



Preventing and eradicating the deadly legacy of explosive remnants of war

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The deadly legacy of armed conflict continues to claim lives long after the fighting is over. As more and more conflicts take place in population centers, including large towns and cities, so does the grave toll of weapon contamination. Unexploded ordnance hamper movement and agriculture, block access to essential services and life-saving humanitarian assistance, and can reverse socio-economic development gains by decades.

In this post, ICRC Legal Adviser Eirini Giorgou lays out the obligations under international humanitarian law (IHL) for States and non-State armed groups with regard to explosive remnants of war, along with recommendations for practical measures to ensure their effective implementation.

ICRC Humanitarian Law & Policy Blog · Preventing and eradicating the deadly legacy of explosive remnants of war

Even after the guns fall silent, a deadly threat remains. In many parts of the world, explosive remnants of war ('ERW') litter landscapes that are no longer battlefields, and *continue to kill and maim* thousands of civilians during and long after active hostilities have ended. A large proportion of *victims are children*. With armed conflict increasingly taking place in urban areas, including cities of millions of inhabitants, weapon contamination of urban terrain has become commonplace, with severe and long-lasting consequences.

ERW are explosive munitions that have failed to explode after being fired or launched ('unexploded ordnance' or 'UXO') or have been left behind by a party to the conflict ('abandoned explosive ordnance' or 'AXO'). Artillery shells, grenades, mortar shells, rockets, missiles, and other explosive munitions – as well as improvised explosive devices (IEDs), depending on how they are designed and function – may all become ERW.

Devastating humanitarian consequences

Explosive munitions of every kind have a failure rate that can vary greatly, *from one to forty per cent*, depending on diverse factors. UXO that fail to explode as intended may explode and kill or injure their victims at an unpredictable point in time. Until then, they *remain a latent threat*, impeding access to health care facilities and other essential services, preventing the proper operation and maintenance of critical infrastructure, blocking escape routes, and hindering the delivery of life-saving humanitarian assistance. Long after hostilities have ended, UXO continue to *hamper agriculture* and trade, delay reconstruction efforts, and *prevent the return of displaced persons* to their places of residence. Ultimately, UXO impede socio-economic development and pose a long-term obstacle to the achievement of the Sustainable Development Goals.

The *use of heavy explosive weapons in populated areas* multiplies these devastating consequences. Recent and ongoing conflicts, be it in the *Middle East*, the international armed conflict between Russia and *Ukraine*, or elsewhere, are clear examples. The density of civilian population in cities accounts for more direct and indirect victims and suffering. Moreover, the difficulty of clearing UXO is much greater in urban areas than elsewhere, given the presence of various metal objects and human remains in the rubble.

What does IHL say about ERW?

Under IHL, States and parties to an armed conflict that use explosive munitions or are in control of areas affected by ERW have an obligation to take measures to minimize the risks and effects of ERW both during as well as after the end of hostilities, notably to protect the civilian population. This obligation stems from the principle of precaution, and are detailed in a legally binding instrument specifically addressing ERW: *Protocol V to the Convention on Certain Conventional Weapons*.

More specifically, the principle of precaution requires that a party using explosive munitions take constant care in the conduct of military operations to spare civilians, and take all feasible precautions to avoid, and in any event to minimize, incidental civilian harm from their attack, including from the resulting ERW (*Rule 15 of Customary IHL Study*). Such precautions include ensuring that explosive weapons and munitions are effectively stored and maintained to reduce the potential of malfunctioning; when assessing the proportionality of an attack and taking precautions, factoring in the risk of the munition not exploding upon impact and the reverberating effects of weapon contamination on the life and health of civilians; recording information on the munitions fired and the location of the targets and surrounding areas; sharing such information as soon as possible after the end of active hostilities with the party in control of the affected territory or with organizations performing ERW clearance; and providing effective warnings to civilians of the location of and dangers posed by ERW.

The principle of precaution further requires that a party that controls an area affected by ERW take all feasible precautions to protect civilians from their effects (*Rule 22 of Customary IHL Study*). This includes identifying, marking, monitoring, and clearing areas containing ERW; and providing civilians with effective warnings of the location and dangers of ERW and with risk education.

A Protocol to end the scourge of ERW

In 2000, the ICRC launched a call for a new international agreement on ERW that would specify the general obligations emanating from the principle of precaution.^[1] *Protocol V of the CCW on Explosive Remnants of War* was adopted on 28 November 2003 and entered into force on 12 November 2006. It was the first multilateral treaty to deal comprehensively with the problems caused by ERW. To date, the Protocol has 97 States Parties. Its implementation has contributed significantly to mitigating the threat posed by ERW across the world.

Protocol V applies in situations of international as well as non-international armed conflict and in their aftermath. The Protocol binds all States that are party to it, as well as non-State armed groups that are or were party to an armed conflict which resulted (or may result) in ERW in the territory of a State party to the Protocol. Although some of the Protocol's requirements apply throughout an armed conflict, most obligations are activated after the end of active hostilities. However, most of these require that measures are taken, and that tools and procedures are put in place, already in peacetime, to enable compliance once the obligations are activated.

Under the Protocol, the party that uses or abandons explosive munitions has three main obligations:

- First, it must 'to the maximum extent possible and as far as practicable' *record comprehensive and accurate information* on the explosive munitions employed or abandoned by its armed forces (*including the types, numbers, and location of targeted areas or of AXO, identification measures and methods of safe disposal*). Such information is crucial for facilitating the rapid launch of clearance and risk-education activities. Some States have developed detailed systems for the recording of such information.
- Second, 'without delay after the cessation of active hostilities and as far as practicable, subject to their legitimate security interests', it must *share the recorded and retained information* with the party in control of the territory where the ERW are located and/or with any organization that will be undertaking clearance or risk education activities.
- Third, after the end of active hostilities, the party that used or abandoned explosive munitions must *provide, where feasible, assistance (technical, financial, material or other)* to the party in control of the affected territory, to facilitate the marking and clearance, removal or destruction of ERW.

States and non-State armed groups to which the Protocol applies and are in control of a territory affected by ERW, whether or not such ERW was a result of their own operations, have two additional obligations:

- Already during active hostilities, but also in their aftermath, they must *take all feasible precautions to protect civilians from the risks and effects of ERW*, including warnings, risk education, and marking, fencing, and monitoring affected areas. Feasible precautions are those

precautions which are practicable or practicably possible, taking into account all circumstances ruling at the time, including humanitarian and military considerations.

- After the end of active hostilities, they must, as soon as feasible, *survey and assess the risks posed by ERW, and mark and clear, remove or destroy ERW*, with priority to those posing a serious humanitarian risk, such as populated areas, roads, or land used for agricultural or herding purposes. Removing ERW on the ground is the most reliable way of eliminating the risk that they pose to civilians.

In addition to these obligations, Protocol V contains a *detailed technical annex* that identifies a number of voluntary preventive and other measures that States are encouraged to take in order to minimize the occurrence of ERW, including in terms of production, storage and transportation of munitions. These can go a long way in protecting civilians from the threat of ERW and mitigating their grave short- and long-term humanitarian consequences.

Humanitarian assistance operations are significantly hampered by the presence of ERW. Protocol V requires States and non-State armed groups to *provide, as far as feasible, humanitarian organizations with information on the presence of ERW* in the territory on which such organizations will operate. If such territory is under their control, they have a further obligation to protect the personnel of such humanitarian organizations, as far as feasible, from the effects of ERW.

States party to the Protocol that are in a position to do so (including affected States) *have an obligation to provide assistance* – either bilaterally to the affected State or through a relevant organization, including the ICRC and National Red Cross and Red Crescent Societies – for the marking and clearance, removal, or destruction of ERW; for risk education to civilian populations; as well as for the care, rehabilitation, and social and economic reintegration of victims of ERW. The responsibility for protecting civilians against the harm of ERW thus does not rest exclusively with the affected State. At the meeting of governmental experts and the conference on Protocol V which take place annually, a number of States Parties report on their activities related to ERW clearance, risk education and victim assistance. Such assistance can be technical, financial, material or other.

The role of the ICRC and the International Red Cross and Red Crescent Movement

The ICRC can offer its services to parties in control of affected areas to provide mine action activities such as incident data gathering, mine risk education, surveying, and clearance, as further detailed below. The ICRC can further offer its services as a neutral intermediary to facilitate transmission of the information recorded on the use or abandonment of explosive munitions from the party that has used or abandoned them to the party that controls the affected area.

Every year, the ICRC, National Red Cross and Red Crescent Societies and other organizations continue to treat thousands of new victims of these weapons that keep on killing. The ICRC undertakes specific initiatives to prevent and address the effects of ERW, including *clearance, awareness-raising, physical rehabilitation* and *support for the social and economic inclusion of survivors*.

Much of *the ICRC's work in relation to ERW* focuses on *developing the capacity of National Red Cross and Red Crescent Societies* to work alongside national authorities that carry out mine action work domestically. In Syria, for example, ten teams of staff and volunteers of the Syrian Red Crescent Society, trained by ICRC, have been working in difficult-to-access areas such as Aleppo, Hassakeh, Homs and Idlib. The ICRC also *helps national mine action authorities* strengthen their ability to undertake humanitarian ERW clearance and risk reduction measures in accordance with international standards, and provides blast trauma care training for health care personnel and first responders during an explosive ordnance assessment or disposal operation.

For example, *in 2021*, the ICRC carried out risk awareness activities for communities and helped manage mine-action initiatives, including ERW clearance, in contexts such as Armenia, Azerbaijan, Colombia, Iran, Iraq, Israel and the Occupied Territories, Libya, Mali, Morocco, Myanmar, Nagorno-Karabakh, Nigeria, Pakistan, Ukraine, Senegal, Syria, Viet Nam and Yemen.

Over the past 40 years, by developing national capacities and directly providing rehabilitation services, the ICRC's Physical Rehabilitation Programme has supported nearly two million people with disabilities, including survivors of ERW, in more than 50 countries around the world. More specifically, *in 2021* the ICRC supported 318 projects addressing the needs of people with disabilities, including as a result of ERW-caused injury. These included physical rehabilitation centres that were given regular or ad hoc assistance; component factories; institutions providing training for physical rehabilitation professionals; and organizations or initiatives promoting the social inclusion of people with physical disabilities.

Conclusion

Explosive munitions constitute the main bulk of States' arsenals and are used in mass numbers during armed conflicts. With these weapons, contamination is fast, and clearance is very slow and extremely costly.

Only half of the members of the international community are party to Protocol V, and the rate of its universalization has stalled alarmingly. We urge all States that are not yet party to adhere to Protocol V and all States parties to faithfully implement their obligations, as this can significantly reduce the deadly threat posed by ERW around the world. We also urge States to facilitate humanitarian operations, to provide access, the necessary legal and import permissions to bring in essential equipment, and security guarantees to enable marking and clearance work to proceed – a task of tremendous proportions, especially if a conflict is ongoing.

All stakeholders must do more to protect civilians and their communities from the indiscriminate harm caused by these weapons. Notwithstanding States' primary responsibility in this respect, they will go a long way towards fulfilling their commitments by *enabling the work of others* and thus saving thousands of lives.

[1] Kathleen Lawand and Isabel Robinson, “Development of Treaties Limiting or Prohibiting the Use of Certain Weapons: The Role of the International Committee of the Red Cross”, in Robin Geiß, Andreas Zimmermann and Stefanie Haumer (eds), *Humanizing the Laws of War: The Red Cross and the Development of International Humanitarian Law*, Cambridge University Press, Cambridge, 2017, pp. 158–164.

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