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Meeting of the High Contracting Parties to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects

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Practical measures to improve policies and practices to reduce civilian harm from explosive weapons in urban conflict

Submitted by Germany

I. Introduction

More can be done to protect civilians from explosive weapons in urban and other civilian-concentrated environments. Exchange of policy and practice among States and their militaries to reduce risks to civilians and further strengthen mitigation measures play an essential role in achieving this objective

1. The purpose of this paper is to help stimulate thinking and dialogue among States which conduct operations in urbanized environments as to how they might do more to reduce civilian harm by proposing practical measures for consideration. The practical measures highlighted in this paper draws from research undertaken in 2019 by the United Nations Institute for Disarmament Research (UNIDIR), which studied State practices and engaged with subject matter experts from the fields of protection of civilians as well as arms control with the aim to improve and enhance compliance with international humanitarian law (IHL).¹ The practical measures highlighted in this paper are not exhaustive. The paper acknowledges the diverse contexts of multilateral operations and that some practical measures presented in this paper may not be suitable or practical in some circumstances. Nevertheless, the paper offers a broad suite of practical measures for consideration and discussion.

2. The research undertaken by UNIDIR has helped inform a shared understanding among relevant subject matter experts that:

(a) The risks to civilians from explosive weapons in urban warfare are considerable. Institutionalizing among States and their militaries the exchange of policy and practice to reduce risks to civilians and further strengthen mitigation measures is essential, including to foster better lessons learned and adaptation of practice over time.

(b) A risk reduction framework is central to better protecting civilians in urban operations. Reducing risks to civilians from the use of explosive weapons in urbanized environments requires choices in military strategy and capability to be made available to a

¹ For more detail on this research, see forthcoming UNIDIR publication, "Opportunities to improve military policy and practice to reduce civilian harm from explosive weapons in urban conflicts: An options paper".





^{*} Second reissue for technical reasons (20 November 2019).

deployed force. Even when choices in strategy and capabilities may be restricted or limited, practical measures can be undertaken to minimize and mitigate civilian harm.

(c) Applicability of risk reduction is not limited to decisions and actions relating to the choice of weapons that militaries may deploy. On the contrary, reducing risks to civilians would benefit from a comprehensive approach that covers the 'civilian protection life cycle' of decisions and actions that militaries must take before, during and after military operations to protect civilians. How States formulate mandate, plan, collect and analyze intelligence, undertake targeting and weaponeering processes, and assess and respond to incidents of harm all form an essential part of this life cycle. Further dialogue on practical measures that States and their militaries can take to reduce risks to civilians from explosive weapons throughout the civilian protection life cycle would be beneficial. This approach is likely to yield improvements in policy and practice, thereby supporting relevant multilateral processes to reduce risks to civilians in urban warfare.

II. Key considerations

A. Understanding the increased risk of civilian harm from explosive weapons when operating in urban and other civilian-concentrated areas

3. When operations are conducted in urbanized environments, the risk to civilians and civilian objects grows exponentially due to the density and inherent vulnerability of the civilian population and its dependence on a web of critical and interconnected services that are equally vulnerable to the damaging effects of explosive weapons.

4. IHL rules regulating the conduct of hostilities apply to the use of explosive weapons in urban environments. These include, but are not limited to, the prohibition of indiscriminate attacks, the prohibition of disproportionate attacks and the obligation to take feasible precautions in attack.² There are multiple reasons why the risk of civilian harm from explosive weapons may be increased when operating in urban and other civilian-concentrated areas (see text box below).

Select examples of risks to civilians from explosive weapons in urban environments

- systemic and random errors in weapon systems;
- wide-area effects other than those caused by inaccuracy, such as large payloads being used against small targets;
- inadequate targeting directives;
- target misidentification;
- target location errors;
- inadequate characterization of structures;
- poor understanding of area utilization;
- the challenge of knowing whether civilians are in a specific building or the extent to which a building is underground or is connected via subterranean structures;
- lack of choice in weapons to deploy;
- weapons failures, or poor selection or performance of fuzes;
- poor condition of munitions used;
- inadequate training on operating in urban environments;
- congested electromagnetic spectrum;
- adversaries using civilians as human shields;
- adversaries using civilian clothes; and
- inadequate collateral damage estimation and battle damage assessments.

² For a concise overview of the normative frameworks applicable to the use of explosive weapons in urban and other civilian-concentrated areas, see section II of the Working Paper submitted by Germany in 2018 to the CCW, "Mitigating the civilian harm from the use of explosive weapons in populated areas", https://www.unog.ch/80256EDD006B8954/(httpAssets)/ADE5D3D54E462D 00C125834C002F177C/\$file/CCW_MSP_2018_WP1.pdf.

B. Considering ways to reduce risk to civilians at the time of mandate formulation, and to resource activities appropriately at planning stage

5. Facilitate dialogue between political decision makers and military planners to close the gap between aspirations and resourcing of capabilities, including particular attention paid to:

(a) materiel capabilities (e.g. types of delivery systems and ammunition that may be available to deployed forces);

(b) materiel management capacities (e.g. to secure their materiel and prevent diversion); and

(c) structures and expertise required to reduce risks of civilian harm, including implementing battle damage assessments, monitoring and responding to civilian harm (e.g. civilian causality tracking, analysis and reporting cell), and documenting lessons learned.

C. Understanding the obligations and implications of partnering

6. There is a need to ensure that IHL obligations are understood and implemented by both partnering and partnered forces, including through the development and implementation practical measures to allow partnered forces to understand and mitigate risks to civilians.

7. Consider conducting thorough risk assessments of partners prior to engagement. The assessment may include, but are not limited to: previous history of IHL compliance; effectiveness of chain of command to exercise control; effectiveness of targeting and weaponeering practices and control measures; understanding what is in their inventory to provide choices in response; materiel security and safety management capabilities, such as inventory and stockpile management as well as surveillance of ammunition conditions; and time and potential resources available to prepare a partner force, among other factors.

D. Considering practical measures to reduce risk to civilians from explosive weapons during the targeting and weaponeering process

8. Where feasible, ensure targeting or engagement directives give guidance on:

(a) scrutinizing and approving target sets;

and

- (b) Rules of Engagement, complete with amplifying guidance;
- (c) Target Engagement Authority for differing levels of collateral damage;
- (d) nomination of a collateral damage estimation methodology and procedures;
 - (e) Positive Identification and Pattern of Life standards, as a minimum.

9. There is a need to ensure protected civilian objects are incorporated into No Strike Lists (NSL), Restricted Target Lists (RTL), designation of No Fire Areas (NFA) or other fire support coordination measures.

 Consider modalities for data exchange requirements and governance protocols among military forces, host States and international organizations and NGOs to prevent unintentional targeting of civilian objects and protected sites.

10. Consider issuing guidance that characterizes risks to civilians from explosive weapons, and introduces tactical options and appropriate oversight for the use of force to help manage these risks. Such guidance or framework should:

(a) provide direction on the use or restricted use of specific weapons and munitions in urbanized environments, to include the level of Target Engagement Authority required to approve the use of such weapons; and

(b) provide guidance on the materiel management requirements, including restrictions and controls on transfers, stockpile management, as well as disposal.

11. Consider a tiered approach to evaluating risk for civilian harm from explosive weapons and incorporate different practices to minimize harm. These may include:

- (a) selection of the lowest-yield weapon to deliver the desired effect;
- (b) time of day for an engagement;

(c) likely effectiveness of any precautionary warnings and associated risk of being manipulated by an armed adversary;

- (d) fuzing options; and
- (e) direction of heading of attack.

E. Developing and implementing assessment and response mechanisms, including tailored approaches to respond to the characteristics of explosive weapons in urban environments

12. Consider as part of planning how data for assessing civilian casualty incidents is to be collected. This process may be supported by understanding how specialized institutions (such as the United Nations or other international organizations and NGOs) characterize incidents.

13. Encourage the development of policy, standards and processes for reporting allegations and real incidents in a timely manner.

14. Encourage the development of strategies and protocols for recording and assessing allegations of civilian harm by partner forces.

15. There is a need to develop means of assessing the secondary and tertiary effects of explosive weapons in urbanized areas. Such methodology should facilitate the assessment of impacts on healthcare, education, transportation, communications, water, food security, sewage and energy networks, among others.

16. Consider the development of a menu of options for making amends to victims, which may range from acknowledgement and apologies, to material or financial assistance. This process may be supported by specialized subject matter experts to support planning of amends and victim assistance.

F. Designing and implementing training that takes into account better understandings of effects of the explosive weapons in urban environments

17. There is a need to ensure that pre-deployment training integrates better understanding of the characteristics of explosive weapons that will be used by deployed forces, including the types and sizes of munitions, as well as blast and fragmentation range or effects, to include reverberating effects of explosive force and the nature and interconnectivity of critical infrastructure and essential services.

18. Consider training facilities requirements at the planning stages, such as specialized urban environment facilities, live firing ranges, modelling and simulation capabilities, experimental and testing facilities, and research and development needs.

19. Consider requirements for certifying standards for targeteers and the designated Collateral Damage Estimate Methodology (CDEM), as well as ensuring certified targeteers retain their currency through realistic, planned training and re-certification. Where relevant, such trainings may be offered to other relevant subject matter experts to understand the CDEM and its limitations to enhance the quality of advice and decision-making.

G. Creating operational and institutional feedback loop mechanisms, including through institutionalizing exchange of policy and practice among States

20. Consider the development or enhancement of dedicated doctrine for conducting military operations in urbanized environments, leveraging lessons learned to develop means of reducing reliance on explosive weapons.

21. Encourage the development of a national policy that defines commitments for reducing the risk to civilians from the effects of explosive weapons, including monitoring of trends and the capture and implementation of lessons learned.

22. Encourage the institutionalization of the collection and sharing of lessons learned and practice among States on reducing risks to civilians from explosive weapons. These may be facilitated by:

(a) the development of a database to which States contribute their lessons learned on reducing risks to civilians from explosive weapons in order to share practices and encourage the transfer of knowledge; and

(b) the organization of periodic meeting among States to facilitate the sharing of lessons and practices on reducing the risk to civilians from explosive weapons in urban operations.

5