International Institute of Humanitarian Law



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

Conduct of Hostilities: the Practice, the Law and the Future

STUDI





FrancoAngeli

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

Conduct of Hostilities: the Practice, the Law and the Future

37th Round Table on Current Issues of International Humanitarian Law (Sanremo, 4th-6th September 2014)

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Preface

The 22nd August 2014 marked the 150th anniversary of the adoption of the first multilateral convention on International Humanitarian Law (IHL), the Geneva Convention for the Amelioration of the Condition of the Wounded in Armies in the Field. One hundred and fifty years later, the application of IHL rules on the conduct of hostilities are confronted with new and increasing challenges in light of the changing nature of armed conflicts, the means of combat and the actors involved.

The XXXVII Round Table on current issues of International Humanitarian Law, jointly organised with the International Committee of the Red Cross, as is the well-established tradition which the Institute is proud to maintain, offered military practitioners and IHL experts, from different regions of the world and with different backgrounds, the opportunity to examine the law and the practice governing the conduct of hostilities in current armed conflicts.

The changing nature of conflicts, with the acute proliferation of noninternational armed conflicts and the conduct of operations within denselypopulated areas, calls for a rigorous application and enforcement of the preexistent norms, as well as for the need to analyse and address their application to new situations that continue to arise. Conflicts such as the one unfolding in Syria or the recent situation in Gaza exemplify the growing difficulties encountered by a strict respect for and observance of the principle of distinction between combatants and civilians and between civilian and military objects, as well as a frequently too loose assessment of proportionality, and an increasing disregard of principles of humanity. The consequence is an increasing exposure of civilian populations to suffering caused by armed conflicts.

Current developments in warfare, such as cyber warfare or the growing use of autonomous weapons in combat situations, elicit debates not only in relation to the current application of International Humanitarian Law, but also to possible future developments and scenarios. Such debates are essential to ensure that international norms and standards are rigorously respected and observed in armed conflicts. The Round Table presented a multinational and interdisciplinary scenario where the most burning issues and challenges were extensively discussed.

With the publication of these proceedings, the International Institute of Humanitarian Law intends to make the debates and discussions of the XXXVII Round Table available to the public, in keeping with its aim of promoting and disseminating the knowledge of International Humanitarian Law.

Fausto Pocar

President of the International Institute of Humanitarian Law

Opening session

Opening remarks

Fausto Pocar

President, International Institute of Humanitarian Law, Sanremo

It is for me a great pleasure and a distinct privilege to open this 37th Round Table on current issues of International Humanitarian Law (IHL) and to welcome such a distinguished gathering of military practitioners and expert IHL specialists from all over the world on this prestigious occasion.

Sono particolarmente lieto e onorato di porgere un caloroso benvenuto a tutti i partecipanti a questa Tavola Rotonda organizzata congiuntamente, secondo un'ormai consolidata tradizione, dall'Istituto Internazionale di Diritto Umanitario e dal Comitato Internazionale della Croce Rossa.

Un vivo e sincero ringraziamento va innanzitutto a tutte le Autorità presenti, alle personalità, ai relatori che interverranno alla Tavola Rotonda, ai membri e agli amici dell'Istituto che hanno voluto essere presenti a questo consueto appuntamento internazionale, che da oltre quarant'anni l'Istituto organizza a Sanremo nel mese di settembre. Anche quest'anno non è mancato ai nostri lavori l'alto patronato del Presidente della Repubblica Giorgio Napolitano, al quale va la nostra riconoscenza per l'attenzione rivolta all'Istituto.

Sono lieto di porgere il mio personale saluto e la mia gratitudine al Sindaco del Comune di Sanremo, Dr. Alberto Biancheri, per l'appoggio dato a questa e ad altre manifestazioni e attività dell'Istituto.

Viva riconoscenza va altresì al Ministero degli Affari Esteri, in particolare al Sottosegretario Senatore Benedetto Della Vedova, che ci raggiungerà tra poco questa mattina per un saluto ai partecipanti alla Tavola Rotonda, e al Ministero della Difesa del Governo italiano, per il supporto offerto in passato e per aver accordato, anche quest'anno, il patrocinio del Ministero all'evento.

Un grazie particolare, infine, al Governo svizzero, per il sostegno offerto nella realizzazione di questa Tavola Rotonda ed al governo svedese.

Vorrei inoltre ringraziare, per la sua sempre preziosa collaborazione in tutte le fasi della preparazione e dello svolgimento della Tavola Rotonda, il CICR, che organizza da anni questo incontro insieme all'Istituto, e che oggi è qui rappresentato dalla Dr Helen Durham, Director for international Law and Policy of the ICRC. Un mio personale riconoscimento va anche ai coordinatori della Tavola Rotonda, alla professoressa e Vicepresidente dell'Istituto Elizabeth Wilmhurst, al Professore e membro del Consiglio dell'Istituto Wolff Heintschel von Heinegg e al Consigliere giuridico del CICR Laurent Gisel, che hanno formulato il programma della Tavola Rotonda e ne hanno seguito l'attuazione con la collaborazione preziosa di tutto il personale dell'Istituto, al quale va la mia più viva gratitudine per l'impegno e la disponibilità prestata.

La présente Table Ronde va aborder un sujet d'actualité extrême dans le monde contemporain: la conduite des opérations militaires, sa pratique et son droit, dans la perspective de son développement futur. Mais il s'agit également d'un sujet dont l'actualité remonte à l'origine même du droit international humanitaire. Il y a exactement 150 ans, le 22 août 1864, la première convention multilatérale de droit humanitaire a été signée à Genève par 16 Etats européens, qui adoptèrent des règles communes «pour l'amélioration du sort des militaires blessés dans les armées en campagne», dans le but d'introduire des principes d'humanité dans le traitement des soldats participant aux opérations militaires et d'en assurer le respect par les belligérants. A partir de l'adoption de cette convention les idées d'humanité desquelles elle s'inspirait ont fait un long chemin, et toute une série de conventions ont été élaborées - notamment à Genève et à La Haye - et ont été ratifiées par un nombre croissant d'Etats au cours du siècle et demi qui a suivi. Ces conventions – qui sont bien connues et sur lesquelles on n'insistera pas ici - ont pour but, soit d'introduire des nouvelles règles de protection des combattants et des civils, soit d'identifier les principes fondamentaux régissant la conduite des opérations militaires, pour en donner une réglementation concrète et pour en assurer la mise en œuvre durant les conflits armés internationaux et non internationaux.

Tout ayant un domaine différent, les règles de protection (droit de Genève) et les règles de conduite (droit de La Haye) se présentent comme étroitement liées, la protection des combattants et des civils dépend souvent du respect et de la correcte application des règles de conduite des hostilités. Néanmoins, l'accent a été mis parfois sur les unes ou sur les autres séparément, et le plus souvent et récemment surtout sur les règles de protection plutôt que sur les règles de conduite. La jurisprudence même des tribunaux pénaux internationaux institués au fil des vingt dernierés années – qui représente la source importante la plus récente à consulter pour clarifier le contenu des règles du droit international humanitaire, coutumières ou conventionnelles, dont la violation constitue un crime de droit international – s'est concentrée notamment sur les règles qui visent directement la protection des combattants et des civils et a négligé ou a moins fréquemment abordé, à quelques exceptions près, l'interprétation des règles de conduite.

C'est l'une des raisons qui nous a conduit – nôtre Institut et le CICR – à dédier cette Table Ronde à un examen du droit et de la pratique relatifs à la conduite des hostilités, à la lumière des principes fondamentaux du droit international humanitaire tels qu'appliqués dans les conflits armés contemporains, dans le but d'en approfondir les traits essentiels, un effort nécessaire pour faire en sorte que les règles existantes soient prises en

compte et rigoureusement respectées au cours des opérations militaires dans le monde.

The subject of this edition of the Sanremo Round Table - the practice and the law on the conduct of hostilities - is of critical importance in the current complex scenarios which characterize contemporary armed conflicts, both with respect to the participants in those conflicts and to the impact of technological development affecting the conduct of hostilities. The application of International Humanitarian Law (IHL) is confronted with new increasing challenges in light of the changing nature of the conflicts, the means of combat and the actors involved. Striking the most appropriate balance between the fundamental principles of military necessity and humanity in the implementation of the rules of IHL presents new difficulties, but remains a key to limit the human cost of hostilities. including civilian casualties and destruction of civilian infrastructure. The Round Table will assess the current practice in the interpretation and application of the principles governing the conduct of hostilities and discuss how such principles should be interpreted and applied to the future evolution of warfare.

In this context, the principle of distinction between civilians and combatants will be at the heart of the debate, and it has rightly been described as "cardinal" of IHL by the International Court of Justice in its Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons (1996). The notion of military objects and the prohibition of indiscriminate attacks will primarily be discussed particularly with reference to attacks in densely populated areas. However, that principle cannot be considered in isolation and must be accompanied by an in depth analysis of the principles which complement it, i.e. the principles of proportionality and precautions. How to assess proportionality, under which attacks are prohibited if the expected incidental harm to civilians and civilian objects is excessive compared to the anticipated military advantage, has always been regarded as a complex exercise, and presents new challenges in contemporary conflicts where civilians are the more and more exposed to the consequences of the use of modern weapons. Precautions in attacks, such as warnings to the civilian population, and precautions against the effects of attacks, in particular with respect to warfare in populated urban areas, are therefore of the utmost importance in the conduct of military operations, both in international and even more in non-international armed conflicts. But translating these binding principles into practice during combat operations requires military commanders to take carefully into account the reality of the battlefield, and offers a variety of experiences and perspectives also in relation to the various domains in which the rules on the conduct of hostilities apply. The aerial warfare and the specificities of naval and outer space warfare will serve as examples for investigation. Furthermore, current developments in warfare, including cyber warfare, and the increasing use of autonomous weapons pose practical and ethical challenges of how far human judgment may be replaced by machines while still respecting the already mentioned fundamental principles of distinction, proportionality and precautions in attacks, and the legal obligations enshrined therein.

Let me conclude by recalling that for almost forty-five years now the International Institute of Humanitarian Law (IIHL) has played an important and unique role in providing an international and informal forum for indepth reflections and open debates, bringing together experts and key personalities from diplomatic, military, humanitarian and academic circles from different regions of the world, with the aim of discussing current developments and challenges of relevance to International Humanitarian Law. Last year's Round Table was devoted to challenges and responses raised by respecting IHL, and focused on ensuring compliance with its rules by enhancing the procedures tasked with their implementation, including the monitoring of their correct application.

The theme of this Round Table is different, but a concrete assessment and knowledge of the law and practice of the conduct of hostilities is of paramount importance also for the shaping of compliance and monitoring mechanisms suitable to ensure that IHL rules are observed and for adopting legal, practical and political measures to this effect.

We look forward with interest to the outcome of our debates during the forthcoming days and to the contributions that this Round Table will make to the assessment of the practice and law concerning the conduct of hostilities.

Welcome address

Alberto Biancheri Sindaco di Sanremo

Sono particolarmente onorato di prendere parte a questa Tavola Rotonda organizzata dall'Istituto Internazionale di Diritto Umanitario di Sanremo. Un incontro importante che consente di affrontare il tema della condotta delle ostilità, fondamento del diritto internazionale umanitario, al centro dell'attenzione in questo particolare periodo.

In questa occasione saranno affrontati argomenti di attualità come l'applicazione delle norme di diritto umanitario, la prassi inerente alla condotta delle ostilità nonché le azioni da intraprendere per individuare nuove idee e sviluppi futuri. Sono certo che sarà dato anche un contributo fondamentale per l'approfondimento della materia e per l'applicazione del dirtitto internazionale umanitario. Per questo è particolarmente significativa la presenza di esperti e di professionisti provenienti dai circoli accademici e militari di tutto il mondo, a cui pongo il mio personale benvenuto.

La Tavola Rotonda di questi giorni si inserisce nell'operosa attività dell'Istituto che, se da un lato permette di promuovere idee ed approfondimenti su tematiche di grande attualità, dall'altro configura la nostra città come significativo punto di riferimento per il diritto internazionale.

Sanremo e l'Istituto Internazionale di Diritto Umanitario condividono gli stessi valori e gli stessi obiettivi e per questo il Comune conferma con convinzione la propria vicinanza ed il proprio sostegno all'Istituto riconoscendone il valore e l'importanza. L'Istituto è infatti uno dei più importanti centri di formazione internazionale, non solo nel settore del diritto umanitario ma anche nel campo del diritto internazionale dei rifugiati, del diritto delle migrazioni e dei diritti umani.

La sua proficua attività determina ricadute positive per l'immagine della città di Sanremo e la sua economia. Tenuto conto del ruolo internazionale svolto dall'Istituto a favore delle tematiche relative alla promozione del rispetto del diritto, della pace e della giustizia possiamo trovare un riscontro di circa 8000 presenze ogni anno nelle strutture ricettive cittadine.

Nel rinnovare i miei saluti e la mia soddisfazione nell'aprire i lavori di questa 37° Tavola Rotonda auguro a voi tutti buon lavoro.

Keynote address

Benedetto Della Vedova

Sottosegretario di Stato, Ministero degli Affari Esteri, Roma

È un onore poter partecipare alla ventisettesima Tavola Rotonda sui problemi attuali del Diritto Internazionale Umanitario, organizzata – come è ormai tradizione – dall'Istituto di Sanremo in collaborazione con il Comitato Internazionale della Croce Rossa, quest'anno, dedicata alla "Condotta delle ostilità: prassi, diritto e futuro".

Si tratta di un tema divenuto di grandissima attualità a causa dei numerosi focolai di conflitto che purtroppo si stanno propagando in varie aree del mondo. Ringrazio, pertanto, l'Istituto di Sanremo per aver acceso i riflettori sulle numerose problematiche connesse all'applicazione del Diritto Internazionale Umanitario nelle aree di conflitto, insistendo soprattutto sui profili pratici. La competenza dei relatori, che si alterneranno nell'ambito di ben dieci panel previsti, offrirà indubbiamente una visione completa e dettagliata del tema.

Le modalità di conduzione dei conflitti armati e, in primo luogo, la capacità di porre attenzione alle parti indifese o non più ostili, testimoniano il grado di sensibilità e di rispetto per la vita e la dignità umana da parte delle forze belligeranti. Tali aspetti sono definiti compiutamente dall'insieme di norme che compongono il diritto internazionale umanitario, che nasce proprio per dare voce all'esigenza percepita dalla comunità internazionale di creare delle regole e porre dei limiti, non solo all'utilizzo dei metodi e mezzi di guerra da adottare durante lo svolgimento degli scontri, ma anche alle modalità di trattamento dei soggetti coinvolti, a vario titolo, nelle ostilità. È in questa prospettiva che si pone lo *jus in bello* e la sua evoluzione convenzionale mirante a disciplinare lo svolgimento dei conflitti armati.

Il diritto umanitario non si pone dunque in termini antitetici con l'idea della conflittualità armata ma, al contrario, è espressione delle regole cui dovrebbe conformarsi la condotta dei belligeranti. La situazione di belligeranza non comporta infatti, come si potrebbe essere tentati di credere, la "sospensione" del diritto. Certo, le frequenti violazioni indurrebbero a ritenere che, dinanzi ad un conflitto armato, parlare di diritto umanitario – se non di diritto *tout court* – sia puro esercizio di retorica. Tuttavia, sebbene il diritto umanitario sia stato messo, anche in questi ultimi anni, a durissima prova, va riconosciuto che la sua codificazione, il suo sviluppo e la sua diffusione hanno indubbiamente contribuito in numerosi casi a migliorare le condizioni di coloro i quali, popolazioni civili e militari, nel corso di un conflitto si siano venuti a trovare in situazione di vulnerabilità.

Ad oltre sessant'anni dall'adozione delle Convenzioni di Ginevra, l'impianto giuridico del diritto umanitario deve oggi confrontarsi con nuove sfide: la proliferazione di gruppi armati non statuali, alcuni dei quali rifiutano l'esistenza stessa del diritto internazionale umanitario; la natura asimmetrica dei conflitti armati contemporanei, che accentua le differenze tra belligeranti in termini di capacità tecnologiche e militari; la crescente difficoltà di distinzione tra combattenti e civili nelle operazioni militari; l'outsourcing di attività militari a compagnie private; la possibilità del ricorso ad attacchi cibernetici.

Siamo ben consapevoli di come, sempre più spesso, alla base dei conflitti vi siano gravi violazioni dei diritti umani e di come i conflitti che ne scaturiscano comportino nuove ed ulteriori violazioni di tali diritti delle popolazioni in una sorta di spirale difficile da arrestare. Di qui l'importanza di promuovere un progressivo innalzamento degli standard dei diritti umani (ed in particolare di determinate categorie di essi), l'importanza di sistemi di allerta precoce in chiave preventiva. Per la Farnesina la promozione e protezione dei diritti umani non solo in quanto tali, ma anche in chiave di prevenzione dei conflitti, l'educazione e la formazione ai diritti umani e la promozione del dialogo interculturale sono obiettivi prioritari nell'attuale contesto internazionale, caratterizzato da livelli di complessità finora inediti.

Per rafforzare il rispetto dei diritti umani, occorre che il diritto umanitario possa utilizzare meccanismi efficaci; in questa direzione, si discute ancora oggi su diverse soluzioni: non è solo un esercizio teorico, ma anche un'esigenza pratica. Ringrazio, ancora una volta, l'Istituto di Sanremo per favorire questo dibattito.

Su un piano operativo, per rafforzare il rispetto dei diritti umani, si sono affermate, negli ultimi anni, nuove tipologie di operazioni di pace, che assolvono su mandato internazionale funzioni sempre più diversificate, finalizzate alla prevenzione, ma anche alla gestione e soluzione di situazioni di crisi, assicurando al contempo la protezione dei civili e il rispetto dei diritti umani. Tali operazioni (*Peace Support Operations*) ricomprendono varie categorie di interventi (*conflict prevention, peace-making, peacekeeping, peace-enforcement, peacebuilding*), che non possono più considerarsi in maniera distinta, ma sono qualificate nel quadro di un *comprehensive approach*. Ciò nella consapevolezza del carattere multiforme e multidimensionale delle sfide alla pace ed alla sicurezza e del legame indissolubile fra sviluppo, sicurezza e diritti umani.

In tale contesto, le attività delle Nazioni Unite per la prevenzione dei conflitti e il mantenimento della pace e della sicurezza internazionali continuano a rappresentare il maggiore strumento multilaterale di sostegno alla convivenza pacifica e ai processi di transizione democratica e stabilizzazione delle aree di crisi. Per prevenire e gestire le crisi con maggiore efficacia e tempestività, è peraltro sempre più essenziale la cooperazione tra l'ONU e le Organizzazioni regionali, come Unione Europea e Unione Africana (si pensi agli esempi del Mali, della RCA, della Somalia), l'Organizzazione per la Cooperazione Islamica.

Il rispetto del diritto internazionale umanitario e dei diritti umani da parte del personale delle missioni e la capacità della missione di esercitare concretamente la protezione dei civili e di assicurare il rispetto dei diritti e delle libertà fondamentali delle popolazioni concorrono a rinforzare la legittimità della presenza internazionale e più in generale al successo delle operazioni.

Per questo, l'Italia sostiene da sempre l'importanza di una adeguata formazione, secondo linee guida ONU standardizzate, e ha istituito nel 2005 a Vicenza, in collaborazione con gli Stati Uniti, il CoESPU (*Centre of Excellence for Stability Police Units*), che ha contribuito e contribuisce in misura sostanziale alla crescente domanda di formazione delle unità di polizia schierate nelle missioni. Il CoESPU, con la collaudata formula del *training the trainers*, ha conseguito risultati significativi, addestrando solo nel 2013 1.200 unità, provenienti in larga misura da Paesi africani e asiatici. Il modello offerto dai Carabinieri fornisce personale con elevata preparazione e autonomia e capacità di dispiegamento in teatro. I corsi organizzati dal CoESPU includono moduli sul rispetto dei diritti umani, del diritto internazionale umanitario, la protezione dei civili e la Sexual and Gender-Based Violence.

L'esigenza di assicurare la protezione dei civili e la sicurezza dei "caschi blu" in contesti altamente sensibili ci induce a considerare favorevolmente l'utilizzo delle "nuove tecnologie" nel peacekeeping. È questo il caso dei droni da ricognizione (autorizzati ad esempio dal Consiglio di Sicurezza per MONUSCO). L'utilizzo delle nuove tecnologie può contribuire al rispetto del diritto internazionale umanitario anche lì dove non sono attive missioni di peacekeeping, ma la Comunità Internazionale è chiamata al rispetto di specifiche risoluzioni del Consiglio di Sicurezza sull'accesso umanitario, come nel caso della Siria. Informazioni geospaziali, acquisite attraverso la tecnologia satellitare, possono essere utilizzate per verificare l'eventuale violazione di quanto stabilito dal Consiglio di Sicurezza. Per questo l'Italia finanzia il programma operativo per le applicazioni satellitari di UNITAR ed è - più in generale - a favore della modernizzazione delle capacità di intervento dell'ONU a sostegno della pace e della stabilità internazionali e del rispetto del diritto internazionale umanitario e dei diritti umani.

I crimini internazionali e le atrocità di massa esigono risposte ferme e condivise, che sono rafforzate dallo stabilimento di un efficace sistema di giustizia penale internazionale.

Creata a Roma il 17 luglio 1998, la Corte Penale Internazionale ha segnato un fondamentale passo in avanti sulla strada della lotta all'impunità dei criminali di guerra attraverso l'applicazione di due principi-cardine del diritto: certezza della pena e sottoposizione ad un giudice naturale. A tal fine, è necessario assicurare la più ampia cooperazione da parte dell'intera comunità internazionale, in primo luogo nella consegna di coloro che si sono macchiati di crimini di particolare efferatezza nei confronti delle popolazioni civili.

L'affermazione del principio dello stato di diritto e l'esigenza di preservare la vita e la dignità umana, anche negli scenari di conflitto armato, impongono alla comunità internazionale l'adozione di risposte immediate ed efficaci per queste nuove sfide e le altre che si manifesteranno negli anni a venire. Tali risposte non potranno non ispirarsi allo spirito delle Convenzioni di Ginevra, i cui principi continuano e continueranno a rappresentare la base fondamentale ed imprescindibile per proteggere i combattenti, i prigionieri e le popolazioni civili nei teatri di guerra.

Keynote address

Massimo Barra

Commissario Permanente della Croce Rossa e della Mezzaluna Rossa, Ginevra

Il mio sarà un breve intervento di saluto, fatto più con il cuore che con la testa, per condividere alcune mie emozioni quando mi trovo ancora una volta in questo nobilissimo consesso che mette insieme gente di Croce Rossa e Mezzaluna Rossa, militari, giuristi ed esperti di diritto internazionale umanitario.

In genere noi ci riuniamo per "razze" diverse, ognuno con i suoi simili, qui stiamo tutti insieme e questo è un grande *added value* dell'Istituto e di Sanremo, questo si può fare a Sanremo. È difficile farlo in altre parti del mondo.

Devo dire, avendo girato il mondo, che forse l'Istituto è più conosciuto all'estero che in Italia. Penso, tuttavia, che il legame tra l'Istituto e la città di Sanremo, confermato dal Sindaco, sia un valore importante da preservare per il futuro, anche in tempi di ristrettezze economiche, per promuovere la città di Sanremo ed il diritto internazionale umanitario in tutto il mondo.

Ho avuto l'onore di partecipare, da giovanissimo pioniere della Croce Rossa Italiana, alla prima ed alla seconda Tavola Rotonda di Sanremo e sono quindi un testimone oculare di come la Tavola Rotonda sia cresciuta in questi anni. Come italiano sono fiero di questa Tavola Rotonda, e lo sono anche come crocerossino per l'opportunità che ci dà di unire il Movimento Internazionale della Croce Rossa e della Mezzaluna Rossa all'Istituto di Sanremo.

Non posso però non essere triste per quello che sta accadendo nel mondo. Ieri sera una professoressa dell'Università di Ginevra mi diceva «c'è il rischio che noi parliamo solo tra di noi, tra persone che capiscono il concetto di diritto internazionale umanitario e poi la maggior parte del mondo se ne sta lontana, non lo capisce e non lo mette in pratica. C'è il rischio che noi diventiamo una sorta di "circolo Pickwick" di persone illuminate, "*inspired*", mentre il mondo va tutto in altra direzione». Ed è proprio quello che succede nel mondo oggi; che è successo ieri, l'altro ieri, un mese fa. Non mi sembra infatti che le regole del diritto internazionale umanitario siano esaltate, anzi mi pare succeda l'esatto contrario, che si vada contro tali norme.

Chi opera sul terreno si trova di fronte a dei problemi spesso insormontabili. Pensate, ad esempio, al problema dell'accesso alle vittime dei conflitti armati. Recentemente in Siria oltre 30 operatori della Mezzaluna Rossa siriana sono morti mentre portavano soccorso in prima linea. È un pedaggio molto pesante, anche perché la distinzione tra coraggio e temerarietà si fa sempre a posteriori: se è andata bene è stato coraggioso, se è andata male è stato temerario.

Come possiamo orientare i nostri volontari? Noi abbiamo 12 milioni di persone che danno il loro generoso contributo nell'arduo compito di prestare soccorso alle persone in situazioni molto difficili. Come li orientiamo? Come possiamo fare in modo che il diritto d'accesso alle vittime dei conflitti venga rispettato? Come ci rapportiamo con i "cattivi"? Che potere abbiamo? Abbiamo un potere? Credo che questa Tavola Rotonda come *leitmotif* debba anche porre la questione del "potere" in mano a chi applica il diritto umanitario, perché il mondo è cambiato, perché esiste internet e tutti possono sapere le cose in tempo reale. Quello che una volta era uno scambio di messaggi cifrati oggi è possibile leggerlo addirittura sul telefono. La gente vede quello che succede, la gente giudica, e per questo quando c'è una violazione del diritto umanitario si indigna.

Quale è il nostro atteggiamento? Noi non possiamo limitarci a fare un elenco "notarile" delle violazioni. E se c'è un conflitto tra due parti noi non possiamo essere equidistanti, l'equidistanza o equivicinanza, è un concetto politico non umanitario. Il concetto umanitario di "equidistanza" è nel principio fondamentale di imparzialità, che contiene in sé il principio di proporzionalità. Come l'imparzialità ci guida nell'assistenza alle vittime, allo stesso modo l'imparzialità (e cioè la proporzionalità) ci deve guidare nella denuncia delle violazioni delle Convenzioni di Ginevra che portano quotidianamente nefaste conseguenze per le popolazioni civili che dovrebbero invece essere tutelate da queste violazioni.

Come riusciamo noi a rendere "sexy" il diritto umanitario? Come riusciamo a finire sugli smartphone, sui social networks che orientano l'opinione pubblica, dando la possibilità ad ogni cretino di scrivere quello che vuole e di trovare altri paranoici che gli danno ragione? Come ci inseriamo in questo meccanismo? Con i nostri sistemi vecchi? Siamo destinati a fallire. Io credo che in passato si abbia peccato di segretezza, la segretezza in questo mondo attuale è finita e quindi anche il CICR si deve porre il problema del dilemma tra la segretezza ed il rendere pubblico. Fino ad oggi siamo stati molto prudenti per evitare reazioni. Ma con l'opinione pubblica quanto abbiamo guadagnato o perso con la segretezza? In questo mondo non c'è più niente di segreto. Tutti sanno tutto o credono di sapere tutto e noi abbiamo il dovere di esprimere il nostro punto di vista per orientare in maniera efficace l'opinione pubblica.

Detto questo, penso che il tema scelto per questa Tavola Rotonda si presti anche ad una riflessione sotto questo angolo, che vi invito a fare coraggiosamente perché ne va di mezzo la nostra credibilità futura e la credibilità del mondo. Un'ultima osservazione riguarda la tortura. Io credo che sulla tortura si debba essere molto chiari perché nel terzo millennio la tortura non deve avere diritto di cittadinanza a nessun livello. La tortura provoca delle reazioni dinamiche scomposte, delle reazioni a catena in cui si sa dove si comincia e non si sa dove si finisce. Credo che vada fatta una riflessione sul nostro atteggiamento comune, singolo e/o collettivo nei confronti della tortura, come tra l'altro già richiamato ultimamente anche da Papa Francesco.

Keynote address¹

Helen Durham

Director of International Law and Policy, International Committee of the Red Cross, Geneva

Today the human cost of current conflicts is abysmal. Too often, as we all know, civilians bear the brunt. They are victims of direct or indiscriminate attacks against the very principles that we are gathered here today to talk about, the principles relating to the conduct of hostilities. Indeed, today armed conflicts, once again as we all know, are not conducted along clearly delineated lines. We don't really have clearly identified parties at times. Hostilities often take place in densely populated areas where civilians are victims, or civilian residencies become dwelling places for the fighters or roof tops of civilian infrastructure become launching beds for attack. And too often in these environments humans become human shields or civilians do.

The heavy fighting in urban areas with devastating destruction in places such as Syria, Ukraine, Gaza, Libya and Iraq recently, demonstrates how homes and places of worship are destroyed. Public services, that are absolutely essential for the survival of the civilians, get reduced at times to rubble. Humanitarian workers are either killed or have fled; infrastructures such as water and electricity have been attacked; schools, hospitals and universities are no longer in existence. All this, plus dangers of just fear, require or force millions of people to flee with increasing consequences and horrors long after the conflict has ceased. Furthermore, another thing that should be considered is that nowadays armed conflicts have become increasingly fragmented, and we can see that once again in Syria, in Somalia, in Yemen, in Democratic Republic of Congo and in the Central African Republic. On top of this, non-state armed groups very often don't have the clarity and the aims of military or political determinations and that makes it very, very difficult to engage with them.

All these situations often occur in a context of a very weakened State which perpetuates the difficulties in having a degree of control and command over those who are engaged in the fighting.

Still, armed conflicts are often fuelled today by ethnic, national or religious grievances which often under shadow or don't have the space for the most basic considerations of humanity. The increasing radicalization, at times, in this area complicates the search for lasting peace, but it is very important in all of our deliberations in the next few days to deeply reflect

¹ Text not revised by the author.

upon the concept that despair becomes a consequence and also a cause of reoccurring hostilities. Now, despite there being cynicism about the IHL framework, today it's wanted and needed more than ever.

One hundred and fifty years ago, the first Geneva Convention was created and the principles contained in that are not things we should be cynical about. It's the application that we need to strive harder for and, as I think we all discussed at the last Round Table, it's an issue of compliance by States and non-state armed groups, all parties to a conflict. It's a compliance issue that we have really got to search deeply about. The outcome of both last year's Round Table and the one organized in 2007 by the Institute, when we last looked at this topic, was not that we needed new rules but interpretive guidance of the applicability of the existing law.

Promoting respect for IHL, including the conduct of hostilities which we are going to discuss in these days, has formed an integral part of the ICRC's DNA, I would say, for decades. Every day ICRC's delegates, colleagues go into the field to work on the issues of compliance but they're not looking at it through a lovely international conference, they are on the ground engaging directly with armed forces and non-state armed groups coming up, in particular, with concrete and practical propositions of how ways to avoid the violation of the rules that govern the conduct of hostilities can be envisaged.

The work that ICRC does, as many of you are aware or have been involved in, entails a number of preventive activities. The concept of prevention is a difficult one, at times, to capture and prove the outcome because what we obviously do in trying to prevent these atrocities is not to demonstrate what we have been able to achieve in the positive but in the negative. How can we explain to the world as well as to ourselves the rules that apply to such preventive activities as, having discussions, training individuals on the rules, clarifying the rules, engaging in non-state armed groups? The concept of prevention is a really important one when clarifying the legal articulation of these rules.

The outreach of the ICRC does not only allow us to engage with groups or in circumstances that are very difficult, but it also allows us to start gathering a better understanding of what motivates or influences arms carriers. One of the key topics my colleagues in the ICRC is working on is a further study of the concept of rules of behavior. What actually changes the rules of behavior of those who are engaged in armed conflict? This is a very important research which should engage non-state armed groups in particular. All of these activities, at least, aim to reduce the human cost of suffering in conflicts, which today should be an overriding humanitarian imperative.

States, and more generally the International Community, must treat this humanitarian imperative as a strategic policy goal, not abstractly as something to talk about once a year and put aside, not as a theoretical paradigm to look at, but as a real strategic policy goal so as to incorporate the humanitarian imperative. But for the law to be effective, it requires belligerents to know clearly what they need to be doing, to have clarity around conflicts, which is what we are going to discuss for the next few days. And, as it has been mentioned previously, what is at stake are fairly basic principles: distinction, proportionality, precautions. But we need to engage in their application and clarity.

With this in mind I would like to quickly look at five key points that are important in this area of discussion.

Firstly, and I think we all agree, the major issue in this field is the principle of distinction. We are all struggling and working together with a global approach on interpreting the notion of direct participation in hostilities. The 2007 Sanremo Round Table on The Conduct of Hostilities. Revisiting the Law of Armed Conflict 100 Years after the 1907 Hague Conventions and 30 Years after the 1977 Additional Protocols examined this issue. Two years later, the ICRC brought out its interpretative guidance on the notion of direct participation in hostilities. The interpretative guidance does not endeavor to change the binding rules of IHL in this area, rather does it represent ICRC's recommendations as to how IHL rules relating to the notion of direct participation in hostilities should be interpreted. It argued that irregular armed forces and organized armed groups consist of only those individuals who have continuous combat functions. Individuals performing political, administrative, judicial or law enforcement functions retain their civilian status and protection against direct attacks. Now, the guidance drew criticisms from both sides and I get the feeling that if we are getting criticized from both sides we must be doing something right. Many argued that this guidance was too strict in its criteria while others claimed that it was too permissive. ICRC absorbed these criticisms and deliberated on them before preparing the final text of the guidelines, which, in our view, provides a very careful balance taking into account military, legal and operational considerations. ICRC continued to closely monitor and listen to these debates. It is also open to criticisms in relation to the interpretations and hopes that this will be a really strong starting point for discussion and eventually persuade States and non-state armed groups to help better protect civilians during armed conflicts.

We are not going to discuss this issue again as it was deeply discussed in 2007. However, I would like to address one particular issue that was not discussed in 2007. In the ICRC's view, although it is clear that a combatant may be captured or wounded *hors de combat* without additional risks to the operating forces, there could be a policy argument that they should be captured. Because to kill an adversary, or refrain from giving him or her the right to surrender, when manifestly there is no necessity for the use of force, would indeed defy the basic notion of humanity. And it should be very clear that there are no additional risks involved for those who are capturing. So it's really looking at the principle of the use of force. This is obviously something we are very keen to discuss with you – this capture or kill philosophy.

Secondly, contemporary warfare also raises a number of challenges in relation to the notion of military objective. While the definition as we all know it given in article 52 of Additional Protocol I is customary, a number of its elements remain debated, such as the term "purpose" which cannot be understood as merely the possibility that an object might be converted into military use in the future. If this were the case there would be no limit to targeting. Another concern, from the ICRC's point of view, is the definition of objects that merely contribute to the war-sustaining capacity of a party to a conflict. Those objects who have "merely contributed" have sometimes been considered as constituting military objectives, which, in our view, is contrary to the requirement that an object has to make an effective contribution to military action.

Thirdly, another issue that is attracting growing scrutiny and concern, which was also discussed during the 2007 Sanremo Round Table, is the use of explosive weapons in populated areas. As the world has witnessed helplessly with the devastation caused by hostilities in Syrian cities over the last two years and in Gaza today, the use of these specific explosive weapons needs to be discussed and deeply examined.

Fourthly, urban fighting and the intermingling of fighters and civilians in recent conflicts have highlighted the important principle of precautions, both precautions in attack and against the effects of attacks. With regard to the former, precautionary measures such as warnings and their effectiveness have been discussed at length at various independent forums since 2007 and this has been a worthy exercise. Another issue arising from the ICRC's work in current armed conflicts is the limits on targeting objectives, which are normally used for civilian purposes, when only a part of the object is used for military purposes. First of all, an object has to be strictly defined: for example, a school comprising of several buildings is not one object for the purpose of the definition of military objective. Each object needs to be looked at individually. But when looking at one individual object partially used for military purposes, for instance, a multistorey building where only the roof or one apartment is used for military purposes, the prevailing understanding of the notion of military objective is that once an object is used in such a way as to fulfill the definition of military objective, the entire object becomes a lawful target. The principle of precaution nevertheless requires that only the part of the building used for military purposes should be targeted, to the extent feasible. Those planning a military attack must, indeed, consider the effects of the destruction of the apartment used by civilians and the potentially long lasting effect on health and well-being. The principle of proportionality forbids the attack if incidental or civilian harm is expected, including indirect harm, and if this harm is excessive in comparison to the direct and concrete military advantage. The relevance of passive precautions cannot be underestimated either. While locating military objectives in or near densely populated areas is only prohibited to the maximum extent feasible, complete disregard for passive precautions may lead, depending on the circumstances, to human shields which is an absolute prohibition. Now, to draw a precise line between the two is very challenging, particularly in many complex contexts and, while it is clear that violations of IHL committed by one belligerent in no way relaxes the obligations of the other towards protected persons and objects, such violations can only increase the already enormous challenges raised by the planning and execution of military operations in densely populated areas. The ICRC would welcome any additional discussion or clarification on the concept of precaution in attack, particularly what is really feasible in the fog of warfare taking into account all military and humanitarian considerations.

The final issue I would like to reflect upon is the future challenges of new technology during armed conflicts. IHL applies to all new means and methods of warfare. However, we need to deeply reflect on whether the preexisting legal rules in the face of new technologies raise questions about whether these rules are sufficiently clear and applicable. This is particularly true with regard to the development of cyber capacities and autonomous weapons systems, two very interesting issues which will be discussed in the last session of the Round Table.

I. Setting the scene

The importance of the law in theatre

Lone Kjelgaard

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This conference will focus on law in international military operations. A topic that could hardly be more important or more topical, whether to policymakers in capitals or to the lawyers wrestling with applying the tools and constraints of law, while warring against an opponent who recognises none of the same constraints.

The North Atlantic Treaty Organization is not only a military alliance, albeit this might be our most visible role. NATO is a political alliance, with broad political objectives, such as supporting the principles of the UN Charter, strengthening our free institutions founded on the principles of democracy, individual liberty and the rule of law, promoting stability and well-being, eliminating economic conflict and encouraging economic collaboration.

These political goals are so much an assumed part of our background, and NATO and its members have been so successful in support and advancing them, that we sometimes lose sight of the contribution that political element gives to NATO's effectiveness and its legitimacy, as it expands the scope of its actions.

Coupled with these fundamental values, there has been NATO's commitment to consensus decision-making, a method which has allowed us to balance the need for effective common action with full respect for the views and legislation of each Ally. The collaborative methods nurtured through the forty years of the Cold War has served NATO well as it has developed new flexibility in responding to the constantly changing international landscape of the last twenty years.

It would not be an understatement to say that NATO has quite some experience with regards to training for, planning and conducting multinational military operations. Nor would it be an understatement to say that NATO places a high value on compliance with both International Humanitarian Law (IHL) and, as applicable, Human Rights Law (HRL).

NATO's approach towards IHL and HRL is directly related to its mission and history and resulting structure. As a political as well as military alliance, Allies' common values drive both its political and its military actions. NATO is designed to be and functions as a mechanism for common action by sovereign states rather than as an autonomous, empowered entity and thus does not have a developed body of legal doctrine; rather, it applies IHL and HRL in NATO operations in a manner reflecting the individual national legal positions of the 28 Allies.

I will elaborate on this pragmatic approach using three examples of current and past NATO operations and finally touch upon future efforts in Afghanistan a little bit later. Before doing so, please allow me to elaborate a little on the specifics of the Alliance.

There is no doubt that other Intergovernmental Organisations, notably including the United Nations (UN) and the European Union (EU), have great experience in conducting multinational peacekeeping operations. None, however, has experience comparable to NATO's in planning and carrying out military combat operations. This experience is among the reasons that NATO has so often been called upon to contribute military resources and structures to achieving the common goals of the international community.

Another reason is the seriousness with which the Allies take their obligation to abide by both the spirit and the letter of applicable principles of IHL and HRL, when planning and carrying out Alliance military operations. NATO sees itself as setting a high standard for the lawful conduct of military operations. The members of the Alliance fully appreciate the importance for the Alliance's credibility and the perceived legitimacy of its actions for meeting a high standard in complying with international legal rules applicable to its operations.

Not only do Nations bring their own high standards to the table when planning military operations, they have also agreed and implemented doctrine applicable throughout the entire Military Structure. In the doctrine it says: «NATO commanders at all levels must be aware of the relevance of the proper use of force on the perceived credibility and legitimacy of operations» and it continues to say: «The use of force in non-Article V Crisis Response Operations depends upon a complex mixture of right and obligations, which are proved by international and national mandates, the UN Charter, applicable international rules, regulations and agreements, the law of armed conflict, international law and national laws and rules».

As just mentioned, NATO operations are planned and conducted strictly in accordance with all applicable international law and conventions. In cases where not all Allies are party to the same agreements, such as for example the Additional Protocols to the Geneva Conventions or the European Convention on Human Rights, NATO adopts the maximalist approach and not the lowest common denominator. So, we believe that we position ourselves appropriately from a legal point of view. For all Member States this is of paramount importance and they view this as an essential part of conducting operations and, therefore, legal aspects are duly reflected in all our operational planning.

Here I believe it to be prudent to shed a little light on the structures of NATO to allow us all to comprehend some of the complexities, which have an impact on the Alliance' relationship with IHL and HRL.

First, NATO decisions are made by consensus of all 28 Allies. Any Member State can block any decision or action by refusing to join the consensus. By the same token, a decision taken by the Allies still requires an Ally's consent to take specific action to implement it.

Secondly, the Organization has practically no autonomous or developed authorities. That is, NATO has legal personality, but unlike the UN, NATO has no "charter" through which the Member States permanently empower the Secretary General or the secretariat to take decision. Almost all decisions are taken by the Member States themselves through the North Atlantic Council or subordinate committees.

NATO as an Organization is in essence tools through which the Allies choose to advance their broad national security ends or particular objectives when they consider it desirable or feasible to do so.

Turning now to NATO's relationship with the law, HRL as a separate body of law was embryonic in the formative years of the Alliance and at that time there was little reason to consider that HRL, as it was developed at that time, had any relevance in situations of armed conflict. Civilian protection was depicted in the provisions of IHL. The legal framework applicable to NATO was, therefore, rather simple: in case of World War III the law of armed conflict including IHL would be applicable. NATO forces trained and exercised extensively together and common understanding of legal obligations regarding the conduct of combat operations emerged.

Here it is important to recall that all NATO military operations are conducted by the national forces of the Member States, and other States that may accept an invitation to join a NATO-led operation. Such forces are voluntarily committed by the respective sending States, and remain only under NATO command and control as long as those States choose to leave them there. The troop-contributing States retain ultimate, and at times substantial, daily operational control over their forces even when they are under NATO command.

And this brings us to a key point: the law applicable to NATO operations is essentially the collection of individual legal frameworks of each of the 28 Allies and any other States participating with them.

There is, of course, considerable overlap among those 28 legal environments. All Allies are party to key "universal treaties" at the heart of both IHL and HRL, including the Geneva Conventions and the International Covenant on Civil and Political Rights. There is, moreover, general agreement on certain basic propositions with respect to the applicability of these two bodies of law, including that the standards of HRL are generally applicable to non-armed conflict operations. In addition, while IHL is *lex specialis* applicable to situations of armed conflict, IHL and HRL may in certain circumstances both be applicable to the same operation. Allies agree as well that other bodies of law may apply in some cases. This is most obviously so in the case of operations built on UN Security Council Resolutions (and virtually all NATO operations have been based on such resolutions) but could also include other special bodies of law such as the Law of the Sea (in the case of counter-piracy or other maritime operations), or the national law of host countries when operations are being conducted in support of and within the territory of such countries.

Therefore, NATO addresses legal questions, including issues of the relationship of IHL and HRL pragmatically rather than doctrinally. Once Allies agree in principle to undertake a military operation, NATO planners develop an Operations Plan (OPLAN) and associated Rules of Engagement (ROE) that will permit the operation to succeed and which all agree are lawful. If they have agreed on the OPLAN and ROE, whether or not Allies or other participating States agree on the exact legal justification or explanation underlying them, is in principle of little interest to NATO as an organization. Thus, rather than requiring adherence to a single common body of law, the Alliance's expectation is that all States participating in a NATO or NATO-led operation will act lawfully within the legal framework applicable to them.

With respect to any particular operation or proposed operation, the question of applicable law will be addressed pragmatically, in the specifics of the OPLAN and the ROE. What the planners prepare and SACEUR, through the Military Committee, presents for Council approval takes national positions into account, but in practical terms proposes specific rules and approaches for particular anticipated circumstances rather than offers conceptual views on the applicability of one or another legal doctrine or body of law.

Any such differences are in any event likely to be relatively minor and inclined to being addressed at the level of implementation. Moreover, no Ally is required to participate in any NATO operation, thus in many cases domestic political or legal issues need not prevent joining consensus to approve an operation that will be carried out by others. In the case of Libya, for example, Germany was able to join consensus on the mandate for Operation Unified Protector despite having abstained on Security Council Resolution 1973 of 11 March 2011, the basis for the NATO operation, and being unprepared to participate in the operation itself.

Participating States are also able to limit their participation in other ways that may resolve for them, individually, any questions relating to their specific legal obligations. They may choose to participate in only parts of an operation. Or they may choose to participate with "caveats" reflecting national legal or political concerns.

Now, please allow me to give a couple of practical examples of how the Organization does this in more practical terms.

Operation Ocean Shield is NATO's counter-piracy operation off the coast of Somalia. The key point of reference for NATO in identifying the applicable legal framework has been Security Council Resolutions and, in particular, Security Council Resolution 1851 (2008).

The Somalia resolutions present a complex legal picture: they identify the law of the sea and, in particular, the UN Convention on the Law of the Sea (UNCLOS), as setting the legal framework for counter-piracy operations. UNSCR 1851, in particular, authorizes the taking of «all necessary measures that are appropriate in Somalia» to counter piracy, thus contemplating and allowing use of force, permits the taking of counterpiracy action on land in Somalia, even though the law of the sea is not applicable on land, and indicates that such actions must be consistent with «applicable international humanitarian and human rights law».

Unpacking these complex provisions is not easy. In particular, the references to IHL and the authorization of «all necessary measures», and the contemplation of such measures in areas to which the UNCLOS framework is clearly inapplicable, are puzzling. Happily, however, for NATO's purposes it has not been necessary to untangle these knots, at least to date. The reason is that Ocean Shield is framed in essentially law enforcement terms, in essence, a legal common denominator on which all Allies can agree. From the beginning, the operation was built on the assumption that captured pirates would be tried as criminals in courts applying national law.

The prudence of this approach has been confirmed by decisions of the European Court of Human Rights and national courts applying its jurisprudence that have treated the terms of the ECHR, notably including its procedural requirements, to the counter-piracy operation -- and in so doing effectively determining that the core law applicable to the participation of 26 Allies is HRL. These decisions are in practice treated as binding by parties to the Convention, but they have no such status for Canada and the United States, however, the ECHR's decisions are an inescapable factor in the context of a NATO operation.)

Because many Allies are reluctant to pursue national prosecutions in Europe, the operational consequence is that many participants in Ocean Shield follow a so-called "catch and release" approach in which pirates are captured and briefly detained, but in the end released rather than being prosecuted. Suspected pirates could in principle be transferred to a regional State which is party to an applicable prisoner transfer agreement, but NATO is not yet a party to any such agreement, yet we are pursuing the conclusion of such agreements.

It is instructive in this context also to consider another and less well known NATO maritime operation, Operation Active Endeavour (OAE). OAE was adopted in the aftermath of 9/11 as a counter-terrorism mission. It is the only NATO operation ever authorized under Article 5, the mutual self-defense article at the heart of the North Atlantic Treaty. While it might seem evident that a self-defense operation necessarily implies an armed conflict paradigm, and with it the application of IHL, in fact the operation has from the beginning been implemented essentially as a law enforcement mission with search and boarding rules and practices consistent with those applicable in any maritime law enforcement action. This approach is consistent with the fact that the Mediterranean Sea, the principal area in which OAE is conducted, is not a combat zone and that more extreme use of force is not necessary to conduct search activities in that environment.

These two examples reflect the pragmatism with which NATO designs and carries out its operations. The missions can be carried out effectively without reference to IHL and thus there is no requirement to consider applying that body of law despite the existence of plausible arguments for doing so.

A third case, the NATO operation in Libya, Operation Unified Protector (OUP), was mandated by Allies to implement Security Council Resolution 1973, which authorized UN Member States to take a range of actions to address the repression of protests by the Qaddafi regime.

OUP had three elements. The first was a maritime arms embargo to be conducted on the high seas, the second element of OUP, the no-fly zone preventing flights over Libyan territory other than those for humanitarian assistance purposes or as authorized by States enforcing the no-fly zone, and the third and by far most important element of the operation was the mission to protect civilians and civilian-populated areas from land attack.

In this context, it was evident that the relevant legal construct was IHL, and the NATO OPLAN and ROE for the protect-civilians element of OUP were drafted on that basis. Among the fundamental elements of IHL are the principles of necessity and proportionality, both aimed in significant part at minimizing harm to civilians. In addition, the express purpose of Resolution 1973 and of the Council's mandate in OUP was to protect civilians, further underscoring the importance of avoiding civilian casualties to the extent possible. In fact, immense care was taken to avoid harm to civilians both in the weapons used, virtually every weapon used was a precision-guided one, and in the "zero civilian casualties" standard adopted by the targeteers. In the event, in over 7000 strikes there were credible reports of no more than 70 civilian deaths, a literally unprecedented performance for a major military operation.

NATO will conclude its combat operations in Afghanistan by the end of this year and, at the clear invitation of the Government of Afghanistan, we will commence the Resolute Support Mission on January 1st 2015 (if we get the necessary legal framework in place). It is of interest to note that one highly-charged issue relating to the application of IHL in the context of a NATO-led operation has been that of treatment of persons detained by ISAF forces in Afghanistan. The issue is politically salient and has been faced continually by NATO forces throughout NATO's decade-long presence in Afghanistan. Because detainees are captured by individual national units, however, responsibility for their treatment thereafter falls to the individual participating States and is determined by each such States' own understanding of its IHL obligations toward detainees, including the implications of its classification of the conflict. The ISAF commander has no authority to dictate a common general policy on detentions and the Allies have not considered it necessary to agree on one on an Alliance basis.

Like in OUP a paramount factor in our operations in Afghanistan has been a desire to implement a higher standard than required by law. In October 2001 Gen Allan, COM ISAF stated that he wanted to «eliminate civilian casualties». Gen Allan was well aware that this commitment not to reduce, not to mitigate, but to eliminate went beyond and above the legal requirements. With Afghanistan now in the lead of all operations, ISAF's focus has shifted from exhaustive efforts to reduce our own civilian casualties to training our Afghan Partners to do the same. This effort will continue with the Train, Advice and Assist mission, where NATO-led trainers will emphasize the importance of law and respect for the rule of law to our Afghan partners, as they conduct their domestic operations.

By way of conclusion allow me to re-emphasise. The Alliance was founded on respect for rule of law and respect for applicable law has been a hallmark of its training and operations. Among the Allies are States that have long been world leaders in developing and applying human rights law; many of the same States have long led in developing and applying IHL as well. It is important to both groups, and indeed, to the Alliance and its members as a whole, that NATO operations be carried out in a manner fully respecting and consistent with both bodies of law. NATO has long seen itself as setting the standard for the effective and lawful conduct of military operations and is aware of the importance of its own credibility and the perceived legitimacy of its actions of meeting a high standard in complying with international legal rules.

However similar their basic legal obligations and perspectives may be, the Allies are sovereign and do not view all legal questions identically. NATO is an alliance, not an institution and it has no mandate or ability to enforce a common view. There is thus no systematic "NATO doctrine" on the relationship between IHL and HRL.

As an alliance of sovereigns, NATO approaches issues relating to the legal framework for its military operations in a pragmatic manner. An operation will not even be proposed if it is known that it cannot command consensus. The primary point of reference for deciding what kind of actions are legally available and appropriate within an operation will be the underlying UN Security Council Resolution, where there is one. ROE and other governing documents will be drafted with a focus on operational effectiveness and ensuring a high legal "comfort level" on the part of all participating States rather than on any *a priori* view of the law.

What may differentiate the situations of NATO and other entities conducting multinational military operations, however, is the fact that actions of the Organization are, under NATO rules, indistinguishable from the collective, common action of all its individual member States. Not only is every major NATO decision taken by the North Atlantic Council rather than by the Secretary-General on the basis of conferred or delegated authority, but each such decision must be taken through a consensus process in which no Ally can be outvoted and for the outcome of which each Ally therefore bears responsibility. Every NATO operation is thus initiated by the consensus authorization of all Allies; every OPLAN and every set of ROE, and every amendment to them, are similarly approved by consensus of all Allies. The Allies decide when to initiate an operation, and when to terminate it. In such contexts it may seem strange to ascribe a responsibility to NATO, at least separately from individual States participating in an operation.

Happily, NATO has to date not had to face serious legal questions relating to the allocation of responsibility for alleged violations of IHL. This fact is far from accidental, however, and reflects the seriousness with which the Organization, its member States and NATO operating partners take their responsibility to comply fully with their obligations under IHL.

L'évolution du droit international humanitaire applicable à la conduite des hostilités

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Le droit international applicable à la conduite des hostilités s'efforce de trouver un juste milieu entre les nécessités de la guerre et les lois d'humanité au cours des conflits armés¹. Longtemps applicable aux seuls conflits armés internationaux, ce corpus de normes s'est étendu par voie coutumière aux conflits armés non internationaux². L'application de ces normes doit aujourd'hui faire face à deux défis: la lutte engagée contre le terrorisme (I) et l'apparition de nouvelles technologies sur le champ de bataille (II).

1. La lutte contre le terrorisme et le droit international humanitaire

Depuis quelques années, une tendance se dessine à étendre, au nom de la lutte contre le terrorisme pour etendre le champ d'application spatiale de ces normes (1.1) et l'on observe une nette propension à attaquer des personnes ne participant pas directement aux hostilités (1.2).

1.1. Extension du champ d'application spatiale du droit international humanitaire

L'application du droit international humanitaire à la conduite des hostilités est conditionnée par l'existence d'un conflit armé. La qualification d'une situation de conflit armé relève du droit international

¹ Déclaration de St Pétersbourg, 11 décembre 1868.

 $^{^2}$ La Chambre d'appel du Tribunal pénal international pour l'ex Yougoslavie, dans l'arrêt relatif à l'appel de la défense concernant l'exception préjudicielle d'incompétence (Aff. n° IT - 94 – 1. AR 72 – 2000 tobre 1995 Le Procureur c. Dusko Tadic alias Dule), déclare: « Ce qui est inhumain, et par conséquent interdit, dans les conflits internationaux, ne peut pas être considéré comme humain dans les conflits civils » (§ 119 de l'arrêt). L'étude menée par le CICR sur le droit international humanitaire coutumier (Jean-Marie Henckaerts et Louise Doswald-Beck, Bruylant 2006) arrive à cette conclusion que la plupart des règles du droit international humanitaire relatives à la conduite des hostilités s'appliquent aussi bien aux conflits armés internationaux qu'aux conflits armés non internationaux.

humanitaire qui fixe des critères objectifs pour définir un conflit armé³. Au cours de ces dernières années, certains Etats ont qualifié de « guerre » la lutte contre le terrorisme⁴, alors même que la situation n'avait pas atteint le seuil fixé par le droit international humanitaire. A supposer que, dans certains cas, on puisse admettre que le seuil requis soit atteint, l'application du droit international humanitaire doit se limiter au théâtre effectif des combats et ne pas s'étendre aux territoires d'Etats non belligérants sans leur consentement. On se doit de constater que ces limites n'ont pas toujours été respectées, particulièrement pour ce qui est du champ de bataille⁵.

On constate que, dans certains cas, ce champ a été étendu au gré des déplacements des personnes supposées être impliquées dans des opérations terroristes, pratique suivie par les Etats-Unis et Israël. Selon les Etats-Unis, le droit des forces armées d'utiliser la force contre Al Qaïda ne se limite pas au champ de bataille effectif mais s'étend au-delà. D'après cet Etat, le droit international l'autoriserait à recourir à la force sans qu'il soit dans chaque cas nécessaire de se demander si nous sommes en situation de légitime défense ou non. Il se réserve en effet ce droit dès lors qu'un Etat serait incapable de prendre les mesures qui s'imposent ou refuserait de le faire⁶. Cette thèse est évidemment rejetée par les organes internationaux compétents dans le domaine du droit international des droits de l'homme.

Le Rapporteur spécial du Conseil des droits de l'homme des Nations Unies sur l'« exécution extra judiciaire et arbitraire » est d'avis que l'existence d'un conflit armé et le champ d'application géographique des normes du droit international humanitaire sont déterminés par des critères objectifs. D'après le Rapporteur spécial, certains Etats se sont référés au droit international humanitaire au mépris de ces critères parce que cette branche du droit offre, contrairement au droit international des droits de

³ Cf. art. 2 commun aux Conventions de Genève de 1949 et l'article 1 du Protocole additionnel pour ce qui est des critères sur la base desquels on peut qualifier un conflit armé d'international. S'agissant des conflits armés non internationaux, ce sont désormais les critères fixés par le Tribunal pénal pour l'ex Yougoslavie dans l'affaire Tadic précitée qui prévalent. D'après le Tribunal, on entend par conflit armé non international « un conflit armé prolongé entre les autorités gouvernementales et des groupes armés organisés ou entre de tels groupes au sein d'un Etat » (§ 70 de l'arrêt). Cette définition est reprise par le Statut de Rome pour la Cour pénale internationale reprend dans son article 8 § 2 (c).

⁴ Des expressions telles que « War against terrorism » ou « Global war » ont été utilisés par les autorités des Etats-Unis d'Amérique pour qualifier la lutte qu'ils mènent contre le terrorisme.

⁵ Louise Arimatsu, "Territory, Boundaries and the Law of armed conflict", Yearbook of International Humanitarian Law Vol. 12 (2009) pp. 157-192.

⁶ Selon John Brennan, Assistant to the President for Homeland Security and Counterterrorism, "The US do not view our authority to use military force against Al Qaida as being restricted solely to hot battlefields like Afghanistan because we are engaged in an armed conflict with Al Qaida" Address at Harvard Law School : "Strengthening our Security by Adhering to our Values" (Sept. 16, 2011).

l'homme, plus de liberté d'action pour tuer (more permissive rules for killing), tout en assurant l'immunité à la personne menant l'attaque. Dans ces conditions, la privation de la vie s'apparente à une exécution sommaire et arbitraire et oblige l'Etat dont les forces armées en sont responsables à mener une enquête⁷.

De même, le Comité des droits de l'homme, examinant le rapport que les Etats-Unis lui ont soumis, s'est déclaré préoccupé par l'étendue spatiale de l'application des normes du droit international humanitaire. Le Comité met par ailleurs en cause le recours excessif à la notion de menace imminente⁸. Ces préoccupations sont partagées par le CICR. Son président s'était demandé s'il était possible d'utiliser la force létale contre une personne participant directement à un conflit armé et se déplaçant sur le territoire d'un Etat non belligérant. Selon lui, le droit international humanitaire ne saurait s'appliquer contre une telle personne. Emettre l'opinion inverse signifierait que le monde entier est un champ de bataille potentiel⁹. Point de vue partagé par le Parlement européen qui déclare que « le droit international, en matière de droits de l'homme, interdit les assassinats arbitraires en toutes circonstances, considérant que le droit international humanitaire ne permet pas l'assassinat ciblé de personnes qui se trouvent dans des Etats non belligérants »¹⁰.

A supposer même que la personne ciblée se trouve sur le champ de bataille, l'attaque ne pourrait être considérée comme licite que si cette personne participe directement aux hostilités.

1.2. Ciblage de personnes qui ne participent pas directement aux hostilités

Selon les deux Protocoles additionnels aux Conventions de Genève de 1949, les civils jouissent de la protection accordée par le droit international humanitaire sauf s'ils participent directement aux hostilités et pendant la durée de cette participation¹¹. Cette exception vise les personnes qui assument une « fonction de combat continu » (continuous combat

⁷ Report of the UN Special Rapporteur, Philip Alston, on "Extra Judicial, Summary or Arbitrary Execution" UN.Doc A/HRC/14/24/Addendum 6 on Targeted Killing, 28 août 2010. D'après le Rapporteur special "Whether a conflict exists is a question that must be answered with reference to objective criteria" (§ 46 et 47 du rapport).

⁸ Human Rights Committee, Concluding Observations on the fourth US periodic report CCPR/C/USA/4 and Corr. 1 § 9.

⁹ Interview de Peter Maurer, Président du CICR, 10 mai 2013.

¹⁰ Résolution du Parlement européen du 27 février 2014 sur l'utilisation de drones armés (2014/2567 [RSP]) Point F.

¹¹ Art. 51 al. 3 du Protocole I additionnel et art. 13 du Protocole II additionnel.

function)¹² concrétisée par des actes hostiles à l'égard de l'ennemi. Il s'agit d'actes qui, par leur nature et leur but, sont destinés à frapper le personnel ou le matériel des forces armées¹³. On ne saurait donc inclure dans cette catégorie les activités qui contribuent à « l'effort de guerre », parmi lesquelles celles destinées à soutenir « le moral de la population »¹⁴.

Selon les Etats-Unis et Israël, non parties à ces Protocoles, ces dispositions ne reflètent pas le droit international coutumier. Ces Etats se fondent plutôt sur le critère d'appartenance à un groupe hostile pour qualifier de participation directe aux hostilités les activités menées par les personnes qui y sont affiliées et justifient ainsi les attaques menées à leur encontre. Il en va ainsi des activités menées par des responsables politiques ou des leaders spirituels contre leurs intérêts. D'après le Procureur général des Etats-Unis, l'assassinat ciblé de hauts responsables d'Al Qaida, se trouvant en dehors du territoire américain, est justifié dans la mesure où ils sont engagés dans la planification d'opérations destinées à tuer des citoyens américains ou dans le cas les autorités américaines sont arrivées à la conclusion qu'ils représentent une menace imminente pour les Etats-Unis et qu'il n'est pas possible de les capturer¹⁵. Tout critère éminemment subjectif laissé à la libre appréciation des autorités qui prennent la décision d'attaquer. La Cour Suprême d'Israël s'est fondée à son tour sur le critère de l'appartenance de la personne ciblée à un groupe armé. Néanmoins, cet Etat prend le soin de souligner que la licéité de l'assassinat ciblé doit s'apprécier au cas par cas¹⁶.

¹⁶ The Public Committee against torture et al. v. the Governement of Israël et al. HCJ 769/02, 14 décembre 2006 "Thus, it cannot be determined in advance that every targeted killing is permitted according to customary international law".

¹² « Guide interprétatif sur la notion de participation directe aux hostilités en droit international humanitaire » CICR, octobre 2010. Le Rapporteur spécial sur les exécutions extra judiciaires, sommaires ou arbitraires se réfère au (§ 62) de son rapport sur ce guide pour conclure que seules ces personnes peuvent être ciblées alors qu'elles se trouvent sur le champ de bataille. Cf. William J. Fenrick *ICRC guidance on direct participation in hostilities* Yearbook of International Humanitarian Law Vol. 12 (2009) pp. 287-300.

¹³ Commentaire de l'al. 3 de l'article 51 du Protocole additionnel I préparé par les soins du CICR, Genève 1986 § 1942.

¹⁴ Ibid. § 1945.

¹⁵ Lors d'un discours prononcé le 5 mars 2013 au Northwestern University School of Law, l'Attorney General, Eric Holder, a déterminé dans quelles conditions les Etats-Unis s'autorisent à procéder à des assassinats ciblés hors de leur territoire. Selon le Procureur, l'assassinat ciblé est justifié «If the targeted citizen (il s'agissait de Al Awlaki, citoyen américain ciblé alors qu'il se trouvait sur le territoire du Yémen) is a senior operational leader of Al Qaida or associated forces, if he is actively engaged in the planning to kill Americans, if the US Government has determined that the individual poses an imminent threat of violent attack on US, if his capture is not feasible and if the operation would be conducted in a manner consistent with applicable law of war». Cf. Beth Van Schaack *The killing of Osama Ben Laden and Anwar Al Awlaqi: Uncharted Legal Territory* Yearbook of International Humanitarian Law Vol. 14 (2011) pp. 255-326.

Dans les situations qui ne peuvent être qualifiées de conflit armé, le recours à la force létale ne peut se justifier qu'en cas de légitime défense. En aucun cas, la privation du droit à la vie inhérent à la personne humaine ne doit être interprétée dans un sens restrictif¹⁷. Malheureusement, on se doit de constater que, dans de nombreux cas, les personnes visées ont été privées de leur vie alors que la possibilité de les capturer existait, ce qui a conduit le Rapporteur spécial sur l'exécution extra judiciaire et arbitraire à affirmer qu'en dehors des situations de conflits armés les assassinats ciblés sont rarement considérés comme étant licites¹⁸. Qui plus est, toute privation du droit à la vie doit, selon le droit international des droits de l'homme, faire l'objet d'une enquête, ce que les autorités responsables se sont abstenues d'entreprendre dans la plupart des cas¹⁹.

2. L'utilisation d'armes nouvelles

Selon la Déclaration de St Pétersbourg, il appartient aux parties contractantes de s'assurer que les perfectionnements que la science pourrait apporter à l'armement soient respectueux des principes qu'elles ont posés. L'article 36 du Protocole I additionnel, selon lequel les parties ont l'obligation de déterminer dans chaque cas si l'emploi d'une nouvelle arme est conforme à ses dispositions, est fondé sur cet instrument²⁰. C'est sur cette base que la Cour International de Justice est arrivée à cette conclusion que l'emploi de l'arme nucléaire, en tant que nouvelle arme, doit être conforme au droit international humanitaire, sans quoi on méconnaîtrait la nature intrinsèquement humanitaire des principes qui imprègnent tout le droit international humanitaire²¹. La question se pose désormais de savoir si l'utilisation de drones et le recours aux cyberattaques au cours de conflits

¹⁷ Observation générale n° 6, art. 6 (Droit à la vie) HRI/GEN Re 9 (Vol. 1) Comité des droits de l'homme, seizième session, 30 avril 1982. Selon la pratique constante du Comité, le Pacte international relatif aux droits civils et politiques dont l'article 6 est applicable aux actes d'un Etat agissant dans l'exercice de sa compétence en dehors de son propre territoire. Pratique relevée par la C.I.J. dans son avis du 9 juillet 2004 sur les « conséquences juridiques de l'édification d'un mur dans le territoire palestinien occupé » (§ 109 de l'arrêt).

¹⁸ Pour le Rapporteur spécial Ph. Alston, «Outside the context of armed conflict, the use of drones for targeted killing is almost never likely to be legal» (§ 85 du rapport).

¹⁹ Ph. Alston estime que «The failure of States to comply with their human rights law and international humanitarian law obligations to provide transparency and accountability for targeted killing is a matter of deep concern» (§ 87 du rapport).

²⁰ «A guide to the legal review of new weapons, means and methods of warfare: measures to implement art. 36 of additional Protocol I of 1977» in International Review of Red Cross Vol. 88 n° 864 pp. 864 et s. (December 2006) Cf. également Kathleen Lawand Reviewing the legality of new weapons, means and methods of warfare" Ibid. pp. 925 et s.

²¹ Avis consultatif du 8 juillet 1996 « Licéité de la menace ou de l'emploi d'armes nucléaires » § 86.

armés peuvent être conformes aux normes applicables à la conduite des hostilités.

2.1. La conformité de l'attaque menée par des drones avec le droit international humanitaire

Si le recours aux drones est rarement conforme au droit international des droits de l'homme, comme cela a été mis en exergue dans le cas des assassinats ciblés commis dans des situations qui ne peuvent être qualifiées de conflit armé, il n'en va pas de même dans le cas de l'utilisation des drones comme arme lors des conflits armés. En effet, les drones permettent une surveillance aérienne en temps réel. On aurait pu s'attendre à ce que le choix des cibles puisse se faire dans de meilleures conditions et que des mesures de précaution soient prises afin d'épargner au maximum la population civile²². Ce n'est malheureusement pas toujours le cas. L'utilisation de drones sur différents théâtres d'opérations a montré que la technique n'est pas encore en mesure de conférer à ces appareils une capacité autonome pour reconnaître les cibles choisies et déterminer le moment optimal pour passer à l'acte avec le moins possible de dommages collatéraux. Question qui se posera avec encore plus d'acuité lorsque les armes autonomes seront mises en service. La réunion des Etats parties à la Convention sur certaines armes classiques s'en est préoccupée. Elle leur a permis de commencer à explorer les questions fondamentales d'ordre juridique et éthique que ces armes poseront. La question se pose de savoir si, en plein combat, les armes autonomes seront capables de distinguer un civil d'un combattant ou si elles seront en mesure d'annuler une attaque qui, après avoir été lancée, s'avérerait génératrice d'effets collatéraux disproportionnés par rapport à l'avantage militaire attendu²³. Le Parlement européen s'est préoccupé des implications en matière de droits de l'homme de l'utilisation de drones et de robots autonomes en temps de guerre²⁴.

Mis à part ces risques résultant de défaillances techniques, on devrait s'interroger sur les effets que l'éloignement des combattants du champ de bataille pourrait avoir sur la mise en œuvre du droit international

²² « Le droit international humanitaire et les défis posés par les conflits armés contemporains » Rapport établi par le CICR (octobre 2011) pour la XXXI ème Conférence internationale de la Croix-Rouge et du Croissant-Rouge, Genève 28novembre-1^{er} décembre 2011 p. 45.

²³ Réunion du 12 mai 2014, communiqué de presse CICR. Selon une étude menée par Amnesty International intitulée «Will be next» et publiée en 2013, au cours des années 2004 à 2013 les quelque 300 attaques menées par des drones américains au nord du Pakistan ont tué de 400 à 900 personnes, dont seules 2 % étaient ciblées.

²⁴ Rés. 2014/2567 (RSP) précitée. Le parlement européen s'inquiète.

humanitaire. Des études ont montré que si on déconnectait un soldat du champ de bataille, il serait tenté, dans la mesure où il ne craint pas pour sa vie, de commettre, en ciblant son adversaire, des abus en violation du droit international humanitaire²⁵. On pourrait au contraire soutenir que, ne se voyant pas menacé, le combattant prendrait le temps d'évaluer sa cible et ne tirerait qu'après s'être assuré de sa nature militaire²⁶. Toutes ces questions ont été abordées lors des réunions organisées par l'Assemblée Générale des Nations Unies²⁷ et le Conseil des droits de l'homme²⁸. Ce dernier organe exhorte les Etats qui ont recours aux drones dans la lutte contre le terrorisme d'enquêter sur les faits quand il existe un indice plausible de violation du droit international des droits de l'homme et d'assurer, dans ce cas, un procès équitable aux victimes innocentes des tirs. Dans le cadre d'un conflit armé, les Etats qui ont recours à cette arme sont tenus de respecter les principes de distinction, de proportionnalité ainsi que celui de précaution²⁹.

2.2. La conformité du recours à la cyberattaque avec le droit international humanitaire

Ce qui nous préoccupe ici est de savoir dans quelles conditions une opération cybernétique peut être considérée comme une attaque au sens du droit international humanitaire. Selon le Manuel de Tallinn sur l'applicabilité du droit international à la guerre cybernétique, une cyberattaque au sens du droit international humanitaire est un cyber opération, offensive ou défensive, raisonnablement susceptible de blesser ou de tuer des personnes ou d'endommager ou même détruire des biens³⁰. Il s'agit d'une définition restrictive dans la mesure où une opération

²⁵ « Le droit international humanitaire et les défis posés par les conflits armés contemporains », op. cit. p. 45 et rapport précité du Rapporteur spécial Alston § 80.

²⁶ Jean-Baptiste Jeangène Vilmer Légalité et légitimité des drones armés Politique étrangère 3 (2013) p. 123.

²⁷ Réunion du 25 octobre 2013 de la troisième Commission de l'Assemblée Générale consacrée à l'examen des rapports des Rapporteurs spéciaux Christof Heyns et Ben Emmerson, respectivement sur les exécutions sommaires et sur la promotion des libertés fondamentales et la lutte contre le terrorisme. Les deux Rapporteurs spéciaux ont insisté sur l'obligation des Etats de faire preuve de plus de transparence.

 ²⁸ Réunion débat du Conseil des droits de l'homme organisée le 22 septembre 2014 (Rés. A/HRC/25/L.32 – 24 mars 2014).
²⁹ Rés. A/HRC/25/L.11 – 21 mars 2014. Les Etats-Unis et Israël ont voté contre cette

²⁹ Rés. A/HRC/25/L.11 – 21 mars 2014. Les Etats-Unis et Israël ont voté contre cette résolution.

³⁰ Tallinn Manual on the International Law applicable to Cyber Warfare, prepared par the International Group of Experts at the Invitation of the NATO Cooperative Cyber Defense Center of Excellence, Cambridge University Press 2013. Ce manuel énonce 95 règles. La règle 30 définit l'attaque cybernétique.

cybernétique qui ne cause pas de préjudice à des individus ou de dommage matériel à des biens ou objets n'est pas considérée comme une attaque au sens du droit international humanitaire. Ainsi, lorsqu'une manipulation du système de contrôle aérien entraîne le crash d'un avion, des coupures d'électricité ou interrompt la distribution d'eau potable, elle constitue incontestablement une attaque soumise aux règles pertinentes du droit international humanitaire.

En revanche, l'opération qui entraîne la neutralisation des données se trouvant dans un ordinateur, à supposer même qu'elle ait pour conséquence l'interruption des communications de l'ennemi, n'est pas considérée comme telle. A l'appui d'une telle interprétation, on peut soutenir que les données ne peuvent être considérées comme un objet tangible. On a soutenu à juste titre que la simple neutralisation, même réversible, d'un bien peut présenter un avantage militaire précis et être considérée de ce fait comme un objectif militaire susceptible d'être attaqué³¹. Ainsi, il n'est pas nécessaire que l'opération cybernétique entraîne la destruction d'un bien. Sous certaines conditions, sa simple neutralisation pourrait qualifier l'acte hostile d'attaque³². La pratique subséquente des Etats apportera la réponse à cette divergence de vues. Quelle que soit la définition retenue, l'attaque cybernétique doit être menée en conformité avec les normes du droit international humanitaire réglementant les opérations militaires.

De sérieux doutes ont été exprimés quant à la capacité des cyberopérations à respecter ces règles, plus particulièrement la règle fondamentale du droit international humanitaire de la distinction entre population civile et combattants ainsi qu'entre objectif militaire et civil. L'interconnexion entre les réseaux informatiques civils et militaires rend le respect de cette règle aléatoire. De plus, l'introduction d'un virus suffisamment puissant pourrait affecter le système informatique civil de l'Etat ciblé, voire au-delà de ses frontières et perturber ou détruire les infrastructures reposant sur ces systèmes. Au regard du droit international humanitaire, de tels virus seraient considérés comme frappant sans discrimination³³. Ces risques sont d'autant plus prévisibles que la responsabilité des auteurs de telles attaques ne sera jamais engagée en raison de l'anonymat qu'offre l'espace cybernétique.

³¹ Art. 52 al. 2 du Protocole I additionnel.

³² Thèse soutenue par Knut Dörmann *Applicability of the Additional Protocol to computer network attacks*, contribution électronique 2004 p. 6. L'affirmation de l'auteur est fondée sur l'article 52 al. 2 du Protocole I additionnel déterminant dans quelle mesure un bien constitue un objectif militaire, à savoir, entre autres, la "neutralisation" d'un bien offrant un avantage militaire précis.

³³ « Le droit international humanitaire et les défis posés par les conflits armés contemporains », op.cit. p. 44. Pour une étude critique et approfondie du Manuel de Tallinn, Cf. Rain Liivoya and Tim Mc Cormack *Laws in the virtual battlespace: the Tallinn Manual and the Jus in bello* Yearbook of International Humanitrian Law Vol. 15 (2012) pp. 45 et s.

Le droit international humanitaire applicable à la conduite des hostilités a été codifié par le Protocole I additionnel aux Conventions de Genève de 1949 dont la plupart des dispositions peuvent être considérées comme reflétant le droit international coutumier. Mais aujourd'hui, ces règles sont confrontées à de graves défis. Pour tenter d'y répondre, comme le montre la pratique dominante, ces dispositions restent malgré tout un point de référence incontournable. Les tentatives tendant à étendre leur application à la lutte contre le terrorisme continuent de heurter, au sein des organes internationaux compétents en matière de droits de l'homme, l'opposition de la très grande majorité des Etats, le respect des droits de l'homme dans la lutte contre le terrorisme ne cessant d'être régulièrement bafoué. Paradoxalement, pour relever le défi de l'emploi d'armes nouvelles, on s'est toujours efforcé d'ériger les normes pertinentes du Protocole en modèle d'une réglementation plus appropriée de leur utilisation.

II. Operational planning and targeting decision processes

Planning and decision-making: differences in processes for pre-planned targets, targets of opportunity and troops in contact situations. National perspectives

Richard C. "Rich" Gross

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I am here on a personal capacity – I am not speaking for the Department of Defense, the Joint Staff, or the US Army.

I would also like to thank the scholars and the academics because they do a great service to us in the military, to those of us who are practitioners. We don't often give the luxury of a great deal of time to advise our commanders and our bosses on important legal issues. We are often given five, ten minutes to make a decision or to give a legal opinion to a commander who has to make a tough call about a military strike, operation or detention. It's the great work of scholars and academics, including the Institute and the ICRC, that develops the law. So, we can learn and be better prepared to give that advice.

I think that if there were a theme to my remarks today, it would be that an operational law attorney or a practitioner really has the most value and the most opportunity to be influential before a military operation and not necessarily during. There was a famous TV show called "JAG" (Judge Advocate General) and everybody in America has probably watched or at least made fun of that show. There was one episode where the commander is discussing an airstrike with multiple aircraft and he turns to the lawyer, the JAG, and says: "I want you to lead the airstrike because you know the ROE" [Rules of Engagement]. That never happens in real life; in fact, not only are you not asked to be on the strike, you are often not in the room when you really ought to be, because the commander brings the intelligence officer and the operations officer together and they may not have brought the JAG in for a very important discussion. I have been blessed with bosses who have always had me in the room. But I still think the greatest influence that a JAG practitioner has, before an operation, is in the development of the rules of engagement and training which two of our panelists will talk about, and not only the training in the rules of engagement but also the training in the law of armed conflict or international humanitarian law. Now, I was asked to talk about three specific aspects of operational targeting: pre-planned targeting, troops-incontact targeting, and, what has been labelled as "targets of opportunity",

which I think is probably the most controversial and challenging aspect for a practitioner and probably gives the most cause for discussion and back and forth dialogue.

So let's talk about preplanned targeting. Obviously, this is the most deliberate type of targeting we do in the military and frankly it's where I think the systems can be emplaced to ensure the least amount of civilian casualties, the most compliance with IHL and the most compliance with the rules of engagement because you put a process in place that allows you to frame an operation in such a way you can make sure you are following all the appropriate rules. That is where we, as lawyers, can have a lot of influence, at the beginning.

Now, one of the speakers referred to a kind of PlayStation (videogame) mentality when it comes to drone strikes. I found that funny, because that analogy only works if you play PlayStation in your room with twenty people watching over your shoulder telling you when you can or cannot take the strike, because that's how deliberate targeting works. There's a process. Deliberate targeting or preplanned targeting really starts with a nomination. That's when a unit, a tactical or operational unit will make a nomination. They'll nominate a target, whether it's a military objective like a site or person or a particular training camp or some other sort of military objective, and put forward a justification under both the law of armed conflict as well as policy, rules of engagement and their words as to why this objective fits their military purposes and what's the military benefit. Why are we taking the strike? Why is it legal? And so forth. And they'll put that forward and that'll move up through policy-makers, decisionmakers, commanders, intelligence officers and lawyers and it's vetted at every step – there is a formal process.

This is not just a United States process, I mean, we do it in the United States for US-only operations but I have seen it at work when I was a ISAF legal advisor, a very deliberate system within ISAF, the NATO process to vet targets and to take it up to a targeting board where multiple individuals are reviewing those targets for a number of things. Certainly the lawyers are looking at it for compliance with the law of armed conflict, for compliance with ROE, but you also have intelligence officers determining if the intelligence supports a particular operation; you have an operations officer reviewing it to ensure it meets the objectives of that military operation, etc. Each person gives it a "green" or "red", a go or no-go, as part of that targeting board, which is a recommendation to the commander who can authorize that strike. It's not a voting process where the majority wins. A single red vote is essentially a veto that goes to the commander, and that commander makes the final decision. As part of that process, we do a very complex collateral damage assessment process, something that was developed within the US military as part of our doctrine that has since been adopted by NATO. It involves a very scientific methodology of looking at a particular objective and looking at factors, like is it daytime or night time, is it in a rural area or is it in an urban area? Is it typically populated or not? Is it a work place or residence, etc.? And that data is used to determine what the appropriate approval level is to authorize a particular strike. It's not a substitute for a proportionality test under the law. The commander still has to determine whether or not a strike is proportional and whether or not any civilian casualties would be proportional to the military benefit gained. The collateral damage estimate process can help inform a commander's views of how that preplanned target goes.

Once that target has been thoroughly vetted and goes to the commander who makes the decision, then he decides whether or not to take that strike and, if so, with what weapon system. So it's a very deliberate process, one that often has challenges, particularly in a coalition environment. In a coalition environment you are faced with interoperability issues and different (ROE national) caveats. Different countries come to the fight with different rules, particularly in the area of self-defense. I can think of all the countries that were in the ISAF coalition, there were probably different national self-defense rules of engagement for every country, and it's something we have to work through. In addition, they may have caveats when it comes to the rules of engagement for deliberate targets, preplanned targets. The most common example I can think of is that some nations came to ISAF with the caveat that they would not do counter-narcotics operations. So they would not participate in an operation if they thought it was a counter-narcotic type of operation, therefore, we had to consider this.

So, turning to the next area, probably the easiest area of these three types of targets, is troops-in-contact. It's not hard to figure out who the enemy is when someone is shooting at you. So typically, in those types of scenarios we don't really have those situations where it's a question of whether or not to respond with lethal force or deadly force. There are proportionality issues certainly and other issues. There are interoperability issues with troops-in-contact situations and we have had situations where, for example, you have one nation's troops under fire, you have another nation's troops controlling the aircraft overhead and a third nation piloting that aircraft. So with three different nations involved in that self-defense situation whose rules of engagements apply? And I can tell you that while troops are being shot at, it's not the time to figure that out. And we had that situation once. We think we had it settled but as people change over I cannot tell you what the status is right now.

Finally, the last area of targeting I was asked to discuss is targets of opportunity. I have given it some thought and I really think this area has the most risks. I will not consider self-defense scenarios where someone is shooting at you and it's easy, nor the preplanned targets when we have

determined someone or something as a lawful military objective and the commander has made that decision. So, I shall consider everything else in the middle as a target of opportunity. I think that it all boils down to one of two scenarios: the first type of target of opportunity might be where a commander and a unit are faced with a possible enemy that, based on something they are doing, they think is a lawful military objective under their orders. So, for example, you come upon a unit, a group of individuals who are armed and you think they might be Taliban in Afghanistan and so you are trying to determine whether or not it is an appropriate target to hit. Again, lawyers can influence that situation by the way we write the rules of engagement to deal with this situation. According to the NATO/ISAF rules of engagement, for example, a target of opportunity like that had to go to a higher level, a certain level of commander for approval. So, the commander on the ground, if he is not faced with a self-defense situation, he is not being shot at and the other party may not even know he's there, often has to seek approval from a higher level commander. This decision allows for a calm head, for someone who's a little detached from the situation to help make that decision.

The other kind of category of target of opportunity is really the harder one where someone's behavior is such that it makes you think they might be an enemy or they might be about to do something. Certainly, if it rises to a level of hostile intent, self-defense would have to be considered, but if it is just short of that, you are looking at their behavior to determine whether or not this is a target of opportunity – those situations are extraordinarily difficult to deal with. Let me give you a couple of examples. A scenario we were asked about quite frequently, both in Iraq and Afghanistan, was where you had a military base and at certain times there would be an individual on a cell phone and within minutes there would be incoming mortar fire or rounds, or a helicopter would land, an individual watching would make a call on a cell phone, and suddenly there would be incoming mortar rounds. So, the question becomes, is that individual on his phone calling in the strikes or is it someone who happens to be on the phone? This is a target of opportunity and it is a very, very hard call for a commander.

The commander may not have time to contact a lawyer and so we try to compensate for this beforehand by teaching the rules of engagement and so forth to make commanders equipped to respond to that situation. Certainly deadly force is not the only way to deal with that kind of situation. You can send out someone and talk to the individual on the cell phone, perhaps temporarily detain them and determine if they have other items on their person to indicate whether or not they are actually an enemy or just an innocent cell phone user outside the base.

Another difficult scenario that came up a lot in Afghanistan were folks digging at night. We come from a lesser agrarian society nowadays. Most

of us are not really used to life on a farmland or the high temperatures they have in Afghanistan. It shouldn't surprise us (but it often did) that farmers in Afghanistan will sometimes dig at night, and they are digging for their crops not digging in IEDs. And yet that was a lesson we had to teach commanders i.e. not everybody digging at night is up to nefarious purposes. They may have a legitimate, agricultural reason for digging at night. It's hot during the day and they can get more work done. So that was one of those areas where it may look like a target of opportunity but proper training in the rules of engagement and frankly alternative means of addressing it, could be helpful to a commander.

We also ran into the check-point scenario in Afghanistan quite a bit. You run a NATO/ISAF check-point to slow traffic down or to search cars and of course the Afghan police do the same thing. As cars approach the check-point, you have a number of signs, warnings, lights, lasers [to slow them down]. You wouldn't believe the measures in place we had, and cars still sped up and headed towards the checkpoint despite the multiple warnings, sounds, everything. So that was a frustrating, scary, situation for our soldiers. It was a frustrating situation for our commanders. And soldiers would often treat it as a hostile intent-type scenario and react and fire at the vehicle – sometimes with warning shots, sometimes without –and that became a difficult situation which required a lot of training and so forth. Because often we found that it was just an Afghan family who thought they would be stopped by the Taliban, so they sped up. So as we advise our commanders often we have to look at culture as well as the law, as culture can make a difference.

I think, in our role as an operational law attorney, we should be there throughout the operation, we should be present in the operation center, we should be at the commander's side, advising. Where I really think we have the most impact as practitioners is in advance of the operation, when we have developed the training, when we've developed the rules of engagement so that they are clear and don't sound as if a lawyer's written them, but sound as if an operator wrote them, so operators can understand them when they are under a lot of stress and often in danger. I think that's when lawyers have the most impact.

Training and political guidance as a comprehensive approach towards improving operational decisions and RoE?

Cynthia Petrigh

Founder, Beyond (peace); Member IIHL

I will speak of a specific example of how we can improve political guidance, decisions, rules of engagement and behaviour with training and with the support of political guidance.

I was based for eleven months in the European Union training mission in Mali. The purpose of this mission is not to be a combat mission but a training mission. The sole purpose is to train the Malian armed forces in all kinds of tactical, military skills, from infantry to JTAG, to commandos, to mortar shooting. My specific role was to train them on IHL, Human Rights and the prevention of sexual violence. We've had unexpectedly very good results and impact. Now, you can ask me how we measured this impact, how we knew we had good results.

Well, first, I used the same questionnaire on the arrival of the troops in our camp and on their departure. We received battalions of seven hundred people for ten weeks. In week one, I would ask them to complete a questionnaire and, in week ten, the exact same questionnaire and there I could measure the acquisition of knowledge. For example, on week one, for a particular battalion, I had 70 per cent of the seven hundred saying that torture was normal and what they had to do when they took a prisoner. On week ten I had only three persons replying with the same answer, that torture was normal. So we could measure a big difference from week one to week ten. Or, for example when we asked the participants "what did you learn on this course?", they would say "before attending this class, I would have tortured an enemy who had surrendered. I'm lucky I took this course and will not commit this crime". Or a participant who said on week one that "rape is the beauty of war", on week ten said that he will treat women "as his sisters and his mother". So we had a very clear impact on knowledge acquisition.

Now, you would ask "ok, that's fine that they learn the rule, it's already fantastic but what is the impact on the ground? How did you measure that?" Unfortunately, I was not authorised to go to the North. After training with us, the Malian military were immediately deployed to the conflict area in the North. I was not authorised to go and see

what they were doing, but I could make contact with other troops and other organisations that were operating in the North, like the Serval French Operation, like the MINUSMA, like Human Rights NGOs. They were reporting to me that there was an improvement in the behaviour and the kind of incidents that were reported to them and which they shared with me: at the beginning they included incidents like cutting the ear of the enemies; in the end the kind of incidents was like the bargaining of the price of a motorbike to pay less because they are militaries. So the kind of problems that were reported to me decreased in seriousness.

Therefore, we were able to measure knowledge acquisition and to receive feedback. I also had the immense chance to be able to de-brief troops that had been trained with us, deployed to the North and returned after six months. They asked for a refresher course because they had changed some of their personnel. I see an African brother smiling. I don't know where he is from, but maybe afterwards we can chat a bit. I asked them: "Was what we taught you last year before you were deployed, useful for you when you were deployed? / Was it useless or / Did it create a problem for you?" Most of them said that it was very useful, but the Malians are a very friendly and polite people, so I wanted to know if they had a concrete example where it had been useful. I asked "do you have a concrete example?" and they answered "yes, we made prisoners and we didn't kill them". I said "would you have killed them before the course" and they said "Of course!", with great enthusiasm. One of them said that for them it was not useful at all and when I asked why he answered "because we couldn't torture them and this prevents us from doing our job". So we had very interesting discussions and conversations. Some of them said "It was very positive because it changed the relation with the population, the population was more supportive because they were less scared of us and because we created good contacts". These examples show that they could also see the tactical benefits in improving behaviour.

Lastly, we could also check the change in behaviour through practicing drills because as you can see in the photos we were running a lot of exercise in addition to lecturing. I'm impressed by the level of sophistication of what was described by the previous speakers but, as you can see in the photos, we didn't have this kind of sophistication. But, for example, we would create some exercises and drills and in one of them we would ask the troops to identify "What is there, just observe, can you describe what you see? Do you see enemies? Do you see protected sites? Do you see a threat?". One group said "Yes, there's an enemy there". And we said "How do you know it's an enemy?" and they said "They are wearing a shesh", the Tuareg costume. For them, this identified this person as an enemy. I would be glad to have the kind of problems you had. Our problem was that, at the beginning, many of them would identify the target just by their ethnic belonging, not by the fact that they were combatants or non-combatants. We, therefore, really had to explain quite a number of things, ethically, politically, tactically, legally; we used all kinds of fields.

We could only do that, and we could only have these results because we had the highest support from the political authorities: 1. from the Malian political and military authorities, because they were encouraging and accompanying this change. You cannot train troops in this comprehensive and effective way if you don't have the highest political support. 2. Also, of course, we had the highest political support from the EU, which was organising this mission and wanted the troops to behave and the Malian army to remain under the control of the civilian authorities.

What I want to say here is that the key to success in changing decisionmaking, the rules of engagement and the behaviour is, as it was said this morning, through prevention and information. It is very trendy now to speak about prosecuting people but many of them don't even know what the rules are. So let us first explain to them what the rule is before jumping to prosecuting them. A successful change goes through a very tailored training. To do this training I had to build a very tailored training, otherwise it wouldn't have been successful. We conducted an applicable law analysis, a context analysis, a pattern of abuse analysis, an audience profile, etc. We created all these exercises and these tools specifically for these troops. In summary, tailored training on the one hand and political support, political guidance on the other hand; these, I believe, are the two factors that were key to success.

Just to tease the audience a bit, I want to add that, surprisingly, where I found more resistance was sometimes from the European troops themselves because, although I had good support from the highest command of the mission, sometimes the European soldiers were saying "what are you teaching them? You will make them gay". Or one officer who was in charge of training other officers said "It's very nice what you are doing but, you know, it's very hard to respect during war.", and I said "IHL is only meant to be respected during war!". I was surprised that even at officers' level we had quite some ignorance, maybe due to the fact that many of the [EU] troops who were participating had good behaviour on the ground for other reasons. For example, they had good Rules of Engagement, they had a good sense of ethics, they had precise weapons, but they were not calling it IHL, they didn't know they were applying IHL.

One of the most successful aspects of this mission is that we managed to bring together the military, IHL and Human Rights aspects; IHL and Human Rights became a real part of the military training and conduct. It was not something optional, and the soldiers understood that you are a professional soldier not only when you have good tactical skills but also good behaviour.

Operational planning and decision-making process. The challenges of interoperability: NATO-type operations and operations in partnership with local forces

Ben F. Klappe

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By the end of this year over 350,000 Afghan National Army officers and Afghan national police will have been trained over the last decade by NATO forces and ISAF will have been transformed into a training and advisory assistance mission in Afghanistan. Interoperability amongst thousands of NATO soldiers and others and also thousands of interactions and operations in partnership with the Afghans occurred over the last decade. Numerous lessons on interoperability were learned and will continue to be learned as there are no clear cut solutions for all the challenges that NATO forces are confronted with and will face in the near future.

Most of the examples I will use are based on my experiences in Bosnia back in 1993 as a company commander and during my tour in Afghanistan in 2012. I have also consulted a number of officers who served during operations abroad in various international staff and leadership positions.

When talking about interoperability there are certain definitions in NATO as to what it is. You can only work effectively and efficiently together with 28 different nations in operations if there are provisions in place to assure smooth cooperation. This has been the case since the organization was founded in 1949 but it has become even more important over the last decade since the alliance began mounting operations outside its normal area of operations, ranging from cold war deployments and exercises of national units in host nations like Germany to the establishment of multi-national divisions, rapid deployable headquarters and brigades. Moreover, there have been NATO deployments in Bosnia, coalitions of the willing in Iraq and Afghanistan (including other countries such as Australia and New Zealand) and the anti-piracy mission. So, here's that definition that I just mentioned. Coalitions are often formed on an ad hoc basis with partners joining and leaving or scaling down their commitments during the course of the operation. But interoperability does not necessarily require identical military equipment. It is important that the equipment provides the possibility to interact effectively amongst nations.

Interoperability will support the implementation of recent NATO initiatives as the SMART defence and connected forces initiatives.

This is a picture of the current NATO force structure and the idea is to have multi-national rapid deployable headquarters throughout Europe. An example is the German-Netherlands headquarters in Munster, Germany. I had the pleasure of working there back in 1995 when it was established. It is an integrated headquarters where the Corps Commander is either German or Dutch – every three years senior positions at the headquarters rotate between both nations and staff officers making a mix. There are all joint staff elements J 1, J 2, J3.

When talking about interoperability one can consider the interoperability concerning the political objectives of NATO – as we speak there is an ongoing summit in Wales and one of the topics on the agenda is the establishment of a very highly rapid deployable unit, brigade size about four thousand – that may be the outcome of a discussion on the political situation in the Ukraine. That part is the most difficult for member States to agree on. What is the end game? Once we commence operations what is the desired outcome? For the military – strategy and doctrine, operations and procedures – this is business as usual and also an ongoing debate as doctrine and strategy will be impacted continuously by developments in nowadays conflicts. What is not depicted in the picture is the so-called non-technical interoperability: issues that you can't solve by adopting a joint publication.

That part of interoperability is about preparedness, understanding, command and ethos. Ethos considers levels of trust and cultural values, understanding non-verbal communication, body language, verbal communication, etc. There is also a command structure and command style. The functioning of a headquarters much depends on the experiences and language skills individuals - commander and staff alike - will bring.

Fundamental principles of joint operations provide some guidance on how best to employ NATO forces to achieve strategic objectives and create a common baseline using agreed NATO terminology. And as we speak the guidance for operations planning (GOP) in short is going to be replaced by a comprehensive operational planning (COPD) directive and you can see the difference in wording.

NATO Joint doctrine

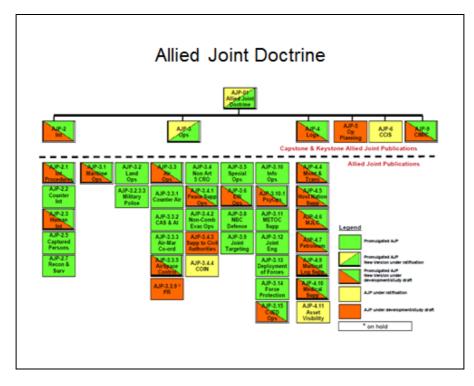
- Fundamental principles of joint operations
- Provides guidance on how best to employ NATO forces to achieve strategic objectives.
- 'Train as we plan to operate'
- Creates common baseline using NATO agreed terminology.
- AJP-5 (study draft) SACEUR Guidance for Operational Planning (GOP) to be replaced by Comprehensive Operational Planning Directive (COPD)

One was a guidance used as a draft study and COPD is more directive.

An example concerning communication can be seen in the early stages of operations in Iraq in 2003. One country contributing to that operation clearly had not understood what should have happened with prisoners. Prisoners were flown to the national capital, whilst only US and UK were considered occupying powers at the time.

Another example from that period is where one of the countries providing security to an airfield stopped patrolling after 17.00. After that time security was no longer guaranteed. You can imagine the anxiety of other units flying missions and working at the airfield discovering they were protected only during the day.

In 2003, a Dutch contingent was deployed back in Iraq and one day two men in civilian attire arrived at the gate of the compound and identified themselves as the new battalion commander and the new brigade commander, stating they were going to take over the compound. There was no prior information given to the Dutch commander on the spot and that again was an example of a lack of proper communication.



This slide is an overview of what is called the NATO allied joint doctrine (AJP) and you can see that in the various areas policy on Personnel is absent. It starts with AJP2, intelligence; AJP1 is, of course Personnel and that is mostly a national issue; AJP3 refers to operations and there you see peace operations, you see support to civil authorities, etc. Green indicates that it's promulgated, that is, a joint-established doctrine agreed by Member States. When it's brown it's still under development and you can see that the AJP file that I have just mentioned on planning is still under development. What is available in the AJP2 are captured persons, so there is a doctrine on captured persons. This morning the senior legal advisor of NATO said that they didn't need a joint doctrine on legal operations because, in effect, it's a combination, it's a collection of individual State's legal frameworks. I agree that commanders and legal advisers should be very pragmatic, but I think there is room to have a joint publication on legal issues as Rich Gross just mentioned. An example where there was no time to consult is when a decision has to be made in split seconds on really important legal issues. And particular when headquarters are more and more integrated, a commander from one country and a deputy commander from another country, staff officers from multiple countries, what law are we going to apply? Pragmatic law? I agree to a certain degree but let's make sure that all nations that contribute, not only staff officers but also forces on the ground, agree to a basic legal framework and let's put it in writing in a joint doctrine publication. There was a dispute between very senior leaders in the mission in Afghanistan when it came to a discussion about direct participation in hostilities. Were all those involved in narco trafficking and in the poppy production directly participating in hostilities? One view was that all farmers and traffickers were sustaining the fight of the Taliban. So all were directly participating in hostilities and were to be targeted. It took lengthy discussions up in the NATO command structure to clear this whole issue. If participating States agree on such legal issues before military operations start it would be very welcome.

This is just to map out, for those of you who have never been in the military, what the operations planning and decision-making process is all about. One determines the objectives based on political objective, strategic objective, determines the new mission given by a higher level, creating opinions, developing courses of action, forming an opinion and then a decision by the commander is made to implement that decision from the concept of operations to an operational plan. This is an ongoing process once the operations start, it continues to be reviewed and assessed during the execution until there is a new mission and Military leaders accept the idea that the plan is already old once the operation starts.

This is just to give you some background on planning processes. In reality there are planning directives but it often comes down to the commander's decisions and the flexibility and the knowledge and experience of staff and senior staff implementing the plan and developing the plan. Considerations while planning: what is the desired end state? What are the strategic objectives? What is the military operational end state? Etc.

In respect to changing views during a deployment, we've seen that in Afghanistan, particularly in 2009, where there was all of a sudden that sense of urgency for transformation and transfer of authority to the Afghans in five years' time, there were changing views with new appointed Force commanders on how to fight the insurgency. Rules of engagement, for example, were releasable to the Afghan National Army. Until then, it was NATO restricted or NATO secrets. Particularly during that episode, General McChrystal tightened the rules. There were heavy debates with the now President Karzai about issues such as civilian casualties and there were huge restrictions to the use of force, leading to situations where soldiers felt that their safety wasn't really taken seriously. So they were restricted in using and employing force and soldiers felt their lives no longer counted. But of course that was a result of what happened on the battlefield. Sometimes troops were behaving very aggressively on the roads, with their military vehicles, Afghan civilians just making phone calls were perceived

as potential opponents triggering improvised explosive devices. In 2012 there was a discussion on the night raids resulting in civilian casualties and you always see the impact of decisions that restrict or enable military force.

Now let's finally get to another issue, that is, the interoperability and the local forces. It starts with "we are there eventually to leave and handover security, responsibility to the nation we are deployed in". They should have ultimate responsibility for security, that's why we were training the Afghan National Army and Afghan National Police. It is about accountability and reliability. Do we NATO soldiers really trust our Afghan brothers in arms? Are we willing to share information? Can we rely on them when they ask for close air support on specific targets that there is real and imminent danger and not just something to settle with the neighbours. Operations security was the name of the game. When I spoke last week to a German planning officer in Mazar-i-Sharif he confessed to have no issues with Operations Security (OPSEC): because 'we share all information with the Afghan National Army'. When the question came up as to whether there were any compartments in the headquarters where Afghan officers were not supposed to work, the discussion became a bit blurred. And, of course, there are smaller types of multi-national operations where the Afghan National Army was not involved in.

Operational mentoring liaison teams was another issue, An international unit of some 15 to 30 staff officers were deployed with an Afghan contingent, battalion or brigade, acting as advisors. They helped in the planning processes and training of the Afghan units. They helped to assure that these units were receiving necessary support including close air support and medical evacuation. These teams were from several countries and, in the period of 2009, some 60 operation mentoring liaison teams were deployed and, in fact, the teams complemented the US-led training teams which were performing similar duties.

The next picture visualizes the so-called non-technical interoperability.

So ethos and understanding is important. The people in the picture are all police officers. Do we share intelligence? What is the non-verbal communication? What is the guy on the right hand side of the picture doing? Is he snoring? Is he watching her? What is the body language? Do we trust each other? And I have tried to translate what is written on the white board and you can see that the text on the left is in English and on the right in Arabic and the pictures – well, they don't match but here is what it says: House search - the military police officers, coincidentally from the Netherlands, are explaining to the two house searchers what a house search should look like. Why would you do a house search? Knowledge is imparted before doing a house search, how to go about it and being aware of the law regulating a house search. It is very basic, explaining to the local police some background and they may be very interested or they may not be too interested particularly regarding the law regulating house searching because they have been doing house searching for many, many years and why would they think that what the officer is telling them is much better than their way of acting?

So, in 2011 and 2012, resulting from the assistance to local forces, and interacting with the local forces and interoperability we had green on blue incidents where, an Afghan policeman or Afghan soldier opens fire on his trainers and, very unfortunately, only three weeks ago, there was this incidence that drew international attention where an American two-star was killed by a so-called green on blue incident. These incidents were increasing with 53 killed and 80 wounded in 2012. Research pointed out that some were infiltrators. Once the disarmament process was over they were recruited and hired and the selection process wasn't done to the best effect. But that was a smaller percentage.

Another smaller percentage were those, once recruited, were not planning to attack ISAF soldiers, but were forced to do so due to pressure and because of threats to their families. But also quite a few of these deadly incidents resulted from a clash of cultures. Afghan men feel perhaps rather quickly insulted. ISAF soldiers were simply not always aware of cultural sensitivities.

The final aspect I would like to highlight is the so-called evidence based operations. General Allen, who was the ISAF commander at the time, said: "I want to move from capture or kill to capture and prosecute". If we want to move to a democratic state we can't continue to kill. We need to have a process in place and that process implies that once you make an arrest make sure there is a trial and make sure that this is a trial that can stand the heat. So the idea was to track what's happening from the moment of the arrest to the days in court and systematically find the weak parts of the process.

Fear was that once you arrest an individual he will be released in the next two or three weeks so we needed to find out what was wrong. And it starts from the collecting of evidence at the crime scene. We have prosecutors on board during raids, making sure that evidence is being collected and then, in the next phase, find out why the prosecutor is dissatisfied with the evidence and then why, if at all, if it comes to a criminal case, why isn't the individual convicted? And it boils down to the idea that a terrorist act is also punishable under Afghan criminal law.

Taking decisions in hostilities situations. Best training practices

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I will present a concise list of matters that I believe need to be taken into account when considering the training of arms carriers in a variety of situations.

From an ICRC perspective, it should be noted that in assessing training needs, a contextual approach should be taken. Any discourse on training should also include reflection on education and the integration of IHL into doctrine and practice. For the ICRC, our area of expertise lies first and foremost in the interpretation of IHL, and of its proper application by the parties to the conflict in different contexts. IHL sets the framework within which the arms carriers must operate. Enhancing their understanding of this framework to ensure respect of IHL at all times is therefore the key objective of any training programme.

Allow me therefore to put forward a few key points which may merit further reflection by this round table.

The first concerns the ICRC's study on the roots of behaviour of war. Through this study, published in 2005, the ICRC sought to better understand the factors which are crucial in conditioning the behaviour of combatants in armed conflict, so as to improve their compliance with IHL. One of the main conclusions to arise from this study, relates to the role and the responsibility of superiors in ensuring respect for IHL and in preventing violations of IHL, by their subordinates. In particular it was noted that a proven way to affect the behaviour of arms carriers was not by trying "to win them over" personally but rather to influence those in their chain of command who have ascendancy over them.

Thus, if training programmes are to succeed in having positive effects, the "buy-in" of the higher echelons is required: military as well as political/civilian. Without this ownership by the superior, training efforts may be futile. Moreover, it should be recalled that pursuant to the Geneva Conventions, all States party to these instruments have a responsibility to ensure the dissemination of IHL and to provide extensive and regular training of IHL to their armed forces. For its part, the ICRC works closely with armed forces and national authorities globally to assist in the development and provision of relevant training programmes. The ICRC has also advised countries around the world on the establishment of interministerial committees or IHL commissions, many hosted by Ministries of Defence, to act as focal points and coordinators of IHL training activities to the armed forces. By having civilian as well as military authorities provide the requisite oversight of such IHL bodies as strengthened IHL training and dissemination endeavours, and the receptiveness of the arms bearers to these.

Turning to my second point, which relates to training capacity, if one were to map the number of legal officers/JAGs staffing the various armed forces in the four corners of the world, it goes without saying that the numbers would vary dramatically. Some armed forces, such as those of the United States, can call upon hundreds of JAGs within their ranks. Many of these JAGs will play an important role in integrating IHL into doctrine, education and training of their respective corps. By comparison, numerous armed forces elsewhere in the world will not find themselves in the privileged position of being able to call upon "experts" in IHL to help develop a better understanding and acceptance of this body of law amongst the troops. Moreover, without this legal capacity, it can be more problematic "translating" IHL legal concepts into tangible and comprehensible standards catered for a myriad of operational realities. As such, one of the main challenges and priorities for the ICRC is to be able to adapt its approaches to enable effective IHL training, best suited to the context and to the logistical reality of the environments.

As a third point, allow me to address succinctly the matter of innovation. As any instructor would be able to confirm, one of the main challenges in training is to be able to distil extensive material and oftentimes complicated issues into an easily accessible and understandable format. Ultimately, the audience needs to be receptive and interested in the issues if these are to influence their behaviour. Throughout its 150 years of history, the ICRC has continuously sought to innovate and to find new approaches to training and dissemination, to ultimately improve compliance with IHL. Whilst traditionally most training materials were paper based, today, thanks to technological advances, there is a plethora of opportunities to innovate and develop new e-platforms to make training materials more readily available and enticing. Recently, the ICRC has been involved in the development of videogame-style Virtual Reality Training tools (VRTs) which can be stored on USB keys and used in most contexts with the trainer only requiring a laptop and projector to make good use of this new technology. In addition, the ICRC in discussion with video game programmers is looking into how we could make use of existing video games to encourage respect of IHL. Indeed, many war themed video games offer the potential to introduce fundamental IHL principles. Rather than encouraging excessive violence, an idea could be to create incentives for the gamers to respect IHL, by, for instance, only allowing progression to

higher levels if the means and methods used in an attack against the virtual enemy complied with IHL. Bonus points could be introduced for each civilian spared, or if attempts have been made by the gamer to exercise precaution and minimise collateral damage. Ultimately, the aim is to make complex legal IHL questions, many of which can be debated *ad infinitum*, practicable and understandable to soldier in theatre, who will be called upon to take split second life or death decisions concerning an individual's "direct participation in hostilities".

Fourthly, besides developing an understanding of IHL by the armed forces, it is often through these training programmes that new recruits and soldiers in pre-deployment are first exposed to the ICRC. Meeting with troops before they are deployed provides the opportunity for the ICRC to brief on its mandate and the nature of its operations in the relevant contexts. During the training, they will receive a first-hand explanation of the ICRC's *modus operandi*, namely as relates to security, access, and detention visits, and hopefully appreciate the importance of the operational dialogue that the ICRC has with all parties to the conflict. Indeed, it is through the operational dialogue that steps can be taken to improve greater compliance with IHL, whether for instance through the modification of tactical directives and rules of engagement during the hostilities, or through the integration of lessons-learnt into doctrine, and subsequent training.

I will now address in the time remaining a few specific questions on topical issues arising from contemporary conflicts.

Allow me to put on the table the practical question of training of peacekeepers. It would be fair to say that, in recent times, we have witnessed interesting developments in the nature of mandates given to peace-keeping missions by the United Nations Security Council. Peacekeepers are being entrusted with a variety of tasks, including custodial responsibilities, intervention brigades have been established, and they are being asked to operate in many complex environments which vacillate between law enforcement and armed conflict paradigms. Peacekeepers, be they military or police personnel, need therefore to have a greater number of arrows in their training quiver and require greater versatility and adaptability in their operations. Moreover, since 2005 there has been a steady increase in the number of military and police troops being contributed by countries to UN Peacekeeping Missions. From an average of 67,000 monthly contributed troops in 2005, by 2014 this figure reached approximately 97,000. Given the dynamics of Peacekeeping Missions, thousands of troops are being rotated in and out of these missions annually. And all of them require training in IHL if they are being deployed to conflict zones. Ideally, such training needs to be effectuated before deployment. Mechanisms need therefore to be in place with relevant military authorities of troop contributing countries, through for instance their respective national peacekeeping institutes, or coordinated by DPKO, to ensure that the required training and dissemination of IHL is carried out. Moreover, as with state armed forces, lessons learnt from peacekeeping missions (for instance on use of force in self-defence or detention procedural safeguards) need to be integrated into DPKO reflection and 'doctrine' or equivalent. The ICRC continues to assist troop contributing countries and DPKO in these endeavours and to continue building on efforts by States and the UN to ensure respect of IHL by peacekeepers.

Similar issues arise as regards to bilateral military cooperation efforts between States, which include training components. Naturally, as mentioned above, such agreements are to be welcomed, to the extent that they allow for capacity building of armed forces with limited resources and the sharing of expertise by sophisticated militaries. As recent experience in a couple of contexts have shown though, despite having received such training and benefitted from capacity building, certain militaries have nonetheless allegedly gone on to commit violations of IHL. A question then that we must ask ourselves, is whether there is any residual responsibility on the part of the training authorities in terms of follow up with these offending militaries? Should we expect the trainers to go back to them to assess what went wrong in practice and seek to 're-train' accordingly? Are the necessary mechanisms in place to ensure that lessons learnt and any shortcomings can be incorporated into future training programmes?

And the very last two points, the first relating to specific training on sensitive issues. Most militaries involved in training would agree that teaching on generic IHL issues such as detention standards, use of force, targeting and even direct participation in hostilities are unproblematic in terms of core subject matter. Whilst there may be disagreement as to their exact contours, discussing concepts such as precaution, distinction and proportionality, is objectively straightforward. By contrast, introducing more delicate issues into training may give rise to social, cultural and religious sensitivities. For instance, there is agreement within the international community that there is an urgent need to put an end to the perpetration of sexual violence in times of armed conflict. It has been recognised that criminal accountability alone is insufficient to address this ill, and that efforts need to be redoubled to prevent sexual violence from being committed in the first place. Training and education of soldiers are therefore pivotal. Yet, it many contexts it may be taboo to speak of sexual violence, and trainers and trainees alike will feel uncomfortable speaking on this topic. Notwithstanding, education on the prevention of sexual violence cannot be simply side-lined as an awkward subject matter. Militaries need to develop the right tools and personnel to be able to systematically incorporate the prevention of sexual violence into training and doctrine.

Finally, and given the legal nature of this round table, allow me to note the significance of the jurisprudence which has emanated from the *ad hoc* UN tribunals over the past two decades. Many of the judgements delivered by the UNICTR and the UNICTY have dealt with core IHL concepts and sought to bring greater clarity to the application of IHL to military operations. Not every judgement has been met with universal acceptance, as the earlier discussion on *Gotovina* demonstrated, but that is unfortunately the nature of International Criminal Justice and the interpretative nature of IHL. Although some military practitioners may find fault with some of the case law or the civilian nature of the tribunals, it is nonetheless important to ensure that, where applicable, the jurisprudence of these tribunals be incorporated into military doctrine. As these Tribunals wind down, they leave behind a rich and diverse jurisprudential legacy, which can hopefully enhance the respect for and understanding of IHL.

III. The notion of military objectives

Current challenges with regard to the notion of military objective – legal and operational perspectives

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1. Military objectives in cyber operations

The problem that arises, and which is relatively unique to cyber operations, is whether data itself can be considered an object. While there is no definitive answer to this question, the currently prevailing view among LOAC experts appears to hold that in most cases data, for the purposes of targeting, should not itself be considered as an object. I will begin by presenting why this conclusion requires further thought and that there is in fact good reason to consider data as a potential object. Following this, I will also raise some of the difficulties such a conclusion would create.

This reasoning is said to be supported by the Commentary to Protocol 1, according to which the term object refers to something which is "visible and tangible". This, *prima facie*, certainly does not seem to include data. But there is good reason to consider this issue further and raise the possibility that data may nevertheless be akin to an object in this context.

The reference to "visible and tangible" is not part of the Protocol definition, but rather the understanding given to it in the commentary at a particular point in time and in a specific context. This must be examined more closely to see whether the same reasoning applies today.

At the time of drafting it is unlikely that they would have considered the possibility of data destruction separate from physical damage. Destroying data at the time would have meant physically damaging the storage method, such as the paper files. Nowadays it is, however, perfectly possible to destroy vast amounts of vital data without physically destroying the computers on which they are stored.

Placing this in context, it begs the question whether a kinetic attack which results in setting on fire of five hundred mail bags, is any more harmful than a cyber-operation which permanently deletes five million emails. This is a scenario that could hardly have been contemplated when the Commentary made the reference to objects being "visible and tangible".

It is also important to see in the Commentary what it was that was being excluded. In fact, the reference to tangible objects was made in order to distinguish objects from the very different concept of "general objective (in the sense of aim or purpose) of a military operation". Consequently, it is at least arguable that computer data is closer to what they wanted to include as objects, than it is to the notion of what they wanted to exclude as aim or purpose.

Insofar as interpretations of the law are required to develop with time, LOAC might need to learn from domestic legal systems, which have demonstrated the ability to evolve beyond physical conceptions of damage, and recognise that rather than physical damage to a computer system, the focus should be on the harm to the contents of the system – data included.

The question of data as an object is complicated by the matter of existing backup data. However, there are a number of reasons that this should not disqualify data from consideration as an object. First, how would this work in practice? How can the attacker know if there is a backup or if the data is irretrievable?

Second, one may question whether potential restoration capability is the correct test for determining the nature of the object and the lawfulness of targeting it. This is not the test we use for physical property. In fact, most physical property is not irretrievable – buildings can be rebuilt, cars can be remanufactured; it is often just a question of time and cost. Restoration of complex digital data might be restorable from a backup, but this too has a cost. Why is causing one costly act more lawful than the other and is it just a question of the degree of time and money involved?

Once again it is useful to compare this scenario to a non-data situation: if a paper document facility or a library is destroyed, do we say it was acceptable because there are copies of the same books in another facility or library? Why treat computer data differently?

Notwithstanding the above, this argument will take on a different shape in the context of cultural objects. It is possible that digital archives might be considered cultural property and as such benefit from added protections to objects of this type. In this context, backup copies may well play a role, since the uniqueness of an object will often be one of the reasons behind its cultural property protection.

If, therefore, it is verifiable and known that additional and equal copies exist and that they will remain unharmed, it may be that a digital item might not benefit from the special protection. But the relevance of backup copies is considered here only in the context of the applicability of extra protections for unique items of cultural value, and the general rules on attacking objects should not be affected by this.

We must accept that the law cannot forever be interpreted and applied in exactly the same manner. If we wish to ensure the relevance of the rules to the 21st century, it is vital that they are interpreted in light of modern reality, and that goes equally for the matter of military objectives in cyber operations.

Proposing new interpretations is not the same as saying that the law itself is inadequate to deal with new challenges. There should be no doubt that existing law can apply to the cyber sphere (and the impressive Tallinn manual is an excellent example of this), but there must be room for further new approaches and interpretations that might differ from the manner in which the same law was read in the past.

All the above notwithstanding, viewing data as an object presents real challenges. First, it has been argued that such a conclusion would make it impossible to carry out any cyber operations, as the nature of joint networks means that all operations are likely to adversely affect civilian data at some point. To this one could respond that the principle of proportionality is well-suited to resolve this concern. Accepting data as an object does not mean that civilian data can never be harmed, but simply that the intended target must be military and any harm to civilian data must be proportionate.

The second concern is more complex and relates to the way we deal with militant propaganda websites. It has been noted that state practice demonstrates that states consider it acceptable to engage in cyber operations against such websites, regardless of whether they are civilian. The answer to this concern must take a number of forms. First, it may well be that the actions against some of these websites is not part of an armed conflict and law enforcement (including international cooperation in this realm) can provide a legal basis for these actions. We must also acknowledge that many cyber operations are currently occurring in the legally murky waters of espionage and such operations are just one small example of many activities which we are not certain how to regulate (or even acknowledge). Finally, the answer might be found in an attempt to distinguish between different types of cyber operations on the basis of the level of harm caused, so that the rules on attacks would only apply to those that cause harm which is more than propaganda activity. Conversely, massive deletion of data from institutional archives (e.g.educational institutions, local councils, government offices...) is an example of an act which can cause a significant level of harm without leading to destruction of a physical object and these should be viewed as civilian objects, just as data on military servers can be a military objective.

Problems clearly remain and further work must be done in order to reach a workable interpretation. However, it should proceed on the premise that the law itself does not exclude the possibility of considering data as an object; rather, those who exclude data do so by relying on past interpretations of the law that were necessarily wedded to the time. Instead, it is perfectly possible to remain true to the object and purpose of the law –

and indeed to the letter of the law itself – by interpreting it in light of the modern day context in which it is being implemented.

2. Military objectives when fighting armed groups during urban warfare

A host of challenges emerge in the context of military objectives when fighting against armed groups in urban warfare. When discussing common military objectives such as military barracks / command centres / weapon storage facilities, we tend to assume that these will be on a clearly identifiable military base. But in urban warfare against armed groups, these activities are more likely to occur from within civilian buildings. The definition of military objectives includes "use" as one of the criteria for identifying an object as a legitimate target. Recent conflicts have highlighted differences in how this criterion might be interpreted and the emerging debates provide some interesting food for thought.

The example of a home allegedly being used as a command and control centre is a useful place to start. To be clear, this is not about the targeting of individuals while they are in the home, but the separate question of when the building itself might be a legitimate military objective. Clearly, a militant commander making phone calls from his home does not make the house itself into a military objective, just as we would not accept the same for the home of every military officer in any army. On the other hand, if a home has a fixed installation of secure lines and communications systems built in and these are the primary lines of communication for issuing military commands, then this might turn it into a legitimate objective.

Matters get even more complex when discussing the question of homes used as regular meeting places for the command staff of the opposing party. This is where the second half of the military objective definition could become important. The definition states that «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.»

There are many debates over whether these two halves are indeed separate. Clearly they can be seen as pointing at two different matters, but some commentators are of the view that when put to the test, in most cases anything that satisfies the first half will also satisfy the second. It would seem to me that the case of a house used as a regular meeting place might be one of the cases in which the need for the two halves of the definition could be demonstrated: the first half might be satisfied in that the building is being used to contribute to the enemy's military actions but one might argue that its destruction does not provide the second half's definite military advantage if all they need to do is sit in the building next door to have the same effect. The case would be different if there were something unique about this house, for example, if there were a secure entrance, such as through a tunnel, and a fortified meeting bunker that does not exist in most other buildings and which makes the destruction of this specific house into an act that offers the required military advantage. In such circumstances the location criterion could also be relevant.

There has also been some confusion over the interpretation of the "use" criterion in relation to the temporal aspect. There is a temporal element in the military objective definition in relation to the question of whether, in the circumstances ruling at the time, an advantage would be gained by attacking it. But some commentators appear to be adding further temporal restrictions by taking the "for such time" requirement from the rule on direct participation in hostilities by individuals, and misapplying it to the concept of military objectives. Accordingly, they argue that in the scenario such as the one described above, the building can only be targeted during the precise moments in which a meeting is taking place. This, I would say, is a mistake. The relevance of the meeting taking place at that time is indeed paramount if the targeting operation is based on the legitimacy of targeting certain individuals who are there at the moment, and in which case the building is a question of collateral damage. However, if it has been ascertained that the structure itself is a legitimate military objective because of a fixed communications installation or a tunnel shaft leading to a meeting room, then there is no requirement to only target it at the moment someone is speaking on the communication system or climbing out of the tunnel. Even if "use" were interpreted in such a restrictive manner, there is also the 'purpose' element which can apply to such a structure in respect to its intended use at a later time.

3. The interaction between the determination of military objectives and the rule of proportionality in urban warfare

When speaking of the law of armed conflict in the abstract confines of books and manuals, we tend to view each of the rules as being separate from each other, going through each one in great detail but not always acknowledging the interaction between them. However, when it comes to operationalising them, it is not always clear when one rule ends and the next one begins. This is very much the case when looking at the relationship between the notion of military objectives and the rules on proportionality and precautions. The proportionality principle requires consideration of the harm to civilians and civilian objects when carrying out attacks against military objectives. But in order to assess the expected outcome of an attack in light of this rule, one must be able to identify where the military objective ends and the civilian object begins. This is particularly acute in urban warfare, where, as noted earlier, the opposing party is likely to be operating from within civilian areas and using civilian structures.

For example, let us assume that the enemy is using one floor of an apartment building as a command and control centre, or even a missile launch centre. We often focus more on civilian lives rather than objects in these debates and, accordingly, the proportionality calculation would be relatively straightforward in that we know that while there are some fighters in the building, any civilians in the same building as them must be considered on the civilian side of the proportionality assessment. But what about the civilian objects? For this part of the assessment, we need to know if the whole building is a military objective, or just the one floor utilised by the enemy. I think it's fair to say that many would view the building as a single military objective and not require distinguishing one floor as a separate object. They would, of course, still consider all civilians in the building within the proportionality assessment. However, the result of this approach means that as far as objects are concerned, the parts of the building not used by the enemy military might not be considered in the proportionality calculation.

Now we could say that the answer depends on the ability to strike the one floor separately – for example, it makes all the difference if this is the bottom floor, the roof, or a floor in the middle of the building. But this takes us into a different set of rules, in particular on the precautions in attack and choice of means and methods, for example, the possibility of using precision weapons. However, this approach creates a 'chicken and egg' relationship between the rules, since the precautions are there to avoid harm to civilians and civilian objects and applying the rule on precautions therefore requires a predetermination of whether the whole building is the military objective or if it's just part of the building, with the rest being a civilian object. Again, if the whole building is a military objective, do the rules on choosing means and methods to minimise harm apply in relation to the other floors of the building?

My impression is that many militaries would on the one hand consider the whole building as a military objective, but nevertheless consider the harm to the non-military part in their proportionality calculation. This may be wise policy, but it might also be seen as a mixed up version of the law. A similar question arises in the context of assessing proportionality for dual-use objects which are a military objective, but the damage of which causes clear harm to civilians. In all these cases, the question is how much of the harm to a military objective must be considered in the proportionality (and precautions) assessment – is it the direct harm caused to the building itself, despite it being a military objective? Is it the incidental harm to the civilians as a result of losing the building (and can this be distinguished from the harm to the building itself)? Is it the indirect longer-term effect on everyone affected? While views on the appropriate answer do exist, there is no clear agreement on this. Nonetheless, it may be the case that while there are differences over legal interpretation, the policy in practice of many militaries could contribute to advancing agreement.

The recent hostilities in Gaza brought a focus on the issue of tunnels. Of course, tunnels are not new and fighters have used underground networks, for example, for hiding in the Parisian catacombs in WW2 and most memorably by Viet Cong soldiers in the Vietnam War. There's no question that in some circumstances the tunnels themselves can be a legitimate military objective, but here too there is a question of defining their precise physical contours. Assuming the whole of the underground tunnel is a military objective, there is of course a need to consider the collateral harm to everything above ground. But could some of the area above ground also be considered part of the tunnel? The entry/exit shafts into the tunnel will often be inside a civilian building. Again, does this mean that a whole house is now a military objective because it is covering the entrance to the tunnel? Or is the tunnel entrance viewed as separate to the building, in which case the building must be considered in the collateral harm?

Urban warfare heightens the need to consider the relationship between the notion of military objectives and the other rules on conduct of hostilities. In particular, determining the precise physical contours of the military objective will have weighty implications for the assessment of proportionality and precautions in attack. The IHL community is increasingly devoting attention to new emerging concerns and we must not forget that many of the early challenges relating to the most basic of concepts – such as military objectives – are still the subject of controversy. Maintaining the appropriate balance between military necessity and humanity, and ensuring protection for victims of war, cannot be achieved without clarification of these basic concepts.

Military objectives and lethal autonomous weapon systems

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Technological progress has always been an important challenge to International humanitarian law (IHL). Today, the robotisation of armed conflicts is part of it. By robotisation, I mean the general trend in many armies to use more machines that are more or less autonomous. According to a widely used definition, endorsed by the American and British Governments, by Human Rights Watch and the UN Rapporteur on extrajudicial, summary and arbitrary executions, autonomous weapon systems - I will not use the acronym "laws", which would be quite unfortunate, especially here - are weapons systems that, once activated, can select and engage targets without further intervention by a human operator. The important part here is "once activated": I will come back to that. I will not say more on their nature and operational capacities, as there is a complete panel exclusively devoted to them on Saturday, chaired by Ambassador Benoît d'Aboville. My angle here is to focus on the notion of a 'military objective' and how it is affected by such a technological development.

So, what is the problem? The targeting rules, based on the notion of a "military objective", are nothing but a corollary of the most fundamental IHL principle: the principle of distinction between civilians and combatants. Hence the prohibition of indiscriminate attacks, explained as "(a) those which are not directed at a specific military objective; (b) those which employ a method or means of combat which cannot be directed at a specific military objective" (Protocol I, art. 51). As for the means, that is the weapons, there are two kinds of indiscriminate weapons: ones which cannot be directed at a specific military objective, and ones whose effects cannot be limited. So, the question is: can lethal autonomous weapons be directed only at a military objective, and can their effects be limited? If the answer is "no", then, clearly, they should be banned. There is an obligation to ensure that targets are military objectives (Protocol I, art. 57.2). In doubt, if we are not sure the machine would be able to detect it, we should ban the weapon. Armed drones can be aimed only at military objectives because they are operated by humans, but what about lethal autonomous weapons? Can something other than a human- and that is the deepest question hereidentify a military objective?

The first difficulty is in the distinction itself. Roboticists often exaggerate their ability to program IHL, that is, to convert laws into algorithms. Not being lawyers, they have a simplistic understanding of these rules, reducing them to unequivocal commands such as "if it's a civilian, do not shoot" and "if it's a combatant, shoot". Not only is it less and less easy in contemporary conflicts to distinguish between civilians and combatants, but it may also be legal to shoot a civilian as long as he takes direct part in the hostilities and that is a complex notion giving rise to contradictory interpretations. I'm thinking of, on the one hand, the ICRC and, on the other, the U.S. and Israel, for instance. It may be illegal to shoot a combatant, as long as he is hors de combat, which is not always easy to establish, even for humans. Therefore, the principle of distinction depends on the context. Will lethal autonomous weapons be able to sense and interpret such a context?

That's the first problem. The second difficulty is that the notion of a "military objective" implies proportionality, because targeting a military objective may kill a number of civilians, either accidentally or deliberately, and this does not alter the legitimacy of the military objective, provided that these civilian casualties are not excessive in relation to the military advantage gained. Now, how will lethal autonomous weapons interpret "excessive"? Measuring the excessive collateral damage according to the anticipated military advantage involves a case-by-case analysis and, again, depends on the strategic and political context, which the machine would simply not be aware of, at least not today. It's difficult to imagine a weapon system that would be capable of such knowledge in the future, except if they were informed by a human in constant communication with the machine, transmitting information on the context. But, in that case, the weapon system would not be fully autonomous, but would only be under what could be called "supervised autonomy", and we would not be talking about the same issue.

So, what would be a potential solution for these problems? I believe it is in a number of safeguards. Firstly, given the previous difficulties with distinction and proportionality, it's probable that lethal autonomous weapons will not be able to fully respect these principles. That being said, we have to keep in mind that humans themselves are not capable of fully respecting them, which is why IHL is so often violated and creates endless doctrinal and judicial controversies. You think of the difficulty for a lethal autonomous weapon to identify a civilian object, but wasn't it because of a human error that the USS Vincennes shot down an Iranian airliner in 1988? We must, therefore, reject the argument of the opponents of lethal autonomous weapons who invoke the incapacity, not only temporarily and currently, but absolutely and eternally- even in the future- to respect IHL, because they require infallibility instead of a lesser or equal fallibility to humans. It must be demanded that the machine pass what Lucas calls the 'Arkin test', from the name of the American roboticist: a robot meets the legal and moral requirements and can, therefore, be deployed when we demonstrate it can comply with the law of armed conflict as well as, or better than a human in similar circumstances - not perfectly. What must be demanded of the system, for example, is to be able to recognise the wounded, not as God could do, but as a human being could, as Marco Sassòli explained at the CCW meeting last May. There is no reason to say today that these machines will not be able, one day, to comply with IHL, not perfectly, but as well as or better than us.

Secondly, only use the weapons against certain military objectives. An object is a military objective by its nature, location, purpose or use, as we have already said, it's established in P1 article 52.2. Here, it may be useful to distinguish between two categories: objects that are military objectives by nature because of their intrinsic character or military significance; and objects that become military objectives by their location (if it is in an area that is itself a legitimate target, i.e. that has special importance to military operations), purpose (when we know the object will be used for military reasons) or use (its current function). Location, purpose and use show the dynamic nature of IHL: civilian objects can become legitimate military objectives and this difference is relevant for lethal autonomous robots.

Some objectives are easy to identify: objects like military installations, bases, fortifications, barracks, camps, airfields, ports, etc.); vehicles of all types (ground, warships, aircrafts, etc.), weapon systems (artillery, missiles etc.), and munitions. Others are more difficult to identify, either because they are potential dual-use-objects (factories, laboratories, power plants, bridges, media, etc.) or because they involve people (combatants).

Even if lethal autonomous weapons are not capable of distinguishing a civilian from a combatant, they can easily identify and be programmed to automatically detect and engage military targets of the first subcategory, like bases, vehicles or radars, for instance. Military objectives by location, purpose or use are more difficult to determine, but it is not necessarily a problem for lethal autonomous weapons, which could be programmed to attack only military objectives that are so by their nature, so that they do not need to make difficult judgements, like assessing if an ambulance, a school or a hospital, for instance, has lost protection from attack because it became a military objective by location, purpose or use.

There is an objection here. The objection is that a by nature military objective, like a tank, can cease to be one by its location- say the tank is parked in a school, for instance, or a column of refugees is walking nearby. A lethal autonomous weapon can be programmed to detect the tank, the military object, but can it assess its environment and the context? So it's always the problem of the context that comes back. The autonomous weapon may not be equipped to know and to interpret such a context. The solution is that if you can't control the weapon, from that point of view, just control the context in which it is deployed.

So, thirdly: only use the weapons in certain contexts. Lethal autonomous weapons' opponents already imagine them on the ground, deployed in populated areas where the distinction between civilians and combatants is extremely delicate, even for humans. And their argument is to say that they won't be able to distinguish. They are right, but by doing this they ignore the very strong environmental logic in which the more or less autonomous systems operate. They are especially suitable to underwater, marine, air and space environments where there is very little risk of meeting civilians, they are of very little operational interest – not only ethical, I insist: operational – in urban environment, because the risk of targeting civilians make them useless weapons to win the hearts and minds of the population, and we know how important this is in today's counterinsurgency conflicts.

Therefore, it is sophistic to say that because lethal autonomous weapons won't be able to distinguish a civilian from a combatant they should be banned. It is sophistic because they will not be deployed in a context where they have to make such a distinction. This supposed inability - that has yet to be proved, but let us suppose for the sake of the argument that these machines won't be able to distinguish a civilian from a combatant - is a sufficient reason not to deploy them in urban guerrilla warfare. It is not a sufficient reason to ban them altogether, if they can be deployed elsewhere in less problematic environments. As Schmitt explains, «even an autonomous weapon system that is completely incapable of distinguishing a civilian from a combatant or a military objective from a civilian object can be lawful per se. Not every battlespace contains civilians or civilian objects. When they do not, a system devoid of any capacity to distinguish protected persons and objects from lawful military targets can be used without endangering the former». So, in the middle of the desert, or on the high seas, in areas where there is certainly no civilian person or object, there is no problem using an autonomous weapon unable to recognise a civilian person or object, just like there was no problem using the Scud missiles in the 1990-1991 Gulf War: they were inaccurate but could be nevertheless employed discriminately in a desert environment. In other words, lethal autonomous weapons could be used only in exceptional situations and specific contexts.

Moreover, there are additional precautionary rules, like prioritising military objectives. The second condition in Protocol I article 52.2 is that military objectives must be objects which are effective contributions to military actions and whose destruction offers a military advantage, as we saw earlier. The expressions "effective contribution to military actions" and "definite military advantage" again give rise to divergent interpretations.

You have the narrow one of the ICRC, excluding potential or indeterminate advantages from definite ones, versus the broader one of the U.S., including any war-sustaining objects. So, here you can ask: what will be the lethal autonomous weapons' interpretation? Isn't it an additional difficulty?

Well, not really, because these subtleties are only necessary for borderline cases and contentious targets, like dual use objects, against which lethal autonomous weapons will not be used first and foremost. If their use is confined to clearly unambiguous military objectives, like an important military base or a high-tech military plane, it's difficult to pretend that their destruction is not an effective contribution to military action and does not offer a definite military advantage. In other words, to avoid these interpretative complications, we have to limit the use of lethal autonomous weapons to certain most obvious military targets, as I said earlier.

Moreover, in conformity with Protocol I, article 57.3. («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»), it is possible to introduce such a prioritisation. It has been done by Lockheed Martin's Low Cost Autonomous Attack System (LOCAAS), currently in the final phase of development. «Prior to the mission, the flight plan and general search area assigned for patrol are uploaded to the weapons. LADAR [the sensor] enables the weapon to find, track, identify and engage specific target vehicles while ignoring other targets which are defined as "low priority" or "non-combatant". In tests, LOCAAS searched a large area for SA-8 and Scud-B targets, detected but ignored T-72 tanks, which were defined as "low priority" targets, and finally located, identified and engaged the SA-8 mobile SAM targets.»

Another precautionary rule is "doubt". Faced with an unexpected situation that its programming does not allow it to evaluate, the lethal autonomous weapon should be programmed to stop and consult its commander, which is an application of the rule "if in doubt, do not shoot". But the enemy could take the opportunity to create an unexpected situation to paralyse these machines all the time and, given the current set of IHL, it does not necessarily constitute an act of perfidy.

An additional precautionary rule is "overwatch". In conformity again with ICRC rule 19 of customary IHL, («each party to the conflict must do everything feasible to cancel or suspend an attack if it becomes apparent that the target is not a military objective or that the attack 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»), humans must maintain a veto power, that is, an ability to switch the machine off. And, last but not least, IHL itself is a precaution, because an indiscriminate lethal autonomous weapon system, unable to be directed at a specific military objective, will simply not be fielded. It will not be fielded not only for legal reasons (article 36), but for purely pragmatic and strategic reasons. It is in the interest of no army in the world to use incontrollable weapons, causing too many civilian casualties and, potentially, even friendly casualties.

The conclusion is that the idea behind these safeguards is predictability, which is ironic because lethal autonomous weapons may have, by definition, uncontrollable effects, for the very reason that they are supposed to be autonomous. That is why we are not talking about fully autonomous weapons (that not only do not exist but will never exist in the complete sense of "fully autonomous weapons", which wouldn't be useful at all, on top of being dangerous), but of relatively autonomous weapons, being deployed only because we believe we can predict their behaviour. It should be predictable, for instance that they will shoot at legitimate military targets and behave in accordance with IHL or, rather, that they will have the capacity to do it at least equal to that of humans, and that is a different requirement.

The difficulty, of course, is that predictability is limited to a finite number of situations while, on the battlefield, the machine will face a multitude of situations. A way to answer this difficulty is to limit its deployment to areas where only a finite number of predictable situations can occur, like I said earlier.

My conclusion is that, with these safeguards, it may be legal and legitimate to use lethal autonomous weapons in exceptional circumstances and specific environments and doing so is not inconsistent with the law of targeting activities. Therefore, there is no reason to defend a preventive ban.

There are even reasons to defend the development of such weapons because their targeting recognition system may be much more sophisticated than what we already have. With all their sensors, they could access information on the exact nature of the target we would not have and, therefore, they could better comply with the principle of precaution, requiring one to do everything feasible to verify that the target is actually a military objective. In other words, they could potentially be, not less, but more discriminate. Plus, the machine will not target a non-military objective if it is not on its pre-programmed list, while how many soldiers have executed illegal orders?

Now, going back to my initial question, does that mean that the notion of a military objective does not need a human determination? No, I believe it still does need human determination, that only humans can fully understand, interpret and debate what a legitimate military objective is. That is why we have all these safeguards. The lethal autonomous weapon is not released free, able to choose its own battlefield and targets. By limiting its use to certain areas, by programming a specific list of military objectives by nature which it can target, by supervising it, we humans are still in control of the targeting. It is still a human targeting. Therefore, it does not make IHL a post-human humanitarian law, as we see sometimes. We are not talking about post-human warfare, where armies of robots would fight each other. War will stay human and the introduction of robots among soldiers will not necessarily dehumanise it. IV. Indiscriminate and disproportionate attacks

Come valutare la proporzionalità

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Affronterò il tema dei *Collateral Damages* portando esperienze operative. All'inizio della preparazione di queste brevi note ho pensato di vedere in Internet quale fosse la percezione di questo concetto. Escludendo tutte le definizioni a contenuto osceno o di scarso valore intellettuale, devo dire di avere trovato spiegazioni piuttosto singolari quali:

- linguaggio militare per definire il massacro di civili effettuato attraverso l'impiego di armi che si sa essere imprecise;
- tu sei un *collateral damage* se sei coinvolto in una rissa fra due persone con cui non hai niente a che fare;
- esplosione inutile che causa la perdita di donne, bambini o edifici;
- si ha quando un cecchino spara ad una persona senza sapere che ve ne è un'altra dietro. Un solo proiettile per due uccisioni.

Credo sia quindi necessario avere una definizione meno artistica di questo concetto. Secondo la terminologia in uso presso le Forze Armate U.S., il termine si riferisce a "danni non intenzionali od accidentali provocati a personale non combattente o materiali di loro proprietà".

Nella storia è sempre stato abbastanza difficile avere comportamenti che preservassero il personale dalle operazioni di combattimento. Basti pensare al fatto che sino a pochi secoli fa il sostentamento di un esercito, in assenza di strutture logistiche, si basava sul saccheggio dei territori attraversati. Le cronache sono poi piene dei racconti di città espugnate, seguite dall'eccidio di tutti i residenti e non fa eccezione l'occupazione di Gerusalemme da parte dei Crociati nel 1099. Anche in tempi recenti durante le due guerre mondiali l'argomento è stato oggetto di dibattito. Se, infatti, nel corso della prima guerra mondiale i danni alla popolazione civile sono stati limitati, nel corso della seconda i morti civili si sono contati a milioni ed in alcuni stati il loro numero ha largamente superato quello delle vittime in uniforme. Nel 1920 il Generale italiano Douhet scrisse un libro profetico Il dominio dell'aria in cui tra le altre cose immaginava che in un futuro conflitto le popolazioni civili potessero essere oggetto di attacchi dall'aria. Venne considerato quasi un terrorista e venne anche rinchiuso per alcuni mesi in fortezza. In realtà la sua visione si dimostrò anche troppo realistica alcuni anni dopo. Ma vi è un secondo fenomeno che ha caratterizzato in maniera significativa la seconda guerra mondiale e cioè la guerra partigiana.

Questa forma di lotta non è così recente, infatti il termine guerriglia fu coniato dagli spagnoli durante le guerre napoleoniche; però solo nel corso del secondo conflitto mondiale ha avuto una estensione su così larga scala, tanto da divenire un elemento importante nella strategia bellica dei due contendenti. Ancor di più nei conflitti successivi, sia in Asia che in Africa, la guerra di guerriglia è divenuta una forma di lotta largamente in uso e spesso ha portato alla sconfitta di eserciti regolari. Ovviamente la guerriglia porta a sfumare i contorni del mondo civile e militare rendendo sempre più difficile una loro differenziazione. Il guerrigliero vive all'interno della società da cui si distacca solo per le azioni armate. Ciò rende molto difficile, prima che il suo contrasto, la sua identificazione e la chiarificazione della sua rete di sostegno con tutti i dubbi di conseguenza. Ad esempio chi rifornisce di cibo un guerrigliero è da considerare combattente o no? Ciò ha portato alla formulazione nel primo Protocollo aggiuntivo del 1977 alla Convenzione di Ginevra del 1949, con varie chiarificazioni su chi potesse essere considerato legittimo combattente. I conflitti recenti hanno ulteriormente complicato la situazione portando a quelli che vengono chiamati hybrid o asymmetrical conflict. Parliamo di quei conflitti in cui l'avversario non fa riferimento ad una entità politica o statale ma ad un movimento religioso o ad una organizzazione sociale che non solo è difficilmente identificabile, ma che altrettanto difficilmente può essere chiamata a rispondere degli atti compiuti.

Quanto detto sinora può solo servire a definire il quadro in cui ci muoviamo, ma è il caso di stabilire anche quali comportamenti responsabili siano da adottare in questo quadro. La presenza sempre più determinante dei cosiddetti conflitti asimmetrici, oltre ad esaltare le caratteristiche della guerriglia (difficile identificazione dell'avversario, situazioni che si materializzano all'improvviso, indeterminatezza delle aree di operazione) portano anche altre conseguenze. La prima è l'estrema dilatazione delle aree di operazione e la rarefazione delle unità sul terreno. Per fare un esempio, io ho partecipato alla missione NATO in Kossovo KFOR nel 2000, dove le forze di peace-keeping superavano le 50.000 unità. Nel 2004 ho comandato la missione Antica Babilonia in Iraq, ove per il controllo della Provincia di DI-QUAR, che per estensione e popolazione è uguale al Kossovo, con città come Nassirva che ha mezzo milione di abitanti, ho potuto contare su di una task force di 3500 uomini e donne. Ciò comporta che le comunicazioni diventano difficili e la struttura di comando diviene problematica. Il controllo minuto delle attività diventa impossibile e pertanto il livello di responsabilità nel dirigere le operazioni viene spinto verso il basso. In questo tipo di situazioni è molto frequente che un caporale od un capo team si trovi a prendere decisioni, senza la possibilità di una verifica dall'alto e queste decisioni vengono ad avere una importanza enorme. Ciò che è importante non è quindi dare ordini minuziosi che rischiano di essere inapplicabili nello scontro con la realtà, ma dare direttive generali concrete e chiare su gli obiettivi da raggiungere; nell'ambito di queste direttive i comandanti subordinati cercheranno la loro strada per ottenere l'effetto desiderato, basandosi sulla situazione reale ed assumendosi anche la responsabilità di quanto deciso.

quindi all'elemento fondamentale Veniamo di tutto questo ragionamento e cioè il fattore umano, perché dopo tutte le varie disquisizioni che possiamo fare, chi decide se deve sparare o no è un uomo con un'arma in mano. Sia che facciamo disquisizioni giuridiche, sia che tracciamo frecce sulle mappe per visualizzare manovre incredibili, dietro vi è sempre un soldato. Un soldato che non può vedere le nostre mappe e le frecce colorate, che non può partecipare ai dibattiti, ma che probabilmente si trova in una postazione infreddolito, con i piedi bagnati, affamato. Lui che è probabilmente oppresso da tutti questi problemi, alla fine dovrà decidere in pochi istanti se impiegare l'arma contro una ragazza che gli sorride ma che ha una cesta sospetta, contro un ospedale da cui arrivano raffiche di mitragliatrice, contro un'auto che procede a zig zag verso il posto di blocco, ma che potrebbe avere solo un autista ubriaco. Tra questi esempi ve ne è uno che mi è particolarmente vicino, in quanto a Nassirva ci spararono per giorni dall'ospedale. E i nostri soldati? In quel caso non hanno mai risposto al fuoco. Perché nella maggior parte dei casi il personale, se è ben addestrato, se ha fiducia nei superiori e conosce bene le direttive generali, è anche in grado di discernere le situazioni, senza alcuna conoscenza di norme giuridiche, ma con una grande dose di buon senso. Ciò non toglie, però, che qualsiasi ragionamento che noi facciamo non possa prescindere dal fatto che la sua applicazione sia devoluta ad un soldato, il quale mentre riceve proiettili ha in mente solamente il fatto che vorrebbe continuare a vivere! Cosa si può fare per questo? Fare in modo che quel soldato, che comunque ha una mente pensante, anche se tale facoltà è spesso sottoposta a stress in situazione di combattimento, riceva pochi ordini chiari e sicuramente applicabili. Ricordo che in alcune missioni gli ordini per l'impiego delle armi recitavano che «l'uso dell'armamento è consentito al solo fine di tutelare l'incolumità personale e solo dopo la chiara manifestazione di una volontà ostile». In questi conflitti di rado qualcuno manifesta la propria volontà. Quindi la possibilità di colpire involontariamente civili inermi esiste, ma può essere mitigata dall'addestramento, dall'organizzazione e dalla capacità di discernimento del personale. Questi elementi sono tutti collegati fra loro.

Resta però aperto un altro problema e cioè: fino a che punto posso pianificare operazioni che comportino un danno a civili? Ritengo che sia molto difficile dare una risposta razionale a questo quesito e penso che la risposta risieda essenzialmente sul piano etico e morale e cioè fino a che punto ritengo di poter rinunciare alla mia umanità per conseguire un fine.

Nell'esperienza storica le grandi distruzioni non hanno mai portato a grandi vantaggi tattici. Ricordo che la distruzione dell'Abbazia di

Montecassino da parte dei bombardieri alleati la trasformò in un imprendibile centro di resistenza presidiato dai paracadutisti tedeschi. Ciò premesso, le valutazioni sul "redditizio" o meno sul "vantaggioso" o meno risalgono tutte a quel complesso di scelte che fanno parte delle funzioni di un Comandante e sino ad ora, per quanti manuali siano stati scritti, non credo ve ne sia uno atto a salvaguardare un comandante dal complesso delle sue scelte e responsabilità. Per offrirvi un fatto concreto: il giorno della prima battaglia dei ponti a Nassirja, sulla sponda nord del terzo ponte ci siamo trovati insorti che spingevano davanti a sé donne e bambini come scudi umani. Abbiamo quindi deciso di non procedere alla conquista della spalla nord, che al momento non aveva un valore così rilevante. Giusto, sbagliato? Ogni Comandante è solo nelle valutazioni di cui risponde. Credo sia impossibile codificare un comportamento per ogni situazione. Come ho detto le valutazioni non sono solo militari, ma soprattutto di natura etica e morale.

A conclusione di queste brevi note vorrei fare un cenno alla percezione che si ha dei *collateral damages* e cioè alla funzione dei Media. Come si può vedere, già Eschilo, cinque secoli prima di Cristo, aveva intuito come sia difficile stabilire quale sia la verità in guerra e lui oltre ad essere un grande drammaturgo aveva partecipato alle guerre contro i Persiani. In effetti le "stragi di civili" o i "danni immotivati" sono spesso percepiti con modalità legate al modo ed al tempismo con cui una notizia viene diffusa. Nella mia esperienza in Iraq ho constatato come noi non fossimo adeguati in questo, in quanto avevamo sottostimato la capacità avversaria di gestire le informazioni. Ad ogni scontro, infatti, vi era una troupe degli insorti che filmava alcune scene e dopo poco tempo metteva queste immagini su Internet con i loro commenti sulla vicenda, ovviamente senza contraddittorio o valutazioni sgradite.

Poiché non tutti gli organi di informazione hanno la possibilità di avere reporter sul luogo degli scontri, una notizia riportata su Internet diviene subito fonte di informazione e nessun organo informativo vuole essere secondo nel diffondere una notizia. Noi non avevamo valutato correttamente questa possibilità e ci siamo sempre trovati ad inseguire il flusso informativo. Avevamo dalla nostra parte il fatto che diversi rappresentanti dei "media" nazionali erano presso di noi e, quindi, anche se in ritardo potevamo dare la nostra versione dei fatti. Anche questo però non era sufficiente, in quanto rimestare una notizia già vecchia non crea la stessa impressione che comunicare un fatto nuovo. Durante gli scontri siamo ad esempio stati accusati di avere sparato alcune granate di mortaio sul mercato di Nassirja provocando molti feriti. Ho quindi solo potuto dimostrare che non avevo mai schierato i miei mortai e le distanze erano comunque tali da non consentirmi di raggiungere il mercato. I feriti andavano quindi imputati ai nostri avversari – forse per una esplosione accidentale. La spiegazione però, per quanto inconfutabile, non creò lo stesso effetto dell'annuncio iniziale dei ferimenti al mercato. Nel giudicare i danni collaterali penso sia quindi essenziale non essere presi dall'emotività degli annunci iniziali e basarsi su dati certi che vengano, se possibile, da un'indagine indipendente. Quando si hanno scontri con forze non regolari, che non portano uniformi o insegne e sono quindi difficili da identificare, i caduti tendono ad essere sempre passanti casuali o vittime innocenti e le abitazioni utilizzate come centri di fuoco sono, purtroppo, case civili senza valore bellico.

The use of explosive weapons in densely populated areas and the prohibition of indiscriminate attacks^{*}

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This presentation is divided in three parts. The first part discusses the notion of indiscriminate attack. The second part highlights the effects of the use of explosive weapons in populated areas in light of the prohibition of indiscriminate attacks. The last part proposes a few forward-looking considerations.

Let us turn first to the notion of indiscriminate attack. The prohibition of indiscriminate attack appeared between the two World Wars, in the 1923 Hague Rules of Air Warfare and in the 1938 Draft Convention for the Protection of Civilian Populations. Both texts prohibited aerial bombardments against military objectives so situated that they cannot be bombarded without the indiscriminate bombardment of the civilian population.¹ The prohibition of area bombardment was also included in the 1956 New Delhi draft Rules.² None of these texts was adopted by States as a treaty.

The first prohibition of indiscriminate attacks that made it into treaty law is to be found in the 1977 First Additional Protocol (hereinafter AP I). It has been described as the confirmation of «the unlawful character of certain regrettable practices during the Second World War and subsequent armed conflicts. Far too often the purpose of attacks was to destroy all life in a particular area or to raze a town to the ground without this resulting, in most cases, in any substantial military advantages».³ The prohibition of

^{*} The views expressed in this opinion note are those of the author alone and do not necessarily reflect the views of the ICRC. The author would like to thank Knut Dörmann, Kathleen Lawand, and Jean-François Quéguiner for their useful comments on earlier drafts of this presentation.

¹ Rules concerning the Control of Wireless Telegraphy in Time of War and Air Warfare, The Hague, 1923, Art. 24(3) of the Rules of Air Warfare; Draft Convention for the Protection of Civilian Populations Against New Engines of War, Amsterdam, 1938, Art. 5(2).

^{5(2).} ² Draft Rules for the Limitation of the Dangers incurred by the Civilian Population in Time of War, ICRC, 1956, Art. 10.

³ Yves Sandoz, Christophe Swinarski and Bruno Zimmermann (eds.), *Commentary on the Additional Protocols*, ICRC, Geneva, 1987 (ICRC Commentary), commentary on Art. 51(4) AP I, para. 1946.

indiscriminate attacks flows from the principle of distinction, which requires parties to armed conflicts to distinguish at all times between on the one hand civilians and civilian objects, and on the other combatants and military objectives, and to direct their attacks only against the latter. It is intended to ensure that attacks are directed at military objectives and are not of a nature to strike military objectives and civilians or civilian objects without distinction.

Article 51 AP I specifies three types of indiscriminate attacks and gives two examples. First, attacks which are not directed at a specific military objective; this type of attack does not depend on the weapon used, but on the manner in which it is used. Second, attacks which employ method or means of combat which cannot be directed at a specific military objective; this second type prohibits the use of weapons that strike blindly,⁴ as well as weapons that are not accurate enough to attack one specific military objective, due to the circumstances and manner in which they are used.⁵ Third, attacks which employ a method or means of combat the effects of which cannot be limited as required by international humanitarian law (hereinafter IHL). As required by IHL refers notably to the prohibition of disproportionate attacks and the norms protecting the environment.⁶ This third type of indiscriminate attacks also covers the employment of means and methods whose effects cannot be controlled in time and space, such as biological agents,⁷ or water or fire depending on how they are used.⁸

Article 51(5) AP I prohibits two specific forms of indiscriminate attacks. First, area bombardments which are defined as attacks «which treat as a single military objective a number of clearly separated and distinct military objectives located in a city, town, village or other area containing a similar concentration of civilians and civilian objects». Second, disproportionate attacks, which are defined as 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».

Since 1977, the prohibition of indiscriminate attack has been included in the amended Protocol II to the CCW Convention on the use of mines and

⁴ Michael Bothe, Karl Josef Partsch and Waldermar A. Solf, *New Rules for Victims of Armed Conflicts*, Martinus Nijhoff Publishers, The Hague, 1982, p. 305.

⁵ See below notes 18 and 19, p. 103.

⁶ Bothe, Partsch and Solf, above note 4, p. 305; Stefan Oeter, 'Methods and means of combat' in Dieter Fleck (ed.), *The Handbook of International Humanitarian Law*, 3rd ed., Oxford University Press, Oxford, 2013, pp. 116-230, para. 458.4.

⁷ Michael Schmitt, 'War, Technology and the Law of Armed Conflict', in A. M. Helm (ed.), *The Law of War in the 21st Century: Weaponry and the Use of Force*, Volume 82, International Law Studies (2006), p. 140.

⁸ ICRC Commentary on Art. 51(4), above note 3, para. 1963.

booby-traps (1996),⁹ and identified as a customary rule applicable in international and non-international armed conflicts in the Customary IHL Study of the International Committee of the Red Cross (ICRC).¹⁰

Turning to international criminal law, the Statutes of the International Criminal Tribunal for the former Yugoslavia (ICTY) and of the International Criminal Tribunal for Rwanda (ICTR) do not refer to the prohibition of indiscriminate attack or even to the prohibition of direct attacks on civilians. However, the ICTY found that direct attacks on civilians constituted war crimes,¹¹ and that indiscriminate attacks may qualify as direct attacks.¹² The Rome Statute does not list expressly the prohibition of indiscriminate attack either, but does list the war crime of directing attacks against the civilian population.¹³ Depending on how the mental element is considered, this war crime might be understood as encompassing notably indiscriminate attacks,¹⁴ which would be coherent with the ICTY case-law. Furthermore, the Rome Statute made the employment of weapons, projectiles and material and methods of warfare which are inherently indiscriminate a war crime in international armed conflicts, though they first need to be listed in an annex which is yet to be adopted.¹⁵ The ICTY case-law and the Rome Statute reflect the International Court of Justice Nuclear Weapons Advisory Opinion, which held that States must never use weapons that are incapable of distinguishing between civilian and military targets because of the prohibition to make

⁹ Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (Protocol II to the 1980 Convention on Certain Conventional Weapons) as amended on 3 May 1996, Art. 3(8).

¹⁰ ICRC, *Customary International Humanitarian Law, Vol. I: Rules*, Jean-Marie Henckaerts and Louise Doswald-Beck (eds), Cambridge University Press, Cambridge, 2005 (ICRC Customary IHL Study), Rules 11 – 13 on the prohibition of indiscriminate attacks and Rule 71 on the prohibition of weapons which are by nature indiscriminate.

¹¹ Prosecutor v. Stanislav Galić, Case No. IT-98-29, Trial Chamber Judgement, 5 December 2003 (*Galić* Trial Judgment), para.s 16-32, confirmed by the Appeal Chamber (ICTY, Prosecutor v. Dario Kordić and Mario Cerkez, Case No IT-95-14, Appeal Chamber Judgement, 17 December 2004, para 54 as corrected on 26 January 2005; ICTY, Prosecutor v. Stanislav Galić, Case No. IT-98-29, Appeals Chamber Judgment, 30 November 2006 (*Galić* Appeals Judgment), para.s 122-125).

¹² ICTY, *Prosecutor v. Milan Martić*, Case No. IT-95-11-T, Trial Chamber Judgment, 12 June 2007 (*Martić* Trial Judgment), para. 69; *Galić* Trial Judgment, above note 11, para. 57. In *Galić*, the Appeal Chamber endorsed the Trial Chamber view that «attacks which employ certain means of combat which cannot discriminate between civilians and civilian objects and military objectives are tantamount to direct targeting of civilians», *Galić* Appeals Judgment, above note 11, para. 132.

¹³ Rome Statute of the International Criminal Court, Art. 8(2)(b)(i) and 8(2)(e)(i).

¹⁴ See Knut Dörmann, *Elements of War Crimes under the Rome Statute of the International Criminal Court*, Cambridge University Press, Cambridge, 2002, p.131f.

¹⁵ Rome Statute of the International Criminal Court, Art. 8(2)(b)(xx).

civilians the object of attack.¹⁶ Finally, the ICTY and the Special Court for Sierra Leone considered that indiscriminate attacks, or threats thereof, can be constitutive of the war crime of terrorizing the civilian population, which underlines the importance of the prohibition.¹⁷

Two points need to be underlined with regard to the notion of indiscriminate attack.

First, the *travaux préparatoires* of the 1977 First Additional Protocol and the case-law from the ICTY indicate that the prohibition of indiscriminate attacks is not limited to means or methods of warfare that are "inherently" indiscriminate. While the use of weapons which are by nature indiscriminate is prohibited in all circumstances,¹⁸ the prohibition of indiscriminate attacks extends to attacks that employ weapons which, «in the circumstances ruling at the time of their use, including the manner in which they are used», cannot be directed at a specific military objective or whose effects cannot be limited as required by IHL.¹⁹ Warfare in populated areas is certainly a situation which might render indiscriminate particular means or methods that could be lawfully used in other situations.²⁰ So asserting that an attack when it is carried out in densely populated areas

¹⁶ Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996, para. 78.

¹⁷ *Galić* Appeal Judgement, 30 November 2006, para. 102; the Special Court for Sierra Leone endorsed this position in *Prosecutor v. Fofana et al*, Appeal Judgement, 28 May 2008, § 351.

¹⁸ ICRC Customary Law Study, above note 10, Rule 71.

¹⁹ See Report of Committee III at CDDH, Official Records Vol. XV, CDDH/215/Rev.1, p 274: «Many but not all of those who commented were of the view that the definition [of indiscriminate attacks] was not intended to mean that there are means or methods of combat whose use would involve an indiscriminate attack in all circumstances. Rather it was intended to take account of the fact that means or methods of combat which can be used perfectly legitimately in some situations could, in other circumstances, have effects that would be contrary to some limitations contained in the Protocol, in which event their use in those circumstances would involve an indiscriminate attack.» See also ICTY, *Prosecutor v Milan Martić*, Case No. IT-95-11-A, Appeals Chamber Judgement, 8 October 2008, para. 247 (*Martić* Appeal Judgment) that recalled the Trial Chamber's finding that the M-87 Orkan "was used as an indiscriminate weapon" and that "by virtue of its characteristics and the firing range in the specific instant" it was "incapable of hitting specific targets" (emphasis added); J. Weiner, Discrimination, *Indiscriminate Attacks, and the Use of Nuclear Weapons*, 19 December 2011, p. 18 (available at www.lcnp.org/pubs/Weiner_Discriminate-Attacks.pdf, all references last accessed 13 April 2015).

²⁰ See Bothe, Partsch and Solf, above note 4, p. 306; ICRC, *International Humanitarian Law and the Challenges of Contemporary Armed Conflicts* (2011) (31IC/11/5.1.2), p. 41 (ICRC IHL Challenges Report 2011, available at www.icrc.org/eng/resources/documents/ report/31-international-conference-ihl-challenges-report-2011-10-31.htm).

does not mean that the same weapon cannot be lawfully used in other circumstances, in open battlefield in particular.²¹

Second, some aspects of the way in which the prohibition of indiscriminate attack is interpreted and applied might evolve with advances in precision weaponry. For example, looking at weapons' circular error probability in the past and today, it has been argued that as precision increases, the interpretation of some aspects of the notion of indiscriminate attacks «will become ever more demanding».²² The same argument can be made with regard to the prohibition of area bombardments, which is an example of indiscriminate attack according to AP I. As already mentioned, area bombardment are attacks which treat as a single military objective a number of clearly separated and distinct military objectives located in a populated area. What is meant by "clearly separated and distinct" leaves, however, some degree of latitude to those mounting an attack.²³ During the Diplomatic Conference leading to the adoption of the 1977 Additional Protocols, some States asserted that this required a distance at least sufficiently large to permit the individual military objectives to be attacked separately, and the ICRC commentary reflects this by recalling the need to «tak[e] into account the means available».²⁴ While this understanding was not expressly included in the treaty text, it implies that the practical application of the notion is evolutional thanks to the advances in weapon's precision. Military objectives that might not have been considered clearly separated and distinct yesterday may be considered so today or tomorrow.²⁵ To be noted that even when the objectives are not clearly separated and distinct, the attack remains governed by the rule of proportionality.

Let us now turn to the effects of the use of explosive weapons in populated areas, in light of the prohibition of indiscriminate attacks that we have just discussed.

²³ ICRC Commentary on Art. 51(5) AP I, above note 3, para. 1972.

²¹ See e.g. United Kingdom, *The Joint Service Manual of the Law of Armed Conflict*, JSP 383, 2004 (U.K. 2004 LOAC Manual): «If the military objective consists of scattered enemy tank formations in an unpopulated desert, it would be permissible to use weapons having a wider area of effect than would be possible if the target were a single communications site in the middle of a heavily populated area» (para. 5.23.3).

²² Michael N. Schmitt, 'Precision attack and international humanitarian law', in *International Review of the Red Cross,* Volume 87 Number 859 September 2005, pp 445-466, p. 456; Christopher Markham, and Michael N. Schmitt, 'Precision Air Warfare and the Law of Armed Conflict', in 89 International Law Studies 669 (2013), p. 682; See also : Harvard University Program on Humanitarian Policy and Conflict Research, *Commentary on the HPCR Manual on International Law Applicable to Air and Missile Warfare* (2010), p. 64, para. 3 (available at http://ihlresearch.org/amw/Commentary%20on%20the%20HPCR %20Manual.pdf).

²⁴ Ibid., para. 1975.

²⁵ Hans Blix, 'Area Bombardments, rules and reasons', in *British Yearbook of International Law* 49, 1978, pp 31-69, p. 66.

There are many types of explosive weapons, ranging from grenades to aerial bombs weighing hundreds of kilos. Some legal instruments define explosive devices, but the definitions are tailored to the purposes of the relevant treaty.²⁶ A recurring element is that such weapons are activated by the detonation of a high explosive substance creating a blast and fragmentation effect. Obviously, the employment of explosive weapons is not prohibited by IHL in a general manner. The lawfulness of their use must, therefore, be determined on a case-by-case basis. Two strands of norms are relevant: first, the general rules governing the conduct of hostilities, such as the prohibition of indiscriminate attacks, as well as the prohibition of direct attacks against civilians and civilian objects and the requirements of the principle of precautions, both outside the scope of this presentation; second, the weapons' treaties covering explosive weapons, such as the Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (Protocol II to the 1980 Convention on Certain Conventional Weapons), the Anti-Personnel Mine Ban Convention and the Cluster Munitions Convention.

The main feature of current conflicts is that they are fought in populated areas, where military objectives and protected persons and objects are intermingled. In such situations, the use of explosive weapons exposes the civilian population to heightened – and even extreme - risks of incidental or indiscriminate death and injury.²⁷ As important are the effects of explosive weapons on infrastructure. When civilian buildings are reduced to rubble, civilians lose their homes and livelihoods, which often leads to long-lasting displacement. When exploding on or in the ground, explosive weapons damage water and sewage systems, or underground electricity networks.

²⁶ The most generic definition is found in Art. 2(1) of the Protocol on Explosive Remnants of War (Protocol V to the 1980 CCW Convention): «Explosive ordnance means conventional munitions containing explosives, with the exception of mines, booby traps and other devices as defined in Protocol II of this Convention as amended on 3 May 1996». See also Art. 2(1) of the Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (Protocol II to the 1980 Convention on Certain Conventional Weapons) «"Mine" means a munition placed under, on or near the ground or other surface area and designed to be exploded by the presence, proximity or contact of a person or vehicle.»; Art. 2(2) of the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction, 18 September 1997: «"Mine" means a munition designed to be placed under, on or near the ground or other surface area and to be exploded by the presence, proximity or contact of a person or a vehicle»; Art. 2(2 and 3) of the Convention on Cluster Munitions «2. "Cluster munition" means a conventional munition that is designed to disperse or release explosive submunitions each weighing less than 20 kilograms, and includes those explosive submunitions. (...) 3. "Explosive submunition" means a conventional munition that in order to perform its task is dispersed or released by a cluster munition and is designed to function by detonating an explosive charge prior to, on or after impact».

²⁷ ICRC IHL Challenges Report, above note 20, p. 41.

While the news often show blown out windows and damaged buildings, these less visible destruction of such essential infrastructure has ripple effects, from the malfunctioning of heath care structures to the spread of diseases.

It is interesting to look at a few analysis and pronouncements by States, the ICTY and various International Inquiry Commissions on instances of use of explosive weapons in populated areas that have been considered to run afoul of the prohibition of indiscriminate attacks.

The paradigmatic example of such indiscriminate attack are those carried out with the V1 and V2 rockets by Germany during the Second World War.²⁸ Furthermore, several military manuals mention the Scud missiles attacks by Iraq against Saudi Arabia and Israel during the Persian Gulf War.²⁹ Various States also identified a number of other weapons as indiscriminate in certain or all contexts, including notably: anti-personnel landmines; mines; booby-traps; explosives discharged from balloons; Katyusha rockets; and cluster bombs.³⁰

Cluster Munitions are an interesting case in point. They are prohibited by the Convention on Cluster Munitions, for the 91 States party to it at the time of writing, notably because of their indiscriminate area effects.³¹ Beyond the Convention, several courts and international commissions analysed specific instances of use of cluster munitions in populated areas. The ICTY in *Martić*,³² the Human Rights Council Commission of Inquiry on Lebanon³³ and the International Fact-Finding Mission on the Conflict in

²⁸ ICRC Commentary on API Article 51(4)(b), para. 1958. See also Ecuador, Aspectos Importantes del Derecho Internacional Marítimo que Deben Tener Presente los Comandantes de los Buques, Academia de Guerra Naval, 1989, para. 9.1.2; U.K. 2004 LOAC Manual (above note 21), para. 6.4.1; United States, Commander's Handbook on the Law of Naval Operations, NWP 1-14M, July 2007, para. 9.1.2.

²⁹ See practice of Canada, Côte d'Ivoire, Israel, United Kingdom and United States quoted in ICRC Customary IHL Study (above note 10), State practice related to Rule 71, available at: www.icrc.org/customary-ihl/eng/print/v2_rul_rule71.

³⁰ ICRC Customary IHL Study (above note 10), p. 249f.

 $^{^{31}}$ See Art. 2(2)(c) of the Convention on Cluster Munitions: «[Cluster munition] does not mean the following:(...) (c) A munition that, in order to avoid indiscriminate area effects and the risks posed by unexploded submunitions, has all of the following characteristics (...)» (emphasis added).

³² Martić Trial Judgment (above note 11), para. 463. Martić Appeal Judgment (above note 19), para.s 247-252. The Appeal Chamber notably recalled that «The Witness was explicit in stating that "the Orkan is not principally suitable for use in populated areas" and because of its characteristics "is not intended for deployment in populated areas." (...) Consequently, the Appeals Chamber is satisfied that the Trial Chamber, given its findings on the nature of the M-87 Orkan, could disregard the presence of military targets in Zagreb» (para. 251).

³³ Human Rights Council, Implementation of General Assembly Resolution 60/251 of 15 March 2006 entitled "Human Rights Council", Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions, Philip Alston; the Special Rapporteur on the

Georgia³⁴ concluded that the use of such weapons was illegal in the case under review because it was indiscriminate, while the Inter-American Court of Human Rights³⁵ and the Eritrea-Ethiopia Claims Commission³⁶ found it illegal under the principle of precautions in attack. Despite the Final Report to the ICTY Prosecutor, which recommended not to commence an investigation on NATO use of cluster bombs against the former Yugoslavia,³⁷ it can be argued that a compelling trend points to the unlawfulness of the use of cluster munitions in populated areas. It is indeed

³⁵ Inter-American Court of Human Rights, Case of the *Santo Domingo Massacre v. Colombia*, Judgement of 30 November 2012, para. 211-230. The Court started by taking note that «the domestic judicial and administrative organs have considered that the State failed to comply with the principle of distinction when conducting the said airborne operation» (para. 213). The Court then focused its analysis on the principle of precautions; among various issues it noted that «manuals and regulations were in force at the time of the events indicating that weapons such as the one used could not be used in populated areas or near villages with civilian population» (para. 227).

³⁶ Eritrea Ethiopia Claims Commission, partial award, Central Front Ethiopia's Claim 2 28 April 2004, para.s 101-113. The Commission found the operation that targeted Mekele airport as a violation of the principle of precautions in attack, because of «a lack of essential care in conducting»the operation (para. 110). However, the Commission mentioned that it did not question the choice of the weapon (*ibid*.). For a critical assessment of this decision, Virgil O. Wiebe 'For Whom the Little Bells Toll: Recent Judgments by International Tribunals on the Legality of Cluster Munitions', in 35 *Pepp. L. Rev.* 4 (2008), pp. 895-965, pp. 908ff.

³⁷ ICTY, Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia, para. 27.

right of everyone to the enjoyment of the highest attainable standard of physical and mental health, Paul Hunt; the Representative of the Secretary-General on human rights of internally displaced persons, Walter Kälin; and the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, Miloon Kothari, Mission to Lebanon and Israel (7-14 September 2006), A/HRC/2/7, «In effect, then, the decision was taken to blanket an area occupied by large numbers of civilians with small and volatile explosives. The impact of these bomblets would obviously be indiscriminate and the incidental effects on civilians would almost certainly be disproportionate.» (para. 56). For the Human Rights Council Commissions of Inquiry on Libya, see A/HRC/17/44, para. 175 (which express concern about reports of the use of cluster munitions in highly populated areas) as well as A/HRC/19/68 paras 72 and 90.

³⁴ International Fact-Finding Mission on the Conflict in Georgia, *Report, Volume I:* «This would indicate that during the Georgian offensive on Tskhinvali cluster munitions on whatever scale and GRAD MLRS were both used, amounting to indiscriminate attacks by Georgian forces, owing to the uncontrollable effects of such weaponry and its use in a populated area. There are also some indications and consequently concerns regarding Russian use of cluster munitions in military attacks on Gori and possibly elsewhere» (p. 28). See also Volume II, pp. 340-343 (in particular «The use of artillery and cluster munitions by Russian forces in populated areas also led to indiscriminate attacks and the violation of rules on precautions» p. 343).

«more than questionable» whether in such area cluster munitions can be directed at a specific military objective as required by IHL.³⁸

Multiple Rocket Launching Systems – or MRLS - are another type of area weapon that has raised concern when used in densely populated areas. While the ICTY in *Gotovina* considered that the use by the Croatian forces in Knin of the BM-21 «was not inherently indiscriminate»,³⁹ the International Fact-Finding mission on the Conflict in Georgia described another MRLS, the GRAD system, as particularly dangerous for non-combatants because of their indiscriminate deadly effects.⁴⁰ Recent use of MRLS in Eastern Ukraine has again ignited the debate on the legality of these weapons when used in populated areas.⁴¹

Finally, in analysing the use of various rockets and mortars fired from Gaza against Israel,⁴² the UN Fact-finding Mission on the Gaza conflict recalled that «there is no justification in international law for the launching of rockets and mortars that cannot be directed at specific military targets into areas where civilian populations are located».⁴³ The UN Human Right Council Commission of Inquiry in Libya similarly expressed its concern that «the Libyan authorities have not been undertaking appropriate and precautionary assessments which would, in the Commission's view,

³⁸ Knut Dörmann, 'The Principle of Distinction in Modern Warfare: Targeting, Weapons and Precautions in Attack', in Larry Maybee and K.C. Sowmya (eds), *30 Years of the 1977* Additional Protocols to Geneva Conventions of 1949, ICRC, New Delhi, pp 59-76, p. 66.

³⁹ ICTY, *The Prosecutor v. Ante Gotovina and Mladen Markac*, Case no IT-06-90-T, Trial Chamber Judgement, 15 April 2011 (*Gotovina* Trial Judgement), para. 1897.

⁴⁰ International Fact-Finding Mission on the Conflict in Georgia, *Report, Volume I*, p. 28. The *Report, Volume II* indicates that «The Fact-Finding Mission concludes that during the offensive on Tskhinvali the shelling in general, and the use of GRAD MLRS as an area weapon in particular, amount to indiscriminate attacks by Georgian forces, owing to the characteristics of the weaponry and its use in a populated area.» p. 340.

⁴¹ See e.g. Human Rights Watch, 'Ukraine: Unguided Rockets Killing Civilians, Stop Use of Grads in Populated Areas', 24 July 2014, available at: www.hrw.org/news/2014/07/24/ukraine-unguided-rockets-killing-civilians.

⁴² Al-Qassams rockets, anti-armour rockets, and mortars manufactured in Gaza, and 122mm Grad and WeiShei-1E rockets, 220mm Fadjr-3 rockets and possibly also mortars industrially produced and smuggled into Gaza as weapons

⁴³ Human Rights Council, *Human Rights in Palestine and other Occupied Arab Territories, Report of the United Nations Fact-Finding Mission on the Gaza Conflict,* 25 September 2009, A/HRC/12/48, para. 1687. The report was discussing the use of Al-Qassams rockets, anti-armour rockets, and mortars manufactured in Gaza, and 122mm Grad and WeiShei-1E rockets, 220mm Fadjr-3 rockets and possibly also mortars industrially produced and smuggled into Gaza, see para.s 1617-1623. The report also considered that the deployment of mortar weapons in a busy street with around 150 civilians in it cannot be justified (para. 700).

militate against the use of weapons, such as mortars, in densely urban areas.» $^{\rm 44}$

Beyond these few pronouncements on specific weapons or weapons systems, what can be drawn from the ICTY case-law with regard to the accuracy that is required for the use of weapons in populated areas to be lawful? The legality of the use of a weapon, like all the rules on the conduct of hostilities, must not be based on hindsight, but must be assessed from the perspective of the commander at the time of the attack, based on the information from all sources which is available to them at the relevant time,⁴⁵ which include the foreseeable effects of the various means and methods at his disposal in view of the weapons' technical and other characteristics. An accuracy standard based on the actual impact is difficult to reconcile with this, a criticism that many raised against the *Gotovina* Trial Judgement.⁴⁶ But this leaves open the question of what are the requirements in terms of "expected" accuracy and "foreseeable" effects of the weapons when used in populated areas?

In *Martić* and *Dragomir Milosevic*, the ICTY considered the one-km dispersion error of the M-87 Orkan and of the modified air bombs when describing their use as indiscriminate. But this cannot be interpreted *a contrario* that the use of any weapon that has a smaller dispersion error is not indiscriminate! This cannot be an appropriate standard, and this was confirmed by the Appeal Chamber in *Martić* which stated that «a dispersion pattern of such proportion [180m x 165m as claimed by Martić in his appeal] would hardy make the finding of the Trial Chamber that the

⁴⁴ Human Rights Council, *Report of the International Commission of Inquiry to investigate all alleged violations of international human rights law in the Libyan Arab Jamahiriya*, 12 January 2012, A/HRC/17/44, para. 179.

⁴⁵ See the declarations made by many States upon ratification of AP I, as well as United States, Department of Defense, Final Report to Congress on the Conduct of the Persian Gulf War, 10 April 1992, Appendix O, The Role of the Law of War, *ILM*, Vol. 31, 1992, p. 626 (all quoted in Customary IHL Study, above note 10, practice related to Rule 15 available at www.icrc.org/customary-ihl/eng/docs/v2_rul_rule15). Specifically with regard to indiscriminate attacks, see Yoram Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict*, 2nd ed., Cambridge University Press, Cambridge, 2010, para. 315.

⁴⁶ 'Application and Proposed *Amicus Curiae* Brief Concerning The 15 April 2011 Trial Chamber Judgment and Requesting that the Appeals Chamber Reconsider the Findings of Unlawful Artillery Attacks during Operation Storm' in the case *The Prosecutor v. Ante Gotovina and Mladen Markac*, IT-06-90-A, para. 8 p. 15f (the Application was denied by the Appeal Chamber, Decision, 14 February 2012); International Humanitarian Law Clinic Emory University School of Law, 'Operational law experts roundtable on the Gotovina judgment: Military operations, Battlefield Reality and the Judgment's Impact on Effective Implementation and Enforcement of International Humanitarian Law,' p. 5f; Walter B. Huffman, 'Margin of error: potential pitfalls of the ruling in the prosecutor v. Ante Gotovina', *Military law review*, Vol. 211, Spring 2012, pp.1-56, pp. 4f and 24ff.

M-87 Orkan was incapable of hitting specific targets unreasonable».⁴⁷ During the *Gotovina* trial, the issue was discussed at length. Many experts were heard, and they expressed many diverging views.⁴⁸ In its judgement, the *Gotovina* Trial Chamber suggested a 200 meters standard based on the impacts locations: shells which had landed at more than 200 meters from a military objective were considered as evidence of an indiscriminate attack.⁴⁹ When turning down the *Gotovina* Trial Judgement and in particular its 200 meters standard,⁵⁰ the Appeal Chamber, however, failed to offer another standard. This is - to say the least - a missed opportunity to clarify how the law should be interpreted and applied.⁵¹

So what could be the way forward?

We believe that every effort should be made to reduce the human cost of the use of explosive weapons in densely populated areas in current conflicts.

Compliance with the prohibition of directing attacks against civilians and civilian objects needs to be strengthened, notably with regard to attacks carried out with explosive weapons in populated areas. The need to strengthen compliance with IHL is, however, a much broader issue, on which the ICRC and the Swiss Government are currently undertaking a major consultation process,⁵² and it is outside the scope of the issue discussed in this presentation.

Beyond this prohibition, the ICRC considers that explosive weapons with a wide impact area should be avoided in densely populated areas due to the significant likelihood of indiscriminate effects and despite the absence of an express legal prohibition against specific types of weapons.⁵³ Weapons with wide impact area include those that have a wide destructive radius, such as big bombs and missiles; those with an inaccurate delivery system, such as unguided bombs and indirect-fire weapons like mortars or artillery; and weapons systems designed to deliver multiple munitions, such

⁴⁷ Martić Appeal Judgement (above note 19), para. 250.

⁴⁸ For a summary and analysis of the experts' testimony, see e.g. PAX, *Unacceptable Risk, Use of explosive weapons in populated areas through the lens of three cases before the ICTY*, Maya Brehm, 2014, pp. 60ff.

⁴⁹ Gotovina Trial Judgement (above note 39), para.s 1893-1945.

⁵⁰ ICTY, *the Prosecutor v. Ante Gotovina and Mladen Markac*, Case no IT-06-90-A, Appeal Chamber Judgement, 16 November 2012 (*Gotovina* Appeal Judgement), para. 64.

⁵¹ See *Gotovina* Appeal Judgment, Dissenting opinion of Judge Fausto Pocar, para. 13-14; Darren Valletgoed, 'The Last Round? A post-Gotovina Reassessment of the Legality of Using Artillery Against Built-up Areas,' *Journal of Conflict and Security Law* (2013), Vol. 18 no. 1, pp. 25-57, pp. 47ff.

⁵² See www.icrc.org/eng/what-we-do/other-activities/development-ihl/strengthening-legal-protection-compliance.htm.

⁵³ ICRC IHL Challenges Report, above note 20, p. 42.

as MRLS or cluster munitions.⁵⁴ Let us recall that many of these weapons were not developed for urban warfare but rather for being used in the open battlefield, where most of them do not create the same concerns.

A number of States have expressed the view that explosive weapons with a wide impact area should be avoided in densely populated areas, as evident from their statements in Security Council debates on the protection of civilians as well as other fora.⁵⁵ Other States remain at this stage hesitant to articulate specific limits on the use of explosive weapons in populated areas. Some have stated that current law sufficiently addresses the issue and that better respect for the law needs to be ensured to limit the human cost of the use of explosive weapons in populated areas. Still other States have not articulated specific views.

At this juncture, an informed discussion seems necessary and should contribute to States forming a more elaborate policy position as a response to the humanitarian concerns. Such discussion would benefit from a good and shared understanding notably of what the general rules of IHL on the conduct of hostilities more specifically impose in terms of restrictions and prohibitions when it comes to applying them in populated areas.

It is submitted that, notably, an effort should be made to further explore the meaning of and limits posed by the prohibition of indiscriminate attack when belligerents are fighting in urban warfare. Indeed, whether or not States decide to avoid using explosive weapons with a wide impact area in densely populated areas, any attack which actually amounts to an indiscriminate attack is forbidden under the *lex lata*. Furthermore, it would be useful to have a more precise mapping of the weapons whose use in populated areas is likely to have indiscriminate effects – along the line of the three categories of concern mentioned above. More clarity on the restrictions that States already put in place with regard to the use of specific weapons or weapon systems in densely populated areas could also inform discussions in a useful way. Finally, it is important to identify the most appropriate precautionary measures to be taken even when using discriminate weapons in such environments, a topic for the next panel on precautions in attack.

⁵⁴ ICRC, General debate on all disarmament and international security agenda items, United Nations, General Assembly, 69th session, First Committee, statement by the ICRC, New York, 14 October 2014.

⁵⁵ See for example the statement by Slovenia on behalf of the States members of the Human Security Network (Austria, Chile, Costa Rica, Greece, Ireland, Jordan, Mali, Norway, Panama, Slovenia, Switzerland and Thailand, and the Republic of South Africa as an observer) at the Security Council Open Debate on the Protection of civilians in armed conflicts, 12 February 2014, S/PV.7109, p. 74: "*The Network reiterates its call on all parties to an armed conflict to refrain from using explosive weapons with a wide area impact in populated areas.*"

A better knowledge of State policies and practices and a growing international consensus on the notion of indiscriminate attack, in particular when fighting in densely populated areas, will support parties to armed conflicts which endeavour in good faith to comply with the law, and will also help identify instances of violations of the law. This will help protect civilians from indiscriminate attacks, but also allow a more informed assessment on whether the law is sufficient to achieve its goal of protecting civilians and civilian objects from the effects of hostilities, or whether some form of strengthening would be warranted. **V. Precautions in attacks**

The obligation to give effective warnings: lessons learned from recent conflicts

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Minimizing harm to civilians during armed conflict situations is one of the most important objectives of the laws of armed conflict. This has also become one of the main and most complex challenges facing fighting forces today, at least for Western countries.

Attacks leading to civilian casualties draw immediate criticism and accusations, ranging from allegations of disregard to human life to claims of war crimes. They also draw negative public opinion and instigate diplomatic pressure, which leads to less freedom of action. The result is that actions which can assist to minimize civilian casualties are based on legal as well as on moral and operational rationales. Precautions in general and warning prior to attacks in particular, therefore, serve all these logics. The basic rule regarding warnings is addressed in Article 57(2)(c) of Additional Protocol I (API): "Effective advance warning shall be given of attacks which may affect the civilian population, unless circumstances do not permit."

1. The aim of the warning

Warning prior to attack is aimed to enhance the protection of civilians from the harmful consequences of hostilities. More concretely the aim of the warning is to provide civilians with the opportunity to protect themselves from impending attacks. Accordingly, warnings are only relevant when civilians might be physically harmed by the ensuing attack.

There are different kinds of warnings. One main distinction is between general and specific warnings. General warnings are warnings given to the general public, or parts thereof, warning them in general terms. They may consist, for example, of a blanket alert delivered by leaflets or by broadcasts advising the civilian population to stay away from certain military objectives, such as sites used by enemy forces. General warnings may call on civilians to evacuate certain areas. For example, in the Second Lebanon War in 2006 civilians were asked to move from the southern part of Lebanon to areas north of the Litani River.

Specific warnings are aimed at civilians present in a more concrete target (such as a certain building) and would usually involve providing more details regarding the geographical boundaries of the area to be affected and a description of the time of the expected attack in order to enable the civilians to leave or seek shelter.

There are also different kinds of attacks to warn against – aerial attacks are the most common. But warnings are also relevant before ground operations – usually these are general warnings to evacuate the area. Warnings are usually worded in a threatening way – ("Those who fail to comply with the instructions will endanger their lives and the lives of their families. Beware." And so forth.) This raises the question of distinguishing between lawful warnings and unlawful threats that are intended to terrorize the civilian population.

Article 51(2) of API prohibits "acts or threats of violence the primary purpose of which is to spread terror among the civilian population".

The defining element in differentiating between lawful warnings and unlawful threats is the intention. Article 51(2)'s prohibition on terrorizing civilians refers to threats "the primary purpose of which is to spread terror." Therefore, it does not include genuine warnings, even when worded in a frightening way, since their "primary purpose" is to get civilians out of the area for their protection and the principal aim of the action is not to cause terror.

2. Warnings must be effective

In order to achieve the aim of the warnings, warnings must be effective. Effectiveness must be viewed in light of its evaluated effect at the time of issuance of the warning – based on available information at the time. The inherent uncertainty and changing circumstances must be taken into account.

Thus, for example, in some cases there may be uncertainty with regard to the manner in which military operations and attacks are going to proceed. Accordingly, it is not always clear where the fighting will take place, what targets will be attacked and which areas will be safer than others. Much depends, of course, on the actions of the enemy forces.

Timing is also very important. Warnings should be given enough time in advance in order to allow civilians to safely evacuate the area or reach shelters. The larger the area the more time is required. However, warnings shouldn't be given too early – or civilians might think the threat is over and return. An example is the case of the NATO attack on the Belgrade television and radio station. Eleven days passed between the warning received by Yugoslav authorities and the execution of the attack. By the time of the attack, civilian employees, who had emptied the building at an

earlier point in time, had returned to the building believing the threat had passed.

The question of timing is also linked to the issue of uncertainty. There is a dilemma whether it is preferable to issue warnings sooner, despite the vagueness of the situation, or to wait until the situation is clearer. In some cases, giving warnings too soon could actually reduce the protection of civilians. As an example, civilians are requested to evacuate an area and proceed toward a certain location; however, the fighting does not reach the places from which they have evacuated or, even worse, reaches the destination to which they have been directed.

So giving a warning too early might be problematic. On the other hand, postponing the warning might lead to it being given at a time when it has become impossible for civilians to evacuate in an orderly manner. Similar dilemmas might exist with regard to the level of specificity of the warnings.

The content of the warning must be as clear as possible. However, due to the uncertainties I have already mentioned, warnings will sometimes be vague. There is a dilemma as to when the vagueness becomes such that the warning is only confusing the civilians and making things worse and should, therefore, be abandoned.

I mentioned that warnings can be general or specific. There is a question regarding the scope of the legal obligation in this regard. In its operations in the Gaza Strip, Israel developed a practice of giving specific and precise warnings by phone to the inhabitants of a potential target immediately prior to the attack. The aim was to enable the civilians to leave before the planned attack. In some cases this was followed by firing warning shots using small munitions aimed at the roofs of the designated targets. These warnings were accompanied by real-time surveillance in order to assess the presence of civilians in the designated military target. When I presented this practice to colleagues in other militaries they asked me to emphasize that this is not a legal requirement since they do not apply or intend to apply such a detailed warning system.

One must bear in mind that in order to give such specific warnings, as telephone calls to the inhabitants of houses planned to be attacked, one has to have very good and detailed intelligence. It would seem wrong, therefore, to deduce from the Israeli practice in Gaza that the various methods of providing warnings and their specificity represent an implementation of a legal obligation.

However, I do not think that general warnings are always enough. If they are too general to be considered "effective", then more specific warnings are required by law. Relevant factors to determine the required level of specificity are, *inter alia*: timing, modes of issuing the warning, objective of the mission, level of control over the area, operational considerations, etc. In order to be effective it may sometimes be required to repeat warnings, for example, a first general warning to leave the area; a second warning prior to the attack to those remaining to take shelter.

Another question is whether warnings need to include precise instructions to civilians, how to act in order to protect themselves? Some claim that in order for a warning to civilians to be considered effective, "it must clearly explain what they should do to avoid harm and state the location to be affected and where the civilians should seek safety." This seems to go much beyond the legal requirements or current State practice. The law of armed conflict puts the party subject to attack under the responsibility for taking precautions against the effects of the attack. This is reflected in Article 58 of Additional Protocol I, which provides, "The Parties to the conflict shall, to the maximum extent feasible... take the other necessary precautions to protect the civilian population, individual civilians and civilian objects under their control against the dangers resulting from military operations." The purpose of Article 58 is to place on the defending party the main responsibility of taking the defensive measures necessary to protect its civilians against attacks. The law does not impose an obligation on the attacking side to deal with this aspect of the safety of civilians of the opposing party. This also comports with practical considerations - the attacking party usually does not have adequate knowledge of the relevant services and infrastructure to issue detailed instructions to the civilians of the opposing party.

There are various methods of issuing warnings, including by radio and television broadcasts; telephone calls; leaflets etc. Legal questions arise sometimes with regard to the use of "warning shots" ("knock on the roof"). Some have even termed them "a method of attack". I think that using this kind of warning shots is a lawful measure, which can be analogized to warning shots used in law enforcement operations. They are a very effective tool in getting civilians out of harm's way and sometimes there are no other alternatives. Of course, they must be carried out with care. I do not know of any case where this kind of "warning shots" led to civilian deaths or even serious injuries.

3. Exceptions

According to Article 57(2) (c) of API warning is not required when «circumstances do not permit». This exception reflects the understanding that sometimes the existing circumstances preclude giving a warning prior to attack.

The clearest exception regards attacks which require surprise in order to accomplish the mission. The fact that warnings are not required with regard to surprise attacks was recognized in the earliest articulations of the rules addressing warnings already in the 19th century.

The exception covers cases where the success of the military operation is contingent on the element of surprise, such as in instances when the target is transportable and might move (such as a person), or be moved away (such as military equipment and weapons), if a warning is issued in advance.

The focus of this exception is on the effect giving an advance warning will have on the chances of success of the military operation. A question may arise whether the exception applies when surprise is essential for the success of the operation or whether it also applies when surprise only contributes to fulfillment of the mission. There are different formulations in military manuals and other sources. I think the appropriate standard is to apply the exception if warning would "seriously compromise" the success of the attack - the Australian Manual formulation. Another case where warning is not required is where warning would compromise the safety of the forces.

As with mission accomplishment, it would seem correct to conclude that not every remote risk to forces would justify not giving a warning. However, the level of risk to the safety of forces that would justify not giving a warning might arguably be less than the level of risk to mission accomplishment required in order to refrain from giving a warning. This can be exemplified in the wording of the UK Manual dealing with the applicability of the exception, which uses the term "crucial" with regard to the effect a warning might have on the success of the mission, and the much more lenient standard of "be compromised" with regard to safety of the forces.

Warnings may also not be given when one is dealing with time sensitive targets or counter fire situations, namely when there is no time to give such a warning prior to the attack. Additionally, sometimes there is no practical way to issue a warning, for example, due to a lack of means of communication.

4. Ramification of issuing warnings

It is incontrovertible that following warnings civilians remaining in the zone of operation retain their civilian status. Accordingly, civilians not heeding warnings to evacuate an area must be taken into account in the proportionality analysis.

Nevertheless, on a practical level, if, following warnings, civilians evacuate a given area then most of those remaining are fighting elements. This allows the attacker more freedom of action since, as already mentioned, this influences the implementation of the principle of proportionality, namely, the balance between the military advantage to be gained and the collateral damage anticipated from the attack.

One interesting point is that sometimes giving a warning might not lead to civilians evacuating the area, but rather to civilians gathering on, or in proximity to the intended target in order to shield it. This raises controversial questions on the issue of voluntary human shields and also raises the question whether a commander might refrain from giving a warning when it is reasonably believed that such a warning would lead to civilians gathering in the planned target and hence would increase the danger to civilians instead of mitigating such peril. I will leave these questions open.

Precautions with regard to indirect fire in populated areas

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Let me underline that it is not an easy task to elaborate on precautions with regard to indirect fire in populated area. Though, if we take a quick glance at recent past and current developments, we'll be able to identify major directions and recommendations we all need to focus on. I will talk about some measures generally and how we, in the Georgian Armed Forces, try to address these issues.

The Georgian Armed Forces, as an Army of a young State, inherited the Soviet Army procedures, which mostly neglected the principles of International Humanitarian Law (IHL). Transformation of the Georgian Army to western standards resulted in the implementation of IHL requirements in doctrines, training and operational planning procedures. The signing of the Memorandum of Understanding with the ICRC several years ago has significantly contributed to this process.

The security environment of the 21st century remains unstable. In this rapidly evolving world, countries face different security challenges depending on their geopolitical status. However, the post Cold War era has decreased the major conventional warfare threats. The nature of modern armed conflicts is more asymmetric and hostilities increasingly take place in urban areas. These factors expose the civilian population to high risks. It is most worrying that many parties to conflicts, especially non-state actors, show no respect for International Humanitarian Law.

Shift of focus from conventional to unconventional warfare has also impacted the approach to development of war fighting functions. Fire support, as one of integrated parts of mentioned functions, is defined as the use of weapon systems to create specific lethal or non-lethal effects on a target. Effective indirect fire inflicts maximum damage to adversary forces, avoiding direct contact with them and saving one's own forces. However, it can significantly harm the civilian population and cause collateral damage.

In order to avoid casualties among the civilian population caused by indirect fire, different measures can be taken in consideration.

First of all, the norms of International Humanitarian Law should be translated in clear Rules of Engagement and planning guidance. For example, the rule "Use of indirect fire is authorized" should presuppose several warnings. In particular, the authorization implies the obligation to refrain, to the possible extent, from harming civilians. It includes the absolute prohibition to shoot on civilian gatherings, even if there are armed elements among them, if they do not pose an immediate danger to life. It considers the operational environment, for example, a situation of active warfare and danger to troops in an area densely populated with civilians, where the combatants do not differentiate themselves from the civilian population. Georgian military personnel, including artillerists, are periodically briefed about the norms of International Humanitarian Law and officers take in consideration those norms during the planning process.

It is highly important to take all necessary measures during the fire support and targeting planning. All military personnel should take reasonable precautions to ensure that only military objectives are targeted and to ensure that civilian or noncombatant objects are not made the object of attack. Under the law of armed conflict, the principle of proportionality requires that the anticipated loss of civilian life and damage to civilian property incidental to attacks must not be excessive in relation to the concrete and direct military advantage expected to be gained. Commander, therefore, are responsible to evaluate and balance mission requirements and threat to friendly forces while taking all reasonable steps to minimize collateral damage to the greatest extent practicable.

By ensuring fire is observed when accuracy cannot be guaranteed, the most effective use of indirect-fire weapons is attained and collateral damages are minimized. Observed fire results in Target Damage Assessment (TDA) reports. Use of unobserved fire requires follow-up activity to assess effectiveness and to avoid the impact on civilian population. In order to mitigate collateral damages from indirect fire, the Georgian Armed Forces uses the procedures prescribed in the Doctrine "Fire Support and Targeting". Artillery reconnaissance personnel are trained during the national exercises to identify non-combatant objectives and estimate collateral damages. Special attention is paid to the training of Forward Observers who are responsible for bringing all means of indirect fire in support of the Manoeuver Commander.

Collateral damage may be minimized through many different methods, such as choosing an appropriate weapons system, munitions warheads, or others. High precision munitions should be used to strike the targets in urban areas with no or less impact on civilian population. The role of intelligence is dramatically increasing to accurately identify the adversary location in populated areas. Non-lethal weapons can be used to achieve desirable impact on the enemy. The development of non-lethal weapons has recently drawn greater interest due to the restraints imposed on using lethal weapons and greater public sensitivity to military and civilian casualties. For example, smoke and illumination munitions can be used for indirect fire to deceive the enemy. Use of an artillery munitions round as a carrier could be possible with ejected cartridges containing various non-lethal payloads. Conceptually, the cartridges could contain malodorant pellets for crowd control and/or thermobaric or high-power microwave payloads for more specialized mission scenarios. Planners should seek fire support options that mitigate collateral damage and minimize non-combatant and/or civilian casualties, particularly in heavily populated areas. Unfortunately, the Georgian Army does not possess these high precision munitions. This factor is obviously increasing the risk of collateral damages in the case of indirect fire in populated areas.

One of the important precaution measures is the warning of population close to the potential targets for the fire. Different tools of informing the population can be used, such as voice signals or printed materials.

In conclusion, I would like to underline, that despite of development of highly sophisticated weapon systems, we still face challenges in protecting civilian populations affected by armed conflicts. States and other relevant actors should seek to identify practical measures, which may be taken before, during and after operations, to reduce and minimise incidental civilian harm. Such measures may include particular restrictions on the use of indirect fire or other methods or means of warfare in areas where there is a risk of incidental harm to civilians. In particular, the use of explosive weapons with a wide area effect, such as Multiple Rocket Launchers, should be avoided. To be effective, these measures should be properly incorporated into the relevant doctrinal documents, rules of engagement and planning directives, as well as into the training of relevant personnel.

Precautions in attacks and remotely controlled weapon systems

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1. Introductory remarks

In this presentation I will focus on precautions in the use of remotely controlled weapon systems in armed conflict and in law enforcement operations. I will also briefly touch on a few more points that are related to precautions in attacks, although not directly implied in the notion.

There exist several types of remotely controlled weapon systems¹ operating in diverse environments (such as unmanned aerial vehicles, unmanned ground vehicles and unmanned water vehicles, either surface or underwater), that play significant roles in contemporary armed conflict. Among such weapons unmanned combat aerial vehicles, commonly referred to as drones, have become prominent leading to heated debates over their legal and ethical justifications. I will not repeat the many arguments for and against the use of drones in armed conflict. Suffice it to mention here that there is a general sense that remotely controlled weapon systems are not prohibited by international law, but their use must be scrutinized for compatibility as regards *ius ad bellum, ius in bello* and Human Rights Law (HRL).

2. Remotely controlled weapon systems and the legal review of new weapons

The first point I would like to mention relates to the requirement to review the legality of new weapons. A binding obligation for States parties to the 1977 Additional Protocol I (API), it arguably applies to all States, as

¹ Remotely-controlled weapon systems may be defined as machines operated at a distance by humans from which weapons are deployed. They include the physical structure, digital network and personnel on the ground and they remain constantly under control of a human operator to one degree or another ('human in the loop'). The intermediary function of these machines is also reflected in the expression 'unmanned (or uninhabited) combat vehicles' (UCVs) that is widely used to describe the platforms from which weapons are deployed.

a prerequisite for respect of international humanitarian law (IHL), particularly the law of weaponry, and is supported by State practice. It implies that legal advice is sought not only when a State develops, manufactures, buys or otherwise acquires a new weapon or system, but also when new weapons-related technology is developed, or existing technology is adapted to military uses, or an existing weapon or system is upgraded or otherwise changed. It is assumed that all remotely controlled weapons and systems must pass legal review before they are deployed. A State, however, needs only to determine (*ICRC Commentary*) «whether the employment of a weapon for its normal or expected use would be prohibited», because «A State is not required to foresee or analyse all possible misuses of a weapon, for almost any weapon can be misused in a way that would be prohibited.». The unilateral procedure under Art. 36 API neither requires a State to make its findings public nor to share information about new weapons being developed or manufactured.

3. IHL on precautions in attacks

I will first address the rules applying in International Armed Conflict (IAC), then how they reverberate into the law of Non-International Armed Conflict (NIAC).

3.1. International armed conflict

API distinguishes between precautions "in attacks" (Art. 57) and precautions "against the effects" of attacks (Art. 58). The former lie on the attacker, the latter must be taken by the defender. These provisions are generally recognized to reflect customary International Law applicable in IAC and as such they are reformulated in Rules 14 to 24 of the ICRC Study on Customary IHL.

The attacker must take precautions in determining whether the objectives to be attacked are neither civilians nor civilian objects and are not subject to special protection (such as *hors de combat* or medical personnel) (Article 57.2.a.i). As far as targeted individuals the issue of Direct Participation in Hostilities (DPH) is brought up. While a discussion of DPH is way beyond the scope of this presentation, it is important to stress that the decision to use a remotely controlled weapon system to target an individual will be made in light of the interpretation of that concept by the attacking State. On the other hand, the protection of civilians not specifically targeted and of civilian objects takes up the key theme of proportionality calculations weighing collateral damage against the

anticipated military advantage that was discussed in the preceding session of this Round Table.

The obligation to determine that the targets are neither civilians nor civilian objects (resulting from Art. 57.2.a.i) and to take precautions to avoid or to minimize collateral damages (established by Article 57.2.a.ii), are limited to what is "feasible". It has been pointed out that the capacity of remotely controlled weapon systems enables more accurate information gathering as well as more precise targeting. As a consequence, precautions in attacks should achieve greater feasibility and effectively minimise collateral damage. Also the obligation to select the objective of attack so as to cause the least danger to civilians and civilian objects (Article 57.3) is subject to the condition of feasibility, to the extent that it applies only «when a choice is possible». Lastly, obligations to give advance warnings depend on the factual circumstances of each case.

"Passive" precautions to protect the civilian population against the effects of attacks, that is, to remove civilians and civilian objects from the vicinity of military objectives and to avoid locating military objectives within or near densely populated areas (Art. 58 API), are also submitted to the condition of feasibility.²

On the contrary, the obligations to refrain from deciding to launch, to cancel, or to suspend an attack that may be expected to cause excessive collateral damage (set out in Article 57.2.a.ii and 57.2.b), are laid down in strong imperative terms. This imposes a heavy burden of responsibility on ground operators and commanders or civilian supervisors who order an attack using remotely controlled weapon systems. On the one hand, an attack that may be expected to cause excessive collateral damage must not be launched. On the other hand, as N. Melzer writes, operators 'must constantly re-evaluate the necessity and proportionality of the planned attack in light of the evolving circumstances and make the adjustments necessary to avoid or minimize the expected infliction of death, injury and destruction.' This includes precautions to avoid attacks against persons, *hors de combat*, or medical personnel engaged in their rescue.

² For example, during the 1974/1977 Diplomatic Conference it was made clear that they could not restrict the freedom of a State to decide where military facilities should be located in its territory.

3.2. Non-international armed conflict

The 1977 Additional Protocol II (APII) does not contain provisions on precautions in attacks.³ Therefore, we must refer to customary law, where it is recognized that the greatest part of the precautionary rules in IAC also apply in NIAC. The ICRC Study on Customary IHL, however, considers some of them only 'arguably' applicable in NIAC. As a matter of fact, in asymmetric conflicts the burden of taking precautions in the use of remotely controlled weapon systems lies mainly with the government side. It is not, however, unlikely that rebel armed forces, insurgents or terrorist groups, keep or take control over such systems. This raises the general question as to whether armed groups are required to respect IHL in its entirety, which will be dealt with in Session VIII of this Round Table. Here it is worth insisting that basic IHL obligations (including precautionary rules) must be respected by all parties to an armed conflict, be it an IAC or a NIAC. Significantly, the Annual Report 2013 of the United Nations Assistance Mission in Afghanistan (UNAMA) says that civilian casualties from remotely operated explosive devices could be minimized based on factors such as proper operation of the device and the taking of all feasible precautions to avoid civilian loss of life'. The Report also mentions that «civilian casualties from offensive UCAV strikes suggest the need for further review of pre-engagement considerations and precautionary measures by international military forces».

3.3. The role of human rights law in armed conflict

In the conduct of hostilities precautions in attacks are governed by IHL as *lex specialis* in relation to HRL. Even during armed conflict, however, situations unrelated to the hostilities may occur where arms are used against individuals in order to maintain public security, law and order. In these cases law enforcement standards apply.

4. Precautions in the use of force outside armed conflict

As a matter of policy, presently, UVs are used in civilian affairs in the areas of border security, patrolling and inspection, reconnaissance and surveying, usually not involving the use of arms. There is, however, a tendency of law enforcement agencies towards the use of UVs armed with

³ Nevertheless, some precautions concerning objects have been included in subsequent treaty law applicable in NIAC, namely the 2nd Protocol to the Hague Convention for the Protection of Cultural Property.

non-lethal or even lethal weapons. Therefore, it is advisable to consider whether and how force may be used outside armed conflict by law enforcement authorities.

4.1. Human rights standards in the use of force

Law enforcement rules provide that force may be used only as a last resort in order to protect life, when other available means remain ineffective or would not make the intended result possible.⁴ Thus, in law enforcement all precautions must be taken to avoid, as far as possible, the use of force as such, and not merely incidental civilian death or injury or damage to civilian objects; State agents must endeavour, to the greatest extent possible, to minimize injury and to respect and preserve human life. There is no doubt that any possible use of remotely controlled weapon systems for law enforcement purposes within the jurisdiction of a State must abide by these standards, as well as by domestic law incorporating international legal obligations.

4.2. Extraterritorial applicability of human rights obligations

The situation is not different with regard to the use of remotely controlled weapons by a State outside armed conflict and beyond the limits of its national jurisdiction, as is often the case with drone operations. Presently, it is recognized that States must respect the rights of all individuals within the authority, power and control of their organs or agents. Customary International Law that all States are bound to observe indeed prohibits human rights violations such as murder and extrajudicial killings. Therefore, in any operation in foreign territory not amounting to (or below the threshold of) an armed conflict States must fully abide by the law enforcement/human rights standards. Hence the paramount importance of legally qualifying the situation as either armed conflict or law enforcement (again, a topic that is beyond the scope if this presentation). In the former case the precautions in attacks will be those prescribed by LOAC, while in the latter enforcement officials must act either in selfdefense or in defense of a third party and use the minimum amount of force which is necessary and proportionate to the threat. While remotely controlled weapon systems, when appropriately operated, are (at least in

⁴ Human rights jurisprudence has consistently held that force must pursue a legitimate aim, not exceed what is strictly or absolutely necessary to protect life, be proportionate to this purpose and strictly interpreted. Non-binding instruments have been further elaborated in order to guide the action of law enforcement officials according to these standards.

theory) able to comply with precautions in attacks under LOAC, it seems questionable whether they can ever conform to the stricter requirements of law enforcement.

5. Concluding remarks

The increasing use of remotely controlled weapon systems in armed conflict, and the tendency to extend their role to domestic and extraterritorial law enforcement, calls for more precautions against possible misuse of these systems. In this perspective, besides reinforcing_effective weapons review procedures, the appropriate training of operators depending on their functions is essential. This means giving an adequate preparation to military personnel and to law enforcement officers, in accordance with the different roles they play.

Equally important is the proper exercise of the responsibility of command and the continued supervision of the hierarchical superiors over the procedures and requirements of military or law enforcement operations. Increased transparency, especially of criteria for targeting in armed conflict, may also help to regulate the planning and conduct of all operations involving the use of remotely controlled weapon systems.

Several *ex post* measures are also needed in order to detect and correct errors and abuses and to prevent them occurring in future. Firstly, States should record and make publicly available the combatant and civilian casualty figures resulting from attacks using remotely controlled weapon systems. Then, the conduct of post-operation reviews and investigations as appropriate shall promote a balanced assessment of the conduct and ensure accountability of State agents. Last, but not least, prosecution of those responsible of violations will act as a disincentive against future misbehaving, abuses or crimes.

It hardly needs adding that it seems difficult to require the adoption of these measures by non-State armed groups in NIACs. Asymmetry will mostly preclude a balanced comparison of the conduct of the parties to a NIAC in taking precautions in and against the effects of attacks, as well as adopting corrective measures. Nevertheless, the principle of equal application of IHL in the context of NIACs drives towards a unitary vision of both precautionary and remedial measures, in the interest of individuals affected by the effects of armed conflict.

Standard of 'zero expectation' of civilian casualties and its implementation in practice

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In this presentation I will give some general comments on the topic of the standard of 'zero expectation' of civilian casualties, along with its implications and its implementation.

Overall, I will be arguing that this absolute standard is problematic and potentially counter-productive, at least to the extent that it goes beyond existing requirements of the law of armed conflict with respect to targeting. I'll be blunt: at present, the idea of a zero civilian casualty military campaign is a dangerous political fantasy.

Discussion of the standard is most likely to arise in the context of expeditionary warfare, particularly conflicts with little direct national security implications, rather than existential conflicts. In particular, you see the standard discussed and advocated in the context of humanitarian intervention and related humanitarian operations. It tends to look bad if one acknowledges having to kill civilians in order to save them. Although you do see it arise in other contexts as well, indeed, that is one of my concerns.

I think it is fair to say it is not yet a legal standard in any context. There is a growing political restriction of this nature in many types of conflicts, though, for many States.

Obviously, there is already a legal obligation to mitigate harm to civilians not participating directly in hostilities, to the extent feasible in light of operational circumstances. My presentation should not at all be taken as a criticism of this existing standard. It is an important humanitarian core of the law of armed conflict and there can even be legitimate arguments to go well beyond it at times.

However, expecting zero civilian casualties is not necessarily a law of armed conflict requirement. Indeed, the regime is premised on this 'not always' or even 'not usually' being feasible.

An absolute zero civilian casualty standard goes far beyond the law of armed conflict and could, and often would, restrict otherwise lawful attacks. That is: it doesn't matter if the target is a valid military objective, that it is contributing to enemy military operations and that its destruction would offer an advantage to the attacking force. It doesn't matter if there are no further feasible precautions available to the commander on the ground. It doesn't matter that the casualties would not be excessive in light of the projected military gain. If expected civilian casualties cannot be reduced to zero, the attack should not occur. And that is problematic for a variety of reasons.

I think, first, that it masks the current and I believe foreseeable reality of war, even in the context of humanitarian intervention. There is nothing humanitarian about the conduct of a humanitarian intervention. It is about blowing things up and killing people, albeit for a good reason. A zero civilian casualty standard may make justifying such interventions easier for politicians in some cases, but it is premised on a fantasy that would then constrain the potential success of those operations. In some respects, the corollary is that they may be less likely to intervene in conflicts where the standard is clearly not achievable, even if there is substantial net civilian gain that can be reasonably anticipated.

More generally, it raises unmanageable expectations that may serve to undermine domestic and international support for operations if, and generally when, they are not achieved and this certainly affects the reputation of States, of their militaries and the reputations and psyche of individual military personnel. You see this standard contributing to a growing trend of reporting and discussing civilian casualties as wrong or even criminal. This, I believe, undermines the law and reduces the benefits of compliance with the law of armed conflict - one of the only ones considered to be complying with the law of armed conflict (it is one of many I suppose) - and it leads to a false equivalence of belligerents.

This, in turn, can contribute to problematic responses for interveners: classifying, for example, all fighting-age males in a target area as participating in hostilities and therefore lawful targets; or, denying casualties or responsibility at all. There are various reasons for those actions by attacking States, but much of it is reputational.

Beyond that, I think there are significant moral hazards that one needs to be aware of. Such a standard can encourage deliberate enemy placement of potential targets near civilians, or potential placement of civilians near targets, thereby insulating key assets and operations. This is always a risk, but adoption, particularly public adoption, of a zero civilian casualty standard exacerbates and even invites that sort of behaviour.

Most importantly, one might argue that it may simply shift civilian casualties elsewhere when targets are not attacked because of their collateral implications. It is important to stress that I am talking here about lawful attacks against valid military objectives, where the destruction would provide an advantage to the attacking force and where the destruction would also reduce the enemy's capacity to continue operations. Failure to address these targets leaves them free to operate. That may, and often will, lead to a corresponding increase of the threats to civilians on the ground, particularly in humanitarian operations, the very type of operations where the standard tends to be advocated. This is nonetheless attractive politically, as the harm and the resulting civilian casualties are caused by someone else. That is, the standard shifts responsibility for civilian casualties, it does not necessarily reduce actual civilian harm. As a result, its principal effect may be to help the intervening State - rather than the civilians of the targeted State - who are increasingly constraining themselves and being constrained in a way I believe they shouldn't be.

That said, having advocated against the standard - particularly against a public proclamation of such an absolute standard - if that is the direction from State Governments, how can that standard be implemented, or at least how might one move towards a more effective implementation? In short, I would suggest that rather than paying lip service to a problematic concept, States should be increasing the feasible precautions available to commanders on the ground, thereby, in essence, bringing the law of conflict standard itself closer to zero civilian casualties in practice.

That can be accomplished in a variety of ways: through the use of particular weapons or provision of particular weapons (precision-guided munitions, concrete bombs, low yield missile strikes) and understanding, for example, the mitigation options with respect to all of those as well, understanding fragmentation and blast effects of weapons or understanding the impact of delayed fusing. But none of those are risk-free options and, importantly, none of those are cost-free options and that is a factor that needs to be taken into account. Tactics as well; there is a variety that a State might consider and commanders might consider. In particular, taking or requiring increased risks to personnel - flying lower or from less advantageous angles of attack.

Obviously, all of these need to be considered in the context of initial feasible precautionary assessments. However, not all precautions are feasible within the meaning of the law of armed conflict, as they must be assessed and weighed against other operational requirements. There is a range of views here, where the views of a reasonable military commander will likely differ from a reasonable humanitarian activist.

There are other options available, some of which we've heard discussed already, like warnings or leaflets, although there is a risk here too that those may invite the use of human shields as well in some circumstances.

There a couple of general practical challenges I would like to mention. The first is the targeting cycle in operations. Obviously, there are in all operations layers of operational review for planned targets and that is compounded in many respects in multinational operations. Clearly, effective target review is important, but unnecessary delay in that process can be extremely problematic. There is a precarious balance between timeliness, on the one hand, and thoroughness on the other. In dynamic conflicts, with shifting frontlines fought in civilian areas, which is often the case in humanitarian operations, the headquarters and staging areas aren't going to be military bases or even military camps. They are going to be civilian - or otherwise civilian - buildings, often schools and other public infrastructure. The consequences of a delayed attack as a result of an extended targeting cycle can be quite different in that context. A military base will still be a military base the next day, but attacking a house a day too late is very different. It may not be a military objective at all, and it may even have reverted to actual civilian use.

A related issue as well is the timely removal of targets from target lists that have been previously authorised. Obviously, there is a responsibility at the time of the attack to ensure the continued viability as a military objective, but removal from a list - that is timely, regular review of target lists - can avoid some problems in that area as well.

A more significant factor I would like to flag is accurate, comprehensive, timely intelligence. A zero civilian casualty campaign requires extraordinarily detailed information, in particular the establishment of a pattern of life in target areas. That may not be feasible within the meaning of the law of armed conflict, that is, in light of competing operational circumstances. For example, it may require long-term, hours-long deployment of limited intelligence resources like unmanned aerial vehicles. Even if that is possible, it may come at a significant operational cost from taking those assets away from other elements of the operation. As a result, providing adequate intelligence capacity at the outset and throughout operations becomes an essential pre-requisite for anything close to a zero civilian casualty campaign.

It is a state and organisational responsibility not to engage in operations without sufficient intelligence assets if they are going to be advocating a zero civilian casualty campaign, and I would suggest this in all circumstances. That would include unmanned aerial vehicles, satellites, Special Forces or others on the ground providing targeting assistance - particularly unmanned aerial vehicles, as they are able to remain on target long-term and develop patterns of life.

There are few States with military assets capable of consistent zero civilian casualty attacks, although it is these States that are generally the ones that would be proponents of the standard, not as a legal standard *per se* but as a moral standard perhaps. There are fewer States even then with sufficient military intelligence resources to support those activities: the United States and most others are a distant second. This is a particular problem with multinational operations that one needs to be aware of, where various States are providing various capacities and the missions are cobbled together in a sense. But it is also an issue for all States supporting this

standard. It requires investment and it requires resource commitment to specific operations.

In conclusion, I would flag that, obviously, I think this is a problematic standard, but if States are going to support it, it does require both possession and dedication of sufficient resources, particularly intelligence resources, at which point it begins to fit well within the existing law of armed conflict framework. Otherwise, States do themselves, their militaries, their citizens, the citizens of the targeted State and the law of armed conflict itself an incredible disservice by pretending that war is something that it's not.

VI. Capture or kill?

Does a least harmful means rule govern the use of force under IHL?¹

Ryan Goodman

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To motivate the discussion, I would start first with the classical statement by Jean Pictet, which is in some sense the focal point around which debate upon this subject gravitates. Jean Pictet published in 1985, and even earlier if one looks at the dissertation he wrote as a grad student, these remarks: «if we can put a soldier out of action by capturing him we should not wound him, if we can obtain the same result by wounding him, we must not kill him, if there are two means to achieve the same military advantage we must choose the one which causes the lesser evil». So that, in a sense, embodies the "least restrictive means" test and is applied to the kill or capture debate. Another way to motivate the discussion is to just highlight two hypothetical scenarios. I actually present a number of hypothetical scenarios at the beginning of the article that I published, but let me just use two of them here. First is an example in which it is not a question of any military advantage, there is no military disadvantage to capture versus killing, so the example is a person down a well.

After clearing a town, a platoon of soldiers discovers that an enemy fighter has tried to hide down a well, where he is now sitting at the bottom. He is armed with a handgun, but has no provisions and no rope to get himself out. The platoon is not pressed for time. However, it does not try to wait to coax him out. Instead, the commanding officer instructs his soldiers to drop three grenades down the well.

The second hypothetical scenario is one in which it is actually militarily advantageous to capture rather than kill, and I think this is a good thought experiment to try to understand whether or not there is actually a kill or capture rule in the law of armed conflict. So a scenario in which it is actually military advantageous to capture, here is the scenario that I tried to utilise to motivate this.

High-level civilian leaders and military commanders meet to plan a kill or capture operation that will take place in a few weeks time. They conclude that it will be more militarily feasible to capture the target than to kill him. That is, from a military standpoint, the attempt to capture is superior to the attempt to kill. They decide, however, to try to kill the individual. Their decisions is due to information from their Ministry of

¹ Text not revised by the author.

Foreign Affairs that holding the individual in captivity would harm diplomatic relations, and it would be better to present the death of the individual as a 'fait accompli' to the international community.

The question is whether or not the law of armed conflict prohibits the decision to kill versus capture in those scenarios. I think there are three alternative paths to get to the conclusion that the law of armed conflict in fact does have a regulatory rule that would regulate that practice or prohibit that practice. The three ways are, first, the ICRC's interpretative guidance section nine, which uses the principles of necessity and humanity and then arrives to the idea that there are such things as restraints on the use of force that would apply in these kinds of scenarios. I go a different route. There are two other routes, one is the hors de combat rule, so where you define an individual is no longer participating in the conflict might already get to the same result. In those two scenarios you could potentially say that the person down the well is an hors de combat, and therefore reaches the same result as if the rule had been "you have to capture them rather than kill them". The second scenario is not an hors de combat scenario. So the first way to get there is the ICRC's interpretative guidance section nine, the second is hors de combat and the third is superfluous injury and unnecessary suffering, an actual textual hook in Additional Protocol of 1977.

Let me say a few words about hors de combat, there is also a part in which I write that as well in the law review article. So the argument they were trying to analyse, I think, in this panel is whether or not there is a least restrictive means test. One thing to consider is that the hors de combat rule might actually end up in the exact same result. So, for operational purposes, for a military, it also means that a person can't be killed but rather he has to be captured if defined as an hors de combat. The idea here is that the text of the Additional Protocol article 41 does in fact encapsulate a pretty broad scope for hors de combat. I've actually been, to use the term, flabbergasted to read some treatises and books that say that they are only two ways to meet the hors de combat test: one if an individual surrenders and two if they are wounded or sick. The plain text of article 41 says that there is a third category which is if the person is "in the power of an adverse party". Then we have to determine what to be "in the power of an adverse party" means. The deep travaux and the ICRC commentaries I believe suggest that it would apply, in many instances, to the very same text that the ICRC uses in section nine, which is if the person is rendered defenceless or incapable of resistance. So, just to give you a flavour of the deep travaux, in 1970, the Secretary General of the United Nations issued a report which called for the development of new law which ended up being the 1977 Protocol. The Secretary General's report read: «It should be prohibited to kill or harm a combatant who has obviously laid down his arms or who has obviously no longer any weapons, without need for any expression of surrender on his part. Only such force as is strictly necessary in the circumstances to capture him should be applied». The 1973 ICRC draft protocol, which serves the base line for the treaty discussions in Geneva also included that as a category of hors de combat, and included an individual who «no longer has any means of defence». The ICRC's commentary, if you look inside article 41, also suggests that individuals who are defenceless or incapable of resistance should be considered hors de combat. The commentary, just by way of example, says that this category includes «cases [in which] land forces might have the adversary at their mercy by means of overwhelmingly superior firing power to the point where they can force the adversary to cease combat». That commentary also says that «a defenceless adversary is hors de combat whether or not he has laid down arms». The leading treatise on Protocol I by Bothe, Partsch and Solf says the same thing, and in fact says that it was part of customary law, not just the Protocol. There are three implications to that type of analysis: first, as I have already suggested, it gets you to the very same point as Pictet's least restrictive means test; second, it means that, for questions of administrability, it is already a part of the rules that militaries should be applying; and third, it says something about how we try to interpret subsequent State practice, and I only mean subsequent State practice for the purpose of interpreting the treaty, I don't mean subsequent State practice as an element of customary international law. In that, States have in fact trained their forces up to that standard. By way of example, the U.S. Commander's Handbook on the Law of Naval Operations in 1970 said that «combatants cease to be subject to attack when they have individually laid down their arms to surrender» and then, the important part, «when they are no longer capable of resistance or when the unit in which they are serving or embarked has surrendered or has been captured». Michael Schmitt, in his reply to my piece, actually says that he changes his opinion on the basis of that analysis, which is remarkable. I need my evidence to evidence that, so the quote from Michael is: «on reflection on Professor Goodman's analysis regarding the prohibition on attacking those who are hors de combat has caused me to refine my position by re-examining that concept», which is an unusual move as I mention in my rejoinder to his reply, just once again demonstrates his power of intellect and his honesty when he approaches the subject. The other important implication is that Michael also says in his piece, and I agree with him, that his understanding of the approach, and my understanding, «reaches the same result in most cases». So, in other words, it reaches the same result in most cases, and that is also the same result that, I would submit, is reached if you apply Pictet's least restrictive means test.

Just to say a few words then about the least restrictive means test through Pictet. A couple of caveats. First, I do recognise there is a weakness in the argument. Michael also mentions, that there is no equivalent explicit textual provision for the least restrictive means test, that just has to be admitted. Article 57 of the Additional Protocol, for example, is a very explicit text that looks like a least restrictive means for civilians. The question is, where is it in the Protocol for combatants? Another weakness is State practice. The question is whether there is any explicit State practice training troops up to the question of a least restrictive means test in particular, not just an hors de combat test, and I recognise that in the article and in our discussions. That said, I do believe that there is in the Treaty of the Additional Protocol under article 35 the prohibition on "methods of warfare of a nature to cause superfluous injury or unnecessary suffering". My contention is that superfluous injury or unnecessary suffering includes manifestly excessive force, in other words, unnecessary force to subdue an individual the purpose for which the use of force must be to remove them from the battlefield. So, if the person is down the well, and they can be removed from the battle just as easily by capture versus killing, the rule applies. If a person could be captured or killed and it is actually militarily advantageous to capture him, then the law of armed conflict would say 'actually, that is not a void, or lacuna, really there is a law that does apply'. The way in which I get to that analysis is something that surprised me. The deeper I went into the travaux and then the negotiating history, the more evidence I found supporting this. Not only did Pictet say it, but (and I'll just highlight a few of these), it was actually said in the 1973 meeting in Geneva, in which the majority of the participants were Governmental officials, the meeting was called by an intergovernmental meeting, and the final report from the 1973 Geneva. The meeting served as the base line for intergovernmental meetings, in fact, Hans Blix refers to the document as a "confirmation an endorsement of the existing law".

A couple of things before I read the quote from the Geneva report, and there are other quotes just like this in the negotiating history of the 1970s. I want to say something about one of the strongest critics of the ICRC's report. One of the strongest critics of the ICRC's report is Hay Parks' deep analysis of section nine. But Hay misattributes a quote to Pictet which was actually not said by Pictet in 1974 at Lucerne, but instead was said by the group as a whole in 1973, and I'm not sure Pictet was present at the meeting. So it was said by a group of a majority of Governmental experts. Here is the quote:

«What suffering must be deemed "unnecessary" or what injury must be deemed 'superfluous' is not easy to define. The concepts discussed must be taken to cover at any rate all weapons that do not offer greater military advantages than other available weapons while causing greater suffering. This interpretation is in line with the philosophy that if a combatant can be put out of action by taking him prisoner, he should not be injured; if he can be put out of action by injury, he should not be killed; and if he can be put out of action by light injury, grave injury should be avoided».

There are multiple other instances of this. Just to give another example, the ICRC's 1971 Report which was submitted to the intergovernmental meeting negotiating the text for the protocol also said:

«[R]ecourse to force must never be an end in itself. It will consist in employing the constraint necessary to obtain that result. Any violence reaching beyond this aim would prove useless and cruel. The principle of humanity enjoins that capture is to be preferred to wounding, and wounding to killing; that the wounding should be effectuated in the least serious manner».

Then, what took place at Lucerne? At Lucerne, just to give by way of example, several of the experts that had participated in 1973 also participated in 1974 at Lucerne. As everybody mentioned, the background documents that were prepared for them by 1973 were thought as the base line and confirming existing law. The Australian delegation referred very favourably to Jean Pictet. At one point they said they wanted to make «[a]n attempt to do Dr. Pictet's idea maximum justice while at the same time putting it in its proper perspective ... suggesting a formulation which closely followed the idea expressed by Dr Pictet». Again, the Australian ambassador seemed to suggest that Dr. Pictet's analysis had received a majority or consensus of opinion, at least an emerging consensus. Frederick Blakeney, the ambassador, said that any formulation of this idea «obviously needs to be looked at in respect of the enemy as an individual, and as a group. There already seems a wide measure of agreement that as few as possible should be killed, no more than necessary should be wounded and those lightly rather gravely».

In conclusion, I just want to say that one can also look to the ICRC's commentary. In the article that I wrote about this, which is obviously a much longer analysis, I look at the commentary both on article 35 itself, which seems to have a very supportive language, and I also look at the ICRC's commentary in a bunch of other articles that are related in kind, like the denial of quarter or the definition of hors de combat, which also seemed to suggest that there is this kind of least restrictive means test. I didn't mention those in my remarks here because they are much more easily accessible, while the materials I have discussed here are not.

Lastly, there is the "Geoff Corn et al." critique of my position. It is several pages long, I think it might be over a hundred, I'm not sure, so it is hard for me to summarise it and they certainly disagree with my view. Just to say a couple of points of agreement, they say that the purpose for the use of force must be the prompt submission of an enemy and lethal force as a first resort. I accept that. In fact, I articulate other ways which would shift the burden of proof so that you'd have to prove that the force was unnecessary, and manifestly unnecessary in a particular circumstance. And second, something that I think shouldn't be last in this debate, "Geoff Corn et al." agreed with a least restrictive means test as applied to DPH. So, their argument is that the Pictet rule should not apply to members of armed forces. But, as far as I can tell, it is a major concession on their part in which they say «it does apply to civilians who directly participate in hostilities». Their argument against my position, just to foreground it, is that it is hard to administer as an operational matter and as a policy matter. I think their test is a bifurcated test, and even harder. I'll leave it at that and look forward to your comments and questions.

Capture rather than kill in armed conflict as a matter of policy: when, why and how?¹

Darren Stewart

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I am appearing here in my personal capacity and the views that I express are those of my own and do not reflect either Her Majesty's Government or the views of the Armed Forces. Having said that, I will refer to policy documents that the United Kingdom has and which are in the public domain.

When I was asked to speak on this particular topic and, in essence, the component of which I was given was capture rather than kill in armed conflict as a matter of policy, when, why and how; my initial thought was 'well, that is not so difficult'. When? As often as possible. Why? Because it is a good idea. And how? With the minimum amount of damage to one's own forces. But, of course, as the good Professor Goodman has just articulated, perhaps it isn't quite so lineal in analysis in terms of considering all of the issues associated with the capture or kill debate. I was drawn to the particular word that is in the topic I was given, and that is the question of policy and whether or not as a matter of policy the emphasis has now turned to an obligation or an encouragement, an imperative, whichever adjective or adverb you want to use to describe it, in terms of capturing as opposed to kill. Now, in addressing that, I think it is important for me to say from the outset that there is considerable debate, as Professor Goodman has articulated, in relation to the law. And, in that sense, I have to say I have a different view as to the position of the law that Professor Goodman has just outlined. I will touch upon that briefly, but, given that I'm looking more at the question of the use of that tactic in terms of capturing or emphasis in terms of military operations of capturing during operations as a matter of policy, I will only simply say that I am unconvinced by Professor Goodman's argument and on the three grounds. Whilst I accept that by applying, should we say the more 'black letter' rules articulated within international humanitarian law (IHL), within the text, as opposed to his reference to the travaux and the ICRC's interpretative guidance. It is the case that, from a practitioner's perspective, it is hard to see how there is State practice that would in fact support the contentions Professor Goodman is saying as a unilateral rule. Certainly, it is the case, and I will articulate that in a moment, that nations will prefer to capture as

¹ Text not revised by the author.

opposed to kill in operations for a number of very good reasons I'll touch upon in a moment. However, to say that is the primary rule that one has to apply in all circumstances, and with implications in terms of resources and acceptance of casualties or risk to casualties in his own forces, I don't accept that that has evolved as a rule to the level that Professor Goodman is articulating. I am also actually quite sceptical as to whether it constitutes a binding policy requirement either. And the reason I say that is because, in many respects, when nations provide guidelines and rules to its armed forces, the broad rules, and I refer here for example to the joint Defence publication the United Kingdom has produced on captured personnel (this document is available on the internet so, if you go to our search engine and dial in United Kingdom captured persons and JDP 1-10 you'll get a copy of that couple of megabytes-long document), even that document which deals with the treatment and handling of captured personnel, there is absolutely no way it says that you must capture as opposed to kill when it comes to a decision in relation to military operations. It deals more with the benefits that are derived from capturing, and the very detailed rules in terms of how you actually handle captured personnel, but it doesn't conceive that particular point. And if the rule that Professor Goodman was suggesting has developed in such a way, then, clearly, that would be one of the very first documents that certainly my country would turn to and update in order to be able to say "this is the way ahead in the future". So, as a consequence, I am unconvinced in relation to that first reason why it is not necessarily reflective of policy. Secondly, I would also say it is not necessarily a binding policy principle, in that you would be required to give effect to that sort of a rule.

From a practitioner's perspective, to use commander's directions and orders to say to forces on the ground that in all circumstances you have to capture or make every effort to capture an enemy or a combatant first before you could then possibly kill them and that is simply impracticable, it doesn't reflect the realities on the ground and it would also be incredibly difficult to control from a commander's perspective, because he is not there standing over the shoulder of every soldier to say "yes or no", this is a situation where you have to capture first' and the activities the soldier has to go through in order to achieve that. So, the practical delivery of that sort of a policy rule is as problematic as if you were to say it is as a matter of law. That is not to say that we don't do so. In fact, as I have indicated, as a matter of good military practice, there are a number of very good reasons why we would seek to capture combatants, and I'll turn specifically to those in a moment. What I would say is that, at the moment, I am unconvinced that it is certainly a requirement as a matter of law, and I'm also very wary to use the phrase that as a matter of policy you would always carry out that activity, for the reasons I've just mentioned.

I was actually going to exclude the question of hors de combat from the comments I was making because I was going to argue that in fact it is very straightforward that, indeed, wounded soldiers in the battlefields or a soldier who is incapacitated or a prisoner of war are clearly circumstances where the law requires you to capture them. I've listened with interest to Professor Goodman's arguments in relation to the possibility of interpreting the phrase "in the power of the opposing force" as a means by seeking to conduct limitations in respect of what seemed to me, and I may have misunderstood the argument, to be an analysis of the capability of those individuals and their ability to influence or harm your military operation as a nexus to say "well, they are within your power because whatever they could do is frankly not going to affect your wider mission which, in essence, you've won in those circumstances and therefore you should use every single means possible as a matter of law to capture them". I'm not convinced, again from a practical perspective, that it is as easy as that to find those circumstances. I note your example in relation to the soldier down the well, and I would think in those circumstances that there would be some significant difficulties defending a course of conduct which resulted in throwing a couple of grenades down that well in circumstances where the individual was clearly not engaging your own forces. I think in those circumstances, without having to rely upon an obligation under the law to capture them, that there are other ways that those circumstances could have come about probably with the capture but without having to use lethal force and without that obligation to capture under those circumstances.

I'll turn very briefly then to the three questions I have been posed. The first one is when should capture rather than kill as a matter of policy be a preferred course. And here there are obviously two types of armed conflicts, one can consider that you may have a requirement or that there may be circumstances where you would look at capture as opposed to kill: international armed conflict and non-international armed conflict. Some might say that it is quite straightforward in an international armed conflict in that the normal conduct of military activity is such that it is certainly the case that combat operations will produce the use of lethal force and that the completion of that or at some stages through that individuals will be found to be hors de combat either through incapacitation, injury or wound or alternatively by being made prisoners of war. In those circumstances one would argue that the identities of the individuals are clearly known, it's easier to distinguish between civilians and the opposing forces you are fighting in an international armed conflict and therefore the ability to target combatants and accept surrender, in circumstances where it is offered, are more straightforward. But, of course, it is certainly the case that even in conventional international armed conflicts you will have circumstances which will arise where individuals may be captured as a by-product of military operations. For example, the case where a patrol comes across enemy soldiers, surprises them and captures and seizes them in those circumstances. The question of course is whether or not there is an obligation on them to capture those enemy forces in those circumstances before considering options including the use of lethal force towards them. In a non-international armed conflict, it is perhaps a little less straight forward, although I wouldn't say that non-international armed conflict is less straightforward as a broader principle than international armed conflict, they are both very complex environments under the current construct of military operations. But, in terms of the identification of combatants, then clearly here a greater effort needs to be placed on the question of being able to identify those individuals as combatants. In that sense, targeted detention operations are more likely to be a more common course of operations in a non-international armed conflict than in an international armed conflict. Of course, there are occasions in international armed conflicts where one might wish to capture an enemy's commander and send off a number of brave men, Special Forces, to facilitate that particular objective, examples of that have been seen in previous conflicts. But more likely during a noninternational armed conflict you would take much greater care in the conduct of targeted detention operations, hence the word "targeted", in order to be able to go through the process necessary to identify individuals as combatants and therefore people you'd wish to capture. But even in those circumstances one can anticipate that a very carefully planned operation may go awry at some juncture and as a result of that, whether it be lost or lack of the element of surprise or any other circumstances, civilians happening upon a particular location which were not expected. It may result then in the requirement to use lethal force between combatants which would result in the death of combatants on either side. In those circumstances I would argue that it may well be the case that at some point during a targeted detention operation a decision is made to "go hot" as the operators might say and engage in a combat operation.

I have already alluded to the question "why", and I think probably the best exposition as to why we engage in capturing or seeking to capture an enemy as opposed to killing them is articulated in the UK's policy concerning captured personnel. And I read briefly from paragraph 104 of that document, it says that «during international armed conflicts, the taking of prisoners of war brings many practical advantages; it reduces the enemy's strength and fighting capacity; lowers the enemy's morale; and may constrain the tactics of enemy commanders. Similarly, capture may bring advantages such as the stabilisation of the situation on the ground and the enhancement of force protection. Captured personnel may also provide an important potential source of intelligence, and when specifically

authorised, UK forces will engage in the exploitation of that intelligence, including questioning of captured personnel». So, in many respects, there are a number of good reasons why armed forces would seek to capture their opposing forces. Those reasons I have just articulated, and also, when one thinks of the wider construct of an operation, commanders and their political masters are very much aware of public attention that is paid to the levels of loss, not only civilians, but also military personnel, involved in operations. To conduct oneself as a military commander without any regard to casualty levels, including casualty levels on the opposing side as we saw during the First Gulf War with the high rate of death from Kuwait back into Iraq in the amount of attention which was paid to that particular event, and I make absolutely no suggestion there that that operation or aspects of that operation in relation to the engagement of those Iragi convoys were in any way unlawful. But it is certainly something that fits into the minds of commanders now in terms of the overall campaign they are conducting and the objectives they are seeking to achieve.

That leaves me then to the question of how, briefly. First and foremost, as I have just indicated, commanders would consider the aspect of operations which lead to the capture of the enemy as part of the general operational design. Indeed, within our doctrine, we require commanders to do so, and the joint doctrine publication on captured personnel of the United Kingdom actually requires in chapter six commanders to consider and take into account the aspects of operations which result in the capture of individuals into their broad operational planning. And, as a result of that, you'll find that commanders will therefore have regard specifically to the guidelines, the mission commands, they will give to their soldiers with respect to how they may give effect to a desire to reduce casualties, certainly civilian casualties, casualties inside their own forces and perhaps, in some limited circumstances, the casualties of the opposing forces. This is certainly the case in a non-international armed conflict, for example, Afghanistan at the moment where, when one considers what the ultimate objective and outcome of the particular conflict is, and that is the return to normality in Governance within Afghanistan, one has to have regard to the impact of operations that would kill large numbers of insurgents might have on future reconciliation requirements in order to achieve that within that particular environment. Commanders will factor this into their operations and give guidance to their subordinates in relation to that. One of the examples we have seen in relation to that is the example that General McChrystal provided in Afghanistan during his tenure there as the commander, when the phrase 'courageous restraint' came to the fore, where forces were required as a matter of command, or direction or orders from the commander to accept greater risk in order to reduce the levels of civilian casualties, although, interestingly, it didn't, in General

McChrystal's articulation, extend to reducing the level of casualties to the enemy forces. Of course, for the reasons I have just mentioned, it was certainly desirable in a NIAC context to try and keep even those to the minimum possible, in order to achieve the longer-term goal.

I simply conclude by saying that the construct of capture or kill is one which brings about a number of pejorative connotations associated with military's desire to use an unlimited level of force in an almost capricious manner. And that is just simply not the case. The levels of control that are placed on armed forces nowadays by both the commanders and also the political masters and wider public expectations are such that, to suggest that is a gratuitous exercise in killing, is absolutely far from the truth, certainly from western NATO armies, and I would suggest many other armies around the world as well. In some senses, this seems to taint very much the debate relating to whether or not there is a legal obligation to capture instead of using lethal force otherwise within a combat environment. As a practitioner, I find this a concerning development and I pose the question: if you were to introduce that sort of a rule, presumably with the objective of minimising harm to civilians and introducing, or reinforcing I should say, the principle of humanity that exists under IHL, what are the second and third order effects that you anticipate will flow from that? How would you see that being implemented? Because from where I sit as an advisor to commanders, I struggle to see how I can give that detailed effect in its manner.

Can human rights requirements limit the right to use force against legitimate targets under IHL?

Françoise Hampson

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As the one dealing with Human Rights Law, it is obviously my task to sow the seed of discord into the harmony and complete agreement of those addressing International Humanitarian Law (IHL). I have interpreted the title 'can human rights requirements limit the right to use force against legitimate targets under IHL?' as giving rise to two separate questions: the second is about detention, the first is not.

The first area where Human Rights Law requirements may give rise to challenges is where you are relying on status-based targeting. Let me explain what I mean by status-based targeting. Human Rights Law is comfortable with targeting based on the behaviour of the individual at the time they are targeted. But when the armed forces rely on an ability to target people by virtue of the group of which they are a member, irrespective of their behaviour at the time they were targeted, that's what I mean by status-based targeting. In so far as it exists under IHL that could pose a challenge in relation to Human Rights Law.

The second issue is very much the one of this panel. Given that Human Rights Law is preoccupied with the right to life, does this mean that Human Rights Law would seek to impose an obligation to detain rather than kill where the opportunity arises, or even an obligation to injure rather than kill?

In order to say anything at all in the time limits of this presentation, I am going to have to make a range of assumptions. They vary in the confidence with which I make them. I am completely confident about the first assumption, for which there is overwhelming evidence in State practice, judicial decisions, etc. That is that there are situations in which both Human Rights Law and International Humanitarian Law are applicable. The second assumption is one that I think is not as safe as the first, but I think it is certainly a reasonable assumption. The case law hasn't quite got there but it's where it is heading. It is the issue of the scope of extraterritorial applicability of Human Rights Law. It is clearly settled in the case law that Human Rights Law applies in occupation, although what the meaning of occupation is under Human Rights Law is not clear. It is also clear that it applies to anybody you are detaining but in a broader context, for example the conduct of military operations, it is not as yet clear but it looks as

though human rights bodies will end up saying that wherever a State agent acting outside national territory does something or doesn't do it, then the individual foreseeably affected is within the jurisdiction. That doesn't mean there is a violation, it simply means it is an issue that a human rights tribunal can address. A completely separate question is the scope of that jurisdiction, how much do you have to do, and it is very clearly not going to be the same as in peacetime within national territory. So the question isn't whether there is extraterritorial applicability, but rather what is the scope of extraterritorial applicability. The third assumption concerns the relationship between human rights and IHL, and here, let me make it clear from the start, this is very tentative: of course I am assuming throughout this presentation that IHL is applicable. If a State claims that it is applicable, when as a matter of law it isn't, then the situation will fall to be judged solely by the law and order paradigm and human rights law. So I am assuming IHL is applicable. But sorting out how human rights bodies are going to operationalize the relationship is a bit more confusing. I think there will be situations in which human rights bodies indicate that there is only a violation of Human Rights Law if there is a violation of IHL. I think that is how we will operationalize the concept of *lex specialis*. In other cases where IHL is applicable, I think human rights bodies will apply a mixture of Human Rights Law and International Humanitarian Law, as the ICJ indicated might happen, that might be termed 'human rights light', which is likely to be anathema to human rights activists. I think it is likely to dilute the way in which ordinary Human Rights Law would apply, but it won't be a straightforward application of IHL.

I think that distinction between only a violation of Human Rights Law if it is a violation of IHL and the mixture is not going to be a straightforward one. I think that, in practice, most of the activities in an IAC will be covered by the 'only a violation if it is a violation of IHL'. Not everything, because, as Professor Venturini said earlier this morning, even in situations of international armed conflict, some of what happens is not in fact part of the hostilities or combat operations. In Non-International Armed Conflicts, I don't think that human rights bodies will necessarily say that there is no case where there is only a violation of Human Rights Law if there is a violation of IHL. I think at the top end, in high-intensity Non-International Armed Conflicts, when dealing with combat operations or hostilities, not dealing with other issues, I think they might well say there is only a violation of Human Rights Law if there is a violation of IHL. In other situations, I think it will be a mixture.

One area where I didn't even make an assumption, because I am completely unclear as to how human rights bodies will react, is how they will reach this conclusion. There are some significant procedural issues that arise regarding how they get there. One possibility would be their deciding that, because IHL is applicable, *proprio motu* they can consider its impact and relevance. The alternative is that they are going to require a State in front of them to invoke it and that, if the State doesn't invoke it, they might say 'we are entitled to assume you want to be judged by a higher standard', if they are assuming that human rights standard is higher than IHL. Another practical query is whether they are going to require a State to derogate in order to be able to invoke IHL. I can't answer those questions. I think I know where they will end up, but I'm not very sure how they are going to get there.

It is important at this stage to remember certain key features of Human Rights Law that are different from the way in which IHL works. First of all, most of IHL is addressed to the mind of the commander at the time the action is being taken, particularly that part of IHL that deals with means and methods. Human rights bodies, for the most part, are determining whether a violation of Human Rights Law has occurred after the event. They are conscious of the fact that they are doing it after the event, with the benefit of hindsight. Decisions of human rights bodies are very contextspecific, that can't be emphasised enough. Whilst it was clear from the earlier presentation in the first panel this morning that even IHL is very context-specific, it is very difficult to predict simply by coming up with the legal formula what the result of a case will be in a human rights body, particularly in this kind of area. It is going to depend on all the circumstances as they are put before the human rights body. One feature that certainly at first sight is very different from IHL is that there are two dividing lines: there is a minimum threshold below which you can never justify going, but if in these particular circumstances it was practically possible, not theoretically possible, but if it was practically possible to do more, you would be required to do more. And that second threshold is a legal threshold, not a policy threshold. There are analogies here with IHL. You not only have the legal requirement not to breach the principle of proportionality, you actually have an additional legal requirement to minimise civilian casualties. I have always been puzzled at that provision in API, it looks like a human rights provision. In addition, you are used to using two thresholds, even if they are not both legal. You are used to what the law would allow and further restrictions imposed by the ROE. So the sense of there being two dividing lines shouldn't be completely novel, but it is important to remember that that is how a human rights body is actually handling something. Human Rights Law is not going to say what the rule is, for example as to whether you detain or kill, or whether you can use status-based targeting, they won't address it like that. The point about Human Rights Law is actually not that it is a whole load of rules, it's a way of reasoning, it's a way of analysing situations. So, at the end of the day, Human Rights Law will answer those questions, but you won't find it contained in a treaty.

The first of my two questions, 'can human rights requirements limit the right to use force against legitimate targets under IHL?' raises the question of status-based killings. The starting point of human rights bodies is the prohibition of arbitrary killing, even though it is formulated differently in the European Convention. That assumes the minimum use of force, which is a law and order paradigm, unless that assumption is displaced. It can be displaced by the situation. There is case law where they have applied that principle with some flexibility, notably the Isayeva case against Russia regarding the targeting of a convoy, but it could also be displaced by the applicability of IHL. Applying what I suggest would be the way in which they would approach the interrelationship, in international armed conflicts, when considering hostilities, and I don't mean all military operations, I think it is likely to be the case that the human rights body would only find a violation of Human Rights Law if there is a violation of IHL. That does assume they can get the answer to the question 'is there a violation of IHL?'. That assumes there will be agreement. That assumes there is no dispute over direct participation in hostilities (DPH) etc. So one of the messages I think the prospect of litigation before human rights bodies carries for the IHL community is 'get your act together'. If you don't actually know what the IHL rule is, you can hardly blame a human rights court for saying 'well, if they can't agree we'll apply our rule'. I think one of the lessons for this conference is that of course we focus on areas of disagreement, but let's remember we actually agree about approximately 95 per cent of the issues under IHL, and, in some fora, that needs to be the message that's got across, because it is going to affect the attitude of human rights bodies. Where you are not dealing with hostilities, but it's an International Armed Conflict, I think they are more likely to apply human rights light. That is to say: not accepting status-based targeting, expecting there to be something about the behaviour of the individual that justifies the targeting. In other words, it looks like actual DPH. But don't try and use DPH before a human rights body, because I think their way of reasoning is going to be different. The key issue for them will be the nature of the threat. In high-intensity Non-International Armed Conflicts, or at least where hostilities break out in a particular place at a particular time (it doesn't need to be permanent), I think they would apply the same test but possibly with a slightly stricter test for what constitutes hostilities. In the case of Common Article 3, Non-International Armed Conflicts, I think there is no way that a human rights body will say there is only a violation of Human Rights Law if there is a violation of IHL, because in many situations where many people would have argued that Common Article 3 was applicable but where the State didn't, they have applied Human Rights Law with flexibility. So it is not standard Human Rights Law. Just look at the case of Isayeva if you want an example. But that would preclude status-based targeting.

What about the second example, the obligation to detain? Again, where you are dealing with hostilities in an International Armed Conflict or highintensity Non-International Armed Conflict, I think they will say whether you are entitled to start out with the assumption of killing depends on the content of IHL. There will only be a violation of Human Rights Law if there is a violation of IHL and, as we have just seen, there is complete 'agreement' as to the content of IHL. I think there may be a formula. I am not certain that Prof. Goodman and Col. Stewart could agree to this, but let me just try: there may be a formula which, if it could be adopted might be helpful. Col. Stewart is nervous about something being a legal obligation to detain and I think part of the reason for that is that if you send people out with that mission then their starting point is not going to be the use of force. Provided Col. Stewart can swallow something being legal and not policy, would it be acceptable to say "no obligation to detain unless"? And would Prof. Goodman be prepared to accept not "an obligation to detain unless" but "no obligation to detain unless"? Because if it were possible to frame something in those terms, I think we might be able to get something that the human rights community or the human rights courts can then use in order to determine in what circumstances there is no requirement to attempt to detain. My own view is that there is no legal requirement to attempt to detain, but wherever in the circumstances detention is feasible, then there may be a legal requirement, but the starting point is not the obligation to detain.

In all other situations, away from hostilities in an International Armed Conflict, away from hostilities in a high-intensity Non-International Armed Conflict and in all Common Article 3 situations, I think human rights bodies are going to be of the view that the starting point is that there is an obligation to attempt to detain. They will understand that very readily the situation may change and you may need to use lethal force, but their starting point in that second set I'm convinced will be an obligation to attempt to detain.

As a word of warning, these conclusions are dependent on certain elements. I am of course assuming that human rights bodies will operationalize the relationship between Human Rights Law and IHL in the way I have suggested. I am also assuming, and this I am much more nervous about, those human rights bodies, when interpreting and applying IHL, will do it in an IHL kind of way. Many of you must have encountered human rights types who think are talking IHL but it's human rights with a funny accent. It is really important that human rights courts, if they are only finding a violation if there is a violation of IHL, actually do IHL in an IHL way. And they are going to need assistance with that. Personally, I regret the fact that when the European Court of Human Rights earlier this year invited States to comment on the relationship between Human Rights Law and IHL in the context of Georgia v Russia (II), as far as I am aware, no State has taken up the invitation to submit a third party intervention. Certainly, the ones I know about haven't, I do not have a comprehensive response about all other States. It also assumes respondent States will plead the cases properly, and I come from a State that appears to be incapable of pleading human rights cases sensibly because they refuse, at the national level, to adopt a concept as to how to operationalize the relationship between Human Rights Law and IHL. They want to be free to fight each case on its own, which means they have no coherent view of the issue. For example, in Al-Jedda, they didn't use IHL except in the context of the Security Council resolution. Even in Hassan, if you listen carefully with the sound turned up to the oral hearing, you can hear sotto voce «oh, by the way, there is IHL». Domestically, they are getting better about invoking IHL, but these cases do need to be pleaded properly, and that also means not claiming human rights bodies don't have jurisdiction when they do have it. I think one's got to recognise legal issues that you may need to win and, most of the time, you can get what you want by relying on the facts. If you show something wasn't feasible, human rights bodies are not going to require you to deliver it. So how the cases are handled is going to be absolutely vital, and this may not be a problem in other jurisdictions, but in the UK it does mean actually allowing the military lawyers to have some input into the defence cases, not leaving it to civilian lawyers.

Cases to keep an eye on Jaloud v. The Netherlands, may be the first one out. I don't think that is going to say anything new, it is basically a sort of Al-Skeini number two. Hassan, on the face of it, should be a very clear win on the facts, but there is reason to believe the European Court of Human Rights may use that as laying the foundation for explaining its view of the relationship between human rights and IHL, because I think they are trying to create a precedent before they have to address the issue in Georgia v Russia (II). The parties in Georgia v Russia (II) have been told they have got until the beginning of October to comment on one another's submissions, so possibly by the second half of 2015 there may be a decision from the Grand Chamber. The case has got everything: it's got an IAC, it's got what's a NIAC unless you can show the relationship between the Russian forces and the South Ossetian forces meant it was an IAC, which raises the question of what the test is. It's got protection of civilians, it's got targeting, it's got forced displacement, it's got protection of civilian property. That is the sexiest case out there and Strasbourg has been left having to deal with it on its own, apart from a third party intervention by the Human Rights Centre of the University of Essex.

VII. Precautions against the effects of attacks

The feasibility to take precautions against the effects of attacks in urban warfare

Juan Carlos Gómez Ramírez Colombian Air Force, Bogotá

I will address the applicability of International Humanitarian Law offensively by the State. I consider this a useful tool to protect the population and to bring security to our population. I will start with a short video that shows the reality and how the enemy behaves, still today in Colombia. The Guerrilla is attacking a town using non-conventional arms that we call gas cylinders as a tool to launch rockets without precision. This is a video that we caught to the Guerrilla recently. It is exactly the topic that we will talk about, but this is the only part I will show in relation to the illegal groups, I want to talk from the side of the State. These are Guerrilla members inside a civilian house that they destroyed before, and they are using this house to launch another attack.

I think, as a practitioner, that it is absolutely possible to perform an offensive operation under IHL in urban areas and that those attacks are legal and legitimate. But, in order to do that, you have to take into account some points. First, intelligence. We have heard here that intelligence is very important, and I can assure you that it is the most important thing to have, both human intelligence and technical intelligence. Advance technology plays a key role and something that is happening in Colombia is the interaction, the interoperability among the Military Forces. We work together with the Army, the Navy and the Air Force and we coordinate the operations with the Police and also with other agencies of the State very well which is very important. There are a few inevitable considerations that we have to take into account. One, the legal aspect. You have to analyse, before any military action, if you are in the area of International Humanitarian Law. And you get this information by analysing objectively the features to use force offensively like, for example, the line of command, the level of violence and certain territorial control. Something that is very important for us in Colombia, and I know that maybe some scholars here will disagree with me, but in the case of Colombia is very important: the political will, the Government's guidance. Even if we have the legal possibility to use International Humanitarian Law offensively, even if the conditions on the terrain allow me to use International Humanitarian Law; if the Government does not allow me to use these rules, I can't, as a State, use these tools. We use in Colombia this consideration, that is from General Rupert Smith, and I think most of you have read his book, where he says that today's wars take place in the middle of the population and the State and the enemy are fighting among the population and all of them want to gain the favour of the population. So the position here is that we do not want the 'bad guys', we don't want these illegal groups, but if the State and the Security Forces while trying to neutralise this enemy, or terrorists, however you want to call it, they commit too many mistakes, for sure, you will have the population against the State and against the Military Forces and the police. And I can say that collateral damage is less and less acceptable and accepted in the case of Colombia. We face a very difficult situation. Colombia is a State of social right with more or less strong institutions, so we apply human rights, but also, because of the hostilities and the illegal armed groups, we apply International Humanitarian Law. But today these guys are in the middle. Sometimes they are on the side of International Humanitarian Law, sometimes they are on the human rights side. I want to show these pictures because they reflect what is happening in Colombia. On the right you see a policeman, like the two here, and if you look at them, they look like soldiers, and look at the soldiers, on the other side, patrolling neighbourhoods in Colombia. The reason why this is happening is because, in our Constitution, the Police and the Military Forces have the mission to protect and to bring security to the whole population. So it is our responsibility, as militaries, to take care of what is happening also in the streets of Colombia. This is not literal, but almost. In 2002, in almost 50 per cent of Colombia, we were applying International Humanitarian Law, because the war was that large. But, today, the situation is this one: we apply International Humanitarian Law not in the whole country, but just in some places, but if the enemy moves to another place, we can go there and apply International Humanitarian Law without any problem. This is the reality, this is the map today. On the left side, we have the Guerrillas, this is the place where they still are. In the centre, we have the 'bacrims' or criminal bands. And, on the right, there's common criminality. As you can see, they share the same spot, so we have to take care where we apply International Humanitarian Law and where we apply human rights, and this is how it works. I want to emphasise this because it is very important for me to tell you that, in Colombia, Military Forces and the Police act in law enforcement operations and in hostility operations. To do that, we have to take into account these three important aspects: the operational, that is very important; as well as the legal and the third, which is not less important, the political. In order to do that, we apply our Rules of Engagement and they have been very useful. So soldiers know pretty well when they are involved in a law enforcement operation and they know the only possibility for them to use force in that kind of operations is in selfdefence. If they are involved in International Humanitarian Law operations, hostilities, they can use force offensively.

This is a short video which shows what is happening right now in Colombia. In this video, there is a military operation against a criminal band, so the Rule of Engagement for them is to apply human rights. You can see what the soldiers do. It takes place in the jungle under heavy rain. They found various rifles, one of them with a telescopic sight, and a motorcycle. Twenty minutes later, the soldiers found a wounded member of the criminal band who surrendered, and the soldier read him his rights. At the beginning, that was unbelievable for us, but because of the real situation for our soldiers and our policemen, we are doing this right now. As I told you at the beginning, Colombia is a State of social rights, so right now we have got 1500 soldiers and policemen under criminal investigation due to the possible commission of war crimes or human rights violations. Right now we have 600 military members who have been sentenced to 20-60 years of prison because of these kinds of situations. That is why for us it is very important to be clear on what environment we are involved in.

We apply this analysis that I want to share with you. In our intelligence, in our documents, we put exactly this. When we perform any operation the commander already has in his operation, in his papers, the military necessity, what his military necessity is, how this military necessity is related to his mission, what the military objective will be, and he has to think in advance about the possible military advantage of attacking this military objective. And to attack the military objective is not always the best decision. I want to share with you a situation that happened to me a few years ago. I was going back to my home, driving my car in the middle of a traffic jam and I received a phone call. I answered the phone and it was a General who said 'Colonel Gómez, this is General Pérez, I am in the middle of a military operation and I need your legal advice', so I said 'yes, Sir, what can I do for you?'. He also said 'I am in the command and control centre and I'm taking this conversation'. So I said 'ok, Sir, what is the situation?'. And he explained to me that in El Cauca, a place of Colombia, the Guerrilla was launching an attack with cylinders in the middle of the houses, wearing civilian clothes, and they were placed in front of a house that had a white flag. The pilot who could see this from an AC-47 plane informed the General that he could neutralise the military objective. The General wanted to know if he could allow him to shoot. I asked him several questions, among them I asked him if he had the possibility to consolidate the place after the military operation, after neutralising the military objective. The General said 'no, I can't because it is very dangerous, the troop can't arrive because the Guerrilla has mined the place, so I think I have to wait until tomorrow'. So at that moment I thought: 'Sir, if you can't do that, for sure, they will remove the non-conventional arms and then you will have two civilians killed in front of a house that has a white flag, and then you will be in trouble'. He answered: 'ok, then what is your advice?'.

So I told him: 'Sir, I think that if that pilot is recording that, please call that pilot to land and call for a press conference and show this to the Colombian population'. And that is exactly what he did, and I will show a little bit about that. I knew at that time that the plane that was flying over the place had machine guns, and that those machine guns were not precise weapons, but saturation weapons. So, to hit the target, you have to shoot many times and then you will be targeting the centre of your military objective. Imagine using this plane in this place with houses. That was the decision we made that day and I want to share with you that if we have ten military objectives we attack no more than four, and the reason why is trying to avoid collateral damage, because it is very costly for us to have collateral damage, in all senses.

What can the State do? I think legal advisors are a key solution for this. I heard that in the United States they have 1600, we don't have that many, but we have almost 200 and they are very important to us. The after-action review, and I want here to acknowledge the ICRC, each year we perform more than ten workshops with them talking about after-action reviews and they are very good, and we know that there is no unique solution. There is the need to take many actions by many State and society actors. Right now, the criminals or the terrorists or insurgents, call them however you want, have little to lose. They move from one side to another, they apply the balloon effect, so if you attack them here, they will move to another place, they do not have the right to territory to defend right now, they survive in the middle of the population and use them and, as a State, I think that it is not possible to negotiate with them, you can only confront, weaken and prosecute them.

Last remarks, I think that, being a State, legitimacy is the centre of gravity. Intelligence, as I told you at the beginning, is a key factor to avoid negative effects of the military attack. And, in the case of Colombia, joint, coordinated and interagency operations have been very important to improve the effectiveness. If I can reduce to two questions the advice to a commander, I would use these two questions: first, "Sir, will this operation improve or worsen the current situation on the ground?" and, depending on his answer, he will make the decision; and second, and this is a bit sarcastic, but it is true too, "does this attack end the world?", because it could injure or end your career, it could put you in jail, it could end the life of many people, and cause many other problems.

I want to end by saying that the State has the responsibility to protect its population, and that is the responsibility of the Military Forces and the Police in the case of Colombia. We have to keep the monopoly of force and we have the responsibility to keep security. But, the problem that I am seeing, and this is something I want to share with the scholars and all legal advisors present here, is that you have to balance between rights and obligations. I do not know what will happen in the future if we do not do that, it would be a chaos because we need the rule of law. This is very important. And coming back to the question of this panel, I think International Humantarian Law is effective and legitimate in certain violent conditions. And I will end with this phrase, I think it is possible to use International Humanitarian Law offensively. It is legal and legitimate, but not at any cost. If there are abuses or excesses somebody has to pay for them.

When locating military objectives within populated areas becomes using human shields

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In this presentation I will pursue the question: When does the location of military objectives within populated areas become a (prohibited) use of human shields?

Human shielding is not a new battlefield phenomenon, it was prevalent in the American civil war as well as in the Franco-Prussian war, it was relatively widespread in World War II, but as we are all aware, and you just need to turn on the news and think of recent hostilities in Gaza, it is tragically prevalent in contemporary warfare, and Gaza certainly is just one example. Human shielding occurs across the board of armed conflicts, in both international and non-international armed conflicts. We had examples in Iraq, Afghanistan, Liberia, Somalia, to name just a few situations. In particular, human shielding appears to be an endemic feature of asymmetric armed conflicts. It seems to be, unfortunately, an almost "logical" strategy for a militarily inferior enemy to try to stave off attacks from a superior party to an armed conflict.

Human shielding is particularly problematic obviously because it endangers and puts at risk civilians. It is also problematic because it turns on its head the very rationale of the humanitarian legal order because it uses humanitarian legal protection in order to achieve a military goal. The United Nations Security Council has therefore repeatedly condemned human shielding as a blatant violation of international law. And it is beyond any controversy that human shielding is prohibited in all types of armed conflicts under treaty law and under customary international law. It is less clear however, what precisely human shielding entails. When does the (often unavoidable) collocation of military and civilian "things", turn into prohibited human shielding? More importantly still, what are the legal consequences if one party decides to unlawfully engage in this practice? The greatest challenges in this regard arise in the scenario the organizers have asked me to focus on, i.e. when military objects are located within a civilian environment (as opposed to civilians being moved towards a military installation). This is particularly the scenario I will focus on today, and I will do so in two steps.

First of all, I argue that human shielding is a particular form of prohibited collocation. Collocation (of civilian and military objects and persons) is a regular and often unavoidable occurrence of any armed conflict. As a consequence, not all forms of collocation are unlawful. Therefore, I would like to start out by exploring what international humanitarian law (IHL) has to say on collocation generally. Which forms of collocation are permissible, which are prohibited and when – at the extreme end of this spectrum – does collocation amount to the war crime of human shielding?

In a second step, I consider the legal consequences that human shielding brings about. After all, human shielding is just a label. What really matters is whether and if so how, this practice affects the obligations of the attacker and the (legal) protection of the civilian population. Who, at the end of the day bears the risk of this unlawful practice?

In my presentation I will be broadly distinguishing two scenarios. Type A scenarios are those in which civilians are being moved into the vicinity of military objectives. Conversely, type B scenarios are situations in which military equipment is brought into a civilian environment. From a purely legal perspective, there is no significant distinction between the two scenarios. Obviously, the practice at issue in either scenario can amount to prohibited human shielding. The point however is how do you prove that human shielding has in fact occurred? In the B type scenario it will typically be far more difficult to establish the facts to prove that this is indeed a situation of prohibited human shielding. This is problematic because, as you are of course all aware, in the course of an armed conflict some form of collocation between military and civilian objects is at times simply inevitable. The laws of armed conflict take this battlefield reality into account. Accordingly, there is no absolute prohibition regarding the collocation of military equipment and personnel with civilian equipment and personnel. Rather, IHL imposes some important legal constraints when it comes to different forms of collocation. Thus, Article 58 of Additional Protocol I as well as the corresponding customary law provision tells us that parties to an armed conflict must avoid locating military objectives within or near densely populated areas. Article 58 also tells us that civilian persons are to be removed from the vicinity of military objectives. But there are of course some important caveats and exceptions to these stipulations. You only have to do this to the extent that it is feasible. You only have to do this in a densely populated area, i.e. not just a populated area, but a densely populated area. And you only have to do this if the persons in question are under your control. Obviously, you do not need a lawyer to tell you that if you are under an obligation to endeavour to do something to the extent feasible there are many ways how you could argue your way out of this obligation. These various exceptions are perhaps deplorable, but they do reflect a (perceived) need for flexibility that States are not ready to give up in battlefield scenarios. Civilian and military objects cannot be kept separate at all times. This reality creates a grey zone and is the reason why proving that human shielding has indeed occurred will often be difficult.

The only absolute prohibition that we find, and when I say absolute I mean a prohibition that allows for no exception whatsoever, applies to the practice of locating military objects in the vicinity of civilian installations with the specific intent to shield these military objects against attack. Specific intent to shield, in my opinion and in the opinion of most writers, is the distinguishing criterion that separates absolutely prohibited human shielding (that is also sanctioned as a war crime) from other forms of collocation that may or may not be illegal. That brings us to the crux of the matter: how do we, in a battlefield situation, infer the specific intent to shield? How do we establish on the basis of the facts on the ground that collocation occurred with the specific intent to shield? Of course, in some instances inferring specific intent circumstantially will be a straightforward matter. If civilians are visibly and forcibly moved towards a military base, establishing specific intent to shield should be quite easy, especially if there simply is no other explanation for a certain movement of civilians other than the intention to use their presence to stave off an attack. For example, if one hundred civilians have been moved into the dessert to surround an ammunition depot, at least *prima facie* there simply is no other plausible explanation as to why civilians should be there other than an intention to shield. I believe this is a situation in which specific intent could be inferred circumstantially. Unsurprisingly, it is exactly these (A-type) scenarios that are typically discussed in military manuals, that are condemned by the Security Council and that have been the subject of international criminal proceedings.

The B-type scenario, the one at issue here, in which military equipment is brought into a civilian environment, has received much less attention. What makes these scenarios so problematic to deal with in practice, is that military equipment may be found in a civilian neighbourhood for an x number of reasons. The mere fact that it is there does not provide us with sufficient circumstantial evidence to infer a specific intent to shield. There may have been a compelling reason why military equipment was moved into a civilian neighbourhood. Maybe the only water source within two hundred miles is located in the village and the military intended to use that source.

In light of these evidentiary problems, the requirements for what amounts to a specific intent to shield should not be set too high. An intention to render a military object (legally) immune from attack is not required. An intention to discourage (i.e. without necessarily intending to render the target immune in a legal sense) an attack by increasing the civilian costs is sufficient to meet the requirements of specific intent. Moreover, outside a criminal court it is not necessary to establish specific intent to shield beyond any reasonable doubt. Rather, clear and convincing evidence of this specific intention will suffice to prove that a party to an armed conflict has engaged in the prohibited practice of human shielding.

In summing up my first step, I would argue that from a legal perspective it does not make any difference whether we are dealing with an A-type or a B-type scenario. However, factually it will often be much more difficult to establish and prove specific intent in B-type scenarios. That being said, one could think of circumstances where it might be possible to infer a specific intent to shield circumstantially even in B-type scenarios. For example, and obviously Gaza is the elephant in the room in this regard, if you find that hostilities are occurring in a densely populated area, and then that military equipment is being moved closer to those areas that are most densely populated, or military equipment is being moved in the proximity of a civilian installation where you know that the negative publicity of a future attack would be the highest, then it might be possible to infer specific intent to shield from these particular circumstances. Clearly, this is a case-by-case assessment.

Let me now turn to my second point: What are the legal consequences if human shielding occurs? When we speak of legal consequences, we should distinguish different layers: legal consequences for the party engaging in human shielding, legal consequences for the individual ordering human shielding, legal consequences for the other side, and most importantly, legal consequences for the civilians involved. The party to an armed conflict that engages in human shielding will be violating international law. The individual commander may be committing a war crime. In an international armed conflict this violation of LOAC rules may allow the other party to engage in belligerent reprisals but only under very narrow constraints and under no circumstances against protected persons.

Much more important, however, is the question regarding the legal consequences for the attacker if the other side engages in prohibited human shielding. Obviously, the legal consequences for the attacker go hand in hand with the legal consequences for the civilian population. If the obligations of the attacker were somehow mitigated, the legal protection of the civilian population would likewise be diminished. This question really is the crux of the matter here. Treaty law is silent in this regard. Personally, I do not believe that the practice of human shielding in and of itself has any direct impact on the attacker's obligations. To the contrary, article 51 paragraph 8, tells us that the protections of the civilian population are not to be lowered because one side is violating its LOAC

obligations. So the mere fact that one party to the conflict is "utilising" human shields does not change anything for the attacker. However, there is, and this is well-known to the experts in the room, a more indirect way in which the attacker's obligations could be affected, namely if we shift our focus from the party that is utilizing human shields to the individual civilians involved in this practice. Indeed, if the civilians who are engaging in human shielding are thereby directly participating in the hostilities they would (temporarily) be losing their protection from attack. In this context it is somewhat confusing if human shielding is *per se* equated with such a loss of protection from direct attack because what matters from a legal perspective is merely whether the activity amounts to a direct participation in hostilities. There is widespread agreement that shielding activities can, in principle, amount to direct participation in hostilities leading to a loss of protection. The devil, as always, is in the details. It is highly controversial under which particular conditions shielding activities would amount to a direct participation in hostilities. This is a well-known debate to most of the lawyers in the room and I do not intend to rehash it once again. Just briefly, there is one position, not uncontroversial but widespread, that distinguishes whether human shielding is occurring voluntarily or involuntarily. It is argued that if there is a voluntary engagement in shielding activities such voluntary engagement leads to a loss of protection. While this is a defendable position under the law as it stands, I believe that it is too sweeping and impracticable under battlefield conditions since the distinction hinges exclusively on a mental element (voluntary/involuntary human shielding) that would need to be established individually for each and every of the civilians involved.

Moreover, in the B-type scenario that I am considering here today, my hesitations regarding the distinction between voluntary/involuntary human shielding are brought to the floor. Because, if we consider the situation in which military equipment is moved into a civilian neighbourhood, quite frankly, I believe that under these circumstances the voluntary/involuntary distinction cannot be of any practical relevance whatsoever. Civilian protection will remain fully intact in this situation, irrespective of whether the (in any case passive) civilian involvement is to be qualified as voluntary or involuntary. First of all, the civilian population may not even be aware of the fact that military equipment is being moved into the neighbourhood. And even if the civilian population in the vicinity knows, what could they possibly do about it? They may be passively tolerating this activity and they may refuse to leave their homes but they are under no obligation to leave their homes. It seems inconceivable that such a passive activity could ever be equated with a direct participation in hostilities leading to a loss of (legal) protection. Even in the absurd and entirely unlikely scenario that someone would step out on his balcony and say «I welcome the arrival of weapons in my neighbourhood», thereby voluntarily endorsing the presence of military equipment in a civilian area, this would not reach the threshold of a direct participation in hostilities. Therefore, in a B-type scenario it does not matter whether civilian involvement is voluntary or involuntary. Civilian (legal) protections remain fully intact.

VIII. Conduct of hostilities in non-international armed conflicts: specific challenges

Challenges faced by non-state armed groups as regards the respect of the law governing the conduct of hostilities

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Discussing armed groups is similar to discussing armed conflict in general: one does not need to be in favour of armed groups - or in favour of war - to recognize their existence and hence the need to deal with the ensuing humanitarian challenges, in order to meet them with legal rules and mechanisms. Following Professor Dinstein's presentation, we will be discussing the other side of the coin: the various problems faced by non-State armed groups when it comes to their respect for international humanitarian law (IHL) on the conduct of hostilities. As is the case for States, this discussion must equally be had regardless of the groups' willingness to respect IHL: understanding the challenges is necessary before engaging with them and an attempt to engage with them must be made even when we have legitimate doubts over whether they are actually willing to respect the rules. Engagement based on realistic rules may be the starting point for a minimum of willingness to respect rules. Finally, one should keep in mind that while most of the problems mentioned here are genuine ones, some others are not; but because they are often invoked by armed groups, they are included in this presentation.

1. General problems

The first problem – and one of the most important ones when it comes to the willingness to respect IHL – is that non-State armed groups often regard IHL as a set of rules made by others and, more specifically, by States that often interpret them liberally in their favour. As a consequence, the groups will usually see such rules as irrelevant or not binding on them. This is reinforced by the perceived double standards in some rules, the best example of which being the legal framework protecting children during armed conflict and, in particular, the age below which children cannot be recruited into armed forces. Most armed groups know that the rule applicable to them differs from that applicable to States. Such a manifest discrepancy does not increase the group's willingness to respect the law.

In addition, compliance is also limited by the frequent lack of knowledge and training. Even when the rules are known, non-State armed groups feel that respecting IHL has no advantage for them. Their conduct remains illegal under domestic law; they are considered criminals, if not terrorists. In that sense, a first step for States to encourage respect of IHL by their enemies would be to refrain from calling attacks terrorist when they are directed at a military objective or combatants.

Another challenge faced by non-State armed groups, and in particular by those willing to respect IHL, is lack of command and control. While an efficient command and control structure is essential for the respect of IHL, it is often the first aim of States to destroy that of an armed group (and this is not contrary to IHL). At any rate, illegality generally leads to the compartmentalization of the group's structure into small cells, rendering the individual fighter much more independent than a soldier in regular armed forces would be. A fighter in an illegal armed group often does not even know who the commander of his or her command is, or what the overall plan is.

Their technological inferiority is also a factor: they either have limited, old or self-made technology, or when they possess more sophisticated technology, they do not have the capacity to use it responsibly.

When it comes to the law itself and its adaptation to non-State armed groups, several problems must be mentioned. First, while the IHL applicable to Non-International Armed Conflict (NIAC) was developed for situations similar to that of the Spanish Civil War, today's non-State armed groups do not always aim to control territory. This can of course never be seen as an argument to disregard common Article 3 of the Geneva Conventions in all NIACs, even when an armed group does not control territory. However, it makes the principle that the only legitimate aim of warfare is to weaken the military potential of the adversary appear to be beside the point. Several contemporary non-State armed groups will never have the military capacity to defeat the States they are fighting against, inter alia because of efficient measures of force protection on the opposing side. In addition, weakening the military potential of the enemy may sometimes not even be the aim of the group; or rather, they may have a wide variety of end goals, such as hindering the State's construction of a dam in the area where the population they are defending lives. Finally, the rules of IHL have been made neither by nor for armed groups, and this fact is worsened by the tendency to draw analogies between NIACs and the IHL of International Armed Conflict (IAC), in particular through alleged customary rules. This trend voluntarily ignores that the IHL of IAC was made for States and cannot necessarily be applied in the same way by armed groups.

2. Specific problems raised by IHL on the conduct of hostilities

In addition to the general problems mentioned above, non-State armed groups also face problems specific to the rules governing the conduct of hostilities.

The first question is how to define legitimate targets for their attacks. With respect to persons who may be attacked, the ICRC developed and published its approach in its Interpretive Guidance on the Notion of Direct Participation in Hostilities,¹ but this Guidance does not answer all operational questions and it remains subject to controversy. An important issue for every armed group is the status of police forces. In IAC, they are considered civilians, while in NIAC they are usually involved, as law enforcement officials, in the search for and arrest of armed group members: in that sense, the rule cannot be the same in NIACs, because it must be legitimate (from an IHL point of view) to attack those who try to arrest its members. A similar challenge arises when we consider government officials: just as States often consider the political leadership of armed groups as legitimate targets without making the distinction between them and the armed wing, armed groups tend to reciprocate and to consider that government officials are always legitimate targets. As this is obviously not the case, IHL is perceived as protecting "kings" but not "pawns". Furthermore, what about those who finance the conflict, or those who collaborate with the government, e.g. by providing information? In law, they are not legitimate targets, but many groups consider it more legitimate to attack them than simple government soldiers. How should we respond to the claim made by armed groups that civilians have to defend themselves if governmental forces attack them? Where do we draw the line between selfdefence and direct participation in hostilities? May an armed group train civilians in self-defence and even form self-defence groups, without making their members legitimate targets? Ultimately, the principle of distinction will be the first victim.

IHL also protects those who are *hors-de-combat*, who shall no longer be seen as legitimate targets. But how can an armed group realistically accept the surrender and intern a government soldier? This is not only a factual problem but also a legal one: such captured soldiers will generally be referred to as hostages – and the taking of hostages is a war crime – leaving armed groups with no alternative but to kill their prisoners, which is evidently also a war crime.

As for objects which may be attacked, the notion of military objective poses similar questions. The concept of "military" itself is often lacking in

¹ ICRC, Interpretive Guidance on the Notion of Direct Participation in Hostilities (Geneva: ICRC, 2009), 85 p.

the strategies of non-State armed groups: they often proceed with destructions out of political – rather than military – necessity. The example of destroying a dam under construction is again telling.

Furthermore, the application of the principle of proportionality entails additional considerations when applied by non-State armed groups: one should balance the risks to civilians with the expected military advantage, but how may the latter be evaluated when those who launch the attack are unaware of the overall plan? Or when the advantage to be gained is not a military one, or is not to weaken the military potential of the enemy, but instead follows a political or propaganda agenda? The military advantage of capturing one government soldier or of destroying one tank in terms of reducing the military potential of the State may be minimal, but both have a a significant impact for propaganda purposes, by promoting the cause and the visibility of the group. Can this absence of a real military advantage mean that IHL prohibits the capture of government soldiers and the destruction of tanks as soon as the slightest risk of incidental effects for civilians exists?

Turning to precautionary measures, non-State armed groups will face greater difficulties of collecting information, of verifying its veracity when they do and of verifying the legality of their targets. Even if willing to respect IHL, the range of feasible measures is relatively limited. For instance, how can they choose the means causing the least damage when they have only one weapon capable of reaching the enemy at their disposal? Respecting passive precautionary measures is another challenge: the obligation to avoid locating military objectives within or near densely populated areas is often equated, in the case of armed groups, with the prohibition to use human shields, which is wrong. At the same time it is rare to see States themselves implementing the separation of civilian objects and military objectives.

Other traditional provisions of IHL are respected with difficulty: for instance, IHL prohibits perfidy, while it is the essence of guerrilla fighting.

Finally, humanitarian action also suffers from the specificities of NIACs: it is often not only perceived but also openly declared by the government and third States supporting it as an inherent part of peacebuilding efforts. Hence it is not perceived as neutral by armed groups. Sometimes it is even used as a cover by States to defeat armed groups.

All this having being said, one should keep in mind that the rules regulating the conduct of hostilities are flexible and most obligations are situation-dependent.

3. The existing IHL rules are, may and must to a certain extent be adapted to the realities of armed groups

First of all, the treaty rules are rare but clear: it is true that only common Article 3 and Article 13 of Additional Protocol I (when applicable) apply, but both are unambiguous: civilians may not be attacked. The only problem is that the definition of civilians is controversial, in particular in NIACs, both among States and among armed groups. Customary law also applies; and because it is derived from practice, it should by definition be realistic. Nowadays, there is however an increasing tendency to derive it from lofty statements and from treaty rules applicable in IAC. Another problem, which necessarily has an impact on the respect for IHL by armed groups, is that such practice creating customary law unfortunately is not considered as including that of armed groups.

Moreover, most obligations other than the prohibition to target civilians are obligations of means, not of result. Anyway, only intentional violations are prohibited by IHL, but unintentional violations of the prohibition to attack civilians may reveal an intentional disregard of the proportionality principle and of the obligation to take precautions in attack.

In general, IHL concepts must be interpreted by adapting them *mutatis mutandis* to the realities of an armed group. For instance, looking at our preceding remarks, the concept of "military" can be understood as including all that enables a party to harm the enemy through acts of violence. The problem however becomes one of defining "violent": for instance, is the construction of a dam an act of violence? Other concepts can be interpreted taking into account the specificities of armed groups. When it comes to precautionary measures for instance, one should keep in mind the key concept of feasibility. The obligation to take passive precautionary measures is also a soft one. As for the possibility to capture and to intern, it must be made realistic for armed groups if we want them to respect those who surrender.

All these considerations lead us to one essential question: does the existing law already provide for a sliding scale or should it be introduced? In other words, should the applicable law depend on the capacity of the armed group, in the sense that the more organized it is, the more rules it shall be bound to respect? This would certainly make the law more realistic for - and therefore core prohibitions more often respected by - armed groups. However, there are risks of fragmentation of the law and endless controversies over which rules are realistic in a given case. In addition, with such a sliding scale, the question arises of whether the resulting rules apply equally to both sides. Are well-organized governmental armed forces fighting against a poorly organized armed group, also by Human

Rights), or should the principle that both sides of an armed conflict are always equal before IHL be abandoned? If the law is not the same for both parties, will governmental forces nevertheless respect rules which are not only – as currently – not respected by the enemy but not even binding upon the enemy?

4. Conclusion

There remains an inevitable tension between the need to have rules preserving a minimum of humanity in war and the desire to have rules that allow belligerents to overcome the enemy. Indeed, only few groups will respect rules under which they have no chance to win. Unrealistic rules don't protect anyone and undermine the willingness to respect even those rules of IHL which are realistic. However, where do the limits to realism and flexibility lie? To answer that question, I would refer to a remark made by a former assistant of mine: if one pushes the logic of the sliding scales to the extreme, what would happen if the group is so weak that it can only attack civilians? Of course, as is true of all proposals, that of introducing a sliding scale has its limits, but where those limits should be drawn is precisely the question that we should discuss more thoroughly, instead of ignoring the differences between States and armed groups, which is also inherent in the tendency to apply the same law to IAC and to NIAC. IX. Conduct of hostilities: specificities in various domains

Naval Warfare

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This panel deals with the conduct of hostilities and, in particular, with challenges and new developments. I was assigned the task to talk about naval warfare, which is not necessarily a subject that raises the interest of too many people, but I will try to be as interesting as possible.

There are certain points I would like to cover. The first concerns the distinction between international armed conflicts on the one hand and incidents at sea on the other hand. While this may seem surprising, you will see that this has quite an impact on contemporary naval operations. The other is: what about employing other than warships in the conduct of hostilities and the exercise of belligerent rights? What are lawful military objectives? Again, you may say 'but we have the definition'. Yes, we do, but naval warfare has changed considerably, in particular with regard to the issues which qualify as protected objects. And, finally: naval mines and torpedoes.

First of all, you may ask «why is he asking the question of whether and to what extent a naval operation may trigger the existence of an international armed conflict at sea?». Of course, the old battles at sea, like the battle of Trafalgar, belong to the past, so we are not talking about those classical exchanges of fire at sea. But we must be aware that the oceans of the world belong to the region of warfare and that, in some regions the oceans play a very important role, not only with regard to natural resources, but also with regard to sovereignty. It is a highly volatile area and that is why we need to be abundantly clear of whether and to what extent a certain naval operation triggers an international armed conflict or not. The International Criminal Tribunal for the former Yugoslavia (ICTY) and the prosecutor of the International Criminal Court (ICC) have more or less joined the International Committee of the Red Cross (ICRC) in its determination that whenever there is a resort to armed force by one State against another State this is an international armed conflict. The prosecutor of the ICC just recently has given an opinion with regard to the sinking of the South Korean warship Cheonan in 2010, and has come to the conclusion that the sinking triggered an international armed conflict between North and South Korea. Irrespective of the question whether it is one State or whether there are two States, this is the conclusion of the ICC's Prosecutor. What we have to be aware of, however, is that incidents at sea involving the use of force take place on an almost every day basis,

not only by Government vessels vis-à-vis merchant vessels or fishing vessels, which is of course very common, in particular in the South China Sea or even the East China sea, and in other regions by the way. But there are also incidents between Government ships, in particular between warships. The famous 'bumping incident' of the Black Sea between the U.S.A. on the one hand and the former U.S.S.R. on the other hand is just one example, and there are warning shots being fired, etc. In view of that, we have to be very cautious not to too easily draw the conclusion that an incident at sea that involves a certain degree of the use of force immediately triggers an armed conflict between two or more States that may be involved. So far, at least, those incidents at sea have not been considered international armed conflicts. That does not mean that the sinking of the Cheonan was not an international armed conflict. That is obvious. But I would like to draw your attention to the fact that the exchange of force at sea is a common exercise in certain regions of the world, and we should be very cautious not to easily entitle the parties to those incidents not only to use force for a limited purpose, but maybe to resort to the exercise of belligerent rights within a very short period of time. I understand the position of the ICRC, I understand the position taken by the ICC and the ICTY, but the fact that it is here not only about protecting victims, but that the applicability of all the other rules of the law of naval warfare could come into operation, should make us a little bit more cautious and not to easily draw the conclusion that an international armed conflict exists between the respective States.

The next question is: if there are hostilities at sea either in support of land and air operations or at sea as such, are the respective parties limited to using only warships for those purposes? You may recall that the very first multinational treaty of the modern law of armed conflict is not the Geneva Convention of 1864 but the Paris Declaration of 1856, which prohibits privateering. This means that a Government has entitled private vessels to resort to the exercise of belligerent rights. Since 1856, the exercise of belligerent rights has been limited by many States to warships that qualify according to the respective definition under the Law of the Sea Convention of 1982, and the corresponding rules of customary international law. That would mean that not only the right of visit, search and capture would be limited to warships, but also attacks against lawful enemy targets. It may be emphasized in this context that we are focusing on international armed conflicts, because that issue does not arise in the context of a noninternational armed conflict, which will regularly not be conducted in high sea areas anyhow. The question is where do we stand with regard to the rather formal approach dating back to the middle of the XIX century, or do we take today's more liberal approach that at least in the relation between the parties to the conflict we would allow all vessels, whether Governmental or Non-governmental in character, whether military or nonmilitary in character, to be entitled to attack lawful targets of the respective enemy. Again, there is no clear answer and there is a division of opinions between States. The United States, for example, takes the more liberal approach, the Germans take a rather formalistic view. But, again, in the relation between belligerents, that formalistic approach does indeed not make much sense. Why? Because it is all about transparency in the exercise of belligerent rights affecting neutrals, rather than those affecting the respective enemy.

We have to be aware, moreover, that all the issues we will be talking about today, unmanned systems, semi-autonomous systems etc., which have been settled in the aerial domain, have not yet been settled in the naval or maritime domain. It all starts with the question of whether an unmanned maritime vehicle qualifies as a ship at all and there is a dispute about whether it can ever qualify as a warship proper. This does not mean that the use of such unmanned systems would be prohibited or would be clearly in violation of the law of armed conflict, because at sea it is much easier to clearly discriminate between lawful targets on the one hand and innocent shipping on the other hand than it is either in land warfare or in air warfare. In naval warfare, you can even identify an individual ship and then you could send out your autonomous systems and do whatever the system considers necessary, without a violation of the law of armed conflict, without a man in or a man on the loop. However, the legal situation is far from being clear, because this issue has not raised too much attention, maybe fortunately so. Maritime issues are not as attractive as aerial incidents, of course. So a flying drone is always more interesting than a swimming or a diving device because you cannot see them and the sea is so far away. Still, this is an issue that will keep accompanying us for quite a while and it will have an impact on the conduct of hostilities at sea, whether near the littoral or whether in high seas areas, in deep blue sea areas.

The next question is: what are lawful targets at sea? Of course, it goes without saying that enemy warships are of course always lawful targets. The definition that is laid down in article 52 paragraph 2 of the Additional Protocol and customary international law also applies to the naval domain. There is, of course, the problem we have between the United States of America and the rest of the world with regard to the war-sustaining effort which, at least according to the Commander's Handbook of the U.S. Navy, is still considered as constitutive for an object to qualify as a lawful target. Hence, ships exporting oil, if the revenue of the oil helps the enemy in sustaining in prolonging its war effort would constitute lawful targets. Apart from that, however, there is general consensus that those attacks at sea must be limited at objects that qualify under the respective definition. However, the problem now is that the sea is used for many other purposes,

not just for shipping and for fishing or for the transport of goods and people. There are some rules that have also been laid down in the San Remo Manual on the law of naval warfare, namely, that merchant vessels, unless they take part in the hostilities or otherwise contribute to the enemy's military effort, qualify as lawful targets. There are specially protected vessels, like hospital ships, a rule that dates back to the XIX century. That is common ground. But what about submarine cables and pipelines? Why should we care? First of all, the problem is that they are of high importance. Submarine pipelines obviously transport oil, gas and other important energy resources. Submarine cables carry nearly 98% of the international data traffic and the rest are transmitted via satellites. Is there a rule under IHL addressing submarine cables? The only rule with regard to submarine cables can be found in article 54 of the 1907 Hague Regulations. It only regulates those submarine cables that connect occupied territory with neutral territory. The general conclusion that is drawn from that rule is that submarine cables connecting enemy territory that is not occupied or even other territories with neutral territories, will not necessarily be protected under the law of armed conflict. It must be borne in mind that submarine cables may be a very important target, be it only for information gathering or for destructing or disrupting information exchange between the belligerent and its forces, because many of the new assets, like for example unmanned vehicles, can only be controlled remotely if there is data traffic almost in real time and much of the data traffic goes via submarine cables. Hence, it is obvious that destroying submarine cables may be an option at least for weaker enemies or those enemies that do not have the respective high-tech equipment. In view of that, it is rather dissatisfactory that, in spite of the high importance of such underwater installations, and despite certain plans in many naval forces in the world to also interfere with submarine cables or other infrastructure on the seabed or in the seabed, it is necessary that something will be done, because even the peace-time rules applying to those underwater installations are not sufficiently developed, to say the least. The Sanremo Manual contains a paragraph on submarine cables and pipelines, but according to its wording - 'shall take care to avoid' - the protection accorded is not sufficient. But don't forget the time the Sanremo Manual was published, that is almost twenty years ago - maybe another thing we could celebrate. In those days the importance, in particular, of submarine cables was simply not understood. Probably today the experts who drafted *the Sanremo Manual* would come to different conclusions than they did back then. With regard to those underwater installations, I at least would take the position that they may only be attacked, that means physically damaged or even destroyed, if they qualify as lawful targets. The fact that the 1907 rule is rather meagre and the Sanremo Manual has not added too much clarity to it, may leave open questions and may make

belligerents believe that they are free to act at will, even though those installations are of high importance to virtually each State. Of course, submarine cables will always be exploited, but exploitation is nothing that would interfere with the integrity of such cables. For instance, you may have listening devices, you may have devices that would also lead the data to sources that are not necessarily those that are the addressees. That is an issue of espionage or information gathering or reconnaissance and not an issue of the conduct of hostilities.

Many may think of a naval mine as an automatic contact mine, which on physical contact explodes - and in many cases it does not even explode because it is pushed away by the bow wave. These contact mines are still in use. The mines that are employed today are highly sophisticated weapons. They react to electromagnetic or acoustic signatues or to changes in water pressure. They can be programmed in a way to only attack a certain type or even an individual ship if sufficient data is being loaded into the respective device. In 1907, States could only agree on submarine automatic contact mines. Today we are talking about highly discriminating and very sophisticated weaponry that does not necessarily pose a danger to innocent shipping at sea. Hague Convention VIII is limited to submarine automatic contact mines and that it contains a number of obligations of the parties to the conflict, which are not necessarily applicable to modern mines. The question is whether and to what extent those rules do apply to modern naval mines. First of all, many States still have submarine automatic contact mines. Maybe even the majority of the mines in the arsenals today are still of the old type. However, they are increasingly replaced by modern mines. Then the question is how far does Hague Convention VIII, which is now more than one hundred years old, contain customary principles that can be adapted and applied to modern naval mines. It is important to note that, in any event, the scope of applicability is limited to naval mines. Beach interdiction mines are covered by Protocol II of the 1980 Conventional Weapons Convention. That is rather a land warfare issue than a naval warfare issue. It may be added that nuclear mines are governed by the Seabed Treaty, which is rather an arms control instrument than an instrument on the conduct of hostilities. If it comes to modern naval mines, we must be very cautious not to adapt or apply too easily the Hague Rules of 1907 to them, because the danger posed are quite different compared to that posed by submarine automatic contact mines.

Just a short word about torpedoes which, like modern naval mines, are highly discriminating weapons. They also react to acoustic, electromagnetic signatures, etc. They are wire-guided for the most part of their journey. The problem today is that the technology in use has blurred the dividing line between a torpedo on the one hand and a mine on the other hand. There are devices that can move on the seabed, that can release a device that looks more like a torpedo or even a missile. Hence, there is no real definitional clarity of how to distinguish a naval mine from a torpedo. Probably, the best way is to apply the NATO definition, which I think is the best definition of a naval mine we have so far. Still, there are certain issues which make it difficult to distinguish. Another aspect that must be borne in mind is that mines are not only designed and used in order to sink ships, but also in order to change geography. It is about denying certain sea areas to the enemy, which is a very important aspect of naval warfare which had always had a certain economic strategic element that many people have forgotten about. Naval mining is different than mining in land warfare, although land mines are also used for modifying geography. Moreover, it may not be forgotten that there are also controlled mines that can be controlled remotely. They can be sleeping and you can arm them at will. Do they pose a risk to innocent shipping as long as they are not armed? Can you deploy them, for example, in an international strait, even though the international strait may be of overall importance for the economy of the world, like the Strait of Hormuz or the Strait of Malacca? They are the two most important straits of the world, be it only for the supply of energy of all the regions of the world. We have to be aware that technology in the context of naval warfare with regard to naval mines and torpedoes has developed significantly, and we should not be too bold to just say 'this is the old Hague Convention VIII of 1907 and we can apply those rules one by one to those modern devices'. It is not that simple, I am afraid to say. The same holds true with regard to torpedoes, which, according to the rules of 1907, must become harmless after they have missed their target. This, however, is not an issue today because torpedoes are much more sophisticated and much more discriminating than they were back then.

In conclusion, I think there are certain issues that need to be clarified. First of all, incidents at sea must clearly be distinguished from international armed conflicts at sea. The mere reference to a use of force by one State against another at sea is, in my view, not sufficient to state or to allege that an international armed conflict exists as such. Secondly, the legal status of unmanned maritime or sea-going vehicles must be settled, because it is not only an issue of sovereign immunity that would of course apply to such unmanned vehicles. It is about whether such vehicles or systems may be employed during armed conflict, and, if so, for which purposes. Finally, the status and the protection of submarine cables and pipelines must be improved. Submarine cables are much more important than pipelines. The destruction of submarine pipelines will always have an environmental impact, which might render the attack illegal. That is an aspect you cannot fall back to in the case of submarine cables, in particular not in the case of submarine communication cables. Finally, there are two last points: (1) Is it lawful to lay mines in vast areas of the high seas and, thus, to prevent or

impede upon, for example, the sea traffic between Europe and North America or between Europe and Southeast Asia for a long period of time, with all the huge impacts on the world economy, as was done during the World Wars? I have my doubts whether that would still be acceptable today. The geographical limitations of minefields are an important issue. (2). The old distinction between mines and torpedoes should be abandoned. Rather, both should be considered means of naval warfare, which are governed by the principles of IHL that apply to the conduct of hostilities as they do in other domains.

Guerre Aérienne: le cas du conflit colombien

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Cette présentation portera sur la guerre aérienne en analysant, en particulier, le cas du conflit armé en Colombie. La Colombie est un pays au cœur d'un conflit armé non-international depuis environ 50 ans. Les opérations aériennes dans ce pays ont toujours été très complexes mais maintenant on peut considérer ce conflit dans sa phase finale. Le groupe armé terroriste des FARC (Forces Armées Révolutionnaires de Colombie - Armée du peuple) est en négociation avec le Gouvernement colombien pour mettre fin au conflit.

Toutes les opérations aériennes de la Colombie sont effectuées selon une planification initiale. On ne peut sortir en mission aérienne sans savoir la mission à accomplir. Elles sont établies conformément à la loi nationale et ne visent que des objectifs militaires. En Colombie, toutes les opérations militaires sont menées contre des objectifs militaire, si ce n'est pas le cas, la loi colombienne ouvre une enquête pénale à l'encontre du commandement de l'opération et des pilotes – ils sont également susceptibles d'être pénalement sanctionnés. C'est ainsi que fonctionne la loi colombienne.

Une protection spéciale est assurée contre les attaques dans des zones avec une forte concentration de personnes civiles. Les opérations ont lieu dans de petites villes et dans la jungle. Il faut éviter des dommages collatéraux au cours des opérations contre les objectifs militaires. Les règles doivent être claires et toutes les personnes participant à l'opération doivent les connaître ; en effet, des simples doutes peuvent mener à des tragédies.

Le renseignement est très important pour les opérations en Colombie. On effectue en moyenne une mission par jour -environs 20 opérations par mois – opérations d'attaque, bombardements, des tirs au canon avec des missiles, surveillance, etc. A présent, presque toutes les opérations sont menées selon un cadre d'interarmées, avec la participation des militaires -Armée de Terre, Armée de l'Air, de la Marine- et de la Police nationale. Une bonne préparation est essentielle. Le renseignement y occupe une place très importante. Il s'agit, selon moi, de la clef pour mener à bien les missions aériennes. Si on dispose de bons renseignements, les dommages collatéraux seront réduits au minimum.

L'utilisation sûre de l'espace aérien répond à une question efficace avec la coordination et la régulation des opérations à tous les niveaux en optimisant les efficacités au combat. En effet, la préparation opérationnelle se déroule dans la salle de briefing. Il faut avoir une coordination maximale entre les moyens aériens (avions de combat, avions de transport, hélicoptères, drones, etc.) et également entre les moyens terrestres (l'artillerie, les troupes de manouvre, forces spéciales, etc.). On doit avoir une coordination maximale entre les armés.

Le niveau d'autorisation dépend de l'armement utilisé. Chez nous, le Commandant de l'Armée de l'Air est le seul à pouvoir autoriser une opération de bombardement. Dans le renseignement, le commandant légal en coordination avec le commandant de la mission décident des mesures et précautions à prendre dans les préparations et les exécutions des attaques pour en limiter les effets et pour s'assurer qu'il n'y ait pas d'effets indiscriminés. En effet, toutes les opérations doivent respecter les règles du Droit International Humanitaire.

Le renseignement technique et humain doivent faire l'objet d'un processus de validation. Le renseignement technique est effectué grâce à des avions de l'armée de l'air, de terre ou par la marine. Il importe de coordonner le renseignement avec l'information de l'armée de terre. Cette tâche n'est pas aisée au vu du nombre de personnes impliquées - l'armée de l'air, pilotes, infanterie. Mais effectuer une fusion de ces deux sources est essentiel.

Je vais vous exposer à présent le processus de décision du commandant pour attaquer un objectif militaire en Colombie.

On commence par les buts de l'opération. Pour illustrer, prenons l'exemple de la neutralisation d'un bâtiment civil au troisième étage-. Cet étage est utilisé pour garder des explosifs, des mines anti-personnelles et d'autres armes non-conventionnelles (cette information est donnée par le renseignement). Ensuite, on se pose deux questions: 1) l'existence d'une nécessité militaire; 2) si la neutralisation de ce bâtiment offrira en l'occurrence un avantage militaire. Si on ne conclue pas à l'existence d'une nécessité militaire, on cherche un autre objectif et si ce n'est pas possible, alors il faudra abandonner l'attaque. S'il y a la nécessité militaire, on va chercher quel type d'armement utiliser et le pourcentage de neutralisation de ce bâtiment. Peut-être 40%? Après il faut savoir si on dispose d'une arme appropriée pour l'opération - peut-être des bombes, des missiles, des rockets. Si l'objectif militaire est un bâtiment, je ne peux pas utiliser des bombes parce que si je veux neutraliser 40% seulement du troisième étage, avec ce type d'armement on va à neutraliser plus de 40%. On devra plutôt utiliser un rocket ou bien un missile. Il faut utiliser des armes appropriées qui minimisent les dommages collatéraux lors des opérations. Si on ne peut pas minimiser les dommages collatéraux pour faire l'opération, on doit chercher d'autres moyens afin de minimiser les dommages collatéraux (opération de nuit, etc.).

Si on décide de mener l'opération, il faut contrôler l'ordre. Si la mission est aérienne, en cas de présence d'hélicoptères, il faudra assurer une bonne communication avec les avions de combat et chercher une solution s'il y a des problèmes de communication telle que avoir recours à un contrôleur aérien avancé et ce pilote devra préparer cette mission. Si on peut réaliser ce contrôle de la mission, on effectuera la mission, sinon, on reste sur terre.

Quand on dispose de toute l'information nécessaire pour la planification de l'opération, on peut initier la mission aérienne. Cependant, si une personne impliquée dans cette mission a reçu des informations différentes lors du briefing, il faudra l'annuler et en planifier une autre.

En Colombie, aucune opération n'est pas la même que la précédente. La complexité des opérations en Colombie peut faire que la stratégie qui nous a conduits au succès aujourd'hui, nous mène à l'échec demain.

X. Developments in warfare: autonomous weapons

Key trends of international law relating to the conflicts in cyberspace

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In this presentation suggestions regarding the potential trends of international law for conflicts in cyberspace will be argued.

This issue appears of current interest and has been pointed out repeatedly in resolutions of the UN General Assembly, as well as in political documents of the leaders of many States of the world.

In essence, the issue can be described as follows. On the one hand, experts believe that the misuse by countries of modern information and communication technologies (ICT) can be considered, in a number of instances, as a threat of force or a threat against territorial integrity or political independence of countries, or even as a sort of militant action. Most experts do not dispute the applicability of rules of international law in this situation.

On the other hand, the international community has not yet built a common understanding of how exactly to use these rules of law.

This report suggests one of the possible approaches to handling the issue. The approach is based on assumption that key challenges in defining the methods of applying the rules of international law to the situations of misuse of ICT for military and political purposes are induced by the following circumstances:

- Novelty of the subject field of power struggle between the countries, i.e. cyberspace;
- The fact that ICT have no signs of "weapons" in the common understanding of the term;
- Inability to directly observe the use of ICT;
- Unapparent existence of the relationship between the acts of malicious use of ICT and the onset of social and political backwash effects.

To define the ways of overriding such circumstances, I shall proceed to the current practices of regulatory enforcement that enable us under some conditions to determine an act of aggression without the use of weapons in the common understanding of the term as an "armed assault".

It appears that the precedent for this practice originates from UN Security Council Resolution 1368 dated September 12, 2001 and Resolution 1373 dated September 28, 2001, which followed up the discussions concerning September 11, 2001 tragedy in the USA. As we all know, the tragic events of that day were marked by an attack of international terrorists on a number of civil and defense assets using civil aircraft as weapons. The UN Security Council did not object to the enforcement by the US, in pursuance of Article 51, UN Charter, of the "inherent right of the individual and collective self-defense" and the use of armed force against Iraq and Afghanistan in the wake of the global war announced on international terrorism.

In fact, the above UN Security Council resolutions introduced the concept of unobvious "Intangible Weapon" to international practice.

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The essence of the concept is the following: Any non-military device or asset may turn into a weapon if disturbance of its normal operation (including through the misuse of ICT) results in extermination of troops and destruction of equipment. So, assault with the use of such devices and assets may be treated as an "armed assault".

Recognition of the "intangible weapon" concept allows us to isolate the following development trends in the subject field of international law for conflicts in cyberspace:

- Norms and principles of Jus ad Bellum;
- Principles of recording legal facts recognized by the rules of international law *Jus ad Bellum* that create legal relationship in the field of use of force through the development of a system for

objectivizing the facts of misuse of information technologies and evaluating the effects of such misuse, as well as attribution of the subjects in fault of such acts;

- Norms and principles of Jus in Bello;
- Formalisation of the proposed innovations in the international law of conflict.

Norms and principles of international law *Jus ad Bellum* ultimately contained in the UN Charter and UN General Assembly Resolution of December 14, 1974.



Analysis of the mentioned sources in reliance on the "intangible weapon" concept resulted in the following findings.

Articles 41 and 42 of the UN Charter describe two basic types of "force": force with the use of arms (weapons), and force without the use of arms.

Force with the use of arms involves coercion of one State to act in accordance with the will of another State by creating a deadlock for the coerced State under the threat of violence. One of the ways to use force may involve malicious use of ICT, which can lead to the death of people (attacks on automated control systems of airborne, railway and motor transport, power supply management systems, etc.), significant structural damages (attacks on automated process control systems of hydro and nuclear power plants), economic and military contraction of a nation and disturbance of various vital functions of the society.

Force without the use of arms may be applied through total or partial "containment" of the coerced State, interrupting its communication with other countries. Such containment may be implemented in the form of the disruption of economic ties, disturbance of rail, sea, air, mail, telegraph, radio and other means of communication, as well as severance of diplomatic relations. Malicious use of ICT by a country may also aim at disrupting the delivery by national service providers of data communication, storage, processing, search and distribution services. "Forceful" malicious use of ICT may also involve infliction of minor damages to economic and defense capabilities of the target country. An example of this is the Stuxnet malware attack on the uranium enrichment facility in Iran in 2010. According to the media reports, this attack was carried out by Israel and the USA. Political effects of the attack included a delay in the delivery of Iran's uranium enrichment program of around 18 months.

The term "armed assault", as defined in Article 51 of the UN Charter in the context of *Jus ad Bellum*, may be interpreted as the "use of force" with weapons that must be refrained from subject to Article 2 (4) of the UN Charter, or as aggression, that is, use of armed forces against sovereignty, territorial integrity or political independence of the other State or different way, inconsistent with UN Charter.

Malicious use of ICT in form of "intangible weapon" may lead to the extermination of troops and destruction of equipment, and in case of severe damage, it will qualify as an "armed assault", thus engendering the country's inherent right of the individual and collective self-defense.

Based on the foregoing, the rules and principles of *Jus ad Bellum* basically almost do not require any adaptation to cyberspace.

Adaptation Jus ad Bellum

- Article 2 (4) of the UN Charter no need;
- Article 51 of the UN Charter no need;
- Addition to the Convention on "Definition of Aggression" by the note of ICT malicious use resulting in aggression.

Principles of recording legal facts recognized by the rules of international law *Jus ad Bellum* in cyberspace different from similar actions in the material world. As noted above, one of the essential features of malicious use of ICT as means of "force" in the meaning defined in Article 2 (4), Articles 41 and 42 of the UN Charter, and exercising an "armed assault" in the interpretation given in Article 51 of the UN Charter, is represented by the inability to directly observe such misuse of ICT. This is predicated by the essence of information technologies that basically constitute a process of targeted and algorithm-based modification of information, communication devices and other equipment based on computer technology.

National enforcers of international law *Jus ad Bellum*, i.e. political decision-makers, when deciding whether or not the threat to sovereignty and territorial independence in cyberspace exists, or an armed assault with use of ICT has begun, are forced to rely on information obtained with the help of appropriate recording facilities. It is presumed that the information on recorded events has adequate reliability.

At the same time, such national and regional technical registration systems are of little use in resolving state-to-state disputes on the matter, as they allow States to manipulate collected data. As we know, the only means of proving the parties' positions, which can be taken into consideration by the UN Security Council and the International Court of Justice, are official statements of the authorized persons. Objective political review of most such appeals to the UN Security Council is only possible when interests of permanent members of the UN Security Council match or are fairly equivalent. The possibilities for submitting objective information on situations of this sort when appealing to the International Court of Justice are rather limited due to lack of international bodies authorized to conduct independent operational and investigative activities, as well as the appropriate means of technical support for such measures.

It appears that fair consideration of disputes over the breach of international law *Jus ad Bellum* in cyberspace requires development of a system (possibly based on national and regional systems) for recording appropriate legal facts of misuse of ICT that pose a threat to international peace and security. In the meantime, national and regional elements of the recording system must be certified by authorised bodies in accordance with unified standards, and maintenance staff that services such equipment must obtain a certain status.

Improvement the Procedural Component of *Jus ad Bellum*

Establishing the <u>international (technical and</u> organizational) system to define and register facts and entities (attribution) of threat or use of force by "intangible weapon" against UN Member States (perhaps on the base of national or regional systems).

Norms and principles of international humanitarian law Jus in Bello is intended to mitigate the physical suffering of persons directly exposed to the effects of armed conflicts, reduce damages to the property of civilians and ensure safety of items of cultural value.

Evaluation results indicate that most of the provisions contained in *Jus in Bello* sources are either invariant as to the type of weapons employed in warfare, or focus on the use of specific types of weapons. As such, the rules of warfare and restrictions on the means of executing combat missions barely depend on the type of weapon used, and the rules prohibiting the use of certain weapons govern relations that involve the use of these specific weapons. From this perspective, the adaptation of International Humanitarian Law in cyberspace can affect a relatively small part of its norms and principles.

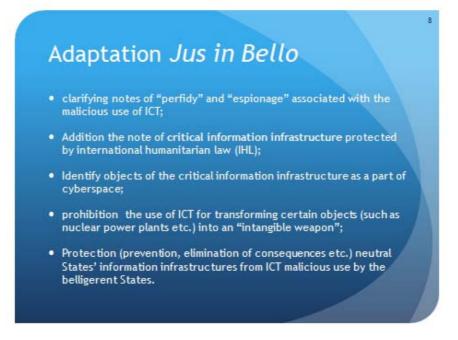
Due to the fact that the malicious use of ICT in conflict as "armed force" may, on the one hand, prevent the application of the existing rules and principles of law and, on the other, bring such suffering to the sick and wounded, the civilian population and cultural values, as well as conventional weapons.

For example, ICT can be used to disrupt the normal operation of navigation systems or other important information and communication systems of military hospital ships (Art. 14 of the Geneva Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea), the process of information systems in the Information Bureau for prisoners of war (Section V of the Geneva Convention relative to the Treatment of Prisoners of War, 12 August 1949), the International Register of Cultural Property under Special Protection (Section 6 of Article 8 of the Convention for the Protection of Cultural Property in the Event of Armed Conflict (The Hague, 14 May 1954) and other registries and directories, the creation of which is provided by international humanitarian law.

As noted earlier, ICT can be used in the form of "intangible weapons" for violations of the automated control systems for hazardous industries, and other critical infrastructures of the State, capable of causing unnecessary suffering (Article 23 of the Annex to the Convention respecting the Laws and Customs of War on Land, 18 October 1907, The Hague), as well as an extensive, long-term and severe damage to the natural environment (Article 35 of the Protocol Additional to the Geneva Conventions relating to the Protection of Victims of International Armed Conflicts, 8 June 1977).

In addition, ICT can be used to carry out espionage, treacherous action, i.e. action to try to induce the confidence of an adversary and to defraud such trust. ICT provide the opportunity to participate in armed conflict as combatants and mercenaries (Part III of the Additional Protocol), as well as have a significant impact on the possibility of application of the rules of identification (Annex 1 of the Additional Protocol).

It appears that the list of *Jus in Bello* rules that need to be adapted to cyberspace should include the rules that govern international relations in the slide below.



- Prohibition of perfidy (treachery), as well as espionage activity;
- Protection of critical information infrastructure facilities related to the life support of the civilian population;
- Identification of objects, the attack on which may cause damage to persons and objects protected by international humanitarian law;
- Prohibition in certain cases, the use of ICT as an intangible weapon;
- Preservation of neutrality of States that are not involved in the armed conflict in cyberspace.

Formalisation of the proposed innovations in the international law of conflicts is a key aspect of the adaptation of international law of conflicts to cyberspace. Drafting annexes to international treaties that govern relations *Jus ad Bellum* and *Jus in Bello* appears to be a reasonable approach to legal formalisation of the proposed innovations. It is common knowledge that there are not too many references on international law in this field, so preparation of Annexes to the relevant international instruments require less time than creating a new branch of law governing the relations of the conflicts in cyberspace.

Such drafting of international treaties could be arranged as processing a range of relatively independent material with common terminology and carried out with the employment of procedures used in international practices, for example, in the Sixth Committee of the UN General Assembly. Some of the proposals are shown in the slide below



Technological developments: where do we stand? What might the future look like?

Paul Scharre

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I will focus really on the technical aspects and, in particular, the idea I want to get is: how does it change the decision that a person is making when they launch the weapon? Much of the discussion in this area tends to focus on the weapon, is the weapon doing this? Is it doing that? That is important, but I think it is also important to focus on how it changes the decision that the military commander is making when they use the weapon.

There are three aspects that I want to focus on in particular. The first is the role of the human with respect to the weapon. We tend to use words like the person being "in the loop" for a machine that performs a function and then it stops and waits for further involvement, and that is one aspect of autonomy. Another one is the sophistication of the weapon: how complex is it? Dr. Boothby talked about the difference between the word 'automation', which is more predictable, and the word 'autonomy' to refer to things that are more sophisticated and maybe less predictable. And then the third aspect refers to the function that it's actually performing. So these are three different concepts that I want to talk about: the type of human control, the complexity and the task that is being performed. And the key idea here is that in English at least – I know here there are people from many different countries and languages - we use the word autonomy to refer to all three of these ideas, but they are actually very different concepts, which makes it rather confusing. So I just want to walk through that.

The first is that we talk about weapons that are 'semi-autonomous' where there is a person in the loop: it performs a function and then it stops and asks for permission to do the next thing. Then sometimes we talk about the concept of 'supervised autonomy', so the machine can perform an action on its own, but the person can intervene if they choose, but if the person does nothing it will continue. Sometimes people use the phrase 'on the loop' to refer to this. Then sometimes we'll talk about things being 'fully autonomous' if there is no person involved and that person cannot intervene, at least in real-time. We talk about the person being 'out of the loop'. This is one way that we use the word autonomy. And as this changes, there is increasing freedom for the machine.

The second way in which we use the word is we talk about the level of complexity of the machine. We use words like 'automatic' to refer to things

that are very simple, like a mine or a toaster, for example. We use words like "automated" to refer to things that are more sophisticated; they are rule-based. The pictures on the top there, that is a picture of an old mechanical thermostat, and a sort of new digital programmable thermostats, with their many different functions you can program, which is more complicated. Then sometimes we use the word "autonomous" to refer to things that are self-learning or evolving in some way. Here is a picture of a robot that taught itself how to walk. They just programmed in some basic rules, the robot taught itself how to walk. And this is a picture of the Nest learning thermostat that monitors your behavior and then learns on its own what temperature to make your house. And then sometimes we use the word "intelligent" or "artificial intelligence" to refer to things that are sophisticated enough to actually have human-level cognition of a particular problem, a very narrow problem. There, of course, is a picture of Garry Kasparov losing to the computer Deep Blue and then this is IBM's most recent incarnation, the Jeopardy-playing contestant "Watson", that beat the best human contestants at Jeopardy a couple of years ago.

Now, why does this matter? This is a spectrum of increasing intelligence. It is generally good to have machines that are more sophisticated. As Dr Boothby pointed out, they can be used maybe in a more discriminate manner. The challenge is if it is then harder to predict their specific actions, because it is more complicated. And so, with the toaster for example, you have a pretty good handle on what the toaster is going to do. With things like a robot that's teaching itself how to walk or something like Deep Blue, the chess playing computer, there are moments when the machine might surprise you with what it does. Again, if it is performing its function the way you wanted it to, that's ok, but it does change as you start to expand the amount of situations the machine is dealing with and then the risk of those situations.

A third way that we use the word 'autonomy' is to refer to the test that's being performed. It is sort of meaningless to talk about something being autonomous or not without referring to the type of job it's doing. There is a big difference between a thermostat or a toaster that is performing a function that is maybe relatively low-risk, and an autonomous robot that is performing medical diagnosis, something that IBM is working on currently, or maybe getting the diagnosis wrong could be very high-risk, or decisions about the use of force in the military context.

I want to focus on this concept of some of the decisions about use of force. I know some of the follow-on speakers will talk about this also at some length, but I just want to point out that within the concept of decisions about the use of force there are many different tasks that are encompassed. There are different types of force that could be used, lethal or non-lethal force. There are different types of targets – there is certainly a difference

between targeting people versus material versus objects, different environments that could be used. And then within even the idea of the task of engagement, there are many different functions. The particular function that many looking at this issue have focused on is the act of selecting a particular target for engagement and saying "that target there is something that is going to be engaged with force".

So, there is no agreed upon definition for an autonomous weapon. However, most of the people talking about this have focused on this particular task, including the U.S. Department of Defense in their policy directive, Christof Heyns, the Special Rapporteur for extrajudicial killings in his UN report, Human Rights Watch in their report, and then the ICRC as they have written on this. They have all focused on this particular task.

So, what I want to do next is talk about how autonomy is used in weapons today with respect to that task. With respect to this idea of selecting specific targets for engagement, I want to talk about some weapons that have a person in the loop, on the loop and then out of the loop. So moving along that spectrum of human control, I am not really going to talk about this issue of sophistication, the complexity of the weapon, because all of these weapons are relatively simple in their level of sophistication. In that sense, we might refer to them as automated, they are certainly not learning or evolving in any sense like that. So there are many weapons where the human selects the target and then we use homing munitions or cruise missiles or other things to carry out the actual act, but the person is selecting the target. Dr Boothby alluded to this, so I won't go through all of this in great detail, we can talk about them later in Q&A if there are any particular questions. There are some examples of weapon systems in existence today where the machine is selecting the target and the person is supervising. But once activated, the person no longer has to take any actions. There are modes existing in the U.S. Aegis and Patriot missile defense systems where this can happen. It is not a day-to-day mode that they are using but it is a war-time mode that they can be used in where they can be turned on and the machine will engage incoming missiles and a person can intervene if necessary. Many countries also had active protection systems for ground vehicles to intercept incoming rockets like rocket-propelled grenades (RPGs) because the time of flight is so short that if there was a person in the loop it would be impossible for the person to make that decision fast enough.

And there are some examples of out-of-the-loop weapons where the machine is selecting the target on its own and a person cannot intervene. The United States has a system that does this to jam radars. It is not kinetic; it is not lethal; it uses just jamming in the electromagnetic spectrum. But there are some examples, very limited in existence, of offensive, of lethal weapons, that target materiel – not people, but objects – that do this. They

are relatively simple. The Israeli Harpy, for example, flies over a relatively wide area and targets enemy radars. When it finds them, the weapon flies into the radar destructing it and the person doesn't need to do any other additional action. It doesn't ask permission from a person to do so once it has been launched. A handful of countries have this. The United States has developed over the years a couple of systems along these lines. They are not currently in the U.S. inventory but they have been developmental systems in the past. We normally exclude mines, because mines are stationary and they are very simple. Depending on your definition, there is a type of weapon called an encapsulated torpedo mine that instead of blowing up it releases a torpedo which then homes in on a target that may qualify, depending on your definition.

So, very briefly, I just want to say what is different about autonomous weapons. Certainly from a legal perspective we understand the legal requirements and from the legal perspective you would say «well, if it meets the principles of discrimination and proportionality then fair enough». The interesting thing here I think is to talk about how an autonomous weapon changes the nature of the decision that a person makes when employing the weapon. When using a semi-autonomous weapon where the person is selecting the target, the person is able to make all of these determinations about distinction and proportionality on their own. They are able to say «is this particular use of force against this specific target lawful?». Now with an autonomous weapon, that decision changes. That is not to suggest that it is inherently unlawful, but the type of decision the person is making is a little bit different. Now the person is saying: «based on my understanding of the weapon's functionality and what it will do in this environment, and based on my understanding of the environment, will the use of force against whatever target the weapon selects, be discriminate and be proportionate?» This is a slightly different issue. Now, why does that matter? Again, from the legal perspective, if it is discriminate and proportionate then it's not a problem. So questions that have been raised, however, that are moral questions or ethical questions that I think are pertinent, I am not going to answer them, I just want to raise them here. Does this change, reduce the potential for human empathy to act as a break on killing? So there are certainly many examples of warfare situations where it may be lawful to use force but humans restrain for a variety of reasons and they do not actually kill even a lawful target, because humans, most people at least, have empathy and for a variety of reasons they may choose not to use force in that instance. Is this removed because machines do not have that natural brake? Does this lead to an offloading of moral responsibility for the actions to the machine? So a person says, «well, I am not doing the killing. The machine is doing the killing. I'm simply placing the machine into operation». And does that lead to, therefore, more use over time?

A particularly interesting question is: how does this change the role of the military professional in the use of force? Does it change what is human judgement by the military professional about whether or not force should be used in this situation and replace it with judgement that has been preprogrammed ahead of time by perhaps lawyers and scientists and engineers into an algorithm? Whether or not it is a good thing depends on your point of view, I suppose, about how easily some of these ideas can be captured into algorithms and whether people get this very well in the first place.

And the last issue that some have raised, is that if we were to move down a path where there were large amounts of autonomous weapons used, even if they were used lawfully against lawful targets in a discriminate and proportionate manner, does it change how we perceive human life and how we value human life? This is very similar to issues that have been raised in the context of robotics and other areas, for example, in elderly care or child care. Some societies have asked, if we move to an environment where we use robots to take care of elderly, does that mean that we no longer value older citizens as much? Because humans don't want to spend time with them we say: «well, that is something for the robots to deal with». So there is an interesting analogue here in the military space as well. So I am not going to answer those questions, I just do want to raise them. I think Peter Asaro, who is a professional ethicist, may talk about that in a little bit more detail.

Automated and autonomous weapons: what military utility in which operational scenario?

William Boothby

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I will be focusing on the legal implications of automation and autonomy in the use of weapon systems. I will be asking essentially which capabilities are really going to cause us concern, and, by extension, which technologies either won't or, in my view, should not do so. Part of the discussion must necessarily reflect what capabilities we already have, because when it comes to talking about automation, as distinct from autonomy, there are a significant number of capabilities that we currently use, that we are currently familiar with, and that have a significant degree of automation associated with them. I will be taking a very brief look at the adequacy of the law but before getting into the law, we should start by considering some terminology. What exactly do we mean by automation?

The UK's Joint Doctrine Note 2/11 talks of automation in terms of a system which, in response to inputs from one or more sensors, is programmed logically to follow a predefined set of rules in order to provide an outcome. Essentially, the bottom line is that what you are doing is putting into a system features which enable the weapon system to operate automatically in a predetermined way. And that, I think, is where the material distinction lies between automation notions on the one hand and autonomy which we'll talk about in a few moments. The significant point, therefore, is that if you know the set of operating rules under which the automation process is working, you are going to generally speaking know what the outcome is going to be, what it is actually going to be doing. And, as I say, we are all already extensively familiar with automation from our daily lives, including automation of the operation of our central heating or air conditioning systems, automation of the operation of traffic light control systems, systems associated with the operation of the family car and automation of manufacturing and workplace processes.

Automated systems are also extensively used today in military operations. Examples include 'fire and forget' missiles such as PARS 3 LR, the Brimstone missile system and the AM39 Exocet, where you fire a missile in the air-to-air mode and the missile will then identify the target in the direction of which it is being fired, will automatically lock on and will then engage that air-borne target. In the maritime context, we have numerous examples including the MBDA Milas ship-borne torpedo system, which also incorporate in the anti-submarine mode for example these automated facilities. On land, automation is widely employed, for example in the Archer FH 77BWL52 automated artillery weapon system; and in the air domain contemplate, for example, the use of data fusion systems in manned aircraft to present a coherent, fused tactical picture to the pilot by co-ordinating inputs from numerous sensors. That is also a feature of automation.

So, it is immediately apparent that different functions of a weapon system and/or of a platform can be automated, that there can be differing degrees of automation and that some automated systems will be so configured that an operator will be permitted to over-ride the automatic operation of the system. If you are looking at a description by a manufacturer of a weapon system you will guite often see the word automation and the word autonomy sprinkled through the description to make his or her weapon system seem sexy and, therefore, worthy of purchase. Quite clearly, what you are interested in is what exactly has been automated and how and what the significance of that is for the way in which the system operates. Some systems permit a human over-ride, in the sense that yes, this function is automated, it can be undertaken in an automated way, but the human being who is there perhaps has the capability of waving the red card and stopping this automated machine from operating in the automated mode if it becomes clear that the prevailing circumstances are such that the automated operation of the system should indeed be stopped. But then, when considering the possibility of human over-ride of automated functions, we must be careful. The critical issue is whether this individual with this degree of over-sight, with this red card, with this opportunity to intervene is actually equipped with the required degree of information, realistically, to enable him to make a sensible decision as to whether to intervene. The second issue is whether that individual is tasked in such a way that he or she can exercise proper over-sight. And I think those factors are reasonably critical to an evaluation of whether human involvement actually enables critical law rules to be complied with in relation to particular systems in a particular set of circumstances.

There is no International Humanitarian Law (IHL) instrument that addresses automation as such. Fire and forget technology is not, *per se*, prohibited and IHL does not impose restrictions that are stated explicitly and specifically to relate to such technology. It is perfectly lawful provided that it is suitably controlled. Neither is data fusion prohibited. The issue, ultimately, is whether the targeting law requirements as to distinction, discrimination, proportionality and precautions can be complied with. In an automated context, you can send out a missile or send out a platform on the basis that the platform will search and identify areas of search seeking targets which comply with algorithms pre fed into the controlling software. That, ultimately, is going to be an automated system as opposed to an autonomous system if the system is looking for these targets and is then pre-programmed to engage them in a particular way. That can be done lawfully. Equally, it can be done, in my view, unlawfully in the sense that one can imagine circumstances where the software doesn't adequately discriminate between objects which are legitimate targets for an attack and objects which are not, does not, for instance, sufficiently distinguish between tanks, on the one hand, and commercial delivery lorries on the other. So one is always going to be interested in whether the system can adequately distinguish. One is always going to be interested in whether the system is going to comply with the rule of discrimination, i.e. whether it is possible in using a system of that nature to identify that in that area of search, any attack that the machine is going to undertake is going to comply with the rule of proportionality. In certain circumstances, desert and remote areas of international waters spring to mind, where civilians and civilian objects are unlikely to be, it may well be possible to make that determination at the planning stage simply because of the isolated nature of the location. In other contexts, it may not be possible. Therefore, the judgement that you are making isn't so much whether the weapon system as a whole, in theory, is capable of being used discriminately, it is whether in the intended circumstances of use it is of a nature to breach the discrimination principle. It would also, however, seem to be the case that using such systems in the complex, rapidly changing and inherently difficult highly populated urban environment is liable to be significantly more problematic from a legal perspective.

But we should now move on to consider autonomy. Autonomous weapon systems are described in the UK doctrine note I mentioned earlier as being able to understand higher level intent and direction and to perceive the environment thus bringing about a desired end state. They can decide a course of action from alternatives without human oversight or control, although that oversight and/or control may, of course, be present. So they differ from automation in the sense that, while their overall activity may well be predictable, individual events may not be. We can immediately see the distinction between autonomy and automation. So an autonomous system is no longer reacting automatically to a stimulus in a manner predetermined by the way in which the machine has been set up. So, in the situation I have described just now, what you have got basically is the machine doing what it has been told to do. With autonomy, the system is itself deciding what action to take, what to tell itself to do. That is a gross oversimplification, but, for my purposes, that, I think, is what we are talking about.

And that seems to be where much of the concern with autonomy rests. The machine itself has the choice, so it is the machine that makes the decision as to what or who is to be attacked, as to how the attack is to be conducted, which angle of approach to employ, which weapon to use and, in somewhat stark terms, what is to be destroyed and who is to be killed or injured. People have justifiable or at least understandable concerns in that regard. Not least from an ethical point of view. Is it ethical for machines to decide who is to live and who is to die? Those are concerns that need to be taken seriously and that need to be addressed.

I think, from my point of view, that the issue boils down to a distinction between autonomy when employed in point defence such as to intercept inbound missiles and rockets or to protect a platform such as a warship from inbound torpedoes on the one hand and the sorts of automated system that are intended to be used for what you might call offensive attack on the other. This is not an easy distinction to draw. The definition of attack in article 49(1) of API refers, of course, to acts of violence whether 'in offence or defence'. Consequently, all acts of violence, even if you are in a defensive mode, even if you are operating in order to prevent attacks on a particular point, both point defence and offensive attacks come within the overall definition of 'attacks', and therefore the precautions in article 57 apply to all such uses of force. We are all familiar with that idea. It seems to me, however, that Iron Dome types of capability, that Phalanx types of capability, which are aimed at addressing inbound threats to either civilians or a warship or whatever it might be, where those inbound threats are by definition going to be military objectives because they are inbound rocket systems, they are inbound torpedoes, whatever you might like to call them, that sort of capability, provided that the system adequately distinguishes between inbound torpedoes or rockets and a civilian airliner that happens to be flying in the area, provided that that distinction can be properly made by the system, that isn't causing us excessive concern. I think the focus of concern in this area is, if you like, the use of a platform such as Predator, such as Reaper, an air-borne UAV, to engage in offensive attack operations using this autonomous technology to select the target to be attacked, the method of attack and so on and so forth. And the concern, undoubtedly, is based on the ability of the system to comply, for example, with the evaluative rules set out in article 57, the ability to determine military advantage, the ability to determine the degree of civilian loss to be expected and the ability to compare the two for the purposes of proportionality, the ability to determine whether the target of attack, if it is human beings, constitutes able bodied combatants or whether it constitutes people who are hors de combat and then there is the additional question of its ability to comply with article 51.5.a. as well for that matter. Therefore, I think if that is the focus of concern, then what we ought to be doing is recognising that the law actually at the moment has something to say on that subject. This is not a blank sheet of paper where there is no law. The law requires all States legally to evaluate weapons before fielding them, new weapon systems. That's, as we all know, the legal review requirement in article 36 of Protocol I and there is a customary law equivalent rule as well binding all States legally to review new weapons. It's a rule which is all too frequently ignored by States. The number of States that are known to have weapon review systems is worryingly small but, nevertheless, that is where the legal obligation lies. If you are looking at acquiring a weapon system the use of which will not comply with article 57 precautions obligations, then it seems to me that the obligation is not to acquire the weapon system. There is no doubt, in my view, that offensive autonomous weapon systems of the sort that I've described should be rejected under article 36 weapons review processes at the moment.

What I am not prepared to do is to go along with the Human Rights Watch proposal in its Losing Humanity report in 2012, where it draws attention to weapon systems in which the human being is either entirely out of the attack decision-making loop or in which he is "on the loop" with the possibility of intervention but with limited supervision. The Human Rights Watch Report calls for prohibition, at this stage, of all future autonomous weapons capabilities, basing themselves on the need to protect civilians. However, that is banning something, the capabilities and characteristics of which we do not presently know. And that, it seems to me, is something that States are very unlikely to be willing to do. States in practice, in my experience, want to know what the opportunities of new weapons capabilities are and what the risks and dangers are. Because once a new technology has been worked through, once the opportunities have become clear and once the dangers and risks have become clear, then you have a firm basis upon which to conduct a sensible discussion over whether or not this is a capability that we ought to be proceeding with or not. Whereas to do that sort of thing, to come to that sort of position, in advance of having seen what the capabilities and possibilities are, is inappropriate. Particularly inappropriate, in my view, in a situation where, as the technology currently is, there is no doubt that such systems are not lawful and ought not to be introduced by States. It isn't that we are talking about a legal vacuum. That is absolutely not the case. The law is there, the law should be complied with. The States represented in this room and States not represented in this room ought to be complying with that law. They ought to be undertaking these weapon reviews.

So, what is the solution? It seems to me that the solution is engagement among States. The solution is the sort of discussions that are taking place in Geneva as part of the CCW process. But the solution also lies possibly in other engagements between States on this topic, on a bipartisan and on a multi-partisan basis. Because States, by engaging with one another, can start to develop their views which they can then incorporate into their weapons reviews as the technology evolves. And that will then help to produce informed weapons reviews of these sorts of technologies. The direction of scientific and technological development, it seems to me, is clear. We are going to see increasing autonomy in our daily lives as well as, in my view, in the battle space in the military sphere. I think what we need to do is to see how that technology evolves and to be prepared to accept the advantages that it may bring while prohibiting or constraining the disadvantages. After all, if you have, for instance, a system that operates on a point defence basis, of the Iron Dome variety, and you incorporate within that system an autonomous facility and the autonomy is directed at improving, rather than diminishing, the ability of the system to act in a discriminating way; because it distinguishes between inbound civilian airliners on the one hand and inbound rocket systems on the other, you would regard that, I trust, as being a positive development. I certainly would. So let's not go running away with the idea that all autonomy is a bad thing. I am not here to defend it. I am not here to argue for it. What I am here to say is that this is not the time to prohibit it. This is the time to see how the technology develops and to be prepared, at an appropriate time, to take a sensible view as to whether, in the long run, this is technology that is going to benefit or whether this is technology that is going to damage.

Autonomous weapons: requirement of human judgement in targeting decision-making. Legal aspects¹

Kathleen Lawand

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In the last two years we have really seen a dramatic increase in the debate about autonomous weapons. This has really taken off tremendously and the ICRC is very pleased with this, of course, because we have been calling for such a discussion and examination at least since 2011 in our report on contemporary challenges to international humanitarian law (IHL).

In March of this year the ICRC held its own expert meeting on the subject and this was attended by a range of governmental and independent experts, some of them are in this room today. A summary report of that meeting is available on the ICRC's website and we will be publishing the full report in the next weeks. So, many of the points I will be making in my presentation are informed by what we learned at that expert meeting, as well as by what we learned and contributed to at the CCW expert meeting on autonomous weapons held in May of this year. I should stress that on thinking about this complex subject which we had first articulated, as I said, in 2011 challenges report, it continues to evolve as we gain a better understanding of the technological capabilities, military intent and the legal/ethical issues raised by this new technology of warfare. For want of time and in view of Peter Asaro's presentation which will follow mine, I will not address autonomous weapons from the point of view of the principles of humanity and the dictates of public conscience, that is the Martens Clause, except to recall the profound ethical and societal issues raised by the idea of a weapon system that places the use of force beyond human control and this is a concern again that was expressed by the ICRC in the 2011 challenges report.

Now, although the ICRC, as I said, very much welcomes the increased attention the international community is paying to autonomous weapons, at times, discussions have lacked focus due to a difficulty in grasping exactly what the issue is. This is partly due, and this has been underlined by the previous speaker, to the fact that today there is no internationally recognized definition of an autonomous

¹ Text not revised by the author.

weapons systems. In addition, positions have often been based on assumptions and speculations about the future capabilities and uses of autonomous weapons, sometimes involving quite fanciful scenarios, and this appears to be coming from both sides of the debate on the acceptability of autonomous weapons.

In the ICRC's view, it would be more helpful to ground the discussion on how weapons technology is actually developing rather than attempting to predict the future. In this respect, I will begin by offering some thoughts on how the debate can be framed to facilitate more informed discussions, looking particularly at whether we are speaking about autonomous weapons or autonomy in weapons, and at issues that Paul Sharre has just mentioned.

A second framing question is a question which has arisen in quite a lot of literature as to whether or not autonomous weapons are inherently unlawful. So, starting first with the initial question of how to define the issue – is it concerned with autonomous weapons or autonomous functions in weapons? In preparation for the ICRC expert meeting in March we surveyed the various definitions in use and found that common to all definitions of autonomous weapons systems is the inclusion of weapons systems that independently select and attack targets with or without human oversight and by oversight I mean the ability of a human to supervise and override the system's actions as described by Paul. Looking at the definitions, we found that the distinction between autonomous and automated or semi-autonomous weapons systems is not always clear as both are described as having the capacity to independently select and attack targets within the bounds, of course, of their human determined program. Now the difference appears only to be in the degree of freedom with which the autonomous weapons can select and attack targets. Indeed, as a number of authors have underscored it is difficult to draw bright lines between the categories and use and indeed this task would seem rather arbitrary. So, the defining issue is the one of the degree of human involvement and the intended circumstances of use in our view.

Currently used categories and definitions might not fully capture this granularity. So, for the ICRC's part we have suggested, and Paul mentioned this in discussions on autonomous weapons that it may be more useful to focus on autonomy in what we have called the critical functions of the weapons system and, that is, the functions required for acquiring, tracking, selecting and attacking targets. Indeed these are the functions directly relevant to targeting decision making and thus the ability of using the system in compliance with IHL rules on the conduct of hostilities. So, framing the discussion in terms of the critical functions of concern of what's getting bogged down into a definitional exercise at least at this very early stage of the debate.

This approach is far from conclusive or perfect but we believe that it provides a useful starting point to facilitate constructive discussion. It seems clear, based on this approach, that weapons with significant autonomy in the critical functions of selecting and attacking targets are already in use today and both Paul Sharre and Bill Boothby have outlined some of them and some of these systems have existed for quite some time. Today, these weapons systems tend to be highly constrained in the tasks they carry out, the types of targets they attack and the contexts in which they are used, again as Paul has mentioned. My point here is that closer examination, and the ICRC has emphasised this repeatedly, closer examination of existing autonomous weapons, including existing constraints placed on their operation, may provide insights into what types of autonomous weapons would be considered acceptable and, in particular, what level of human control would be considered appropriate and in what circumstances both from a legal and ethical standpoint. Now in this regard I would just like to make a remark. I would caution against overplaying the defensive or offensive divide factor as has been mentioned, particularly by Paul, there exist relatively simple autonomous weapons systems that operate in offensive mode. What is crucial in that instance is looking at the time and space limitation of the system given its constraints in targeting and ability to distinguish military objectives from civilians and civilian objectives.

I shall conclude my first point on this note. In order to ensure informed discussion the ICRC is encouraging transparency about existing and emerging autonomous weapons systems and, in particular, we are encouraging States, to the extent possible, to share information on their legal reviews of existing and emerging systems. This will better inform debates about autonomous weapons. Looking at existing technology and foreseeable future developments, roboticists on the whole agree today that machines generally do better than humans in quantitative analysis, repetitive actions and sorting data and I might note that perhaps this explains why robots win at jeopardy as they can press the button faster. Roboticists certainly agree that humans will continue, at least in the foreseeable future, to outperform machines in actions that require qualitative judgements and reasoning. These technological limits and realities are critical to keep in mind when discussing the ability of the autonomous weapon to be used in accordance with IHL rules governing the conduct of hostilities.

This brings me to the second frame in question. Are autonomous weapons, and as I have just explained I am using this term as short hand to mean weapons systems that have autonomy in the critical functions thereby allowing them to independently select and attack targets, are autonomous weapons inherently unlawful? Conversely, can we say they are not inherently unlawful? I am not convinced that this question is appropriately framed in so far as our starting point is autonomy as a characteristic of a technology attached to a function or functions of a weapon system and not the weapons system itself. In this sense, autonomous weapons can be seen as an umbrella or a catch all term covering a range of different kinds of autonomous weapons systems each of which differs from the other based on a number of factors and variables. These factors include, and Paul has mentioned some of them, the type of task the particular weapon is being used for, offensive or defensive, the context in which it is being used – air, ground, sea, simple or cluttered environments, etc, the type of target, the type of force being used - non kinetic force versus kinetic force - and in this respect it is important to note that an autonomous weapon should also be seen as a munitions delivery platform such that the kind of munition that is being used, e.g. an autonomous weapon fitted with a chemical munition would obviously contravene IHL. Of course, we also look crucially, for the purposes of proportionality and precautions in attack, at the freedom the weapon has to move in space and in the time frame of action of the weapon. All of these factors are, of course, critical in determining the foreseeable effects of a particular weapon in ensuring it can be used in conformity with the rules of proportionality and precautions in attack as I have said. Like any new weapon, new weapons with autonomy and critical functions must undergo rigorous legal reviews taking into account the expertise needed, so applying a multi-disciplinary approach.

The obligation to carry out legal reviews of new weapons creates an onus on the State developing or acquiring the weapon to show that it is capable of being used in accordance with the rules of distinction of proportionality and precautions in attack among others. According to the commentary of Article 36 of Additional Protocol 1 that requires legal reviews of new weapons, the review should consider whether the employment of the weapon for its normal or expected use would be prohibited under some or all circumstances. This requires examining the foreseeable effects of the autonomous weapons system, that is, how it is expected to function based on its design and based on the circumstances in which it is intended and expected to be used, including the factors and variables that have been mentioned.

So, returning to the question of whether an autonomous weapon is inherently unlawful, as I mentioned, the question perhaps should be reframed by reference to the particular kind of autonomous weapon under consideration. Arguably the legal review of a new kind of weapons systems may come to the conclusion that the particular autonomous weapon would be per se that is, inherently unlawful, in view of its intended use. Let's consider the example presented by Mike Schmidt and Jeff Turner of an autonomous anti-personnel weapons system designed for employment in an urban area. Because it is contemplated for use where combatants are comingled with civilians the system must have sufficient sensors in artificial intelligence capability to distinguish civilians from combatants. According to Schmidt and Turner if the system does not have such capability it qualifies as indiscriminate per se because there are no circumstances, given its intended use, in which it can be used discriminately. Therefore, the weapons system is inherently unlawful.

Conversely, if the same autonomous, anti-personnel system being unable to distinguish between civilians and combatants is programmed and planned for use where civilians are not present it would not be unlawful per se, however, its use must be subject to geographical restrictions and arguably also to temporal limitations since few areas are always completely devoid of civilians and civilian objects. Any limits on the use imposed by the legal review must, of course, be incorporated into the instructions and rules of engagement applying to the weapons, to ensure it is not misused. However, it may happen that the permitted circumstances of use are so limited or complex that it is unrealistic to apply in real-world scenarios and it may be more appropriate in such cases to prohibit the weapon's use all together.

My final question is whether there is requirement of human judgement in targeting decision making. Now, at the ICRC's expert meeting on autonomous weapons, participants recognised the importance of maintaining human control over selecting and attacking targets notably because of existing and foreseeable technological limitations mentioned previously. This means that programming a weapon to undertake the quality, and some would say subjective and this term has come up in our discussions the last two days when speaking about the rule of proportionality in attack and precautions in attack, the subjective assessments required by these rules, particularly in complex and dynamic environments, would make autonomous weapons systems extremely challenging. However, there was less clarity in the discussion at our expert meeting on the degree of human control that would be acceptable including legal acceptability and this is really the crux of the matter.

Does IHL require human judgement in targeting decision making? As pointed out by Marco Sassolì, clearly the only subjects of IHL rules are human beings – we are responsible for complying with them, in particular, the obligation to take precautions in attack. The addressees of this obligation remain humans who plan, decide and execute the attack to use the terms referred to explicitly or implicitly through the ICRC commentary – the actions used in reference to the article 57 obligation. Moreover, it is positive that the feasibility of precautions would be determined based on

the possibilities available to the human who plans and decides upon the attack and not on the capabilities of the weapons system.

So, based on current and foreseeable technological limitations we could assume that, at least in the near future, humans will remain in charge of at least planning the attack. However, when the human commander deploys an autonomous weapon for a particular mission – we are speaking here of an offensive mission – and that autonomous weapon will independently select and attack targets, is the commander delegating his or her responsibilities to decide and/or execute the attack to the weapon system itself? I think Bill Boobthy articulated this point well at the beginning of his presentation, are we really speaking of machine decision making here?

Now it could be argued, and a number of authors are doing this, that an autonomous weapons system is never completely independent in its actions as it always operates within the human design limits of its software algorithms – Paul touched upon this. Some argue that a human is always involved if only in the programming of the autonomous weapon and the decision to deploy it. In this respect, Turner has suggested that because autonomous weapons are unlikely to be capable of performing the subjective evaluations involved and applying the rules of proportionality and precautions in attack.

Humans will need to inject themselves at various points into the process and make the necessary subjective determinations. And he identifies the last point as ordering the deployment of the autonomous weapons system. Here the person ordering the deployment of the weapon will be expected to make a reasonable decision about the appropriate amount of risk in using the autonomous weapon system. The commander ordering the deployment of the weapon as the last human intervention in the process is my understanding of how UK policy views the responsibility of using autonomous weapons.

At any rate, the obligation to take all feasible precautions in deciding to deploy the autonomous weapon would at a minimum require an understanding and consequent foresight of what the weapon system can or cannot do in the context in which it is deployed. This means the weapon should have some degree of predictability which gets more difficult as the technology becomes more complex and has greater and greater levels of autonomy. This is, therefore, another important question to address: what is the degree of predictability required for the purposes of the rules of proportionality and precautions in attack?

Autonomous weapons raised a number of issues, notably in terms of precautions regarding the obligations to cancel or suspend an attack if it is found that, at the moment of execution of the attack, the target is not in fact a military objective, or the rule of proportionality in attack cannot be respected. I will not have time to get into that but suffice it to say again that in respect of that consideration the longer the time frame between the deployment of the weapon and the actual execution of attack will raise concerns especially in a dynamic environment where the estimated incidental civilian casualties and damage to civilian objects done in the proportionality assessment before deploying the weapon that this estimation may no longer be reliable.

Ethical and societal perspectives on the development of autonomous weapons

Peter Asaro

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I will just try to fill in a little bit some of the questions that have been left open with regard to the nature of the ethical and moral questions involved, in particular, the relationship between automatic and automated processes and the human decision-making and how that relates to legal notions as well as moral notions. There are many different ways to define autonomous weapons systems, but I think we have established quite clearly that it's about these critical functions: about target identification and the decision to use force. Those are the critical functions. There are different ways to articulate that and the human relation to that: humans in-the-loop, humans on-the-loop, humans out-of-the-loop. A lot of the so-called confusion around autonomous weapons are these different ways of defining autonomy, different ways of defining weapons and how they might operate and function. These are attempts to create some rule that will identify all and only those kinds of weapons that we might want to regulate or prohibit. I think it is more useful to think in terms of meaningful human control as a norm that would be required for any kind of weapon system, and to think about how we might articulate that in international law. So I want to go through some of the issues that come up in that regard.

In particular, is this notion of automating the reasoning that humans currently do, and in particular the requirements of International Humanitarian Law (IHL) on commanders to do certain kinds of decision making and reasoning. I think there is also an important distinction to raise here between the compliance with IHL in terms of the effects of military action and the realisation of that compliance. There are somewhat different ideas between IHL and Human Rights Law in terms of how it looks at the implementation of law. Where IHL looks at influencing the decision making of commanders, Human Rights Law is more focused on the forensic uncovering of responsibility for violations of the law after the fact. So there is a temporal dimension as well as a psychological dimension to how we understand the implementation of International Humanitarian Law. It has been pointed out quite clearly already that there are the primary principles or requirements of IHL in terms of the principle of distinction, the principle of proportionality, the obligation to take precautions in attack and the evaluation of military necessity. I just want to go through those in terms of what it means to actually automate that. Right now we are in a situation where humans are making these judgements and deciding to use a weapon to achieve a certain military objective. And when they do that they are required to make distinction judgements, to determine who is *hors de combat*, to determine when civilians are directly participating in hostilities and just in general to distinguish between civilians and combatants. All of these are very difficult for humans to do in many cases and as we have seen in many other panels over the week we don't even necessarily agree completely on the rules that should be implemented for civilians directly participating in hostilities.

I think the ICRC guidelines are quite reasonable and effective. There are those who do not agree with that. But then if we think what would it mean to implement that as computer code, I think we are in another task altogether. There is a degree of complexity that would be involved in trving to articulate what are often ambiguous or somewhat uncertain rules. And we've heard this also in terms of the implications for proportionality judgements in terms of the use of human shields, whether they are voluntary or involuntary. What are the particular circumstances of their being designated human shields? What are the implications for judgements of distinction and proportionality in the light of that? And if that is not settled in terms of agreement amongst all the IHL lawyers, how are we going to convince computer programmers of what the right rule is that they should be implementing in some computer programme that would try to be operating in an environment where it was supposed to be making those decisions. As Ms Lawand pointed out, the value judgements that are involved in proportionality are not things that are calculable or computational in the way that computers are generally devised to make computations. So when we are deciding, or a commander is deciding on the value of some military objective relative to the risk that would be posed by an attack towards civilians in the area, this is a value judgement. What is the value of the military objective? What are the risks and the negative values to civilians who are in the immediate area? How do we preprogramme that? Who decides what the values are? Once this is programmed into the machine, they are fixed, they are set. What we see in real military engagement is a lot of dynamics, things change over time. There has to be a continuous evaluation and re-evaluation of the value of military objectives. These are all done in the context of situational awareness, which is a very sophisticated cognitive process that artificial intelligence systems, even Deep Blue and Watson, are not capable of in any meaningful sense. We have even heard in the discussion, of military objects and military objectives, so we can create some computer programme that can pick out targets, those become targets. But, as we saw, there is a degree of complexity of what is a target. Is the whole building a target? Is only the piece of the building that is being used for military operations a target?

Once you write the code, that becomes fixed, that is not revisable anymore. So I think, in general, the threat to IHL is not only in the implementation and realisation of systems that would be conducting IHL, but in the ability of lawyers and IHL lawyers to continue to evolve our discussion and understanding of what the basic concepts of IHL are and how those ought to evolve over time.

There's been some discussion about whether IHL is sufficient to regulate autonomous weapons systems as they develop, and we've heard various views including the notion that in fact there is no explicit prohibition on these sorts of systems. So as long as they could pass an Article 36 review, then they would be acceptable. But we could also ask: is Article 36 review sufficient to regulate this kind of weapon, which is really a new means and method of warfare? So it is not simply an effect. I don't know that the question of just whether it is possible to use a given weapon system in some context in a way that would comply or conform to IHL is sufficient to really answer the question of whether replacing the moral obligations and legal obligations of IHL with automated algorithms that would be making those decisions going forward is a sufficient kind of review process. So, again, what we are talking about is removing human decision-making, human agency and human lawyers, in fact, from decisions about what is morally acceptable, legally acceptable, what is a lawful target, what is an acceptable killing and what is an unacceptable killing. I think that, in general, lawyers share with computer scientists and engineers a love of rules, so we like to make up rules and think that if everything conforms to the rules in the world, then justice would be done, a system would be efficient. Of course, there are violations of rules and the world never quite operates according to them, so there is a lot of frustration. But I think we also need to be very careful about what we wish for. It may seem very appealing to create a computer programme that would implement IHL and do it very efficiently and avoid all the human mistakes and errors and foibles, but the reality of how computer systems are actually built and designed, if we just look at database systems or healthcare database systems, perfectly well meaning, well intended, but the millions of individual questions that have to be answered in order to implement the engineering of these kinds of systems is enormously complex and rarely conforms precisely to the intended legal, social and moral objectives of the system. Engineers make shortcuts, they figure out ways to represent things that the computer can manage because a lot of what we actually talk about in law is abstract, it is not something you can easily programme into a machine. We can approximate those things, but making those approximations has implications, implications that we may not be able to see immediately. It is not simply that mistakes will be made, but we are in fact changing the nature of this relationship between humans and the

decisions to use force. We have also seen numerous times that there are existing ambiguities in the law, and if those ambiguities exist in the law, they are either going to be implemented as ambiguous in the machines or they are going to be settled in some sense arbitrarily by engineers who just need to get some system to work. And, fundamentally, this changes then the norms of decision-making, and I think Mr. Scharre was guite articulate about how it changes the nature of how commanders decide to make an attack in terms of what their relationship to a weapon system is. If we have these sorts of 'black boxes' then more and more soldiers and officers and commanders will start thinking «well, that's the IHL component, I don't need to talk to my IHL lawyer anymore, I don't need to make the proportionality and distinction decisions, I don't need to take the precautions, that's all built into the system already, I'm just going to point it and press the button», it changes then the norms. This has very real implications for jurisprudence and if we think about what it means for war crimes, any kind of accountability after the fact, certainly the relinquishing of the responsibility and the delegation of authority to make these kinds of decisions to machines is going to make it much more difficult to prosecute anybody for even intentional wrong-doing. How do you demonstrate the intention when you can't really know what the intention inside the machine is? Maybe the operator knew that to some extent the system might have a negative implication, but how do you prove that? In Court, it is going to become much more difficult as these systems have greater autonomy and that also changes the internal reasoning process that commanders and soldiers and officers are using, and this is the psychological element. The notion that IHL is primarily giving guidance, moral guidance and legal guidance, to commanders who are making decisions-automating these decisions is going to change that pretty fundamentally.

I want to talk about the Martens clause in this context. It's had much iteration over the years, but the fundamental notion that in cases not covered by Protocol I or by other international agreements, civilians and combatants remain under the protection of an authority of the principles of international law derived from established custom and from the principles of humanity and the dictates of public conscience. I think there are different ways of interpreting this. One is that just because something is not explicitly illegal in the letter of the law doesn't imply that it is legal or moral. In fact, I think that the morality element of it is foregrounded in a way that if we think about what should become international law, whether it is customary or treaty law, that we should look towards the moral guidance of the principles of humanity and the dictates of the public conscience in shaping that international law. The ICRC Commentary on the Martens clause, specifically refers to the applicability of the principles mentioned, regardless of subsequent developments in types of situations or technology. I think what the Martens clause is also getting at is that authors of these international treaties should understand that the law needs to be dynamic and it needs to evolve over time because technology is evolving over time, conflict is evolving over time. We saw this quite clearly in the discussion of non-international armed conflict, where we saw how new kinds of conflict did not conform to our existing treaties and laws. We need to find ways of articulating that, offering clarification and guidance. I think what we really need to be doing in the debate and discussion about autonomous weapons systems is offering this kind of clarification and guidance in terms of what constitutes meaningful human control over the selection of targets and the decisions to use force. I think in that context we can look historically at other kinds of international norms and particularly the concepts of superfluous injury and unnecessary suffering which are in some sense abstract notions, somewhat vague notions. That terminology has been around for 160 years, but it is still being articulated in particular instances. We know what it means when we see it, we understand it, in a moral relation, that there are certain kinds of injuries that are unnecessary and superfluous, and there is suffering that is unnecessary to achieve military objectives. We can't necessarily itemise every single weapon that might do that and there might be some logical inconsistencies with banning small explosive bullets while we allow big explosive artillery shells. But, at the same time, it captures something that I think is essential and caught up in the public conscience and the principles of humanity. The necessity of meaningful human control in any kind of use of force in military conflict, has been mentioned. So, in particular, how do we articulate that into technologies as they emerge and evolve and how can we put that into an international agreement that creates a norm that could be something that holds people accountable for the adoption of systems but also shapes the emergence of new technological systems? So any of these technologies could be used to improve discrimination and proportionality. We could come up with something that does that. We can also design a system whereby the human, who has the ultimate decision about the use of force, is informed.

Closing remarks

Fausto Pocar

President, International Institute of Humanitarian Law, Sanremo

We have come to the conclusion of this Round Table. We have come to the end of fascinating debates conducted during these two and a half days on critical issues of International Humanitarian Law triggered by the subject of this Round Table "The conduct of hostilities: the practice, the law and the future".

I wish, first of all, to thank all the speakers of the panels, all those who participated in the debates and the panel moderators who led the debates. I believe that all of them, all of you attending this Round Table, have done a very good job in dealing with these very complex matters.

During these days we have taken up a number of questions, perhaps too many considering the short time available. But then, on the other hand, dealing with a wide range of subjects and trying to explore them in depth but not necessarily exhausting the debate have always been among the purposes of the Sanremo Round Table. This has been the case in so many situations in the past whereby this Institute, on the occasion of these Round Tables, launched the debate on some specific issues which were then further elaborated in other fora.

I will not try to mention all of the subjects that have been taken up, as they are reflected in the programme as this would be an exercise that would probably keep you here for another couple of hours. We examined them from a practical point of view and from a legal point of view. The latter approach is obviously critical when we speak of the conduct of hostilities because, while many rules of IHL of mere protection look as hard rules that do not allow for flexibility in their application, rules of conduct of hostilities are grounded on solid principles that aren't challenged or in any event should not be challenged. It is true, however, that when you come to their application in concrete terms on the battlefield, there is some margin for flexibility subject to interpretation, quick interpretation, by commanders that have to make decisions during the hostilities. It is clear that distinction, proportionality, precautions, necessity require or imply a margin of appreciation in the application of the law as practice clearly shows. But this is also one of the reasons why the scope of application of many rules of protection has been clarified and adjudicated by Courts. This is not the case for rules on conduct of hostilities, where Courts have either avoided dealing with them - perhaps they have dealt with them and have taken interpretations - or in other cases they have just circumvented the problem or avoided the problem without giving guidelines, as jurisdiction should normally do. I will not refer to any specific decision but some have been mentioned here during the debates by speakers.

Our task here has been to clarify the law, to clarify it on the basis of practice. We have done, and I believe you'll go home with a better understanding both of the law and the practices, but we have to recognise that a vast number of questions raised during these days leaves room for more complete answers, for more in depth consideration in the future. Debates cannot be considered as exhaustive on all the issues, on some perhaps, but not necessarily. Some will have to be taken up again in future debates. This seems even heavier and more complex when we look at the future.

The panel this morning on autonomous weapons, on cyber-warfare, on automation and autonomy of weapons, raised a number of problems and we had answers from the speakers, we had answers in the debate, but certainly there is room to explore this issue more in depth.

Not that the conduct of hostilities poses less problems. Again, this was discussed within the context of non-international armed conflicts, considering both the applicability of the law and the scope of the obligations of the parties, in particular non-state actors, in the conflict. I hope that the debates we have had here, we have engaged in during these days at the Round Table, will stimulate further debate, with a view to an increased understanding of the law and how it has to be applied. This is also critical if we look from the perspective of the supervision of the conduct of hostilities by the international community. We don't have many instruments for that supervision, but we will have them in the future. It's clear that supervisory mechanisms imply good knowledge of the law and good competence in the law. I hope that we may have mechanisms of this kind in the future. There are initiatives in this sense and this Institute is obviously looking forward to giving its contribution to achieving that goal.

I wish again to thank all those who contributed to making this Round Table a success: the Committee of colleagues that coordinated the programme and the preparation of the Round Table and, in particular, the interpreters which made our debate possible. I wish all of you a safe return to your homes and I hope to see you all again at the next Round Table or in future activities of this Institute in Sanremo or elsewhere.

Closing remarks¹

Helen Durham

Director of International Law and Policy, International Committee of the Red Cross, Geneva

It gives me great pleasure to formally close the Thirty-Seventh Round Table on the "Conduct of hostilities: the practice, the law and the future". As was expressed by the President of the Institute, Prof. Pocar, I feel it would be neither wise nor have intellectual integrity if I tried to neatly sum up the wide range of issues that we have discussed over the last few days. And as I am a good ICRC girl, I hope I have both wisdom and integrity, so I am not going to attempt to do that task. What I did want to do is to spend a few minutes flagging some of the key themes that came out again and again, as we reflected on these very important principles, rules and application in the reality.

I think we started with almost a collective sense of shock, in a way, that a topic that we dealt with during the Sanremo Round Table in 2007, and that had been identified at least a year ago, was so deeply relevant to what we are witnessing today, so deeply an issue that needed reflection when we look at some of the ways armed conflict is being fought at the moment. But I think there are some things we definitely all agreed on, which, once again, are the basic principles as articulated, the very fundamental rules, and that in the current fog of war, which gets foggier at times, particularly with fighting in heavily populated areas, this fog needs to have as much clarity around the rules and their application as possible.

We were sternly warned by Professor Hampson of the need to identify the areas where we do agree on. I think we do spend a lot of time necessarily discussing the areas we don't, but her estimation was 95 per cent of the time we agree on things. Whatever the proportional amount is, she warned us that if we don't, as a group of IHL lawyers from very, very different areas and very different ways of applying, start expressing our agreement on things and find some common ground, the other side of the family, the Human Rights lawyers, may come in, as she expressed, and start interpreting through Human Rights mechanisms such as Human Rights Courts.

I think it was very important that time and time again, particularly from a military perspective, we were reminded that these principles, whilst having a legal containment and an understanding of the precision, need to be applied and that commanders and others need to understand the

¹ Text not revised by the author.

operational environment before they actually get to the application of the law, whether this be understanding that in some communities it is appropriate that farmers dig at night or whether it be the very complex interface in some armed conflicts between the law enforcement paradigm and IHL in places such as Colombia. So that need to have a contextual understanding as well as a legal precision, I think was highlighted a number of times.

There were some topics though, distinct and discrete topics, that we clearly had more work to do on, and I think that's important to highlight. The definition of military objective is a really interesting debate, whether it be about cables, whether it be about data, whether it be about the range of ways these principles, many of them having a subjective as well as objective element, are applied and the interface between many of these principles. As I started from an ICRC perspective, we have really come to engage with all of you to get a better understanding of the notion of indiscriminate attacks in populated areas. We are open, we are engaged, but we have clear views based on the operational experiences that as an Institution working in the field we experience.

There was obviously a lot of debate about capture and kill and I think that panel had a really, I would say not extreme but a polarised view, not so much on the law but on the application of the law and the types of law that can be utilised. But what was really interesting to see, and I think reminded us of the value of this Institute, was that, at the end of that panel, the idea of the sentence that was articulated that 'there is no obligation to detain unless, dot, dot, dot," there seemed to be at least a step forward in some common understanding to move forward, at least from that panel. So I think it's really excellent when you see genuine, authentic, robust debate and then at the end at least an understanding that there is common ground to stand and to move forward.

We heard that bodies or organisations such as NATO and others very much have a strong respect and application of IHL and a low rate of civilian casualties despite all the complexities in governance and interoperability issues. But concurrently we were warned not to fall for the fantasy, the political construct of military activities that had zero fatalities or zero casualties. I think it was a very clear warning that we are not politicians in here, we are lawyers and we are practitioners and we are people who are engaged in IHL, and that this fallacy of being able to undertake military activities with a zero casualty rate was something we were very carefully warned about.

Time and time again very different speakers raised the issue of training, training and the need for such training to be clear, to be concise, which goes back to the points we've all been making in relation to the clarity of the applicability of the rules. I think one of the big issues was the difficulties involved in training. Not just States with the dispersion of capacity for a State to absorb and despite the resources put into training, but also the big issue that has hummed in this conference, if I may say, the training of non-state actors, the engagement with non-State actors and, particularly, as we were very clearly cautioned, not to create clear categories of States that always apply, because some States don't, and non-State armed groups that always don't want to apply because many, or some, do. We need to be a bit more sophisticated and nuanced in our understanding of what we call fighters and combatants.

I also think that there were questions, raised from the floor, related to how do we can capture, so to speak, the outcomes of our preventative work, our training, and once again I would urge that we need to think very carefully about how we can start expressing and doing some analysis of the benefits, of the impact or otherwise of that training. We have also heard sporadic examples from military generals and highlevel commanders to members of civil society, examples of how training can impact and influence behaviour. It would be great if we, as a community, developed a better analysis of that.

We heard about the complexity of Non-International Armed Conflict (NIAC) and situations of fighting fragment, and we were warned very carefully about the use of words when talking about these types of things. Furthermore, there was the issue of autonomous weapons in the last session. What came across very clearlywas the need for us to be very careful in making sure we know exactly what we are talking about: the distinction between the type of weapons, the type of systems, getting a deeper understanding of the issues at hand.

There is no doubt that out there in the community as well as in this room there is a deep discomfort at the idea of allowing machines to make life or death decisions with little or no human involvement, but that may not be always the essence of the question we are talking about, we have to clarify those areas. Ultimately, it would be the international community that obviously has to decide what level of human control is required in relation to these machines not only within the law, but also in what is morally acceptable.

So there were certainly a few key issues throughout the Round Table that I think came to the fore. Some areas where we agreed, some where we disagreed. Often the most interesting and enlightening discussions happened at the coffee breaks, which is why an event like this is so important. I wanted to echo my thanks to everyone who was involved, everyone who contributed, and not just the speakers and the presenters but all those who asked questions.

Acronyms

AJP	Allied Joint Doctrine
API	Additional Protocol I to the 1949 Geneva Conventions
APII	Additional Protocol II to the 1949 Geneva Conventions
CCW	Convention on Certain Conventional Weapons
CICR	Comité International de la Croix-Rouge
CIJ	Cour Internationale de Justice
CoESPU	Centre of Excellence for Stability Police Units
DPH	Direct Participation in Hostilities
DPKO	Department of Peacekeeping Operations
ECHR	European Convention on Human Rights
EU	European Union
GOP	Guidance for Operations Planning
HRL	Human Rights Law
IAC	International Armed Conflict
ICC	International Criminal Court
ICJ	International Court of Justice
ICRC	International Committee of the Red Cross
ICT	Information and Communication Technologies
ICTR	International Criminal Tribunal for Rwanda
ICTY	International Criminal Tribunal for the Former Yugoslavia

IED	Improvised Explosive Device
IHL	International Humanitarian Law
IIHL	International Institute of Humanitarian Law
ISAF	International Security Assistance Force
JAG	Judge Advocate General
KFOR	Kosovo Force
LOAC	Law of Armed Conflict
MINUSMA	United Nations Multidimensional Integrated Stabilization Mission in Mali
MONUSCO	Mission de l'Organisation des Nations Unies pour la Stabilisation en République Démocratique du Congo
MRLS	Multiple Rocket Launching System
NATO	North Atlantic Treaty Organisation
NIAC	Non-International Armed Conflict
OAE	Operation Active Endeavor
OPLAN	Operations Plan
OUP	Operation Unified Protection
RoE	Rules of Engagement
RPGs	Rocket- Propelled Granades
SACEUR	Supreme Allied Commander Europe
TDA	Target Damage Assessment
UAV	Unmanned Aerial Vehicle

UCAV	Unmanned Combat Aerial Vehicle
UCV	Unmanned Combat Vehicle
UN	United Nations
UNAMA	United Nations Assistance Mission in Afghanistan
UNCLOS	United Nations Convention on the Law of the Sea
UNITAR	United Nations Institute for Training and Research
UNSCR	United Nations Security Council Resolution
UV	Unmanned Vehicle
VRT	Virtual Reality Training Tool

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QATAR RED CRESCENT

Conduct of Hostilities: the Practice, the Law and the Future

The 37th Round Table on current problems of International Humanitarian Law (IHL), recalling the 150th anniversary of the adoption of the first multilateral convention on IHL, namely, the "Geneva Convention for the Amelioration of the Condition of the Wounded in Armies in the Field", focussed on the new and increasing challenges of the application of the law governing the conduct of hostilities in light of the changing nature of conflicts, the means of combat and the actors involved.

It gave military practitioners and international experts from different regions of the world and with different backgrounds the opportunity to examine the law and the practice governing the conduct of hostilities as applicable to current/ongoing armed conflicts, with a particular focus on the future and the challenges posed by new technologies.

Recent developments in warfare such as cyber warfare or the growing use of autonomous weapons in combat situations, elicit debates not only in relation to the current application of IHL, but also to possible future developments and scenarios. Such debates are essential to ensure that international norms and standards are rigorously respected in future conflicts.

The International Institute of Humanitarian Law is an independent, non-profit humanitarian organization founded in 1970. Its headquarters are situated in Villa Ormond, Sanremo (Italy). Its main objective is the promotion and dissemination of International Humanitarian Law, human rights, refugee law and migration law. Thanks to its longstanding experience and its internationally acknowledged academic standards, the International Institute of Humanitarian Law is considered to be a centre of excellence and has developed close co-operation with the most important international organizations.

