

DRAFT FOR FOURTH STATE CONSULTATION

Workstream 4 – PROTECTING CIVILIAN INFRASTRUCTURE

CO-CHAIRERD by Algeria, Costa Rica, Sierra Leone, Slovenia and the International Committee of the Red Cross

Overview

The shocking levels of damage and destruction to civilian infrastructure in armed conflict have shaken the public conscience. Too often, they have severed the vital lifelines that sustain humanity and dignity. To abandon or abuse the intransgressible limits placed by international humanitarian law (IHL) on such destruction is to risk returning to a world where future generations are forced to accept, as lawful, the reduction of entire cities to uninhabitable rubble by warring parties.

States and parties to armed conflict must, in good faith, uphold and comply with the IHL principles and rules protecting civilian infrastructure. Central to this is preserving the concept of military objectives, which exists to limit the range of objects that may be lawfully targeted. Consultations on the definition of military objectives have resulted in a sharper delineation of the limits inherent in this concept under IHL. Moreover, the consultations reaffirmed that just because infrastructure, or parts thereof, satisfies the definition of military objectives, this does not make attacks against it lawful. Attacks against military objectives must always comply with the prohibition against indiscriminate and disproportionate attacks, and the obligation to take all feasible precautions in attack and against the effects of attacks.

This document outlines practical measures for ensuring that infrastructure and other objects that are protected under IHL are not attacked, for anticipating harm to civilians resulting from damage and destruction to civilian infrastructure, and for protecting civilians and civilian objects from avoidable and excessive harm. These measures include robust verification procedures to ensure that objects to be attacked are not protected against attacks under IHL, and ways to anticipate and mitigate the consequences of military operations on infrastructure enabling the delivery of essential services and on the civilian populations who rely on them. It also identifies means of ensuring the continual access of civilians to essential services, such as those relating to the safe and sustained movement of essential service providers and flow of critical consumables.

The implementation of these measures will determine whether present and future generations may be spared the devastation resulting from the damage and destruction of civilian infrastructure that has become a hallmark of contemporary armed conflicts.

Outcome

1. Protecting all civilians and civilian objects, including civilian infrastructure, by upholding the limits imposed by the concept of “military objectives”

All objects, including infrastructure, are protected from attack under IHL by default. They remain protected unless and for such time as they satisfy the strict criteria in the definition of military objectives.

The concept of “military objectives”, defined in Article 52(2) of Additional Protocol I and reflected in customary international law, was devised to impose significant limits that warring parties must respect at all times. How it is understood and applied has profound implications for the protections afforded to civilians and civilian objects, including civilian infrastructure. Broad conceptions of military objectives mean more infrastructure destroyed, more civilians killed or injured incidentally, and less access to the essential services – services that are vital for meeting providing civilians’ basic needs.

Under IHL, objects such as infrastructure cannot be targeted based on blanket classifications. Each object to be attacked must individually fulfil the definition of “military objective” in the circumstances ruling at the time of attack. Nor can warring parties attack complex infrastructure in its entirety merely on the basis that one or more buildings or other objects comprising them are military objectives. Objects that do not exhibit a sufficiently close connection to the fighting, such as war sustaining objects and economic targets that do not make an effective contribution to military action, cannot satisfy the definition of “military objective”. Nor can objects whose attack does not offer a definite military advantage, but would only offer purely political or economic effects, or only serve to harm civilian morale.

To ensure that the definition of “military objectives” remains capable of providing meaningful protection, it is essential to:

- a) reinforce the critical importance of legal advisers to commanders being well versed in IHL, including but not limited to the definition of “military objectives”, and enable them to provide timely, clear and accurate advice, including through legal training based on scenarios
- b) integrate the definition of “military objectives”, in line with its object and purpose, in military doctrine and ensure that operational forces are effectively informed about and trained in the protection of civilian infrastructure and other civilian objects
- c) establish or adapt existing military doctrine, standard operating procedures, rules of engagement and operational orders, as well as targeting processes, to reflect the need to delineate infrastructure into the smallest practically distinguishable objects and assess whether they individually satisfy the definition of “military objectives”; reinforce this in the training of military decision makers and operational units.

2. Respecting the heightened protection afforded to specific types of objects and infrastructure under special protection regimes

IHL grants special protection to certain types of objects, due to their particular importance or the exceptionally grave risk to civilians if they are damaged or destroyed. Failing to respect these protections results in devastating consequences. Patients die, diseases spread, famine and malnutrition ensue, populations face the threat of floods or radiation that could make areas uninhabitable for

decades or even centuries. Communities suffer deep psychological harm and loss of their cultural, historic or religious identity. Entities meant to protect and assist civilians are unable to function. For these reasons, special protections go beyond those general protections afforded to civilian objects. Special protections apply to certain types of infrastructure, such as:

- hospitals and other medical facilities
- objects indispensable to the survival of the civilian population
- infrastructure containing dangerous forces, notably dams, dykes and nuclear electrical generating stations
- cultural property, including but not limited to buildings dedicated to religion, art, science, education or charitable purposes and historic monuments
- premises and assets of impartial humanitarian organizations
- buildings, shelters and materiel of civil defence organizations.

To ensure that these objects are protected, it is essential to establish or adapt military doctrine, standard operating procedures, rules of engagement and operational orders, and targeting processes to reflect these special protection regimes and emphasize this protection in the training of military decision makers and operational units. Such measures must ensure that these special protections continue to apply even if the infrastructure or object in question satisfies the definition of “military objective” under IHL.

3. Protecting civilian infrastructure through robust verification procedures and related measures

IHL can do little to prevent the humanitarian consequences of attacks against civilian infrastructure if warring parties fail to take steps to ensure that their attack is directed against a specific military objective that is not specially protected, and that it uses a means or method of warfare that can be so directed. To ensure that the attacking party respects the limits inherent in the concept of “military objectives”, and minimize errors in targeting, IHL requires parties to armed conflict to do everything feasible to verify that objects to be attacked satisfy the definition of “military objectives”. It further requires the attacking party to verify that the object is not otherwise subject to special protections. In case of doubt as to the status of an object, it must be presumed to be protected.

To ensure that infrastructure and other objects that are protected under IHL are not attacked, it is essential to:

- a) identify and map civilian infrastructure and other infrastructure enjoying special protection and ensure that this information is communicated to military decision makers and operational units
- b) place infrastructure subject to special protection and other infrastructure enabling essential services to civilians on “no strike” or “restricted strike” lists and apply strict requirements and procedures for their removal from such lists in accordance with international humanitarian law
- c) establish “no fire zones” to protect civilian infrastructure
- d) ensure that these “no fire zones” and objects on “no strike” and “restricted strike lists”, or similar measures, are mapped, updated, integrated into targeting procedures and communicated on a timely basis to military decision makers and operational units

- e) continuously review and cross-verify information relating to the status of potential targets in light of information available from all sources and whenever circumstances change, in particular when planning, deciding upon or executing an attack
- f) establish and apply elevated verification standards and procedures for infrastructure and other objects that are normally dedicated to, or are in fact being used for, civilian purposes.

4. Assessing anticipated effects prior to attacks impacting civilian infrastructure

The impact of attacks against military objectives that incidentally affect civilian infrastructure can have severe consequences for the civilian population. The effects of attacks that destroy or damage civilian infrastructure that provides or enables the delivery of essential services may continue long after the attack takes place. A non-exhaustive, but well-documented list of examples includes displacement, hunger and food insecurity, energy insecurity, an increased risk of outbreak and spread of infectious disease, reduced livelihoods and even death. These consequences arise not only when civilian infrastructure is damaged or destroyed incidentally, but also when the infrastructure itself is attacked. This is particularly relevant for so-called “dual-use” objects and infrastructure.

The interdependent nature of infrastructure, especially in urban settings, increases the likelihood of such indirect effects and requires special consideration. The significance of the infrastructure vis-à-vis other infrastructure and the delivery of essential services factors into the scale and severity of the indirect effects of attacks. This significance may change depending on the degree to which other infrastructure has been damaged or destroyed.

IHL requires warring parties to account for direct and indirect harm to civilian infrastructure, civilians and the essential services upon which civilians rely. This extends to long-term, cascading and cumulative effects of attacks against or impacting civilian infrastructure insofar as they are reasonably foreseeable. Attacks whose effects cannot be limited as required by IHL are prohibited as indiscriminate. In this regard, parties to armed conflict must do everything feasible to obtain information that will allow for a meaningful assessment of such effects. To do so, it is essential to:

- a) establish or adapt existing doctrine, emphasizing the requirement to take all reasonably foreseeable direct and indirect effects of attacks into account, and incorporate good practices and procedures, including collateral-damage estimation methodologies or similar assessments to that end
- b) ensure, to the maximum extent feasible, that in addition to legal advisers, engineers, urban planners, and water, environmental and other specialists are included in the decision-making process for targeting to provide expertise on the location and structural make-up of civilian infrastructure
- c) actively seek information reasonably available from all sources, including quality data and intelligence on the condition and interdependence of civilian infrastructure and the essential services they provide or enable, and ensure that this information is continuously updated and made available to field commanders
- d) develop civil-military liaison channels, including with local authorities, to ensure that information regarding civilian infrastructure, its condition, the services it provides and the civilians that rely on it can be obtained
- e) presume the presence of civilians inside or in the vicinity of infrastructure where there is evidence of human habitation or activity, unless otherwise apparent.

5. Addressing the challenges relating to so-called “dual-use” infrastructure

During armed conflict, some infrastructure and other objects are used simultaneously for civilian purposes and by the armed forces. These so-called “dual-use” objects raise unique challenges and require measures additional to those applicable to civilian infrastructure more generally.

Destruction or damage to such “dual-use” objects can have devastating direct and indirect effects on civilians. In this sense, they are similar to civilian infrastructure more generally. But the fact that they may fulfil the definition of “military objectives” creates the potential of exposing nearby civilians and civilian objects to harm and increases the risk of disruptions to the essential services they provide or enable.

To address the humanitarian consequences relating to dual-use infrastructure, it is essential to implement the following measures in addition to those enumerated above:

- a) develop or adapt doctrine to allow for the targeting of such objects only when there is sufficient evidence that they are actually being used at the time of attack in a way that fulfils the definition of “military objectives” and require that such use makes a significant contribution to the military action of the adversary
- b) adapt doctrine, instructions, targeting procedures, collateral-damage estimates and similar assessments to include the loss of civilian function or civilian use of such an object, including but not limited to the essential services it may provide or enable
- c) presume that attacking certain categories of dual-use infrastructure, such as power infrastructure, will have reverberating effects on the civilian population and impact the delivery of essential services to civilians, unless otherwise apparent.

6. Avoiding and minimizing all reasonably foreseeable effects on civilians resulting from attacks against infrastructure that has become a military objective, or incidentally impacting civilian infrastructure

Harm to civilians, such as death, injury, spread of disease and displacement, are not inevitable consequences of armed conflict. Even if the infrastructure to be attacked satisfies the definition of “military objectives” and is not subject to special protections, parties have an obligation to limit these effects as much as possible. IHL requires that all reasonably foreseeable effects on civilians that are anticipated to be caused by an attack must be avoided, or in any event minimized, to the greatest extent feasible.

To ensure that armed forces can avoid and minimize civilian harm, it is essential to:

- a) ensure the command authority for an attack is commensurate with the gravity and scale of the anticipated harm to civilians and the essential services upon which they rely
- b) ensure that practical measures aimed at avoiding or minimizing the effects of attacks on civilians, including but not limited to those enumerated below, are clearly integrated into military doctrine and operational frameworks, and that all relevant personnel, including military decision makers and operational units, are trained on them regularly
- c) do everything feasible to employ only those weapons or tactics which have the greatest likelihood to avoid, and in any event minimize, the effects on civilians resulting from damage and destruction to infrastructure and the services they provide or enable.

The following measures must be taken whenever feasible:

- i) adopt a policy that some means and methods of warfare, such as explosive weapons with wide area effects, should not be used in populated areas, including where civilian infrastructure is located, unless sufficient mitigation measures are taken to reduce the weapon's wide area effects and the consequent risk of harm to the civilian infrastructure and civilians who rely on the essential services they enable
 - ii) avoid the use of unguided airstrikes and limit the explosive yield of munitions used in the vicinity of civilian infrastructure
 - iii) favour the use of precision-guided munitions with low explosive payloads and pre-fragmented casings over weapons with a wider impact area
 - iv) choose the timing and angle of attack that is most suited to limiting the civilian harm
 - v) refrain from launching attacks that would result in the total destruction of infrastructure satisfying the definition of "military objectives" when temporarily disabling or partially destroying, neutralizing or capturing it would be effective in achieving the military advantage sought
 - vi) consider the time, expertise, equipment, and capacity needed for repair of the infrastructure to be targeted, or parts thereof, in addition to the danger to civilian lives and objects, when selecting among several military objectives which offer similar military advantages
 - vii) warn civilians in advance of attacks that may impact them, include in the warning information pertaining to their access to essential services, and ensure that such warnings can be easily received and understood by as many civilians as possible.
- d) put in place a system for recording and retaining to the greatest extent possible, information on the use or abandonment of explosive ordnance, and create a process for providing that information to the party in control of the relevant territory and to civilian populations, including organizations and personnel involved in the marking, clearance, removal or destruction of such ordnance, as well as the maintenance and repair of the infrastructure.

7. Protecting civilians and civilian objects from excessive incidental harm

Even when attacks are directed against military objectives, the incidental effects of such attacks may lead to intolerable humanitarian consequences. For this reason, IHL prohibits attacks that may be expected to cause incidental harm to civilians or civilian objects that would be excessive in relation to the concrete and direct military advantage anticipated.

To prevent such excessive attacks from being launched and enable the cancellation or suspension of such attacks once such excessiveness becomes apparent, it is essential to:

- a) train military decision makers to determine whether an attack may result in excessive civilian harm, including through scenario-based exercises, taking into account the unique characteristics of civilian infrastructure and the services they provide and enable
- b) ensure that the targeting cycle includes, to the maximum extent feasible, sufficient time to allow for the provision of advice from advisers with the relevant expertise as to the expected harm to civilians
- c) ensure that all relevant information is made available to the individuals carrying out an attack and update them on a timely basis prior to the attack, to equip them to make determinations as to whether the attack must be cancelled or suspended due to a change in circumstances

- d) ensure, similar to section 6(a) above, that the command authority for an attack is commensurate with the gravity and scale of the expected incidental civilian harm.

8. Protecting all civilians and civilian objects, including civilian infrastructure, from the effects of attacks by the adversary

IHL requires, to the maximum extent feasible, that parties remove civilians and civilian objects under their control from the vicinity of military objectives, avoid locating military objectives within or near densely populated areas, and take other necessary precautions to protect civilians and civilian objects against the dangers resulting from military operations.

Whether or not a party complies with these obligations does not change the obligations of an attacking party. At the same time, the role that these so-called “passive precautions” can play to protect civilians and civilian infrastructure from the potential effects of attacks must not be underestimated. To provide that protection, many measures must be taken during peacetime as well as during armed conflict.

Failing to do so can result in the dire consequences described above when infrastructure is destroyed or damaged because of attacks by the adversary. Infrastructure is put at risk of direct attack when the parties use it for military purposes and at risk of incidental harm when parties locate military objectives inside it or in its vicinity.

To maximize the protection of infrastructure and the civilians dependent on it from the effects of attack, it is essential to:

- a) build redundancies into infrastructure, including during peacetime, so that the systems that rely on it can continue to meet the basic needs of civilian populations in the event of an armed conflict
- b) develop or adapt existing doctrine to avoid the use of civilian infrastructure for military purposes and the placing of military objectives in the vicinity of such infrastructure
- c) clearly separate the parts of infrastructure used for military purposes from the parts dedicated to civilian use and, when feasible and it is expected to enhance protection, communicate or make visible such distinctions to the adversary
- d) provide military decision makers and operational units with accurate and timely information regarding the location and condition of civilian infrastructure and the essential service systems they enable or serve
- e) ensure that military decision makers and operational units are trained to identify such infrastructure and instruct them to avoid using them or locating military objectives in their vicinity
- f) give warnings to civilians to prepare for potential disruptions to essential services, especially when the above measures cannot be taken.

9. Continuously improving military practices to better protect civilians and civilian objects, including the capacity to anticipate, prevent, mitigate and respond to the effects of military operations on civilian infrastructure and dependent populations

The principles and rules protecting civilian infrastructure were codified at a time when there were considerably fewer resources, less technological capability and less expertise on limiting the effects of

military operations and sparing civilians and civilian objects. There was not the knowledge that is widely accessible today on the direct and indirect effects that armed conflict has on civilian populations, including those resulting from damage and destruction to civilian infrastructure. Progress in these areas since then has generated greater potential for parties to spare civilians from the calamities of armed conflict.

For IHL to remain effective in limiting the impacts of armed conflict on civilian populations, it is crucial that states prioritize improvements in their capacity to protect civilians and civilian objects, including infrastructure, especially whenever they decide to increase their defence capacities. This extends to the measures included in this document, particularly the capacity to anticipate, avoid, minimize and respond to the effects of military operations on civilian infrastructure and the civilians who rely on it. For these purposes it is essential to:

- a) invest in training and capacity-building, including, when feasible, through the development of innovative methods using new and emerging technologies
- b) leverage and improve technologies to track attacks, assess damage, and enable swift and effective responses to the effects of attacks, in order to minimize harm
- c) develop and strengthen cooperation with civilian authorities to form a knowledge base of risks to civilians and of measures to anticipate, prevent, mitigate and respond to those risks, and ensure this knowledge base is reflected in doctrine, training and data modelling
- d) establish multidisciplinary mechanisms and institutions for the purpose of consolidating, expediting and institutionalizing measures to anticipate, prevent, mitigate and respond to harm to civilian infrastructure and civilians
- e) document every phase of the targeting decision-making process, including target verification, proportionality assessments, and the decisions as to the precautionary measures taken to avoid and minimize civilian harm.

To this end, it is essential to:

- i) regularly review and compare this documentation with post-strike assessments to evaluate the suitability of the targeting process
 - ii) set clear criteria for determining whether targeting processes must be updated or amended and incorporate lessons learned.
- f) establish or participate in peer-to-peer exchanges on good practices.

10. Protecting civilian infrastructure through the establishment of protected zones or similar measures

IHL sets out specific measures that parties to armed conflict can take to enhance the protection of individuals and objects. For instance, protected zones such as neutralized zones, demilitarized zones and non-defended localities may be used to designate specific areas where civilian infrastructure is located. These measures can be used to enhance the protection of civilian infrastructure above and beyond the robust protections that already apply by virtue of its civilian status.

To ensure the effectiveness of arrangements including, but not limited to, protected zones, it is essential that parties to armed conflict:

- a) implement and adhere to such arrangements in good faith, irrespective of their precise nature

- b) ensure the complete and effective demilitarization of such zones
- c) ensure that the location of such areas is clearly communicated to operational units with the direction that such areas are not to be attacked or used for military purposes
- d) clearly and visibly mark the zones including, where possible and likely to result in greater respect, through digital means
- e) establish supervisory, monitoring and verification mechanisms.

11. Ensuring continued access to essential services when exercising control over civilian infrastructure

In armed conflict, a party may be tempted to destroy or seize all or part of the infrastructure under its control. In exceedingly narrow circumstances, this may be lawful insofar as it is justified by “imperative military necessity.” Separately, civilian infrastructure may suffer misuse by the party exercising control over it to cut off civilian populations from essential services, either to put pressure on the adversary or punish the civilian population. In both cases, the resulting loss of access by civilian populations to essential services can result in the same humanitarian consequences described above in relation to attacks.

To ensure the continued access of civilian populations to essential services, it is essential to:

- a) never misuse civilian infrastructure in a manner that disrupts or cuts off the access of civilians to essential services, including when those civilians are in territory under the control of an adversary
- b) never destroy infrastructure when seizure would suffice
- c) limit the destruction or seizure to the specific part of the infrastructure that imperative military necessity requires
- d) not destroy or seize infrastructure when doing so would deprive the civilian population of an object indispensable to its survival
- e) assess in good faith whether the destruction or seizure of the property in question is required by imperative military necessity and maintain proportion between the destruction or seizure of property and the military advantage to be secured.

12. Safeguarding essential service providers and their personnel and critical consumables to ensure civilians have continual access to essential services

The delivery of essential services depends not only on infrastructure and other hardware but also on people, particularly those involved in the operation, maintenance and repair of infrastructure, and on consumables, i.e. the materials necessary for the functioning of the infrastructure, such as fuel, disinfectants and medicines.

The impact of armed conflict on these critical components can lead to long-term deterioration of essential services. This cumulative impact is often the most destructive and difficult to recover from. It can have devastating, long-lasting and even irreversible consequences for civilian populations.

Deaths and injuries among essential service personnel, along with restrictions imposed by parties to an armed conflict on their movement, prevent them from safely accessing the areas where they are needed.

These risks may also lead to fewer staff reporting to work. Before long, the civilian population loses access to the services they enable.

Damage or destruction to, or restrictions on, the flow of consumables depletes reserves that enable civilian infrastructure to continue to function. It can trigger price increases due to shortages, further exacerbating scarcity. What emerges is a vicious cycle that accelerates the degradation of infrastructure or compromises the quality and safety of the service, such as the provision of clean water.

Safeguarding essential service providers and their personnel

To ensure the continued functioning of infrastructure, it is essential to:

- a) set up robust domestic legal and policy frameworks to respect and protect essential service personnel and ensure their safe and sustained access to civilian infrastructure
- b) develop relationships with essential service providers prior to, and during, armed conflict to understand their needs and existing capacities in order to facilitate their work and ensure their respect and protection
- c) draw up operational plans with essential service providers and give the necessary support to facilitate their safe and sustained access to civilian infrastructure, including in instances where they must cross front lines
- d) establish coordination mechanisms, including an emergency hotline
- e) develop practical measures to increase the visibility of essential service personnel, vehicles and equipment when this enhances their protection.

Safeguarding critical consumables

To ensure the sustained flow of critical consumables necessary for ensuring continual access to essential services, it is essential to:

- a) ensure the safe, rapid passage of consumables and spare parts through agreed coordination mechanisms, priority checkpoint clearance and, where necessary, neutral intermediaries to facilitate their delivery across front lines
- b) maintain buffer stocks of critical consumables in multiple secure locations and diversify suppliers
- c) map key supply routes and storage sites, and provide military decision makers and operational units with accurate and timely information regarding these locations
- d) assess the flow of consumables and the effects of any disruption on the civilian population and their access to essential services when evaluating the impact of attacks and other military operations, including the destruction and seizure of such consumables based on imperative military necessity
- e) ensure that restrictive measures that could delay or prevent the import of critical supplies do not result in disruptions to the delivery of essential services, including through well-framed and standing carve outs.