¹²⁶ Under the Statutes of the ICTY and the International Criminal Tribunal for Rwanda (ICTR), the definition of genocide includes the infliction of “serious bodily or mental harm”,¹²⁷ elevating mental harm to the same level as physical harm. The consideration of criminal liability for mental harm in international criminal law has been said to strengthen the case for the concept being sufficiently tangible for inclusion in the assessment of incidental harm in the analysis of the principle of proportionality under IHL.¹²⁸

¹¹⁸ ICTY, *Prosecutor v. Galic*, Appeal Judgment, IT-98-29-A, 30 November 2006, para. 102 (references to the indictment omitted).

¹¹⁹ In favour: E. Lieblich, “Beyond Life and Limb: Exploring Incidental Mental Harm Under International Humanitarian Law”, in D. Jink *et al.* (eds), *Applying International Humanitarian Law in Judicial and Quasi-Judicial Bodies*, Asser Press, The Hague, 2014, p. 201; *Tallinn Manual 2.0*, Commentary on Rule 92, para. 8, p. 417. Apparently against: Dinstein, note 43 above, p. 126.

¹²⁰ *Tallinn Manual 2.0*, Commentary on Rule 92 (on the definition of cyber attack), para. 8, p. 417. The reasoning is equally valid for the notion of injury in the proportionality rule.

¹²¹ *Tallinn Manual 2.0*, Commentary on Rule 113, para. 5, p. 472.

¹²² *Tallinn Manual 2.0*, Commentary on Rule 100, para. 26, p. 443.

¹²³ See, for example, *Report of the United Nations Fact-Finding Mission on the Gaza Conflict*, UN Doc. A/HRC/12/48, 25 September 2009, paras 1653–1658. With regard to the psychological effects, particularly of the use of drones in armed conflicts, see “Living under drones: death, injury and trauma to civilians from US drone practices in Pakistan”, International Human Rights and Conflict Resolution Clinic (Stanford Law School) and Global Justice Clinic (NYU School of Law), September 2012, pp. 80–88.

¹²⁴ Lieblich, note 119 above, p. 191. When discussing whether traumatic brain injuries (TBI) should be considered in the proportionality analysis, it has also been argued that “there is no convincing rationale for omitting cognitive or psychological consequences of a brain injury from ‘injury’”, while rejecting “purely psychological harm unrelated to TBI, at least in the current state of the law”. M.N. Schmitt and C.E. Highfill, “Invisible Injuries: Concussive Effects and International Humanitarian Law”, *Harvard National Security Journal*, Vol. 9, 2018, pp. 72–99, p. 92.

¹²⁵ *Report of the Preparatory Committee on the Establishment of an International Criminal Court*, Part 2, Jurisdiction, Admissibility and Applicable Law, UN Doc. A/CONF. 183/2/Add.1, 14 April 1998, p. 11, footnote 3.

¹²⁶ ICTY, *Prosecutor v. Akayesu*, ICTR-96-4-T, Judgement (Trial Chamber), 2 September 1998, para. 502.

¹²⁷ Art. 4 of the ICTY Statute and Art. 2 of the Statute of the International Criminal Tribunal for Rwanda.

¹²⁸ Lieblich, note 119 above, pp. 206–208.

B) EXPERTS' COMMENTS AND DISCUSSION

Guiding questions

The following questions were submitted to the experts to guide the discussion:

Are incidental mental harm and illness relevant considerations when conducting a proportionality analysis?

If yes, to what extent and how can such harm be anticipated and assessed?

Mental harm

With regard to mental harm, the experts agreed that inconvenience, stress or fear incidentally caused by attacks are not relevant for an assessment under the principle of proportionality. The experts debated the relevance of more serious forms of mental harm, referring in particular to the example of PTSD. The discussion focused on the meaning to be attributed to the term 'injury' in the principle of proportionality and the practicalities of including incidental mental harm considerations in the analysis.

Does the notion of injury include mental injury?

Several experts underlined that the wording of Article 51(5)(b) AP I does not expressly limit the relevant injury to physical injury. The ordinary meaning of the term 'injury' today was said to encompass both physical and mental injury. In the 21st century, mental health has the same status as physical health; UN General Assembly resolutions and other intergovernmental resolutions, international organizations working on health issues and the work done by UN special procedures in the field of human rights were mentioned as evidence of the evolution of the understanding of health by States over recent decades. While the tangibility and foreseeability of incidental mental harm are relevant issues (see below), these experts saw no reason to categorically exclude mental health from the principle of proportionality, in particular serious mental harm. On the contrary, the law has to be interpreted in a dynamic fashion. War has always been traumatizing, but the medical notion that mental trauma could be equivalent to physical trauma is more recent. During hostilities, such mental trauma is caused by violent action. Under this view, the object and purpose of the principle of proportionality – protecting civilians from incidental harm by establishing a balance between military necessity and considerations of humanity – reinforce the need to interpret the norm in view of the contemporary understanding and knowledge of the health of civilians, as this is the value that the principle of proportionality is designed to protect. If the law can be interpreted to take into account technological developments unforeseen by the drafters, such as applying IHL to autonomous weapons, a dynamic interpretation is also justified with regard to the improved understanding of health developed over the last few decades. There is growing scientific data establishing the influence of mental health on physical health or on the ability to work. One expert also argued that even if 'injury' should be understood as physical injury alone, it is well established today that PTSD is linked to physical effects on the brain which could be permanent.

With a view to understanding the meaning of 'injury', several other experts focused on the intent of the drafters and the understanding of the term at the time of the adoption of AP I. They held the view that States did not contemplate or sign up to the inclusion of mental injury in the proportionality assessment when adopting the text of the treaty. Despite the fact that mental harm caused by war was already well known then, as evidenced by the experience of World War II and by the prohibition in AP I of attacks whose primary purpose is to cause terror in the population, mental injury was not intended to be part of the assessment of the proportionality of an attack. These experts further disputed the relevance of developments in the understanding of health in peacetime in the context of IHL. They were doubtful about the possibility of adopting such an evolutive interpretation of AP I and found it difficult to agree that the general practice of States and their *opinio juris* had changed so much over the last decades that the interpretation of 'injury' for IHL had been expanded to include mental harm in the proportionality assessment.

Is it possible to assess expected incidental mental harm?

Moving the discussion from the theoretical level to the practical one, several experts contested the practicality of properly assessing mental harm *ex ante* during armed conflicts. While collateral damage estimate (CDE) methodology has developed to enable a better assessment to be made of the magnitude of the expected losses of life, physical injuries and damage, this is not the case for mental injury. Accounting for this could

not be reasonably expected of a commander. Even for physical injury, CDE methodology does not distinguish between the types of injury foreseen. It is therefore unrealistic to require consideration of specific types of mental harm. Furthermore, mental harm is too hypothetical because the mental reaction of different individuals to the same potentially traumatic event could differ markedly depending on different vulnerabilities and resilience. Mental harm is thus unpredictable. It is also too difficult to identify a causal link between one particular attack and mental harm, which could be caused by general exposure to hostilities. It was therefore suggested that care for civilian mental health falls rather under the obligation of the parties to the conflict to protect the civilian population under their control against the effects of attacks (e.g. by way of building shelters) and to provide the wounded and sick with medical care afterwards. Finally, one expert stated that it is impossible to contemplate a situation in which the expected incidental mental harm would be so great as to render the attack disproportionate.

Without disputing the practical difficulties of assessing incidental mental harm *ex ante*, several other experts did not view these arguments as justifying a dismissal of the proposition in its entirety as a matter of principle. They argued that there could be situations in which incidental mental harm could be linked to a particular attack and not be hypothetical. This could be the case when it is linked to physical harm or the result of exposure to danger from or proximity to a particular attack. As an example of the latter, it was suggested that it could be expected that an attack with explosive weapons on a military objective located next to a kindergarten would traumatize children for many years to come, if not for the rest of their lives. If the military advantage sought by the attack is too minor, such mental harm could be excessive either in isolation or in combination with other expected incidental harm.

One expert stressed that incidental mental harm could be more easily considered in pre-planned operations than by a commander when receiving enemy fire. It was further suggested that the incidental causation of PTSD could be better considered at the strategic level than at the tactical level, by relying upon statistical models. CDE methodologies are constantly improved and refined, and the fact that such methodologies do not currently consider mental harm should not be invoked to preclude the future inclusion of PTSD statistical models within CDE methodologies, for example. From a different angle, it was suggested that mental harm could be analysed with regard to specific weapons, identifying whether there are means or methods of warfare that would be more prone than others to cause mental harm, such as the use of high-explosive weapons in urban areas. This was viewed as primarily relevant for precautions in the choice of means and methods of warfare. However, assuming that mental harm constitutes relevant incidental harm for precautions in attack, it would, from that angle, also be relevant for proportionality.

In terms of the *ex ante* foreseeability of mental harm, some experts pointed to the fact that mental harm is relevant in international criminal law (when intentional) and widely considered in tort law (even when incidental). The relevance of incidental mental harm under tort law is premised on the proposition that mental harm can be foreseeable, otherwise no responsibility could be incurred for it. However, other experts disputed the relevance of tort law considerations for the interpretation of IHL.

Illness

Far less time was devoted to discussing the relevance of causing incidental illness for the principle of proportionality.

A few experts argued that injury should be interpreted as encompassing illnesses, for which the issues of foreseeability and tangibility were less challenging than in the case of mental harm. Two scenarios were suggested to illustrate the issue, both dealing with incidental damage to sewage pipes. Taking the example of damage to a sewer causing it to overflow into a kindergarten, one expert deemed it absurd for damage to the pipe itself to be considered in a proportionality assessment but not the ensuing illness caused to children. It was also argued that incidentally damaging a sewerage system that would overflow in the middle of a city constitutes more serious incidental harm than incidentally damaging a similar sewer in the countryside because of the health risks associated with the former.

Conversely, a few other experts contested the relevance of incidental illness for the principle of proportionality. It was submitted that the notion of incidental injury encompasses only violent physical trauma. Furthermore, compared to physical injury, illness was arguably much more problematic to calculate through CDE methodologies. Under this view, in the sewerage scenarios described above, it was only the risk of death associated with these health risks that was relevant, not illness *per se*, as well as protection of the environment in the case of sewage overflowing in the countryside.

B. HARM TO CIVILIAN USE OF 'DUAL-USE OBJECTS'

A) BACKGROUND INFORMATION

Under Article 52(1) of AP I, objects which do not qualify as military objectives are civilian objects. The difficulty arises when objects that are still used for civilian purposes qualify as military objectives because they are simultaneously used for military purposes, which is increasingly common, in particular in urban warfare. Such objects are referred to here as 'dual-use objects', a functional term that does not exist as such in IHL.

An example of a dual-use object might be a multi-story apartment building where only one floor or one apartment is used for military purposes. The question is whether damage to the civilian part of the building – which can be distinguished from the part used for military purposes – should be factored into the analysis of the proportionality of the attack. Looking at a more complex example, basic infrastructure, such as electricity generating plants, often fulfils both a military and a civilian purpose, in which case it is the entirety of the object that fulfils both a civilian and a military function. The issue in relation to such dual-use objects is how to consider the harmful effects on the civilian function of the infrastructure and their impact on the civilian population. The reverberating effects from an attack on a power plant might indeed have a significant impact on public health, as electricity is needed to operate hospitals and treat water and sewage.¹²⁹ (See also session 4 below.)

As mentioned above, from a legal perspective, an object is either a military objective or a civilian object, and there is no intermediate category of dual-use objects.¹³⁰ It has been argued that there is therefore no incidental harm to be considered with regard to the damage caused to a dual-use object fulfilling the definition of a military objective.¹³¹ This view could mean that if a fairly minor military use has turned a civilian object into a military objective (assuming that it fulfils the definition of Article 52 AP I), the damage caused to the remaining civilian part – however important it is – would have no bearing on the decision to launch an attack.

Another view, widely supported in the literature¹³² and shared by the ICRC,¹³³ is that while the dual-use object is a military objective, the impact of the attack on the civilian part or component of the object

¹²⁹ H. Shue and D. Wippman, "Limiting Attacks on Dual-Use Facilities Performing Indispensable Civilian Functions", *Cornell International Law Journal*, Vol. 35, No. 3, Article 7, 2002, p. 568; ICRC, *Urban services during protracted armed conflict: a call for a better approach to assisting affected people*, Geneva, 2015, in particular, pp. 31 ff., available at <https://www.icrc.org/en/explosive-weapons-populated-areas>.

¹³⁰ See, for example, F.J. Hampson, "Proportionality and Necessity in the Gulf Conflict", in *Proceedings of the Annual Meeting (American Society of International Law)*, Vol. 86, 1992, p. 50; Greenwood, note 116 above, p. 73; *Tallinn Manual 2.0*, Commentary on Rule 101, para. 1, p. 445.

¹³¹ W.H. Parks: "Asymmetries and the Identification of Legitimate Military Objectives", in W.H. von Heinegg and V. Epping, *International Humanitarian Law Facing New Challenges*, Springer, Berlin, pp. 106–107; Henderson, note 85 above, p. 207 (focusing on the direct harm to the dual-use object itself).

¹³² HPCR Manual, Commentary on Rule 22(d), p. 119, para. 7; *Tallinn Manual 2.0*, Commentary on Rule 101, para. 3, p. 445; Greenwood, note 116 above, p. 74; M.N. Schmitt and E. Widmar, "'On Target': Precision and Balance in the Contemporary Law of Targeting", *Journal of National Security and Policy*, Vol. 7, Issue 3, 2014, p. 393; M. Sassòli and L. Cameron, "The Protection of Civilian Objects: Current State of the Law and Issues *de lege ferenda*", in N. Ronzitti and G. Venturini (eds), *The Law of Air Warfare: Contemporary Issues*, Eleven International, The Hague, 2006, pp. 57 ff.; Shue and Wippman, note 129 above, pp. 565–566.

¹³³ H. Durham, "Keynote address", in E. Greppi (ed.), *Conduct of Hostilities: The Practice, the Law and the Future*, International Institute of Humanitarian Law, FrancoAngeli, 2015, p. 31.

(such as apartments in a building whose basement is used as a munitions depot) or on the simultaneous civilian use or function of the object (such as in the case of a bridge or electricity station used for both military and civilian purposes) must also be taken into consideration in the assessment of proportionality. A number of military manuals and official declarations support this view. For example, one manual states: “If the attack is directed against dual-use objects that might be legitimate military targets but also serve a legitimate civilian need (e.g., electrical power or telecommunications), then this factor must be carefully balanced against the military benefits when making a proportionality determination.”¹³⁴

The ICTY Trial Chamber endorsed such a view in *Prlic et al.* when analysing the destruction of the Old Bridge in Mostar. It deemed the Old Bridge to be a military objective, notably because it was “essential to the ABiH for combat activities of its units on the front line”. However, it considered the destruction disproportionate, noting that it had made it “impossible for [the residents of the Muslim enclave on the right bank of the Neretva] to get food and medical supplies resulting in a serious deterioration of the humanitarian situation for the population living there” and that it “had a very significant psychological impact on the Muslim population of Mostar”.¹³⁵

B) EXPERTS' COMMENTS AND DISCUSSION

Guiding question

The following question was submitted to the experts to guide the discussion:

Assume that an object fulfilling the definition of military objective is also used for civilian purposes. To what extent is the incidental damage caused to the (partial) use of the object for civilian purposes relevant under the proportionality principle?

Doubts were expressed about the adequacy of the notion of dual-use objects. The term was said to give the mistaken impression that this specific category exists, whereas it would, in fact, be sufficient to refer to the principle of proportionality for all cases. One expert recommended against using the term ‘dual-use object’, as it is a term of art in arms export control frameworks, and suggested calling such objects ‘civilian objects used for military purposes’ instead. Other experts found it useful to identify something as a dual-use object in their practice. They also gave examples of objects that are military objectives by nature and are turned into dual-use objects when used by civilians, such as a military compound where soldiers’ families are living. The phrase ‘objects that have both civilian and military functions’ was therefore suggested instead of ‘civilian objects used for military purposes’.

134 United States, Joint publication 3-60, *Joint Targeting*, 31 January 2013, p. A-5; see also US, *Digest of United States Practice in International Law 2014*, p. 737; US, *The Commander’s Handbook on the Law of Naval Operations*, NWP 1-14M, 2017, para. 8.3; Royal Army of the Netherlands, *Humanitair Oorlogsrecht: Handleiding*, VS 27-412 (official version in Dutch, unofficial English translation available at the ICRC library – The Humanitarian Law of War: A Manual), September 2005, para. 0546; Norway, *Manual i krigens folkerett*, 2013, para. 2.22; Pentagon briefing on 5 February 2003, arguing that attacks on dual-use facilities are automatically considered to cause collateral damage, available at <http://www.washingtoninstitute.org/policy-analysis/view/infrastructure-targeting-and-postwar-iraq>; Greenwood, note 116 above, pp. 73 and 79 (discussing coalition practice in the 1990–1991 Gulf War); N. Lubell, “Current challenges with regard to the notion of military objective – legal and operational perspectives”, in E. Greppi (ed.), *Conduct of Hostilities: the Practice, the Law and the Future*, International Institute of Humanitarian Law, 2015, p. 84.

135 ICTY, *Prosecutor v. Prlic et al.*, IT-04-74-T, Judgment (Trial Chamber), 29 May 2013, Vol. 3, paras 1582–84. In November 2017, the Appeals Chamber recalled the findings of the Trial Chamber with regard to incidental harm but did not discuss whether or not the attack was disproportionate. It declined to enter a conviction for the Old Bridge in Mostar because the Trial Chamber had considered the bridge to be a military objective. The Appeals Chamber concluded, Judge Pocar dissenting, that its destruction could therefore not be considered wanton destruction not justified by military necessity (ICTY, *Prosecutor v. Prlic et al.*, IT-04-74-A, Judgment (Appeals Chamber), 29 November 2017, Vol. I, para. 411). In his dissent, Judge Pocar “strongly disagree[s]” that being a military objective can be *per se* determinative of whether or not the destruction can be justified by military necessity. He notes that “the Majority appears to uphold” the finding that the attack was disproportionate and recalls that only measures lawful under IHL, including under the principle of proportionality, may be justified by military necessity (ICTY, *Prosecutor v. Prlic et al.*, IT-04-74-A, Judgment (Appeals Chamber), 29 November 2017, Vol. III, XIV. Dissenting Opinions of Judge Fausto Pocar, paras 8–10 (p. 4 of the dissenting opinions, pp. 298 ff. of the pdf)).

Turning to the substance, the experts generally agreed that the civilian use of a dual-use object had to be considered in a proportionality analysis. Many deemed this uncontroversial. Putting an end to or impairing this civilian use by damaging the object could render the attack unlawful despite the fact that the object had become a military objective. The very idea of the principle of proportionality requires that the civilian use that would be harmed by the attack be taken into account, precisely because the principle of proportionality is relevant when – and only when – civilian harm is expected. One expert, however, considered that the only relevant incidental harm was loss of civilian life, injury to civilians and damage to civilian objects (i.e. objects other than the dual-use object targeted), whether caused directly by the attack or brought about by reverberating effects of the attack on the dual-use object.

The assessment of harm to the civilian use of the military objective was labelled by some experts as ‘internal proportionality’, as opposed to harm to civilians or civilian objects (i.e. objects other than the dual-use object targeted), described as ‘external proportionality’. Some experts criticized any distinction between internal and external proportionality as being unnecessary, noting that any expected incidental harmful effects mattered, while others deemed this distinction useful to clearly identify the different aspects of civilian harm, agreeing that both were equally relevant.

‘External proportionality’, namely harm to civilians or objects other than the dual-use object targeted (provided they are civilian objects) was deemed obviously relevant by all the experts, whether or not the targeted object was a dual-use object or an object used solely for military purposes.

With regard to damage to the dual-use object itself (‘internal proportionality’), the experts described the proportionality test as a balance between the military advantage anticipated from the destruction of the military part of the object or from otherwise putting an end to the military use or function of this object and the incidental harm entailed by the destruction of the civilian part of the object or by otherwise ending its civilian use or function. Most experts considered that incidental harm could comprise both the reverberating effects of the destruction of the dual-use object targeted (see session 4 below) and the direct effects on the targeted object itself. One expert, however, would limit the relevant harm to the reverberating effects and only when they amounted to loss of life, injury or damage. This expert would not consider the direct effect on the targeted dual-use object itself, as it had to be a military objective to be targeted.

One expert wondered whether there were differences in the analysis of ‘internal proportionality’ in cases where the civilian and military parts of the object could be distinguished, compared to cases where they could not. A bridge used by civilians was given as an example of the latter, while an apartment used for military purposes in a civilian apartment block was given as an example of the former. In the case of a bridge, most experts considered that the attacker had to consider whether it was used by civilians to go to their fields or work or to access vital goods and whether they would have alternative routes. One expert, however, held the view that preventing the civilian use of a bridge was not harm that was relevant *per se* unless it could foreseeably lead to harm of the types relevant for the principle of proportionality (in this case, death or injury of civilians, caused by them being prevented from using the bridge, or incidental damage to other objects; see session 4 below). With regard to the apartment block scenario, some experts held the view that it raised a preliminary issue in relation to the definition of the military objective: is the military objective the building, just the apartment or even just the room specifically used for military purposes in the apartment? The exact boundaries of the military objective were viewed by the experts as an issue that is relevant for the principle of distinction and, in particular, the prohibition of indiscriminate attacks (especially where the attacker does not know which apartment is being used for military purposes). However, most experts deemed that even if the entire object was considered a military objective – a question that was left open – the part used for civilian purposes had to be considered under the principle of proportionality. One expert expressed the view that what mattered for proportionality was the object’s civilian value in relation to its military value, not the ability to draw physical boundaries between the part(s) used by the military and the part(s) used by civilians. Similarly, on the other side of the equation, the relevant concrete and direct military advantage to be anticipated is exclusively that which is offered by the destruction of the part of the object that is actually used for military purposes – whether it be the room or the apartment – and not by any damage to the part used by civilians. One expert held the view that, as in the case of the bridge, the destruction of the part of the

building used for civilian purposes was not relevant *per se* (as the object has, in this expert's view, become *in toto* a military objective) unless the destruction was expected to cause (directly or indirectly) incidental harm of the relevant types (including damage to moveable civilian objects located in the building but not an integral part of the building itself).

Discussing a scenario where the attack is not expected to cause any civilian death, injury or damage outside the object to be attacked, the experts focused on whether the damage to the object itself could render an attack disproportionate. Several experts confirmed that the damage to the civilian use or part of the targeted object itself had to be considered and could possibly lead to the attack being considered disproportionate. One expert gave the example of an attack on a radio tower: the civilian communication function of the tower had to be considered before attacking it, even if the tower was also used for military purposes in a manner that turned it into a military objective. Two other scenarios in which a civilian building was used for military purposes were suggested by the experts: a school used as military barracks and as an arms depot, in which children were still attending school during the day; or a one-room building that was sheltering forty internally displaced persons (IDPs), but in which one soldier also hid weapons and ammunition and occasionally slept. It was suggested by most experts that, in these examples, the civilian use of the object could potentially render the attack disproportionate, depending on the circumstances of the particular case and the respective importance of the civilian and military use. One expert, however, expressed the view that, in operational reality, it was hard to imagine a scenario in which an attack executed during an operation offering a concrete and direct military advantage toward fulfilling the operational plan would be considered disproportionate if the targeted object itself was a military objective and no incidental harm was expected to be caused (directly or indirectly) to civilians or civilian property other than the damage to the civilian use or part of the dual-use object targeted. With regard to the example of the one-room building in which one soldier hides weapons and ammunition and occasionally sleeps, one expert viewed the military advantage of destroying the room as insufficiently concrete and direct to be considered, while others went further and deemed such military use insufficient to turn the room into a military objective in the first place.

The experts also discussed another scenario, namely an attack on a weapons factory that would cause loss of life among the civilian workers. The number and type of weapons produced and their direct connection to front line hostilities were given as illustrations of factors relevant to the evaluation of the concrete and direct military advantage anticipated. The experts agreed, however, that before targeting the weapons factory, this military advantage had to be compared with the expected loss of life and injury among the civilian factory workers. In that regard, they expressed disagreement with the position taken in the 2015 US Department of Defense Law of War Manual according to which harm to civilians who are in or on military objectives would not prohibit attacks on these objectives.¹³⁶

¹³⁶ The Manual's position on this point was amended in December 2016. The original Manual issued in June 2015 held that "[h]arm to certain persons who may be employed in or on military objectives would be understood not to prohibit attacks under the proportionality rule. These categories include (...) civilian workers who place themselves in or on a military objective, knowing that it is susceptible to attack, such as workers in munitions factories." (US DoD, Office of the General Counsel, *Law of War Manual*, June 2015, para. 5.12.3.2 (updated May 2016)). The Manual was amended in December 2016, and this position was modified: "Provided such workers [Civilian Workers Who Support Military Operations In or On Military Objectives] are not taking a direct part in hostilities, those determining whether a planned attack would be excessive must consider such workers, and feasible precautions must be taken to reduce the risk of harm to them." (para. 5.12.3.3 of the December 2016 updated version).

C. ECONOMIC LOSSES AND DISPLACEMENT

A) BACKGROUND INFORMATION

Another aspect of the notion of incidental harm relates to whether economic losses and displacement should be included in the assessment of incidental harm despite the fact that neither are specifically mentioned in the definition of the principle of proportionality in AP I.

Hostilities often cause the massive displacement of people. One motive, amongst others, for the displacement of civilians is that they want to avoid, at least temporarily, being exposed to incidental harm in future attacks, in other words, they are seeking to protect themselves.¹³⁷ In the longer run, displacement can also be detrimental to their well-being (exposure to other types of risks, loss of livelihood, reduced or no access to basic services, etc.).

Economic losses and displacement could be considered from two perspectives in terms of incidental harm.

The first perspective relates to the ‘value’ or ‘weight’ given to the incidental damage caused to civilian objects when evaluating the excessiveness of this damage. For example, would more ‘value’ or ‘weight’ be given to the destruction of a house if a family is still living in it and is displaced as a result of the attack than to the same damage caused to a similar but abandoned house? Similarly, should the damage caused to a well-functioning factory, which makes a profit and employs civilians who would lose their jobs and income if the factory were to be incidentally damaged, be of more ‘value’ or ‘weight’ than the same damage to a similar factory that is no longer functioning and generates no revenue or employment?

The second perspective concerns the indirect effects that economic loss and displacement have on the civilian population. Causing civilians to move away from sources of food, water, sanitation, health care and other essential infrastructure may have a severe impact on their health and well-being and increase their morbidity and mortality rate. Loss of livelihood and other economic losses may also have a severe impact on the health and well-being of the civilian population and eventually lead to an increase in the mortality rate, especially in protracted armed conflicts.

As mentioned above, a number of military manuals and declarations made by States refer to ‘adverse effect’, ‘possible harmful effects’, ‘suffering and destruction’, or ‘the humanitarian consequences’ caused by the attack when talking about incidental harm.¹³⁸ These are all notions which could be understood to encompass economic loss or displacement. In relation to economic loss, the Final Report to the Prosecutor Reviewing the NATO Bombing Campaign in the FRY noted, more specifically, that “[e]ven when targeting admittedly legitimate military objectives, there is a need to avoid excessive long-term damage to the economic infrastructure (...) with a consequential adverse effect on the civilian population”.¹³⁹ One military manual specifies that it views the indirect economic effects of the death or destruction of lawful targets (as opposed to direct or indirect incidental damage to protected objects, as in the example suggested above in relation to the first perspective) to be too remote to be relevant.¹⁴⁰

This seems to show that at least direct economic loss and displacement are relevant to the assessment of proportionality. However, the extent to which these factors enter into the collateral damage calculus also depends on the causal link between such damage and the attack and the degree of foreseeability of the damage for military commanders (see session 4).

¹³⁷ D.J. Cantor, “Does IHL Prohibit the Forced Displacement of Civilians during War”, *International Journal of Refugee Law*, 24 (4), 2012, p. 842.

¹³⁸ See above text in relation to notes 106 to 109.

¹³⁹ ICTY, Final Report to the Prosecutor Reviewing the NATO Bombing Campaign in the FRY, para. 18.

¹⁴⁰ “For example, the death of an enemy combatant might cause economic harm to his or her family, or the destruction of a tank factory might cause economic harm in the form of lost jobs; the attacker would not be required to consider such loss in applying the proportionality rule”. US DoD Law of War Manual, para. 5.12.1.3.

B) EXPERTS' COMMENTS AND DISCUSSION

Guiding question

The following question was submitted to the experts to guide the discussion:

Assume that an attack on a lawful target incidentally causes displacement and economic losses to civilians. To what extent are these consequences relevant under the proportionality principle?

Introductory remarks

The experts noted that hostilities in an area where civilians live often have a cascading effect, for example, when the incidental killing or injuring of civilians leads to the displacement of other civilians for fear of further attacks. This is followed in many cases by the progressive destruction of civilian infrastructure while hostilities persist in that area and by serious damage to the local economy, which may not recover well at the end of the hostilities.

The experts recalled that economic losses and displacement were neither expressly included in nor excluded from the types of incidental harm listed in Article 51(5)(b) AP I. However, some experts argued that a systematic interpretation of the principle of proportionality showed that such effects must be considered, provided that they are foreseeable and not too remote in the circumstances. The discussion showed that the possibility of linking economic losses or displacement to a specific attack was seen as a key criterion.

Economic losses

The experts generally agreed that economic losses could be considered but differed on the manner and extent of their consideration.

Communities and individuals undoubtedly suffer from economic losses as a result of hostilities. However, the experts agreed that it may be difficult to relate these losses to specific attacks. Economic losses may occur over a long period of time with a number of contributing factors, ranging from the hostilities, including specific attacks, to more general and drawn-out effects, such as reduced access to markets, labour, raw materials, spare parts, etc. These types of economic consequences cannot be sufficiently closely connected to specific attacks to be relevant under the principle of proportionality; they are too remote to be considered foreseeable by the commander. Such consequences, at a global level, were seen as relevant considerations for *jus ad bellum* proportionality rather than *jus in bello* proportionality.

Conversely, most experts viewed economic losses as relevant when they could be tied to a particular attack and the destruction of a specific object. There was broad consensus that the economic function or value of an incidentally damaged object was a relevant consideration when assessing this damage. For example, the attacker had to consider whether the object expected to be incidentally damaged is a civilian's means of livelihood, for example, when destroying a market shop as opposed to an abandoned garage. The experts also recalled the conclusion of the Final Report to the ICTY Prosecutor Reviewing the NATO Bombing Campaign in the FRY, according to which there is a need to avoid excessive long-term damage to the economic infrastructure.¹⁴¹ However, some experts opined that a belligerent is not required to estimate the economic losses in terms of loss of future earnings. These experts viewed future earnings as too remote. Estimating them, especially for the mid- to long-term period, requires technical advice which is not available to commanders.

There was also broad agreement that general harm to business in the area of operations does not have to be considered. For example, during an attack of the type that occurred in Fallujah in May–June 2016, the fact that access to the city's markets would be made impossible during the operation was not a relevant consideration when planning the operation, nor was the fact that when civilians leave an area these markets lose potential customers. Tying this into the next session on reverberating effects, one expert deemed that such economic loss would be relevant only when it was so severe as to foreseeably lead to civilian death or injury.

¹⁴¹ ICTY, Final Report to the Prosecutor Reviewing the NATO Bombing Campaign in the FRY, para. 18.

One expert recalled that experience in recent conflicts has also shown that incidental damage to economic goods could turn the population against the party to the conflict that causes such damage, especially when this population is already struggling to find the means to survive. Belligerents have taken this reaction into consideration in various conflicts. The experts diverged, however, on whether the parties are required to do so under the principle of proportionality or whether those that have considered the issue did so as a matter of policy only.

Displacement

The experts viewed the displacement of civilians as an unfortunate but regular and persistent feature of modern conflicts. It could occur as a direct response in the aftermath of an attack out of fear of an imminent attack or even on some occasions as a result of warnings of a future attack issued by either the attacking or defending party. These reactions exacerbate displacement and are very likely to increase hardship for the civilian population.

The experts recalled that forced displacement is prohibited by IHL,¹⁴² hence the only point under discussion was displacement caused incidentally. As for economic losses, the experts considered that the link to specific attacks is the key element.

Because loss of life constitutes more severe harm than displacement, when an attack that is expected to incidentally destroy a house and kill the inhabitants is not assessed as disproportionate, the risk of displacing the same inhabitants could not make the attack disproportionate. The relevance of displacement for the principle of proportionality was deemed more debatable when an attack would be considered disproportionate on account of the expected death of the inhabitants, but the civilians could be warned to leave the house before the attack. Provided they did leave the house before the attack, this would avoid the incidental loss of civilian life but cause their displacement, as their home would have been destroyed. For some experts, the expectation that this attack would cause the displacement of the house's inhabitants was incidental civilian harm relevant for the principle of proportionality because it was foreseeable and not remote, while others considered it relevant only if such displacement would foreseeably lead to civilian death or injury. The experts suggested, in this regard, that the context of the displacement matters. For example, freezing temperatures would be a factor that would increase the risk of displacement leading to death or serious health conditions.

In the same scenario, the experts were divided on the relevance of the displacement of the inhabitants of the house(s) next to the one that is expected to be damaged. Even when their displacement could be tied to a particular attack, the inhabitants would not be leaving due to the destruction of their own homes, but rather out of fear. Some experts, however, cautioned against making a distinction between these two situations, considering it would be arbitrary. In the view of these experts, all such expected displacement is relevant, provided it can be linked to a particular attack, while other experts were less assertive.

SESSION 4: REVERBERATING EFFECTS

A) BACKGROUND INFORMATION

Reverberating effects: what is at issue?

Reverberating effects are consequences which are not directly and immediately caused by an attack but which are nevertheless a result of the attack. Also referred to as 'indirect effects', 'repercussions', 'knock-on effects', or 'long-term consequences', reverberating effects are not specifically defined under IHL. As identified in session 3, there is an overarching issue concerning the extent to which reverberating effects must or should be taken into consideration as incidental harm under the principle of proportionality.

¹⁴² See Art. 49 of the Fourth 1949 Geneva Convention, Art. 17 of the Second 1977 Additional Protocol and Rules 129 to 133 of the ICRC Customary IHL Study.

The issue of reverberating effects has gained prominence in recent decades, notably since the 1990–1991 Gulf War¹⁴³ and, more recently, in the debates on cyber warfare, where the interconnectivity of military and civilian computer systems increases the risk that the effects of an attack might spread beyond the intended target.¹⁴⁴ This heightened attention can be attributed to: the increased interconnectedness and interdependence of modern societies;¹⁴⁵ technological development in targeting capabilities;¹⁴⁶ and the development of more sophisticated collateral damage estimation tools. Indeed, “[a]s a science, the CDM [collateral damage estimation methodology] uses a mix of empirical data, probability, historical observations, and complex modeling for CDE [collateral damage estimation] analysis”.¹⁴⁷

Are reverberating effects to be considered under the principle of proportionality?

While reverberating effects are not referred to in the principle of proportionality, the qualifiers ‘expected’ and ‘incidental’ do not limit the relevant incidental harm to direct effects only, unlike the relevant military advantage which must be ‘concrete and direct’.¹⁴⁸ Indeed, the 1974–1977 Diplomatic Conference rejected attempts to limit incidental loss to those in the immediate vicinity of the military objective.¹⁴⁹

A number of military manuals and other official State documents on collateral damage or targeting require the consideration of reverberating effects, which is also the position taken in the *Tallinn Manual*.¹⁵⁰ A military manual gives the following example: “if (...) a precision bombing attack of a military fuel storage depot is planned but there is an expectation that the burning fuel will flow into a civilian residential area and cause injury to the civilian population which would be excessive in relation to the military advantage anticipated, that bombardment would be disproportionate and unlawful, owing to the excessive collateral damage”.¹⁵¹ Another illustrates the issue as follows: “factors involved in weighing anticipated incidental injury/death to protected persons can include, depending on the target, indirect effects (for example, the anticipated incidental injury/death that may occur from disrupting an electric generating plant that supplies power to a military headquarters and to a hospital)”.¹⁵² The Final Declaration of the Third Review Conference of States Parties to the CCW also noted that the “foreseeable effects” of explosive remnants of war on civilian populations was a factor to be considered in applying the principle of proportionality and precautions.¹⁵³

The key argument raised against including reverberating effects as a relevant consideration for the principle of proportionality is that there are too many potential variables outside of the attacker’s control that make it practically impossible to consider these effects as ‘expected’. Such variables range from the ability

¹⁴³ See, for example, Greenwood, note 116 above, p. 79, and F. Hampson, “Means and Methods of warfare”, in Peter Rowe (ed.), *The Gulf War 1990–91 in International and English Law*, Routledge, New York/Sweet & Maxwell, London, 1993, pp. 97 ff.

¹⁴⁴ See, for example, C. Droege, “Get off my cloud: cyber warfare, international humanitarian law and the protection of civilians”, *International Review of the Red Cross*, Vol. 94, No. 886, 2012, pp. 572 ff.

¹⁴⁵ ICRC, *International Humanitarian Law and the Challenges of Contemporary Armed Conflicts*, 03/IC/09, 2003, p. 13.

¹⁴⁶ M.N. Schmitt, “The Principle of Discrimination in 21st Century Warfare”, *Yale Human Rights and Development Law Journal*, Vol. 2, Issue 1, 1999, p. 168, available at <http://digitalcommons.law.yale.edu/yhrdlj/vol2/iss1/3>.

¹⁴⁷ US Chairman of the Joint Chiefs of Staff Instruction, *No-Strike and the Collateral Damage Estimation Methodology*, CJCSI 3160.01, 2009, p. D-1.

¹⁴⁸ See R. Geiss, “The Conduct of Hostilities in Asymmetric Conflicts”, *Journal of International Law of Peace and Armed Conflicts*, No. 23, 3/2010, pp. 122 ff., p. 128.

¹⁴⁹ Such an attempt was made in the framework of the precautions required in view of applying the principle of proportionality; see Bothe, Partsch and Solf, note 36 above, p. 406, para. 2.6.2 on Art. 57.

¹⁵⁰ *Tallinn Manual 2.0*, Commentary on Rule 113, p. 472, para. 6. See also Sassòli and Cameron, note 132 above, p. 65.

¹⁵¹ UK 2004 Military Manual (as amended on 25 July 2011), para. 5.33.4.

¹⁵² US, *The Commander’s Handbook on the Law of Naval Operations*, NWP 1–14M, 2017, para. 8.11.4. See also *Australian Defence Force Publication*, 3.14 Targeting, 2009, para. 1.21: “**Collateral.** Effects can create unintended consequences, potentially in the form of injury or damage to persons or objects unrelated to the objectives. Planned first order effects will invariably generate subsequent effects that were unintended or unanticipated. It is important to distinguish between collateral damage and collateral effects. A collateral effect is not damage to a target or any directly associated collateral damage to the immediate area, rather they are any effect(s) achieved beyond those for which the action was undertaken. Collateral effects may be either positive or negative. Sound planning considers the risks of unintended second and third order consequences which are unintended. Collateral effects should be a major, deliberate consideration in planning, executing, and assessing military actions on any scale.”

¹⁵³ Third Review Conference of the High Contracting Parties to 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, *Final Declaration*, 17 November 2006, preambular paragraph 11, CCW/CONF.III/11 (Part II), p. 4.

and willingness of the enemy to repair the damage, the additional effect of other factors (such as economic sanctions), the behaviour of the civilian population in the area (e.g. whether displaced persons will return to an area that is littered with explosive remnants of war) and even the extent and speed of post-conflict reconstruction.¹⁵⁴ It has, for example, been suggested that although very fact-dependant, “a generally reasonable standard would be days and weeks but not months and years”¹⁵⁵ and that an open-ended consideration of the reverberating effect cannot be required.¹⁵⁶ This argument does not seem to contest the relevance of reverberating effects *per se* – on which there appears to be a growing consensus¹⁵⁷ – but rather on their foreseeability. In terms of causalities, one author has suggested distinguishing between the ‘almost inevitable’ and the ‘not necessarily inevitable’ consequences,¹⁵⁸ while other possible standards include ‘reasonable causality’ or ‘reasonable expectation of causality’, ‘close nexus’ and ‘likely’ or ‘foreseeable consequence’.¹⁵⁹

The ICRC has expressed the view that reverberating effects that are foreseeable in the circumstances must be taken into consideration in the proportionality assessment of an attack. It is submitted that those who plan and decide upon an attack have an obligation to do everything feasible to obtain information that will allow for a meaningful assessment of the foreseeable incidental effects on civilians and civilian objects. In doing so, they should be informed by past experiences and the lessons learned by their armed forces.¹⁶⁰

The consideration of reverberating effects is particularly relevant in relation to the use of explosive weapons with a wide impact-area in populated areas, which often disrupts the functioning of essential services, such as health care and water and electricity distribution. Reverberating effects may also include disease, disability, the long-term impact on mental well-being, economic loss and displacement. These effects may be heightened with the repeated use of such weapons.¹⁶¹

Challenges in assessing reverberating effects *ex ante*

Further consideration of such foreseeable reverberating effects leads to the question of the expertise of those planning and executing attacks to make such an analysis. It has been suggested that where attacks in urban settings “may be expected to damage utilities on which the civilian population relies, an assessment should be made of how long it is likely that the relevant services will remain out of action and what damage, injury, and death civilians are likely to suffer during that period as a result”.¹⁶² Anticipating the likelihood and magnitude of reverberating effects might require technical expertise from engineers or public health specialists. Furthermore, the protracted nature of the conflict, the death or displacement of the technicians or a lack of spare parts may mean that it is difficult to repair damaged civilian objects fully for many years, while services and infrastructure may already be under stress because of the conflict. The question has also arisen as to how the willingness or ability of either party to mitigate incidental harm after an attack has been carried out can influence the proportionality assessment *ex ante*.¹⁶³

154 J. Holland, “Military objective and collateral damage: their relationship and dynamics”, *Yearbook of International Humanitarian Law*, Vol. 7, 2004, pp. 61–2; C. Greenwood, “Legal Issues Regarding Explosive Remnants of War”, Working Paper submitted to the CCW Group of Governmental Experts, UN document CCW/GGE/1/WP.10, 22 May 2002, para. 23; W. Boothby, “Cluster Bombs: Is There a Case for New Law?”, HPCR Occasional Paper Series No 5, Program on Humanitarian Policy and Conflict Research, Harvard University, Fall 2005, p. 31 (see also note 157 below).

155 Holland, note 154 above, p. 62.

156 K. Rizer, “Bombing Dual-Use Targets: Legal, Ethical and Doctrinal Perspectives”, *Air & Space Power Journal*, 1 May 2001.

157 For example, compare the *Tallinn Manual 2.0*, Commentary on Rule 113, p. 472, para. 6, with the HPCR Manual, para. 4 on Rule 14. Compare also W. Boothby, who notes in 2012 that “when considering the proportionality of a proposed urban attack, expected reverberating effects on the civilian population must be taken into account” (note 114 above, p. 414), with Boothby’s position in 2005, note 154 above.

158 Henderson, note 85 above, p. 210.

159 Report on the Expert Meeting on Targeting Military Objectives, organized by the University Centre on International Humanitarian Law, Geneva, 12 May 2005, p. 15, available at http://www.geneva-academy.ch/docs/expert-meetings/2005/trapport_objectif_militaire.pdf.

160 ICRC, *International humanitarian law and the challenges of contemporary armed conflicts*, Geneva, October 2015, p. 52.

161 See ICRC, *Explosive Weapons in Populated Areas: Humanitarian, Legal, Technical and Military Aspects*, 2015; and ICRC, *Urban services during protracted armed conflict: a call for a better approach to assisting affected people*, Geneva, 2015, in particular, pp. 31 ff., available at <https://www.icrc.org/en/explosive-weapons-populated-areas>.

162 Boothby, note 114 above, p. 414.

163 Holland, note 154 above, p. 62.

B) EXPERTS' COMMENTS AND DISCUSSION

Guiding questions

The following questions were submitted to the experts to guide the discussion:¹⁶⁴

- When do reverberating effects become too remote to be foreseeable? Are there limitations with respect to time, scope or location when considering expected reverberating effects under the proportionality principle?
- Is the possibility to mitigate or repair damage relevant to the incidental harm assessment?
- When are reverberating effects expected/foreseeable and how should uncertainty be dealt with?
- What level of information "available to the commanders" is required?

Relevance and limits of reverberating incidental harm

There was general agreement that a causal link between the attack and the reverberating incidental harm has to be established for the harm to be relevant for the principle of proportionality. Some experts suggested that the question of whether the attack was the only, or at least the main, cause of harm is a useful criterion for identifying what reverberating incidental harm is relevant.

Furthermore, only reverberating incidental harm that is foreseeable by the commander in the circumstances ruling at the time has to be considered. While planning was seen as key at the tactical, operational and strategic levels of warfare in assessing reverberating incidental harm, the experts underlined that what was foreseeable can vary notably depending on the situation (for example, a pre-planned operation as opposed to troops under enemy fire) and on the level of the commander (tactical, operational or strategic). The experts agreed that secondary explosions when attacking a weapons or ammunition factory must be expected and therefore considered and that their extent may be possible to foresee if intelligence regarding the type and quantity of the weapons and ammunition is reasonably available. However, some of them warned against overburdening the commander with requirements that are too stringent in terms of identifying and assessing reverberating effects. Because the rules on the conduct of hostilities have to remain reasonable and practical for military commanders, the remoteness of the harm was seen as a relevant criterion for identifying whether the incidental harm has to be taken into consideration. The more remote the reverberating incidental harm is, the more time and resources will be required to assess it, and time and resources might be limited in the middle of a fast-paced conflict. One expert illustrated the issue of remoteness as follows: in the event of conflict in the Persian Gulf, the sinking of ships in the Strait of Hormuz would be likely to lead to an increase in the price of oil on the world market, and this increase could be expected to create economic difficulties and budgetary constraints for oil-importing countries. Countries that subsidize bread or other basic foods might be forced to cut or reduce these subsidies, which could eventually lead to an increase in the mortality rate caused by malnutrition among the poorest part of the population relying on subsidized food in these countries. This expert expressed the view that a commander considering the targeting of an enemy ship in the Strait of Hormuz was not required to take into account such an increase in the mortality rate because it was too remote.

A few experts limited the relevant effects to those that manifest themselves in the short term, relying on Greenwood's declarations in the CCW discussions on explosive remnants of war.¹⁶⁵ One expert even suggested

¹⁶⁴ The questions were developed with sub-questions, see Annex 2, Agenda.

¹⁶⁵ Greenwood expressed the view that "it is only the immediate risk from ERW [explosive remnants of war] which can be in issue. If, for example, cluster weapons are used against military targets in an area where there are known to be civilians, then the proportionality test may require that account be taken both of the risk to the civilians from sub-munitions exploding during the attack and of the risk from unexploded sub-munitions in the hours immediately after the attack. It is an entirely different matter, however, to require that account be taken of the longer-term risk posed by ERW, particularly of the risk which ERW can pose after a conflict has ended or after civilians have returned to an area from which they had fled. The degree of that risk turns on too many factors which are incapable of assessment at the time of the attack, such as when and whether civilians will be permitted to return to an area, what steps the party controlling that area will have taken to clear unexploded ordnance, what priority that party gives to the protection of civilians and so forth. The proportionality test has to be applied on the basis of information reasonably available at the time of the attack. The risks posed by ERW once the immediate aftermath of an attack has passed are too remote to be capable of assessment at that time." (C. Greenwood, *Legal Issues Regarding Explosive Remnants of War*, Group of Governmental Experts of the States Parties to 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, 23 May 2002, CCW/GGE/I/WP.10, p. 8, para. 23).

that only incidental harm that the attack would bring about in one causal step was relevant. For this expert, the reference to “the circumstances ruling at the time” put a temporal boundary on the relevant effects to be analysed.

Several other experts recalled that the law does not qualify the relevant incidental harm as being limited to direct harm, unlike the relevant military advantage. In their view, there is no basis in law to limit the relevant harm to that occurring in one causal step. These experts viewed the reference to “the circumstances ruling at the time” as reflecting the need to assess respect of the rules *ex ante* at the time of the attack and not with the benefit of hindsight. Under this view, if at the time of an attack a commander expects incidental harm, this harm has to be considered even if it is only expected to materialize much later. Given that effects arguably become less foreseeable as the time they are expected to take to manifest themselves lengthens, causality was considered more relevant than timing *per se*. Finally, it was recalled that States have increasingly considered that long-term or reverberating effects are relevant, as seen in the CCW discussions¹⁶⁶ or, more recently, in the cyber warfare debate, where the relevance of reverberating effects has been deemed very straightforward.¹⁶⁷

Discussion on scenario 1

To make the discussion more specific, the experts looked at the first scenario proposed in the agenda.

Scenario 1 – summary¹⁶⁸

An enemy operational command post is located within a densely populated area in the centre of the city, and launching a direct attack on it would be disproportionate. However, there is a power station on the outskirts of the city that provides electricity to this command post. It is also providing electricity to the civilian population and local hospitals. Destroying the power station would cut off the power supply to the command post.

The experts were asked to discuss the extent to which a number of factors had to be taken into consideration when assessing proportionality, such as:

- *damage to empty civilian houses and a factory surrounding the power station*
- *the impact on the daily life of the local civilian population*
- *the economic impact on the civilian population and businesses*
- *the impact on local hospitals*
- *the impact on the drinking water treatment plant*
- *the possible damage to the underground sewage and water system*
- *the possible impact of long-term harm to the civilian population living downstream and to the natural environment from contamination through the release of untreated wastewater into the city's main river*
- *the limited ability of the party controlling the city to repair the power station because of the scarcity of materials, a lack of expertise or its tendency to focus its effort on fighting rather than repairing the power station*
- *the fact that the attacking party hoped to gain control of the area where the power plant is located and the city shortly after the attack and would have the means to repair the power station in a matter of days.*

¹⁶⁶ The Final Declaration of the Third Review Conference of States Parties to the CCW noted that the “foreseeable effects” of explosive remnants of war on civilian populations was a factor to be considered in applying the principle of proportionality and precautions (Third Review Conference of the High Contracting Parties to 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, *Final Declaration*, 17 November 2006, preambular paragraph 11, CCW/CONF.III/11 (Part II), p. 4).

¹⁶⁷ See text in relation to note 144 above.

¹⁶⁸ For the full scenario, see Annex 2, Agenda, Scenario 1.

Relevance of the various types of reverberating effects

There was general agreement that damage to empty civilian houses and factories surrounding the power station as well as the impact of electricity cuts on the local hospital and on the drinking water system (treatment plants and drinking water network), which may in turn lead to injury or loss of life, have to be considered. In terms of causality, electricity cuts to the hospital or drinking water treatment plant were deemed to be caused directly by the attack on the power station. Some experts went further and suggested that any impact that was related to the health of the civilian population might have to be considered, for example, the effects resulting from damage to underground sewage systems or the impact on the refrigerated food chain. Opinions varied on the consequence of the impact of electricity cuts on heating systems: some viewed it as relevant, in particular in situations where inhabitants would be at risk of freezing to death because of the climate, while a couple of experts cautioned against overestimating the consequences of power cuts.

In line with the preceding discussion on economic damage, one expert considered that the general economic impact on the civilian population and businesses should not be considered in this scenario because it would be difficult to establish that the electricity cut caused by the attack on the power plant was the only or main reason for the harm and it was also unclear whether it would foreseeably lead to incidental death or injury.

At the other end of the spectrum, one expert suggested that the disruption that electricity cuts cause to air conditioning (even in extremely hot countries such as Iraq) or the ability to communicate on social networks does not constitute relevant incidental harm in the context of a proportionality analysis.

Assessing the reverberating effects

Without disputing the relevance of reverberating harm for the principle of proportionality, some experts highlighted the practical difficulty of assessing it. One expert illustrated this difficulty by building upon the abovementioned scenario on the impact of electricity cuts on a hospital. This expert described a situation in which the commander knows that the hospital has generators and fuel for a week, but it is not clear whether the hospital would receive further fuel supplies during that week. The commander can foresee that there will be some effects on the functioning of the hospital, but it will be difficult to ascertain the nature and extent of the effects even if the size of the hospital and the number of patients in the intensive care unit are known. While wondering how these effects could be evaluated, this expert felt that they do have to be considered. It was noted that the scientific precision that CDE methodologies seem to offer to measure expected incidental harm should not be misread as implying that incidental harm that is expected but whose scope cannot be precisely estimated could be disregarded. From another perspective, it was recalled that the situation before the attack has to be considered; for example, when the hospital is already suffering power cuts because of a general power shortage, these cannot be attributed to the attack.

The experts pointed to the fact that experiences of previous conflicts increase the foreseeability of reverberating incidental harm. One expert recalled the example of the electricity cuts caused during the 1990–1991 Gulf War. Even if their impact was not fully foreseeable at the time, belligerents in subsequent conflicts could no longer claim that such an impact was hypothetical. It was noted that State practice had evolved: in the 2003 Gulf War the US-led coalition targeted switching stations instead of power stations, as the former are easier to repair than the latter and thus less likely to lead to long-lasting electricity cuts. One expert suggested, however, that this might have been done as a matter of policy rather than due to a sense of legal obligation.

Information available to the commander

Several experts stressed that it is undisputed that commanders have an obligation to proactively seek out and collect relevant and reasonably available information, a position that no expert contested.

Opinions on whether this obligation requires commanders to seek out expert advice were more nuanced, with the experts focusing on the notion of feasibility.

There was general agreement that when expert resources are reasonably available to the commander, they must be consulted. One expert gave the example of cultural advisers for US forces in Afghanistan.

Some experts, however, were reluctant to view the law as imposing a general obligation on the party to the conflict to deploy such experts or on the commander to otherwise seek out advice from them. These experts considered that deploying or contacting them could be best practice but not necessarily a legal requirement. It was considered unrealistic for most military forces and unrealistic at any level below theatre level even for the most advanced ones. While one expert deemed it unreasonable for military forces today to claim that they lack engineering expertise, others noted that not all militaries necessarily have enough engineers to begin with and that the existing engineers might have other urgent and demanding missions preventing them from advising on targeting issues in general or reverberating effects in particular. It was noted that other types of expertise might be even less readily available.

Seeking out expert advice could, however, be required in certain circumstances, when there is a particular trigger for doing so. For example, if the country is known for widespread waterborne diseases and weak health services, it might be reasonable to require epidemiologist advice before an attack that was expected to negatively impact health services. Cyber warfare was given as an example of a type of operation where there is general agreement on the need for expert advice. The experts pointed to the increasing interdependence of societies, notably in urban areas, as a reason for the increased need to resort to expertise. Some of the experts considered this increased recourse to expertise as part of the feasible precautions required by law.

Indeed, one expert recalled the requirement to use all feasible means at the planning phase before any attack, which in this expert's view includes getting expert advice from sociologists, anthropologists, engineers, economists, epidemiologists, etc., as appropriate. Obviously, expert advice will be considered more feasible for pre-planned operations. One expert gave the example of the 2003 Iraq War, where target lists had been established before the start of hostilities. In this situation there was sufficient time for it to be reasonable to require the attacking party to seek technical advice. More recently, expert advice was also sought from oil refinery engineers before planning attacks on oil infrastructure that had fallen into the hands of the Islamic State armed group (and that the belligerent had deemed a military objective) in order to design the attacks so as to avoid the complete destruction of the targeted infrastructure and make it easier to repair. These experts further stressed that technical advice can be made easily available today through communication technology, without experts necessarily having to be deployed in theatre. It was also recalled that 50 years ago, the deployment of military legal advisers to counsel commanders on operational law was uncommon, if not unheard of, which shows that capabilities and expectations are evolving.

It was noted that the unavailability of technical expertise does not necessarily mean that military commanders cannot identify and assess reverberating effects, and the more significant and direct the expected harm is, the easier the assessment by the commander will be. One expert illustrated this point with the example of the use of high-explosive weapons in urban areas and opined that it was reasonable to expect today's commanders to be aware that such use is likely to incidentally damage water and sanitation services. The absence of technical expertise would not absolve commanders from taking the reverberating effects of such damage into account.

Relevance of incidental harm mitigation or repair after the attack

A few experts considered that mitigation of reverberating incidental harm was relevant when it could be reasonably expected. On the contrary, most experts expressed doubts about, or clearly opposed, the idea that the possibility of incidental harm being mitigated or repaired would be a relevant consideration for an assessment under the principle of proportionality. For these experts, this held true regardless of who would mitigate or repair the damage: the party that carried out the attack, the other party, civilians or humanitarian agencies.

All the experts agreed that the possibility that damages would be repaired at the campaign level at the end of the hostilities, for instance, following an international community donors' conference or by one party to the conflict, was irrelevant for the proportionality assessment of attacks under IHL. It should be underlined that the discussion on mitigation focused on damage to objects, as loss of life obviously cannot be mitigated.

At a more tactical level, there was disagreement on whether an expectation that incidental damage would be repaired shortly after the attack could reduce the relevant harm for the proportionality analysis and thus whether it could change the assessment compared to a situation where this damage would not be repaired.

As mentioned, a few experts considered that the law allowed consideration within the proportionality analysis of an expectation that the incidental damage would be repaired after the attack, provided that it was a reasonable and good-faith expectation in the circumstances of the particular attack. Mitigation was not seen as relevant for the damage to the object itself, which had to be considered in any case; it was only considered relevant in terms of reverberating harm. Under this view, hypothetical reverberating effects that were expected not to manifest themselves after – and thanks to – this foreseen repair would not need to be considered, whoever was expected to carry it out. This was also seen as an incentive for the attacking party to repair the damage or otherwise mitigate the harm after the attack. For example, in scenario 1, if it was expected that fuel would be provided to a hospital in the immediate aftermath of an attack that damaged the power station supplying electricity to the hospital, the only relevant reverberating effects on the hospital's functioning would be those occurring during the short period of time until fuel was expected to be provided. Similarly, if there was a pattern showing that the enemy systematically repaired incidentally damaged infrastructure shortly after the attack, a commander would be entitled to expect such repair to occur when considering the reverberating effects of the party's next operation. Conversely, if nobody was repairing such damage, the commander must consider the impact of the infrastructure remaining damaged over a longer period of time. It was underlined that the same held true for the military advantage, that is, if it is expected that the enemy would repair a dual-use object, the anticipated military advantage would only be that of denying the enemy the military function of this dual-use object until such time as the repair was expected to be done.

On the contrary, most experts opposed the idea that repairs after the attack could affect the proportionality assessment and render lawful an attack that would be disproportionate in the absence of repair. For example, if a bridge was expected to be incidentally damaged, and it was the only bridge that could be used to deliver humanitarian assistance to civilians, the impact of the damage on the delivery of assistance has to be considered. However, the expectation that someone might repair the bridge is one step further and was considered too remote and hypothetical to be considered in a proportionality assessment.

All the experts saw merit in the idea that the party that caused the damage would undertake to repair it. They recalled that military forces have sometimes required the support of engineers, doctors and pharmacists when moving into conflict-affected areas so as to have the capacity to provide prompt assistance for civilians. However, counting on one's own ability to repair damage after the attack was seen as too speculative by the experts rejecting the idea that repairs after the attack could affect the proportionality assessment. Even if the party carrying out the attack was planning in good faith to repair the damage afterwards, this possibility might easily disappear because of developments in combat operations, for example, failing to gain ground in the area where the damage had been caused. Furthermore, that party could simply change its mind after the attack without affecting the lawfulness of the attack, as the latter is to be assessed *ex ante*. Therefore, recognizing this as relevant for the principle of proportionality entailed a risk of the law being manipulated.

Similarly and even more strongly, these experts considered action by the enemy as too fluid and unpredictable to be reasonably considered in this regard. A belligerent is normally seeking to overwhelm and defeat the enemy, so they viewed it as counterintuitive to simultaneously count on this enemy's ability to repair the damage caused. The enemy might devote resources to the hostilities rather than to repairing incidental damage to civilian infrastructure. If the enemy takes measures that mitigate reverberating incidental harm, it may do so to discharge its responsibility towards the civilian population under its control and restore public services. This might be the case, in particular, when the object incidentally damaged and repaired is a civilian object distinct from the targeted military objective. However, the repair might also take place for military reasons, especially when considering dual-use objects. In scenario 1 described above, repairing the power plant could aim to ensure the provision of electricity to the hospital or the functioning of the command post – or both. In the latter cases, repair by the enemy might sometimes lead to a further attack on the target to regain the military advantage sought by the first attack. In these cases, any mitigation gained by the repair

might not last. Furthermore, considering mitigation to be relevant could even become a disincentive for the party that suffered the attack to repair the damage because repairing it would create an expectation of future repair which could in turn widen the military options of the attacking party by decreasing the relevant harm that it has to consider. In any case, the fact that the enemy's choice in terms of its allocation of resources would be questionable with regard to its responsibility to provide for the basic needs of the population under its control was deemed irrelevant and would not reduce the protection that the principle of proportionality afforded to civilians in case of enemy attack.

Finally, most experts strongly opposed the idea that humanitarian assistance could be viewed as broadening the possibilities of attack, that is, that an attack that would be disproportionate and therefore prohibited in the absence of a humanitarian relief operation could become lawful if it was expected that humanitarian action after the attack would mitigate the reverberating incidental harm to the point where it would no longer be excessive. It was notably suggested that if humanitarian actors were mitigating the reverberating harm by constantly repairing the incidental damage caused by the attacks of one of the belligerents, it might be an indication of the need for this belligerent to reconsider its proportionality assessment in the first place, as it would signal the importance of the harmful incidental effects of these attacks on the civilian population.

In any case, even if mitigation is seen to be relevant in theory, doubts were expressed as to whether mitigation by an intervening agency could in practice be speedy enough to avoid or limit the relevant incidental harm. It often takes years to rebuild bridges or restore other infrastructure providing essential services to the civilian population and decades to clear landmines or other explosive remnants of war.

PART III: THE REASONABLE MILITARY COMMANDER ASSESSMENT OF EXCESSIVENESS

A) BACKGROUND INFORMATION

In order to satisfy the principle of proportionality, the expected incidental harm must not be excessive in relation to the concrete and direct military advantage anticipated. As already noted, making a determination of what amounts to ‘excessive’ incidental harm is by no means a straightforward analysis, and the law does not provide a set formula to follow in making such a determination. Nevertheless, determinations on excessiveness are carried out daily by militaries, and attacks are cancelled based on them. The difficulties in reaching such decisions should therefore not be seen as depriving the principle of proportionality of its value for the protection of civilians. What is of most interest in this context is what considerations commanders take into account when assessing excessiveness.

The principle of proportionality as a value judgement

It is often acknowledged that assessment of proportionality involves a value judgement,¹⁶⁹ and the ICRC 1987 Commentary on AP I recognizes that the formulation of the principle of proportionality allows for a “fairly broad margin of judgement”.¹⁷⁰ The diverse views of expert witnesses giving evidence before the ICTY during the *Gotovina* trial also illustrate the differing assessments that military commanders might have.¹⁷¹ It has been suggested that the determination of excessiveness “is not amenable to a precise or mathematical tabulation”¹⁷² and “does not necessarily lend itself to quantitative analysis because the comparison is often between unlike quantities and values”.¹⁷³ The ICRC 1987 Commentary on AP I highlights that the question is one of “common sense and good faith for military commanders”, and it is therefore often said that evaluation in accordance with the principle of proportionality involves at least some element of subjectivity.¹⁷⁴ However, it has also been suggested that although the determination of the military advantage and of incidental harm are subjective, the determination of excessiveness is an objective one, based on what a reasonable person (or commander) would conclude in the circumstances.¹⁷⁵

¹⁶⁹ See footnote 37 to Art. 8(2)(b)(iv) in the ICC Elements of Crimes, as discussed in Dörmann, note 60 above, pp. 164–165. Watkin, note 13 above, pp. 289 ff.

¹⁷⁰ ICRC 1987 Commentary on AP I, para. 2210.

¹⁷¹ For a summary and analysis of the experts’ testimony, which covered the various principles governing the conduct of hostilities as well as the principle of proportionality, see, for example, PAX, *Unacceptable Risk: Use of explosive weapons in populated areas through the lens of three cases before the ICTY*, Maya Brehm, 2014, pp. 60 ff.

¹⁷² ICTY, *Prosecutor v. Pavle Strugar*, IT-01-42, Prosecutor’s Pre-Trial Brief Pursuant to Rule 65 *ter* (E) (i), 27 August 2003, para. 152. See also the HPCR Manual, Rule 14, p. 98, para. 7.

¹⁷³ US DoD Law of War Manual, para. 5.12.4.

¹⁷⁴ ICRC 1987 Commentary on AP I, para. 2208: “this system [referring to 57(2)(a)(iii)] is based to some extent on a subjective evaluation”; Bothe, Partsch and Solf, note 36 above, para. 2.6.2 on Art. 51: “the judgment must be subjective”.

¹⁷⁵ Henderson, note 85 above, p. 222 “there are both subjective and objective aspects to the proportionality test”; see also J. Wright, “‘Excessive’ ambiguity: analyzing and refining the proportionality standard”, *International Review of the Red Cross*, Vol. 94, No. 886, 2012, p. 853; HPCR Manual, para. 6 on Rule 14; Gardam, note 45 above, p. 407.

The notion of the ‘reasonable military commander’

The Final Report to the Prosecutor Reviewing the NATO Bombing Campaign in the FRY briefly touched upon these issues. It noted that questions on the application of the principle may need to be resolved on a case-by-case basis and that the evaluation may differ depending on the doctrinal backgrounds, degree of combat experience, national military histories and values of the decision-maker. However, the Committee suggested that the standard should be that of a “reasonable military commander”. It held that even though there may be some differences of opinion in close cases, generally, many military commanders will agree on whether incidental harm is clearly disproportionate to the military advantage.¹⁷⁶

This notion of a ‘reasonable military commander’ was viewed as an acceptable way to use an objective approach.¹⁷⁷ Others have deemed it unsatisfactory “at least not unless the military commander is defined in more civilian terms”.¹⁷⁸ Yet others favoured the test of the “honest judgement of a responsible commander” appearing in a military manual.¹⁷⁹

The Trial Chamber of the ICTY in *Galic* defined the standard as follows:

In determining whether an attack was proportionate, it is necessary to examine whether a reasonably well-informed person in the circumstances of the actual perpetrator, making reasonable use of the information available to him or her, could have expected excessive civilian casualties to result from the attack.¹⁸⁰

A standard of reasonableness has also been included in some States’ military manuals. One such manual provides that “[t]he commander must determine whether incidental injuries and collateral damage would be excessive, on the basis of an objective and reasonable estimate of the available information”.¹⁸¹ Other manuals articulate that the proportionality analysis must be made on the basis of “an honest and reasonable” estimate of the facts available to the commander,¹⁸² and one of them states that “a rational balance” is required.¹⁸³

Guidance on the notion of excessiveness in military manuals and case law

Beyond these general standards, publicly available military manuals offer little guidance on the notion of excessiveness, as the examples of attacks deemed proportionate or disproportionate are usually obvious. For example, bombing a refugee camp where refugees are knitting socks for soldiers,¹⁸⁴ bombing an isolated fuel tanker in the middle of a densely populated city,¹⁸⁵ bombarding a village because of the presence of a single sniper¹⁸⁶ and the complete destruction of a town in order to eliminate a small pocket of opposing forces¹⁸⁷ have been offered as examples of disproportionate attacks.¹⁸⁸ On the other hand, some examples of proportionate attacks offered in military manuals include: an air strike on an ammunition dump where there is a farmer ploughing a field beside it;¹⁸⁹ an attack on a village occupied by opposing forces at an important

¹⁷⁶ ICTY, Final Report to the Prosecutor Reviewing the NATO Bombing Campaign in the FRY, para. 50.

¹⁷⁷ P. Benvenuti, “The ICTY Prosecutor and the Review of the NATO Bombing Campaign against the Federal Republic of Yugoslavia”, *European Journal of International Law*, Vol. 12, No. 3, 2001, p. 517.

¹⁷⁸ M. Bothe, “The Protection of the Civilian Population and NATO Bombing on Yugoslavia: Comments on the Report to the Prosecutor of the ICTY”, *European Journal of International Law*, Vol. 12, 2001, p. 535.

¹⁷⁹ F. Kalshoven, “Bombardment: From ‘Brussels 1874’ to ‘Sarajevo 2003’”, in J. Dora, H-P. Gasser and C. Bassiouni (eds), *The Legal Regime of the International Criminal Court: Essays in Honour of Professor Igor Blishchenko*, Martinus Nijhoff Publishers, The Netherlands, 2009, p. 127.

¹⁸⁰ ICTY, *Galic case*, TC, para. 58.

¹⁸¹ Ecuador, *Aspectos Importantes del Derecho Internacional Marítimo que Deben Tener Presente los Comandantes de los Buques*, Academia de Guerra Naval, 1989, para. 8.1.2.1.

¹⁸² US, *The Commander’s Handbook on the Law of Naval Operations*, NWP 1-14M, 2017, para. 8.3.1. Canada 2001 Military Manual, para. 415(2), p. 4-4.

¹⁸³ Canada 2001 Military Manual, para. 204(6), p. 2-3.

¹⁸⁴ New Zealand, 1992 Military Manual, para. 207, and Canada 2001 Military Manual, para. 204. 6.

¹⁸⁵ Belgium, *Droit des Conflits Armés : Manuels du Cours pour Conseiller en Droit des Conflits Armés*, Vol. VI, 2009, pp. 14-15.

¹⁸⁶ Burundi, *Règlement n° 98 sur le droit international humanitaire*, note 109 above, p. 33.

¹⁸⁷ Canada, *Code of Conduct for CF Personnel*, Office of the Judge Advocate General, 4 June 2001, Rule 2, para. 5.

¹⁸⁸ While given as examples of attacks which would violate the principle of proportionality, actually some of these examples would constitute violations of the principle of distinction in the first place.

¹⁸⁹ Canada 2001 Military Manual, para. 204.6

crossroads even where such an attack will lead to civilian casualties and damage to civilian property;¹⁹⁰ the targeting of a munitions factory where the collateral damage is limited to the deaths of the civilian factory workers;¹⁹¹ or the targeting of an oil depot vital for the enemy's logistical operations that might damage a few surrounding houses.¹⁹² Occasionally, examples are given which are said to depend on the circumstances, such as the destruction of all or a portion of a church steeple, which may or may not be justified if it is being used by a sniper.¹⁹³ Military manuals often underline that most applications of the principle of proportionality are not so simple and while it is easy to formulate the principle in general terms it is far more difficult to apply to a particular set of circumstances.¹⁹⁴

Case law on disproportionate attacks remains too scant to provide more concrete guidance. A few cases can be found, however, in ICTY case law.¹⁹⁵ In *Galic*, the ICTY Trial Chamber considered that attacking with artillery a “significant” (although actually unknown) number of unarmed and off-duty soldiers in a crowd of 200 civilians would be expected to cause clearly excessive incidental harm.¹⁹⁶ In *Gotovina*, the ICTY Trial Chamber considered the shelling of Martić's apartment and another area where he was believed to be present. While the chance of hitting or injuring him was very slight, the Chamber held that “firing at Martić's apartment could disrupt his ability to move, communicate, and command”. Both targets were in a predominantly civilian area, and the Chamber noted that the means used to attack them “created a significant risk of a high number of civilian casualties and injuries, as well as of damage to civilian objects”, which it considered excessive.¹⁹⁷ As is well known, the *Gotovina* Trial Judgment was overturned at the appeal stage and, on this particular point, the Appeals Chamber noted that the Trial Chamber analysis was “not based on a concrete assessment of comparative military advantage, and did not make any findings on resulting damages or casualties”.¹⁹⁸ The ICTY analysis of the destruction of the Old Bridge in Mostar in *Prlic et al.* has already been mentioned above.¹⁹⁹ The Trial Chamber also assessed attacks against Eastern Mostar, where military objectives, such as the enemy forces headquarters, were not distinctly separated from civilian buildings. It considered that repeated and heavy artillery attacks would have to have resulted in substantial incidental harm, which it deemed excessive in relation to the concrete and direct military advantage anticipated.²⁰⁰

190 Canada, *Code of Conduct for CF Personnel*, Office of the Judge Advocate General, 4 June 2001, p. A-41.

191 UK 2004 Military Manual, para. 2.6.3, as amended by amendment 3.

192 Belgium, *Droit des Conflits Armés : Manuels du Cours pour Conseiller en Droit des Conflits Armés*, Vol. VI, 2009, pp. 14–15.

193 Canada, *Code of Conduct for CF Personnel*, Office of the Judge Advocate General, 4 June 2001, Rule 9, para. 5.

194 ICTY, Final Report to the Prosecutor Reviewing the NATO Bombing Campaign in the FRY, para. 48.

195 Contrary to the IHL standard, the war crime of disproportionate attack under the Rome Statute requires the expected incidental harm to be *clearly* excessive in comparison with the direct and concrete military advantage anticipated. The ICC Office of the Prosecutor looked at the war crime of disproportionate attack in the *Situation on Registered Vessels of the Union of the Comoros, the Hellenic Republic of Greece and the Kingdom of Cambodia*. It held that the boarding of a vessel seeking to reach the coast of Gaza had not been disproportionate because the Israeli Defense Forces, subjectively, were likely to have viewed the seizure of the blockade-running vessels as “essential” to maintaining the effectiveness of its blockade, expecting low-level violence and “some degree of civilian casualties or damage to result” but not ten civilian deaths (ICC-01/13, Public Redacted Version of Prosecution Response to the Application for Review of its Determination under article 53(1)(b) of the Rome Statute, 30 March 2015, paras 47–49, ICC, Pre-Trial Chamber I).

196 ICTY, *Galic case*, TC, para. 387. The ICTY Trial Chamber in *Karadzic* concluded that this same incident was “an example of indiscriminate fire” (Trial Chamber Judgement, IT-95-5/18-T, 24 March 2016, para. 4087).

197 ICTY, *Prosecutor v. Ante Gotovina et al.*, Trial Chamber, para. 1910.

198 ICTY, *Prosecutor v. Ante Gotovina et al.*, Appeals Chamber, para. 82, with Judges Agius and Pocar dissenting (see their dissenting opinions, paras 44 and 18 respectively).

199 See text in relation to note 135.

200 ICTY, *Prosecutor v. Prlic et al.*, IT-04-74-T, Judgment (Trial Chamber), 29 May 2013, Volume 3 of 6, paras 1684–86. In November 2017, the Appeals Chamber judged that the Trial Chamber had reached this conclusion without having determined the military advantage anticipated and had thus erred in law by failing to provide a reasoned opinion. The Appeals Chamber nevertheless concluded that this error would not invalidate the Trial Chamber finding the crime of unlawful attack on civilians to have been committed in view of the overall analysis of these attacks (“*in light of the weapons used and, most of all, how they were used, the attack was indiscriminate*”) and the basis for the Trial Chamber's findings (*inter alia*, “shelling and firing at the civilian population of East Mostar”), ICTY, *Prosecutor v. Prlic et al.*, IT-04-74-A, Judgement (Appeals Chamber), 29 November 2017, Vol. I, para. 561.

At the national level, the Israeli High Court of Justice offered, as an example, the situation of a sniper shooting at soldiers or civilians from his porch. The Court deemed that shooting at the sniper was proportionate even if a civilian were to be incidentally harmed, but that it was not the case if the building was bombed from the air and scores of residents and individuals passing by were harmed.²⁰¹ In the *Fuel Tankers* case, the German Federal Prosecutor General stated that, even assuming that dozens of civilian casualties were anticipated, the attack would not have been “out of proportion” in view of the anticipated advantage of the destruction of the fuel tankers and the death of high-level Taliban, notably because it would considerably reduce the risk of enemy attacks.²⁰²

Relevance of other factors, such as the type of conflict, the broader context and the personal circumstances of the commander

It has been suggested that what amounts to ‘excessive’ might vary depending on the different contexts in which a conflict is waged. For example, it has been suggested that the weight given to a particular military advantage is inherently contextual and that the wider context of the conflict and the enemy’s strategic objectives will affect the determination of the notion of excessiveness.²⁰³ On the incidental harm side, it has also been suggested that enduring suffering might desensitize a population to death and that this “shades proportionality calculations”.²⁰⁴ The inclusion of broad strategic considerations when determining the military advantage has, however, been viewed with concern because such considerations were neither concrete nor direct or military and were confusing *jus ad bellum* and *jus in bello* proportionality. Furthermore, considering cultural factors when assessing excessiveness was deemed “a most risky proposition, which ties the application of IHL to controversial theories of culture relativism”.²⁰⁵

It has similarly been suggested that the type of conflict may also affect the levels of incidental harm that is considered permissible. Relevantly, in situations of counter-insurgency, some restrictions have been put on the use of military force, including on proportionality, although they are often deemed to be based on policy rather than law. It has also been suggested *de lege ferenda* that higher standards of protection of the civilian population, including against incidental harm, should be applied in conflicts conducted as peace enforcement operations on behalf of the international community or other interventions within the framework of a regional crisis.²⁰⁶ To take the example of a relatively recent conflict, NATO stated that it had applied a “‘zero expectation’ of death or injury to civilians” policy standard during Operation Unified Protector in Libya,²⁰⁷ stressing that this approach went beyond the requirements of IHL. The 22 May 2013 United States Presidential Policy Guidance (PPG) also establishes a threshold of “near certainty that non-combatants will not be injured or killed” in the areas where the PPG applies, which again was said to go beyond the requirements of IHL.²⁰⁸ However, it has also been argued against applying a different legal standard for the principle of proportionality depending on the type of conflict, as this would allow *jus ad bellum* considerations to influence *jus in bello*.²⁰⁹

²⁰¹ Israel, High Court of Justice, *Public Committee against Torture in Israel case*, Judgment, 14 December 2006, para. 46.

²⁰² Germany, Federal Court of Justice, Federal Prosecutor General, *Fuel Tankers case*, Decision, 16 April 2010, pp. 63–66.

²⁰³ Schmitt, note 19 above. See also the discussion in Schmitt and Merriam, note 18 above, pp. 125–131.

²⁰⁴ Schmitt, note 146 above, p. 151.

²⁰⁵ Cohen and Shany, note 15 above.

²⁰⁶ The Independent International Commission on Kosovo, *The Kosovo Report, Conflict, International Response, Lessons Learned*, Oxford University Press, 2000, pp. 5, 31 and 166 ff.; O. Bring, “International Humanitarian Law after Kosovo”, p. 271 (although it is a more restrictive notion of military objective rather than a change in the principle of proportionality as such).

²⁰⁷ NATO Legal Adviser letter to Judge Kirsch, Chair, International Commission of Inquiry on Libya, United Nations, OLA(2012)006, 23 January 2012, available at http://www.nato.int/nato_static/assets/pdf/pdf_2012_05/20120514_120514-NATO_1st_ICIL_response.pdf

²⁰⁸ Presidential Policy Guidance, *Procedure For Approving Direct Action against Terrorist Targets Located outside the United States and Areas of Active Hostilities*, 22 May 2013, p. 4, para. 1.E(2). See also Remarks by the United States President at the National Defense University, 23 May 2013, available at <https://www.whitehouse.gov/the-press-office/2013/05/23/remarks-president-national-defense-university>, and Remarks by Brian J. Egan, Legal Adviser, US Department of State, at the American Society of International Law (ASIL), 1 April 2016, available at <https://2009-2017.state.gov/s/l/releases/remarks/255493.htm>

²⁰⁹ Sassòli and Cameron, note 132 above, p. 67.

Whether or not the ‘reasonable commander’ standard and the determination of excessiveness varies depending on the context or the type of conflict, another question arises as to whether the standards vary depending on the rank of the officer or soldier making the assessment, even if in the same conflict. Issues related to the level of the decision-maker making the determination as to whether an attack is excessive may be framed in a manner similar to those discussed in session 1 in relation to the level of the decision-maker assessing the military advantage (see p. 16). More specifically, with regard to the standard of reasonableness, it has been said to be more stringent when applied to commanders of higher positions because more information is available to them than to lower-ranking officers.²¹⁰

Tools and processes to support the assessment of excessiveness

There are various tools and processes in place that can support commanders in making their proportionality determinations. Military decision-making tools, adopted by some States²¹¹ and designed to assist commanders at all levels and in battlefield situations, can be a useful way to ensure a commander makes an informed assessment of proportionality during the planning, ordering and conduct of operations. These analytical tools often require “a thorough study of the total operating environment, including physical (infrastructure, weather, terrain etc.) and social (political, legal, cultural, ROE [rules of engagement] etc.) influences and their cumulative effects on possible threat and friendly forces COA [courses of action]”.²¹² It has also been noted that “the use of science and mathematical indicators (e.g. percentages) as objective indicators for assessing attacks is a significant part of the contemporary dialogue about targeting”.²¹³ While they cannot in the abstract provide detailed guidance as to when “excessiveness” is reached in every specific instance, such tools allow for more informed decision-making. Some States also require that the decision be made higher up in the chain of command, depending on the amount or type of expected collateral damage.²¹⁴

Frame of reference for the assessment of excessiveness

When assessing the excessiveness of an attack, the question arises as to whether the frame of reference used to ascertain the military advantage anticipated affects the frame of reference used to determine the relevant incidental harm. Commenting on the notion of ‘the attack as a whole’, the ICRC submitted that “the same scale” had to be applied on both sides of the balance.²¹⁵

A related but distinct issue is whether the cumulative effects of attacks should be weighed and, if so, how. In the *Kupreskic* case, the ICTY Trial Chamber, invoking the Martens Clause, held that “in case of repeated attacks, all or most of them falling within the grey area between indisputable legality and unlawfulness, it might be warranted to conclude that the cumulative effect of such acts entails that they may not be in keeping with international law. Indeed, this pattern of military conduct may turn out to jeopardize excessively the lives and assets of civilians, contrary to the demands of humanity.”²¹⁶ The Final Report to the Prosecutor Reviewing the NATO Bombing Campaign in the FRY found this to be a progressive statement of the law and noted that “where individual (and legitimate) attacks on military objectives are concerned, the mere *cumulation* of such instances, all of which are deemed to have been lawful, cannot *ipso facto* be said to amount to a crime”.²¹⁷

²¹⁰ E. Lieblich with O. Alterman, *Transnational Asymmetric Armed Conflict under International Humanitarian Law: Key Contemporary Challenges*, Institute for National Security Studies, Tel Aviv, 2015, p. 126.

²¹¹ See, for example, Australian Defence Force Warfare Centre, *The Joint Military Appreciation Process*, 2004; UK Ministry of Defence, *Allied Joint Doctrine for Operational-Level Planning – With UK National Elements*, 2013; NATO, *Allied Command Operations Comprehensive Operations Planning Directive (COPD)*, Interim Version V1.0, 2010; United States Army, “Chapter 24 – The Military Decision-Making Process and Operations Plans”, in *Operational Law Handbook*, 2015.

²¹² Australian Defence Force Warfare Centre, *The Joint Military Appreciation Process*, 2004, pp. 1–13.

²¹³ Watkin, note 13 above, p. 290.

²¹⁴ See, for example, the description in G. McNeil, “Targeted Killing and Accountability”, *Georgetown Law Journal*, Vol. 102, 2014, pp. 681–794, p. 752, discussing non-combatant casualty cut-off values in Iraq 2003 and Afghanistan 2009 and the differences.

²¹⁵ Paper prepared by the International Committee of the Red Cross relating to the crimes listed in article 8, paragraph 2(b)(i), (ii), (iii), (iv), (v), (vi), (vii), (ix), (xi) and (xii), of the Statute of the International Criminal Court, UN doc. PCNICC/1999/WGEC/INF.2/Add.1, p. 32.

²¹⁶ ICTY, *Prosecutor v. Kupreskic et al.*, IT-95-16-T, Judgment (Trial Chamber), 14 January 2000, para. 526.

²¹⁷ ICTY, Final Report to the Prosecutor Reviewing the NATO Bombing Campaign in the FRY, para. 52. For a critique of that aspect of the Final Report, see Benvenuti, note 177 above, pp. 517–518.

Challenges of an *ex ante* assessment of excessiveness

In the so-called ‘fog of war’, the issues discussed above are complicated by uncertainty with regard to the success and incidental effects of an attack. The question as to how uncertainty and magnitude interact in the determination of the anticipated military advantage and of the expected incidental harm has already been mentioned (pp. 11, 17–18 and 48). When evaluating excessiveness, uncertainty may exist on both sides of the comparison, and it has been suggested that what has to be balanced is not the respective values of the military advantage and incidental harm in the abstract but these values and their respective certainty or likelihood.²¹⁸ This could be the case, for example, when comparing a military advantage that is small but highly likely with less likely but much greater incidental harm.

Finally, as mentioned in the introduction, analysis of the application of the principle of proportionality must be made on the basis of the information available to the military commander at the time of the attack.²¹⁹ This is inherent in the use of the words ‘expected’ in relation to the causing of incidental harm and ‘anticipated’ in relation to the military advantage. This was emphasized by the ICTY Trial Chamber in *Galic*.²²⁰ *Ex post facto* reviews should ensure that the benefit of hindsight does not influence the analysis, especially where the collateral damage is already evident but might differ greatly from what was expected.²²¹ This may be more challenging for those decisions based on classified intelligence and on military advantage that a party to the conflict may not wish to disclose for the purposes of a review. It has also been suggested that if parties kept records of their decisions and released them after a certain period of time, it may be easier to analyse such decisions and, where necessary, expose them to external review.²²² Moreover, such records may allow for a more coherent understanding of the standards applied.

B) EXPERTS' COMMENTS AND DISCUSSION

Guiding questions

The following questions were submitted to the experts to guide the discussion:²²³

- Is the ‘reasonable military commander’ standard the correct legal standard to be applied?
- Do specific contextual factors influence the notion of excessiveness or the notion of the reasonable military commander assessing excessiveness and, if so, how?
- Does the standard change in relation to the position or situation of the person?
- Assuming that both the expected incidental harm and the anticipated military advantage are obvious, how do commanders and soldiers ascertain whether such harm is excessive?
- Does the frame of reference used for determining the relevant military advantage affect the frame of reference used to determine the relevant incidental harm?
- How does uncertainty factor into the analysis of excessiveness?

I. THE REASONABLE MILITARY COMMANDER STANDARD

Proportionality, excessiveness and reasonableness

The experts noted that reasonableness is the common law concept equivalent of the civil law concept of proportionality. Both are concepts that legal practitioners are accustomed to applying in their respective systems. The principle of proportionality in IHL, however, uses the word ‘excessive’ and not (dis)proportionate or (un)reasonable. On the face of it, the choice of the word ‘excessive’ rather than, for example, ‘disproportionate’ could be seen as a permissive standard, tilting the balance toward military necessity. While noting that the *travaux préparatoires* are silent on the choice of the word ‘excessive’, one expert reported that Prof. Kalshoven

²¹⁸ *Prosecutor v. Ante Gotovina et al.*, IT-06-90-T, Prosecution’s Public Redacted Final Trial Brief, 2 August 2010, para. 549.

²¹⁹ See note 11 above.

²²⁰ ICTY, *Galic case*, TC, para. 58, footnote 109.

²²¹ Henderson, note 85 above, p. 226.

²²² Sassòli and Cameron, note 132 above, p. 64.

²²³ The questions were developed with sub-questions, see Annex 2, Agenda.

had suggested it during the Diplomatic Conference when States were looking for a word other than ‘proportionate’ and that it had been retained without much discussion. It was also underlined that the object and purpose of the principle of proportionality is to protect civilians, as shown by the titles of AP I’s relevant chapters and the context of its adoption. Some experts considered this as weighing in favour of considerations of humanity and a protective understanding of the rule.

The experts agreed that the standard under IHL is ‘excessive’ and not ‘clearly excessive’, which is only relevant for international criminal law (ICL). Narrow interpretations of the war crime of disproportionate attack that could be developed by international criminal case law on the basis of the ‘clearly excessive’ standard should therefore not be deemed relevant for the IHL norm.

The experts underlined the importance of definitions and criteria. One expert made a comparison with judges, noting that they are also required to act reasonably and adjudge proportionality in various domains. But the judge must not only act reasonably, he or she must also show reasonableness in applying definitions and criteria established by the law. Similarly, for the implementation of the principle of proportionality and the assessment of excessiveness, the sole criterion cannot be ‘reasonableness’, otherwise the law would not provide much of a standard. It was noted in this regard that sociological evidence shows that a morally complex reality does not self-evidently arrange itself into intersubjective truth. Empirical research also shows that people with military expertise might have radically divergent reactions to similar scenarios. In this regard, some experts regretted the lack of commentaries or indications by States and militaries on the meaning of excessiveness, for example, in military manuals.

A subjective standard for commanders, but an objective standard for parties to the conflict

The experts held diverging views on whether the standard is an objective or subjective one. One expert considered that even if commanders have to act reasonably, rationally, honestly and in good faith, the standard is inherently subjective. Another expert objected that while it is correct that targeting decisions, like all human decisions, are inevitably influenced by subjective considerations, the law necessarily aims at a decision based upon objective criteria. It cannot possibly prescribe a subjective evaluation, and commanders are not trained to decide subjectively or simply instructed to act reasonably. Several avenues to objectify the assessment of excessiveness were suggested. They are discussed below (see pp. 66–69):

- legal education
- training and military exercises
- targeting procedures and processes
- availability of military lawyers
- technological support to help calculate expected incidental harm
- pushing the decision up the chain of command.

In this regard, a number of experts underlined the importance of the military art and processes to appropriately assess excessiveness when applying the principle of proportionality.

Another expert insisted that the principle of proportionality, and therefore the standard for excessiveness, is in the first place an objective criterion for States and other parties to an armed conflict – whatever difficulties there may be in defining it – and that the understanding of IHL should not be blurred by importing notions that belong to ICL. Following this remark, some experts suggested a distinction between the analysis of individual responsibility under ICL, which is necessarily subjective to some extent, and the obligation of the parties to a conflict under IHL, which was viewed to be a more objective standard. In this regard, the experts underlined that IHL obligations apply primarily to the parties to a conflict and that a violation could occur even in the absence of individual criminal responsibility. For example, it was deemed that the lack of seniority, training or experience of a particular commander would not necessarily reduce the responsibility of the party to a conflict that put this commander in a situation exceeding his or her expertise, resulting in a violation of the principle of proportionality – irrespective of whether the insufficient expertise of this commander could affect his or her individual criminal responsibility. To underline the objective and administrative nature of IHL, one expert recalled that parties to a conflict have the obligation to suppress all violations

of IHL and not just grave breaches,²²⁴ for example, by carrying out administrative investigations and making recommendations to remedy the situation.

The experts also recalled that the origin of the ‘reasonable military commander’ standard was ICL and not IHL. One expert felt it would be clearer to remove the notion of the ‘military commander’ from the IHL standard. In this expert’s view, the standard for IHL is reasonableness or proportionality, and the reference to ‘military commander’ is an import from ICL that fails to acknowledge the independent existence of the IHL norm. Several experts considered, however, that the reference to ‘military commander’ is also relevant for the IHL standard because, even under IHL, reasonableness is to be assessed from the perspective of the military decision-maker – namely a person trained and experienced in the military art. Furthermore, Articles 86 and 87 AP I put the onus for respect of IHL on the military commander, including with regard to compliance by low-level officers and soldiers.

The same standard for all commanders and soldiers?

In relation to the level of the commander, the experts recalled that every commander – even every soldier – is bound by the principle of proportionality, as they are all agents of the State or a party to the conflict. Therefore, the question is rather the extent to which the rank of the commander might affect the implementation of the principle. On this point, it was noted that a commander’s rank and role may affect what would be reasonable for a commander similarly situated.

The standard and the assessment discussed throughout the meeting were seen as mostly relevant for commanders taking decisions on pre-planned operations. In dynamic targeting, proportionality assessments are also carried out but in a compressed timeframe, with less intelligence and therefore not necessarily through the same processes (see below). The extent to which the principle applies to soldiers other than commanders was debated. Several experts recalled that the rule had to be applied by all decision-makers at any level of the military forces, from the commanding officer taking decisions on pre-planned attacks to those actually pulling the trigger. This stems from the principle of proportionality itself (Article 51(5)(b) AP I), with every soldier being an agent of the State and the principle of proportionality binding on the State. It also stems from the obligation to take constant care (Article 57(1) AP I) and from the obligation to suspend or cancel an attack (Article 57(2)(b) AP I). For example, if a pilot or an infantry soldier realizes, upon arriving at the target, that there is an unexpected or larger presence of civilians than initially expected, the principle of proportionality must be reassessed. It was, however, noted that today’s war pilots do not necessarily see the target, and their bombs strike targets whose coordinates have been pre-programmed. In addition, infantry soldiers would be more inclined – to the extent feasible – to suspend and report according to their rules of engagement and other orders than to carry out the type of assessment discussed during this expert meeting; the assessment of the proportionality of the operation should normally take place earlier.

The same standard for all situations?

The experts agreed that a proportionality assessment has to be carried out for all targeting, that is, deliberate as well as dynamic targeting, including against targets of opportunity or as fire support to troops under enemy fire. In relation to dynamic targeting, one expert noted that, in his experience, more targets of opportunity had been called off than engaged. Conversely, the military advantage of fire support to troops under enemy fire was said to be high by definition, as the operation’s aim is to protect the belligerent’s own soldiers and allow them to progress with their mission. It was noted that the concern that the supporting fire could further harm the very troops it aimed to support constituted a restraining element with regard to the amount of fire-power used in such support. In all these cases, all the experts agreed that the party is required to assess the military advantage and conduct a collateral damage estimation (CDE), even if it is with the information available at the time of the calculation, and then evaluate the excessiveness of the latter compared to the former. The experts recalled that military manuals also include references to the principle of proportionality when discussing dynamic targeting.

²²⁴ See para. 3 of Art. 49/50/129/146 common to the four 1949 Geneva Conventions and Art. 86(1) AP I.

The experts generally considered that the situation has to be analysed differently with regard to troops that are themselves under fire. It was recalled that the principle of proportionality applies in principle to all attacks, including attacks ‘in defence’ (see Article 49 AP I) by troops under fire. However, while IHL principles cannot be disregarded altogether, for example, where civilians are visibly present, being under enemy fire obviously has a significant impact on the feasibility of taking precautions, notably in terms of identifying the source of fire and assessing the expected incidental civilian harm.

The experts explained that in practice, when under enemy fire, soldiers would primarily aim to engage the threat in order to get out of the situation and save their lives. Discussing the situation of a patrol being ambushed in an urban area, the experts noted that soldiers in such situations often cannot even venture their heads out of the vehicle to look for and assess the presence of civilians because they risk being shot dead if they do. Instead, they are trained to aim shots at the source of enemy fire, identified as accurately as possible in the circumstances, and obviously not to target civilians if their presence is noted. In any case, during exchanges of fire in built-up environments, civilians are most often invisible as they try to take cover behind walls. Even in the case of retreat, whether as the best option to save their lives or to avoid returning fire to neutralize the source of enemy fire if civilians are known or suspected to be present around it, forces under fire might have to resort to suppressive fire. They will be using the weapons at their disposal, typically direct fire weapons in such cases. Thus, while there may be exceptions where it is feasible (for example, when protected behind cover), troops under enemy fire typically have neither the information nor the opportunity to carry out a proportionality assessment that balances military advantage and incidental harm. However, it was also noted that soldiers would do some sort of proportionality calculation very quickly in their head, for example, when using a grenade launcher. Indeed, as noted above, the principle of proportionality remains applicable even when circumstances such as being under enemy fire significantly impact the feasibility of the precautions that can be taken (see discussion on self-defence in session 2 above).

A proper – even if very hasty – proportionality assessment can better be done at the tactical operations centre, which provides analysis in the case of calls for fire support. In the tactical operations centre, officers and staff typically look very quickly at the direction in which the supporting fire would be shot, including whether it is a populated area, whether there are objects on a no-strike list or other protected objects in the vicinity, and evaluate the incidental effects expected to be caused by the type of weapons system considered, for example, fire supported by artillery. Usually, the decision is then made by the leader of the operations centre, based on the advice provided by the artillery specialist, the legal adviser and other available experts.

II. CONTEXTUAL FACTORS

The experts discussed whether the notion of excessiveness or the application of the principle of proportionality more generally are influenced by contextual factors, such as:

- military cultural and doctrinal differences
- the type of conflict (IAC vs NIAC; ‘traditional’ vs asymmetric or counter-insurgency; high-intensity vs low-intensity)
- the type of party (State vs non-State armed group)
- other factors, such as control of the territory.

It was suggested that contextual factors could theoretically influence the assessment in the following ways:

- turn something that would not otherwise have been a military advantage into one
- increase or decrease the weight of something that is a military advantage anyway
- turn something that would not otherwise have counted as incidental harm into relevant incidental harm
- increase or decrease the weight of something that counts as incidental harm
- increase what is feasible in terms of gathering information to make these parameter judgements
- increase what is feasible in terms of mitigation.

Influence of the context on the incidental loss of civilian lives

The experts started by discussing incidental loss of civilian life. They underlined the difficulty of the decisions made by soldiers on the battlefield. Society relies on them to carry out this most dangerous activity – war – and tasks them with making life-and-death decisions and taking the lives of other human beings.

Several experts expressed the view that ‘a life is a life’ and that all civilian lives weigh the same in terms of incidental loss under IHL – whether they are old or young or associated with the party carrying out the attack, with the enemy or with neither – noting that this holds true within the same conflict and across conflicts (while the military advantage in relation to which this harm is assessed is indeed contextual). No expert expressed a different view, save for one who suggested medical personnel as an exception. This expert argued that medical personnel could ‘weigh more’ than other civilians in view of their function, which is to afford medical care to, and thus possibly save the lives of, other civilians. This function is recognized by IHL through the special protection afforded to such personnel. This suggestion was met with scepticism, although one other expert remained open to the idea that medical personnel could be an exception.

Apart from this possible exception, the experts considered and generally rejected the idea that IHL would consider an incidental loss of civilian life differently because of the person’s role, their ‘value’ in the eyes of society (for example, a cultural or spiritual leader, who could be considered differently when it comes to genocide) or because of moral considerations (such as a kindergarten as against a prison). This was viewed as far too granular for what IHL could require from belligerents during hostilities. Furthermore, this could lead to a slippery slope towards considering that the lives of some civilians ‘weighed less’, for example, in certain contexts individuals belonging to lower castes, ethnic minorities, women, collaborators, etc. One expert nevertheless wondered whether different societies or cultures had a different institutional perception of the value of life at a generic level, taking the example of the death penalty that exists in some countries and not in others, and if so what it would mean for incidental civilian loss of life under IHL. A few experts noted however that beyond the law, ethical considerations could indeed lead commanders to be more hesitant to attack when expecting incidental harm to children, for example.

Influence of the context on assessing the military advantage

Conversely, the experts agreed that the context of the armed conflict strongly influences consideration of the military advantage. The destruction, capture or neutralization of an identical objective can offer a different military advantage depending on the conflict. This in turn means that the level of incidental loss of life that may be lawfully caused by the destruction of an identical military objective (for example, a tank) can vary depending on the context, even under the view that all civilian lives are equal under IHL. As discussed in the first session, it is not the legal classification of the conflict that matters in this regard, but the factual reality. Being engaged in a traditional conflict or a counter-insurgency campaign or being the weaker party in a highly asymmetric conflict can affect the value of the military advantage offered by a particular operation, but the question of whether this conflict is an IAC or an NIAC does not matter as such.

One expert illustrated the importance of the context by building upon scenario 2 discussed during the first session (see p. 22): killing this commander in a traditional IAC conflict, where the commander could be very important, might offer a higher advantage – and possibly allow the incidental killing of the civilians in the taxi – than the same action in a counter-insurgency NIAC, where the attack might hurt the attacking belligerent’s own cause, which would lead to the military advantage being very low and might therefore render the attack disproportionate. With regard to asymmetric conflicts, a couple of experts underlined the importance of taking proper account of the situation of the weaker party, often an organized armed group, in weighing the military advantage of its operations. The military advantage offered by attacks carried out by a weaker party should not be dismissed even if it has little effect on the overall balance of power. Another expert, however, cautioned against opening the door to going beyond what had been discussed during the first day with regard to the relevance of the psychological effect of attacks (see pp. 21 ff.).

Focusing more on the evaluation process than the standard as such, one expert noted that the time at which the attack occurs within the conflict matters. Indeed, *ex ante* expectations in terms of the effects of the attack (for the military advantage and incidental harm) must be informed by past experience, in particular

the effects of previous attacks earlier in the same conflict. For example, when battle damage assessments of attacks show that the effects do not correspond to the *ex ante* expectations, these expectations ought to be modified for future attacks, especially when there is a pattern of deviation.

One expert pointed to another situation in which the context could affect the assessment of incidental civilian loss of life, namely when the attack expected to cause this loss of life aims to foil an (unlawful) enemy attack against civilians. In this expert's view, in such situations the proverbial difficulty of the principle of proportionality being about comparing apples and oranges disappears because both sides would be assessed in terms of civilians lives: those expected to be incidentally harmed by the belligerent's own attack on the one hand, and those expected to be saved by foiling the enemy attack on the other. However, the question of how to balance them in relation to each other remains (see pp. 30–31 above).

Influence of the context on assessing incidental damage to civilian objects

It was also generally agreed that the context matters with regard to incidental damage to objects in many ways. For example, incidental damage to essential civilian infrastructure could be considered differently depending on the availability or lack of such infrastructure in a particular context. Incidental damage to churches (putting aside the protection granted by the rules on cultural property) could be considered differently depending on how religious the population is; even damage to bare land could amount to relevant incidental harm if, in a particular culture, this specific area of land is used by the population for worship.

The relevance of the context in terms of the feasibility of avoiding or minimizing damage to objects, of assessing such damage before the attack (through information gathering and the CDE methodology) and of possibly mitigating against it after the attack was considered to vary depending on the capabilities of the party to the conflict concerned and on the extent of its knowledge of and control over the area in question.

Universality of the standard beyond differences in culture and military policies

It was argued that the idea that cultural considerations or military policies and doctrines could affect the relevant legal standard would lead to absurd results. It would indeed mean that a military that sets the bar higher on avoiding incidental civilian harm would in the end be legally held to a higher standard than a military that continuously disregards incidental civilian harm, which could continue doing so legally.

Some experts underlined the importance of standardized policies, doctrines and training, which ensure a coherent understanding of the principle or proportionality among allies. Requirements in terms of commitments and training before joining coalitions and the actual practice of combined operations demonstrate such a convergence of views.

Other experts, however, shared experiences of having received radically different answers to the same hypothetical scenario from different militaries. In this regard, one expert noted that different militaries might have different kinds of training, expertise and knowledge of IHL. This expert gave the example of countries where, after a civil war, rebel forces became – or were incorporated into – the regular State military forces. Officers and soldiers in these forces would not have gone through the elaborate training normally implemented in regular military forces. This reality might impact their ability to implement the law, including with regard to assessing the proportionality of an attack. Coming back to the benefit of coalitions in setting shared standards, this expert noted that such troops ought to be – and in practice have been – trained or retrained in IHL upon becoming part of a coalition.

III. ASSESSING EXCESSIVENESS

The experts noted the difficulty in assessing and discussing what is 'excessive'. They underlined the importance of training and education, processes and various tools to support decision-making.

To underline the importance and role of processes, one expert drew a comparison with judicial guarantees, which are required under international law for a trial to be considered fair, that is, for justice to be properly delivered in an impartial manner, despite the fact that most people would usually deem judges to be reasonable and impartial. Similarly, commanders' decisions must be guided and framed through the necessary

processes to ensure that the outcome respects the balance required by IHL between military necessity and considerations of humanity.

Conceptually, the process of assessing excessiveness can be broken down in two phases. First, values are assigned to the concrete and direct military advantage anticipated and to the expected incidental civilian harm. The second phase is a comparison between the two sides of the balance, namely an assessment of excessiveness.

Assigning values to incidental civilian harm

With regard to the first step, it was noted that, in practice, decisions by commanders to assign values in relation to incidental harm involve strong ethical positions. While the experts reasserted the view expressed earlier in the meeting that under IHL all civilians have a similar value in terms of incidental harm (see p. 66 above), several experts argued that moral or ethical considerations will also guide commanders' decisions. For example, there is an instinctive bias for most soldiers and commanders to set the bar higher and err on the protective side when expected incidental harm to children is involved. Some experts wondered whether this might also be the case for other vulnerable groups, such as the mentally ill, elderly or wounded and sick, possibly because these individuals are seen as being less able to cope with the harm. On the other hand, one expert noted that innocence or guilt are moral or ethical concepts that should not influence the application of the IHL rules on the conduct of hostilities. Indeed, while one party could see conscripts as being as 'innocent' as any other human being, they are nevertheless lawful targets under IHL.

The situation was viewed differently for objects, where their value as a matter of law was considered to be linked to their usefulness to civilians. For example, a school will be given a higher value than a shop, houses more weight than garages, etc. In addition, apartments where six families are living will be valued more than the same apartments where only two families live (assuming that all civilians are out at the time of the strike).

The experts agreed that, under IHL, civilian life would be valued higher than civilian property. For example, it was suggested that if a belligerent could spare 10 civilians by using a weapon that would destroy 30 stores, every commander would chose to do so. However, the experts disagreed on whether, exceptionally, property damage could be so serious as to 'weigh' more in terms of incidental civilian harm than a single life. One expert considered it could be the case depending on the circumstances, while another discarded the idea even for specially protected or significant property, such as cultural property.

Assigning values to military advantage

It was recalled that the value given to a military advantage would largely depend on the context. In some conflicts, gaining ground may be more important than killing enemy forces, while in another conflict destroying an enemy rockets arsenal may take precedence. Recalling scenario 4, the value of the military advantage of killing the two snipers will be lower if the soldiers are protected (for example, if they are in an armoured vehicle) than if they are not. One expert took the example of an attack against the military leader of an enemy organized armed group: the military advantage of killing him or her would depend on the manner in which it would affect future enemy military operations (and not what he or she might have done in the past), for example, the threat this enemy commander represents to the soldiers of the party carrying out the attack or to civilians, the disorganization that his or her death would bring to enemy operations, whether this disorganization could be exploited, whether the commander could be easily replaced, etc.

Understanding excessiveness through education and training

The experts recalled the importance of professional military art and agreed that education and training are key to this. Soldiers and commanders undergo education and scenario-based training, which include lists of factors and criteria. Such education and training aim to develop an understanding of what their State and military consider to be reasonable decisions in the application of the principle of proportionality. The experts observed that, in their experience, such training on scenarios and comparing views with others contributes to the development of the necessary mind-set to carry out proportionality assessments, common yardsticks and a shared understanding of the standard. Comparing such dissimilar categories as military advantage and

incidental harm, which is initially not at all intuitive, becomes a more natural process. One expert noted in this regard that it is not possible to humanize war, but it is possible to humanize commanders to reduce the harm that wars cause.

This does not mean that all commanders – even within the same military – will reach the exact same decisions. Similarly, the fact that individual commanders would assign different values or assess excessiveness differently was considered by several experts as not necessarily indicating unreasonableness. Indeed, commanders will share a common understanding of the outer limit of what is reasonable and what is not. One expert noted the importance of ensuring that commanders do not overvalue or undervalue one side of the equation at the expense of the other in a prejudiced manner. Coming back to the example of the military leader of the enemy armed group, one expert discussed the specific scenario of an attack expected to kill Al-Baghdadi, leader of the Islamic State group, and two junior commanders, together with around 15 civilians, destroying the house they were all in and damaging a nearby school. This expert felt that there was no straight answer on the proportionality of this attack. While one expert wondered whether this demonstrated the imprecision of the legal standard, most felt that the law could operate while leaving practitioners a margin of appreciation, which was compared by another expert to the margin of appreciation found in European human rights law.

Processes

The experts also underlined that process is essential in supporting commanders in reaching reasonable decisions. This is well established with CDE methodologies for one side of the equation. Some process to evaluate military advantage can also be established, for example, requiring that a strategic military advantage be assessed by a strategic-level commander. Higher-level approval can also be required for the use of specific types of munitions. The experts noted that various militaries have standing orders in current operations setting a specific number of expected incidental civilian casualties above which higher approval is required, except for situations of troops under enemy fire. In recent conflicts, this specific number has decreased from a double-digit to a single-digit figure and sometimes to zero. Such orders were deemed by some experts to go beyond the legal requirement because they require higher approval whenever the established maximum number is reached and therefore even in situations where the importance of the military advantage makes it evident that the expected incidental harm is not excessive. As these procedures do not necessarily exist for all States participating in a coalition, it has happened that the military of a State without such procedures carried out the mission instead of the military that would have required higher authority approval.

Some experts noted that pushing the decision up the chain of command just moves the problem, without addressing the issue of the lack of definition or criteria. Several experts underlined, however, that it had many advantages, such as the greater experience, training, expertise, seniority and broader view of the higher commander; the availability of more information and additional resources, including more support in terms of expert staff (such as legal advisers); greater distance from the battlefield, which decreases the stress factor and to some extent removes the emotional aspect or bias from the decision, for example, the risk of proceeding with an attack because of the effort that has been put into tracking a specific target when the attack should have been deemed disproportionate; the inherent restraining factor of the process itself and the need to put together the targeting folder; and the need to articulate very clearly a sufficiently important anticipated military advantage. This was said to ensure more deliberate and coherent decisions.

With regard to targeting procedures, the experts noted an apparent difference in the order in which the US and some European armed forces look at the principle of proportionality and the obligation to take all feasible precautions, notably in the choice of means and methods of warfare, to avoid or minimize incidental civilian harm. It was noted that in the US targeting process, proportionality is assessed at the end, after all feasible precautions have been taken to avoid or minimize incidental harm. In the European targeting process, proportionality was said to be assessed early on, before taking precautions to avoid or minimize incidental harm, and then repeatedly throughout the process, including as a last step. Indeed, precautions taken to avoid or minimize incidental harm might also affect and reduce the military advantage, for example, if striking at night would help avoid incidental civilian harm but also mean that fewer enemy fighters are present in the military objective at the time of the strike or when a building that is a military objective

is only partly destroyed to retain part of the building to shield neighbouring civilians or civilian buildings from the effects of the attack. In any event, all the experts agreed that the last step has to be to assess (or reassess) proportionality, which is provided for in both processes. Some experts considered the US process to be better in terms of economy of resources, while others noted that it might carry a higher risk of collapsing proportionality into necessity, namely considering that the attack is proportionate on the mere basis that all feasible precautions have been taken.

The experts noted that targeting assessments and decisions are usually documented, at least by technologically advanced militaries. Many records may therefore exist within the military on the interpretation of excessiveness in specific circumstances. Some experts supported the idea that States should make them public, at least once the armed conflict is over. Doing so would help to demonstrate the seriousness with which the State had applied IHL, which would be beneficial for this State and an encouragement to others to also take the process seriously. Other experts believed that making such assessments public would reveal too much to potential future enemies, giving them the opportunity to manipulate such information, and that they should therefore remain classified even once the armed conflict is over.

Tools to support decision-making

Technologically advanced militaries carry out CDE through a very sophisticated process which factors in the munitions that are going to be used, the location, the time, whether it is a built-up area, whether it is crowded, etc. The commanders understand, however, that the CDE process is not a proportionality assessment but rather a scientific and statistical tool supporting the evaluation of the incidental harm side of the assessment.

Other tools to support decision-making were described, such as a 'matrix' where collateral damage and military advantage are ranked on a scale of low, medium or high or using other more detailed categories, with the outcome that an attack expected to offer, for example, a low military advantage while causing high incidental harm would immediately be deemed excessive. Other specific results in the matrix might require pushing the decision up the chain of command. Some experts confirmed that armed forces have for many years used such matrices and others where each side of the balance is assessed using figures rather than descriptive terms, such as low, medium and high. These and other tools were seen by many experts as being very useful to support decisions but not to replace decisions made by individual commanders.

Finally, the experts discussed the utility of checklists and techniques, tactics and procedures (TTPs). One expert cautioned that checklists can take on a life of their own and risk leading commanders to look only at whether all the checklist boxes have been ticked, without taking a step back to review and assess the overall situation. However, most of the other experts viewed checklists as very useful tools, whose value more than counter-balances the risk they might represent, provided that they are used to support and not replace decision-making. While checklists are not an end in themselves, they ensure that commanders look at the factors included in the checklist. The experts noted that TTPs constitute another important tool to improve conduct on the battlefield. Several experts cautioned against writing checklists or TTPs into the law because checklists can never be exhaustive or anticipate every situation in every context, and TTPs might also need to be contextualized.

ANNEX 1: LIST OF PARTICIPANTS

FIRST NAME	FAMILY NAME	TITLE/FUNCTION (AT TIME OF MEETING)	COUNTRY OF ORIGIN
Experts			
Mr Yutaka	ARAI	Professor, International Law and International Human Rights Law, Brussels School of Int'l Studies, University of Kent, Brussels	Japan
Mr James	BURKE	Colonel, Director of Engineering, Irish Defence Forces	Ireland
Ms Janina	DILL	Assistant Professor, Department of International Relations London School of Economics	Germany
Mr Robin	GEISS	Professor, Chair of International Law and Security University of Glasgow – School of Law	Germany
Mr Mark	GENDRON	Colonel, Deputy Judge Advocate General Operational Law Canadian Armed Forces	Canada
Mr Juan Carlos	GOMEZ RAMIREZ	Brigadier General, Colombian Air Force	Colombia
Mr Levon	GRIGORYAN	Chief Specialist, International Legal Support Desk, Defence Policy Department, Ministry of Defence, Republic of Armenia	Armenia
Mr Richard	GROSS	General (ret.), Senior Fellow, Columbia Law School	United States
Ms Françoise	HAMPSON	Barrister and Emeritus Professor, Law School and Human Rights Centre, University of Essex	United Kingdom
Mr Richard	JACKSON	Colonel (ret.), Special Assistant to the US Army Judge Advocate General for Law of War Matters	United States
Mr Piyachart	JAROENPOL	Colonel, Director Legislation Division, Office of Judge Advocate, Royal Thai Armed Force	Thailand
Mr Adebayo	KAREEM	Senior Legal Officer and Head of Protection Unit, African Union Mission for Somalia (AMISOM)	Nigeria
Mr Qiang	LI	Associate Professor, Director of Military Law Institute, China University of Political Science and Law	China

Mr Eliav	LIEBLICH	Associate Professor, The Buchmann Faculty of Law, Tel Aviv University	Israel
Ms Peggy	MCGREGOR	Commissaire, Legal Adviser, Operational Law Department French Ministry of Defence	France
Ms Jasmine	MOUSSA	Assistant Professor of Law, American University in Cairo	Egypt
Mr Noam	NEUMAN	Colonel, Head of the International Law Department, Israeli Defense Forces	Israel
Mr Marco	SASSÒLI	Professor, Director of the Department of International Law and International Organization, University of Geneva	Switzerland
Mr Darren	STEWART	Colonel, Assistant Director of Administrative Law, British Army	United Kingdom
Mr Andrew	THOMSON	Commander, Director of International and Operational Law, Office of the Judge Advocate General, Canadian Armed Forces	Canada
Mr Jeroen	VAN DEN BOOGAARD	Assistant Professor Military Law, Netherlands Defence Academy	Netherlands

ICRC

Mr Knut	DÖRMANN	Chief Legal Officer and Head of the Legal Division, Geneva	
Mr Jean-François	QUÉGUINER	Head of Unit, Thematic Legal Advice Unit, Legal Division, Geneva	
Mr Laurent	GISEL	Legal Adviser, Legal Division, Geneva	
Mr Thomas	DE SAINT -MAURICE	Legal Adviser, Legal Division, Geneva	
Mr Andrew	CARSWELL	Senior Delegate (Canada), Ottawa	

Canadian Red Cross Society

Ms Catherine	GRIBBIN	Senior Legal Adviser for International Humanitarian Law	
--------------	---------	---	--

Université Laval

Ms Julia	GRIGNON	Professor, Faculty of Law	
Ms Justine	LEVASSEUR	Master's degree student, Faculty of Law	
Ms Sasa	GLUSAC	Master's degree student, Institute for Advanced International Studies	

ANNEX 2: AGENDA

DAY 1

08.15 - 08.45 *Registration and Coffee*

08.45 - 09.15 **Welcome**
Prof. Julia Grignon

Introductory remarks on current challenges in the interpretation and application of the principle of proportionality in the rules governing the conduct of hostilities
Dr Knut Dörmann

PART I MILITARY ADVANTAGE

09.15 - 09.25 **“Concrete and direct military advantage anticipated”**
Introductory remarks

SESSION 1 DEFINING THE RELEVANT ADVANTAGE: CONCRETE, DIRECT AND MILITARY

09.25 - 09.40 **1st scenario**
Introductory remarks by two experts

09.40 - 09.55 **2nd scenario**
Introductory remarks by two experts

09.55 - 10.10 **3rd scenario**
Introductory remarks by two experts

10.10 - 10.40 *Coffee break*

10.40 - 12.30 Discussion among the whole group of experts

Guiding questions for the discussion

1. What do “concrete”, “direct” and “military” mean?

In particular:

- a. What are the requirements of each notion? What type of advantages do they cover – or conversely exclude – from the relevant advantages under the proportionality principle?
- b. Is it possible for long-term military consequences to be considered “concrete” and “direct”? If yes, can you name some examples? Conversely, is there a point – and if so where – at which the long-term military consequences are not sufficiently concrete and direct to be relevant for the analysis? If yes, can you name some examples?
- c. Should the concept of “concrete and direct military advantage” be interpreted differently according to the type of conflict, for example, in the context of asymmetric conflicts compared to more “traditional” conflicts?

- d. Is “tactical deterrence” a relevant military advantage (for instance, directing an attack against an enemy sniper in a residential building that would also deter snipers in adjacent buildings)?
- e. Is thwarting or preventing an attack against civilians under the party’s control a relevant military advantage?
- f. Assume that a State has a very effective anti-missile defence system protecting its territory. How does the availability of such a defence system affect the military advantage anticipated from an attack against the enemy missile launching pads, considering that the capacity of these missile systems to effectively strike their target is already rendered almost useless by the defence system?

2. How do the tactical, operational, strategic and political levels influence the assessment of the relevant military advantage?

Notably:

- a. Is it possible for an advantage anticipated at either the tactical, operational, strategic or political level to constitute a “direct and concrete military advantage”?
- b. If yes, which level of command can/should take these considerations into account? Does it change along the chain of command? For instance, can the top command echelon take into consideration a wider array of advantages?
- c. Can military advantage be assessed in relation to the specific unit’s *mission*?
- d. How important are the higher commander’s intent and mission when assessing the “direct and concrete military advantage” of specific attacks? Does this answer differ depending on the level of the decision-maker?

3. What are the meaning and limits of the notion of “the attack as a whole” (as per the declaration of NATO States)?

Notably:

- a. How does one assess the concrete and direct military advantage of a diversion attack?
- b. Does this differ from the notion of “concrete and direct *overall* military advantage” contained in the Rome Statute and, if so, how?

4. Are military disadvantages that are anticipated to be caused by the attack relevant when assessing the military advantage of an attack?

For example, when past experience in this conflict has shown that civilian casualties will reduce the amount of information that the population will share on the enemy or will inspire more civilians to join the enemy or become its sympathizers?

Time permitting

5. What is the meaning of “anticipated” and how should uncertainty be dealt with?

In particular:

- a. How should one account for a military advantage that is anticipated but whose importance is unclear?
- b. How does one account for a military advantage which may occur but remains uncertain? For example, if the success of the operation is uncertain because the decision-maker is unable to assess the enemy’s most likely course of action in response?
- c. How does one account for uncertainty regarding one’s own force’s future intentions?

6. Is there a difference between “concrete and direct military advantage” and “definite military advantage” (as per the definition of military objective) and, if so, how does it differ?

12.30 – 14.00 Lunch

SESSION 2 RELEVANCE OF FORCE PROTECTION AND PROTECTION OF CIVILIANS FOR THE PRINCIPLE OF PROPORTIONALITY

- 14.00 – 14.15 **4th scenario**
Introductory remarks by two experts
- 14.15 – 14.30 **5th scenario**
Introductory remarks by two experts
- 14.30 – 15.30 Discussion among the whole group of experts

Guiding questions for the discussion

1. What is the relevance of force protection considerations for the principle of proportionality in situations involving “troops in contact” operations?
2. Should one distinguish between the military advantage anticipated from attacks carried out by troops under fire in their own defence and the military advantage anticipated from attacks conducted by friendly forces – not themselves under fire – in support of these troops?
3. What is the relevance of force protection considerations for the principle of proportionality in situations that do not involve “troops in contact” operations?

Time permitting

4. Is the military advantage of neutralizing an enemy’s military capacity different when this capacity is used to target civilians instead of, or in addition to, targeting lawful targets?

15.30 – 16.00 *Coffee break*

PART II INCIDENTAL HARM

- 16.00 – 16.10 **“Expected incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof”**
Introductory remarks by one expert

SESSION 3 RELEVANT TYPES OF INCIDENTAL HARM

16.10 – 16.50

Incidental illness and mental harm

Introductory remarks by one expert

Discussion among the whole group of experts

Guiding question for the discussion

- 1. Are incidental illness and mental harm relevant considerations when conducting a proportionality analysis? If yes, to what extent and how can such harm be anticipated and assessed?**

16.50 – 17.40

Civilian use of a “dual-use object”

Introductory remarks by one expert

Discussion among the whole group of experts

Guiding question for the discussion

- 2. Assume that an object fulfilling the definition of military objective is also used for civilian purposes. To what extent is the incidental damage caused to the (partial) use of the object for civilian purposes relevant under the proportionality principle?**

DAY 2

PART II INCIDENTAL HARM (CONTINUED)

SESSION 3 (CONT'D) RELEVANT TYPES OF INCIDENTAL HARM

08.30 – 09.10 **Displacement and economic losses**

Introductory remarks by one expert

Discussion among the whole group of experts

Guiding question for the discussion

3. **Assume that an attack on a lawful target incidentally causes displacement and economic losses to civilians. To what extent are these consequences relevant under the proportionality principle?**

SESSION 4 REVERBERATING EFFECTS

09.10 – 09.30 **1st scenario**

Introductory remarks by three experts

09.30 – 10.15 Discussion among the whole group of experts

Guiding questions for the discussion

1. **When do reverberating effects become too remote to be foreseeable? Are there limitations with respect to time, scope or location when considering expected reverberating effects under the proportionality principle?**
2. **Is the possibility to mitigate or repair damage relevant to the incidental harm assessment?**
Notably:
 - a. If the party that conducts the attack also expects that it can itself mitigate or repair the damage caused after the operation (because it anticipates that it will seize the terrain and take control of the area)?
 - b. If the party conducting the attack knows that the enemy and/or the affected civilian population has the means to mitigate or repair the damage and expects that they will do so shortly after? What about if the party conducting the attack knows that the enemy will not mitigate or repair? Or when it is not clear whether the enemy will do so?
 - c. If the party that conducts the attack could provide the enemy and/or the civilian population with the means to mitigate or repair?

Time permitting**3. When are reverberating effects expected/foreseeable and how should uncertainty be dealt with?**

In particular, how can one account for reverberating effects:

- a. Which are expected but whose magnitude is unclear?
- b. Which may occur but remain uncertain?

4. What level of information “available to the commanders” is required?

- a. According to a number of declarations made by States, decisions to execute an attack must be based on “information from all sources which is available to the commander at the relevant time”. What does this mean?
- b. Is there an obligation to proactively seek out and collect information on reverberating effects (potential and/or expected) when the magnitude of such effects is undefined? If so, what is the extent of this obligation?
- c. Is there an obligation to seek out technical expert advice on reverberating effects (engineer, epidemiologist, etc.) during the targeting process as well as for other decisions involving weapons? If so, what is the extent of this obligation?
- d. In this context, how does one deal with those reverberating effects that, while immediate, also require significant technical expertise to foresee (e.g. an attack on a building causes an entire street to blow up because it shares gas infrastructure with other buildings)?
- e. What level of available intelligence would be sufficient? What is the standard of certainty with respect to such intelligence that must be reached?

10:15 – 10:45 *Coffee break*

10.45 – 11.40 **Session 4 (cont'd) | Reverberating effects**

PART III THE REASONABLE MILITARY COMMANDER’S ASSESSMENT OF EXCESSIVENESS

11.40 – 11.50 **“... excessive in relation to ...”**
Introductory remarks by one expert

11.50 – 12.30 **The reasonable military commander standard**
Introductory remarks by one expert

Discussion among the whole group of experts

Guiding question for the discussion:

- **Is the “reasonable military commander” standard the correct legal standard to be applied?**

Notably:

- Are there substantial differences between different formulations found in military manuals or international case law?
- How can its subjective and objective components be better understood and articulated?

12:30 – 14.00 *Lunch*

14.00 – 14.45

Contextual factors

Introductory remarks by one expert

Discussion among the whole group of experts

- **Do specific contextual factors influence the notion of excessiveness or the notion of the reasonable military commander assessing it and, if so, how?**

For example:

- Cultural and doctrinal-military diversity differences?
- The type of conflict (IAC vs NIAC; “traditional” vs asymmetric or counter-insurgency; high intensity vs low-intensity)?
- The type of party (State vs non-state armed group)?
- Other factors, such as control of the territory?

14.45 – 15.30

The relevance of the commander’s position or situation

Introductory remarks by one expert

Discussion among the whole group of experts

- **Does the standard change in relation to the position or situation of the person?**

In particular, does it change according to:

- The circumstances of decision-making (for instance, under fire vs planning stage)?
- The level of the commander in the military hierarchy and/or the level of decision-making (tactical, operational, strategic)? In that regard, who is bound by the principle of proportionality? Does it apply only to those planning or conducting an attack or to any combatant in a position to carry out such an assessment? How can soldiers assess the excessiveness of incidental harm in relation to the expected military advantage in view of “the attack as a whole”?

15:30 – 16.00

Coffee break

16.00 – 16.45

Assessing excessiveness

Introductory remarks by one expert

Discussion among the whole group of experts

- **Assuming that both the expected incidental harm and the anticipated military advantage are obvious, how do commanders and soldiers ascertain whether such harm is excessive?**

In particular:

- a. What factors must “a reasonable military commander” take into consideration when assessing the possible excessiveness of the expected incidental harm with the concrete and direct military advantage anticipated?
- b. Are there strategies or tools that can assist decision-makers (e.g. training, doctrine, risk assessment matrix, military decision-making tools and processes, level of decision-taking, standard operating procedures)?
- c. When weighing the expected incidental harm, should a distinction be made between persons and objects? Should a particular weight be ascribed to certain individuals (e.g. child vs adult) or to various objects (e.g. medical facility vs house vs road vs environment)?

16.45 – 17.30

Additional question for the discussion, time permitting (or items left over from previous sessions)

- **Does the frame of reference used for determining the relevant military advantage affect the frame of reference used to determine the relevant incidental harm?**

In particular:

- a. If one considers the military advantage to be derived from the “attack as a whole”, does that also mean that one must also consider the relevant incidental harm resulting from the “the attack as a whole”?
- b. How does one account for the cumulative incidental harm expected from several distinct attacks?

- **How does uncertainty factor into the analysis of excessiveness?**

When evaluating “excessiveness”, is the assessment influenced – and if so how – by:

- a. The likelihood of either causing the expected incidental harm or securing the military advantage anticipated?
- b. The level of certainty as to the status of the person or object that is expected to be incidentally harmed (e.g. “certainty” of protected status vs likely to be protected though unclear)?

17.30 – 17.45

Closing remarks

Dr Knut Dörmann

SESSION 1 DEFINING THE RELEVANT ADVANTAGE: CONCRETE, DIRECT AND MILITARY

Scenario 1

Alpha is in an armed conflict with Bravo. At present, Alpha forces control the area surrounding Beaville, one of the main cities of the region. However, Beaville itself is controlled by Bravo, but little fighting is actually occurring between the Alpha and Bravo forces in the area at this moment.

Bravo operations' command post (the command post) in Beaville is located within a densely populated area in the centre of the city. Alpha higher command has ordered that his commanders refrain from launching an attack against the Bravo command post as it anticipates the attack to be disproportionate. Alpha forces are looking for alternative ways to disrupt the command post. Alpha forces have identified a power station on the outskirts of Beaville, operated by Bravo's armed forces. Alpha's intelligence indicates that this power station provides electricity to Bravo operational command post in Beaville as well as to the civilian population and local hospitals and that destroying the power station would cut off the power supply to the command post.

How should the anticipated concrete and direct military advantage of destroying this power station be analysed? How is the analysis affected:

- a. *If Alpha forces have information that the command post has generators and sufficient fuel supply to provide for its functioning until it can get connected to another power line? Conversely, if Alpha forces consider it possible that the command post has generators and sufficient fuel supply but does not have concrete information to confirm this?*
- b. *If, contrary to the original scenario, the command post is overseeing active hostilities in the area surrounding Beaville?*
- c. *If Bravo operational command posts are set up in such a manner that other command posts will take over the functions of the command post located in Beaville in case and as soon as the latter is rendered inoperable? If this attack is part of a concerted military operation targeting all of Bravo's command posts in the region?*
- d. *If this attack is part of a broader operation aimed at taking control of Beaville, as opposed to an attack limited to taking down this command post without further concrete plans?*

Scenario 2

Delta is in an armed conflict with Gamma. Delta and Gamma are presently conducting military operations in the vicinity of Gitown area.

Reliable intelligence has confirmed that one of Gamma's commanders is presently travelling in a local taxi alongside the taxi driver and four other civilian passengers. An attack against Gamma's commander is possible and would probably kill all persons in the taxi. The company commander of Delta forces anticipates that Gamma's commander's death would disrupt Gamma's military operations in Gitown area in the short term.

A common feature of this conflict is that when one of Gamma's commanders is killed, Gamma's forces significantly intensify their offensive operations. Gamma forces increase their attacks against Delta and take revenge by harming those civilians identified as Delta's sympathizers.

Another common feature of this conflict is that when Delta causes civilian casualties, the civilian population is more reluctant to provide Delta with information. This has a negative impact on Delta's ability to gather intelligence on Gamma forces and, inevitably, affects Delta forces' situational awareness. Furthermore, in many cases, family members of civilians killed in Delta's operations choose to join Gamma's forces or become its sympathizers.

- a. *What considerations should be taken into account when assessing the military advantage of the attack on Gamma's commander? In particular, should the military disadvantages that the attack causes for Delta forces be taken into consideration – such as its reduced ability to gather intelligence and the fact that family members of civilians killed would join Gamma's forces or become its sympathizers – when assessing the value of the military advantage offered by this attack and lead to a reduced level of acceptable incidental harm?*
- b. *Would this analysis differ if intelligence confirmed that Gamma's commander was preparing to conduct a coordinated attack against Delta's armed forces?*

Scenario 3

Echo is in an armed conflict against Foxtrot. Located near Echo's capital city, at some distance from the hostilities, is a small but historically renowned military fort. The military fort is of significant symbolic value for Echo. The fort hosts a small military garrison in which soldiers from units on standby rest. On the basis of available information, Foxtrot estimates that there are currently a total of between 30 and 40 soldiers located inside the fort. The majority of these soldiers are on rest with a few performing sentry duty. The fort also hosts a small museum and shops which are open to visitors despite the conflict. The fort is surrounded by a small village of 1200–1300 inhabitants.

The commander of Foxtrot is deciding whether to conduct offensive operations against this fort. Foxtrot does not have air capabilities, so it has to be a ground operation, in which he could involve a company consisting of approximately 90 troops. The commander of Foxtrot has assessed that the element of surprise will allow his troops to at least severely damage the fort and possibly clear and destroy it. He has also assessed that there will be a number of enemy casualties (killed and wounded), depending on how many manage to flee. However, he does not have the military capabilities to hold and defend the terrain on which the fort is located for an extended period because it is located in enemy-controlled territory. He estimates that there will be up to a maximum of a dozen civilian incidental casualties (mainly injured with possibly a few killed) as a result of the attack, despite taking all feasible precautions to avoid them. However, the exact numbers of casualties depends on many variables, such as the resistance put up by the fort's troops and the civilians' reaction when the operation unfolds. He cannot warn the civilians without losing the element of surprise which is essential to the success of the operation.

The commander of Foxtrot anticipates that the destruction of the fort would be viewed as prestigious in the eyes of many. The attack would lead to a boost in Foxtrot troops' morale and an increase in the recruitment of new members. At the same time, such an attack would decrease the support for the conflict among Echo's sympathizers, as they will fear that fighting is about to move towards the capital and directly affect them. It would also significantly reduce the morale of Echo's troops.

- a. *What considerations should be taken into account in an assessment of the anticipated military advantage of the attack on the fort?*
- b. *Does the analysis change if the attack against the fort formed part of a series of offensive operations taking place concurrently within the region?*
- c. *Would the analysis change if Foxtrot did have the capacity to hold and defend the area in which the fort is located?*
- d. *What about if the fort was located in an area where Foxtrot might conduct other operations in the foreseeable future (though, at this stage, there is no concrete plan in this regard)?*

SESSION 2 RELEVANCE OF FORCE PROTECTION AND PROTECTION OF CIVILIANS FOR THE PRINCIPLE OF PROPORTIONALITY

Scenario 4

Sierra and Tango are in an armed conflict. Located in a village, amongst the civilian population, are four fighters from Sierra (all wearing uniforms of their own armed forces). Presently, they are performing essential repairs to the village's local water treatment facility. All of a sudden, the four fighters start receiving sniper fire from Tango forces, coming from two directions. The four Sierra fighters identify the location of the sniper fire. While they possess the required capability to return fire and eliminate the threat, the Tango snipers are surrounded by civilians. Should the Sierra fighters return fire, it is likely that there will be civilian casualties, from 1 or 2 to possibly up to half a dozen.

- a. *What are the factors that should be taken into consideration in the proportionality assessment?*
- b. *To what extent does the need to protect Sierra fighters affect the assessment of the military advantage of killing enemy Tango snipers?*
- c. *Would the analysis be affected if:*
 - i. *It is possible for the four Sierra fighters to protect themselves by taking cover behind a nearby building?*
 - ii. *The enemy Tango snipers are directly targeting protected civilians as opposed to Sierra fighters?*
 - iii. *The enemy Tango snipers are targeting protected civilians in addition to Sierra fighters?*

Scenario 5

Lambda is in an armed conflict with Omega. Oscar, one of Omega's company commanders, has proven to be a particularly elusive target until now. Lambda's intelligence confirms that, for a limited time only, Commander Oscar will be located inside his company's command post situated in the centre of a town controlled by Omega. Lambda believes that within the command post, in addition to Commander Oscar, there are two junior officers and three senior non-commissioned officers (responsible for operations, intelligence and logistics). In the immediate vicinity of the command post, 10–15 infantry soldiers are on sentry duty. The command post is located on the ground floor of a civilian apartment block in a densely populated area of the town. According to the size of families, time of day and pattern of life in this conflict, Lambda estimates that around 20 to 30 civilians, a majority of whom are children and women, are currently in this apartment block.

Lambda's commander, tasked with overseeing this area of operations, has immediate access to precision-guided air strike capabilities. Lambda's commander, however, has assessed that the use of such an air strike to target the command post is not a viable course of action. Indeed, the attack would very likely lead to the destruction of the entire apartment building and result in half of the civilians being killed or seriously injured. Lambda's commander has deemed this excessive in relation to the military advantage of possibly killing or injuring the commander and most of the soldiers and damaging the command post. It would not be possible for the commander to warn the civilian population prior to the attack, as this would alert Commander Oscar.

Lambda's commander is not able to acquire precision-guided munitions during the brief time in which the commander is likely to be present in the command post. Left with few options, the commander tasks two platoons of Special Forces totalling 50 soldiers to attack the command post and capture Commander Oscar.

Shortly after the commencement of the contingent's mission, Lambda's intelligence confirms that Omega forces have become aware of Lambda's Special Forces mission. While Lambda Special Forces should still be able to capture Commander Oscar, they will sustain a much higher number of casualties than initially anticipated. It is still possible for Special Forces to abort the mission. However, it is unlikely they will be able to launch another operation to target Commander Oscar within the limited time frame. Presently, Lambda's Special Forces are not receiving fire from Omega forces. Lambda does not have intelligence on whether Omega forces are taking position to attack its Special Forces while they are retreating.

How do the new circumstances, including the security of the Lambda Special Operations forces, affect the Lambda commander's proportionality analysis when reassessing his decision whether to use his precision-guided air strike capabilities to target the command post of Omega forces where he believes Commander Oscar to still be?

SESSION 4 REVERBERATING EFFECTS

We return to the *power station scenario in Beaville (scenario 1)*

New

The power station that provides power to the Beaville command post also provides power to most of the city's inhabitants, its 5 hospitals, and its drinking water and waste water treatment facility.

The power station is located on the outskirts of the city in an area which has largely been temporarily evacuated by the civilian population. Civilian houses as well as a (closed) civilian chlorine factory located next to the power station have not yet been impacted by the conflict and remain intact.

In light of the division commander's previous orders not to target the command post located in Beaville, Alpha forces consider targeting the power station as a means of cutting power to the command post. The power lines are underground, and powerful explosives would be required to damage the station itself or the underground power lines.

- a. *When assessing the proportionality of an attack on the power station, to what extent should the following factors be taken into consideration and how would this be done in practice:*
 - *Damage to the empty civilian houses and factory surrounding the power station?*
 - *The impact on the daily life of the local civilian population?*
 - *The economic impact on the civilian population and businesses?*
 - *The impact on local hospitals?*
 - *The impact on the drinking water treatment plant?*
 - *The possible damage to the underground sewage and water system?*
 - *The possible impact of long-term harm to the civilian population living downstream and the natural environment from contamination through release of untreated wastewater into Beaville's main river?*
 - *The limited ability of Bravo to repair the power station because of the scarcity of materials, lack of expertise or Bravo's tendency to focus its effort on fighting rather than repairing the power station?*
 - *The fact that Alpha hopes to gain control of the area of the power plant and Beaville shortly after the attack and would have the means to repair the power station in a matter of days?*
- b. *Assume that Beaville is experiencing a limited number of cholera cases. The outbreak and spread had been caused by the poor hygiene, medical and sanitation conditions in Beaville which are a result of earlier fighting. How does this affect the analysis?*

MISSION

The International Committee of the Red Cross (ICRC) is an impartial, neutral and independent organization whose exclusively humanitarian mission is to protect the lives and dignity of victims of armed conflict and other situations of violence and to provide them with assistance. The ICRC also endeavours to prevent suffering by promoting and strengthening humanitarian law and universal humanitarian principles. Established in 1863, the ICRC is at the origin of the Geneva Conventions and the International Red Cross and Red Crescent Movement. It directs and coordinates the international activities conducted by the Movement in armed conflicts and other situations of violence.

 facebook.com/icrc
 twitter.com/icrc
 instagram.com/icrc



ICRC

International Committee of the Red Cross
19, avenue de la Paix
1202 Geneva, Switzerland
T +41 22 734 60 01
shop.icrc.org
© ICRC, August 2018