

HUMAN RIGHTS COUNCIL ADVISORY COMMITTEE
QUESTIONNAIRE ON HUMAN RIGHTS IMPLICATIONS OF NEW AND EMERGING
TECHNOLOGIES IN THE MILITARY DOMAIN

QUESTIONS

I. All stakeholders (core questions)

1. Which international legal frameworks, such as international human rights law and international humanitarian law, are currently applicable to the design, development, deployment and use of new and emerging military technologies in the military domain (NTMD)? What international legal instruments – treaties, soft law – are most relevant to NTMD? How effective are these instruments in addressing the challenges posed by NTMD?
 - None yet

2. What measures can be taken to foster international cooperation and dialogue in order to promote the responsible and transparent utilization of NTMD while ensuring compliance with international law, international humanitarian law, and international human rights law?
 - Both formal negotiation forums, such as official treaty negotiations or a UN committee, and informal crisis communication channels.
 - Non-legally binding guidelines describing best practices for responsible use.
 - Unilateral declarations and actions, which might later transition into a confidence building measure involving more parties.
 - Confidence building measures intended to reduce the dangers or risks of particular weapons capabilities or systems, promote transparency and minimize misperceptions.
 - Data or information exchange.

3. From a human rights protection perspective, what are the key domestic regulatory gaps that can be identified? In your opinion, what legal or other domestic measures are necessary to prevent human rights violations and abuses and international humanitarian law violations stemming from the use of NTMD?
 - The need for functional and resilient crises communications systems, as a top priority for all technologies emerging, these systems help dissipate the fog of war by allowing for communication between adversaries to facilitate confidential conversations between political or military officials.
 - New and emerging technologies bring with them new systems, behaviors, and risks but not necessarily the shared language to define and describe it all. Therefore, an important step toward arms control is the establishment of shared or common definitions of key terms.

- Norms such as basic principles, best practices, guidelines, rules of the road and codes of conduct.
4. What are the primary human rights challenges presented by NTMD, including artificial intelligence (AI), autonomous decision systems (ADS), enhanced decision support systems, autonomous weapon systems (AWS), technologies for human enhancement, and the dual use of technologies? How can these challenges be effectively addressed?
- The use of new and emerging technologies in a conflict could escalate the pace to a dangerous extent, the tight timeline might not allow sufficient time for the decision makers to analyze everything through a human lens, and draw conclusions on the nature of an incoming attack, these circumstances lead to higher chances of a human rights crises.
 - It also could increase various areas of uncertainty about an attacker's intentions and so trigger accidental or inadvertent nuclear escalation.
5. What criteria and guidelines exist to guarantee the establishment of meaningful human control over the use of force and during the conduct of hostilities, and to ensure compliance with international human rights law and international humanitarian law within the military domain?
- A major part of that effort has involved efforts by parties to the Convention on Certain Conventional Weapons (CCW) to consider the adoption of a legally binding prohibition of the deployment and use of fully autonomous weapons. Several dozen states, along with civil society groups such as the Campaign to Stop Killer Robots, have called for negotiating an additional protocol to the treaty banning autonomous combat systems.
 - One such path being considered is a drive to persuade members of the UN General Assembly (where measures are adopted by majority vote, not consensus) to adopt a ban of this sort akin to the 2017 Treaty on the Prohibition of Nuclear Weapons (TPNW).
 - Another approach, advanced by representatives of France and Germany at the CCW expert group's meetings, would be the adoption by key states of a political declaration affirming the principle of human control over weapons of war, accompanied by a nonbinding code of conduct
6. How can the right to equality and non-discrimination be upheld in the design, development, and use of NTMD, especially when they rely on data sets and algorithms that may introduce or amplify bias or discrimination? How can the collection and management of representative data be ensured? How can the transfer and trade of NTMD be effectively regulated?
- This process would likely entrench bias and discrimination through flawed profiling of human characteristics, particularly if seeking to target some people

rather than others. Through reducing humans to data, problematic judgements might then be made concerning the characteristics of a human that are inadequate or inappropriate as a basis for targeting them. In addition, features like skin color, which is complex and variable, should not be used as a basis for using force against people. Features like gait and movement speed are not adequate proxies for legal grounds permitting targeting of persons due to the wide variability of how people express themselves and the complexities of social interactions. Reliance on such features further risks entrenchment of bias discrimination which raises additional ethical concerns and lends further support to a prohibition of systems that are designed to target humans directly

- A prohibition is required on NTMDs that are designed or used to target humans directly.
 - Under this prohibition, the data pattern representing a target profile that is matched with the processed data captured from the external environment using sensors must not be designed to represent a human.
7. What are the potential risks associated with using NTMD that could be exploited for malicious purposes, such as cyberattacks, espionage, spoofing, jamming, sabotage, or bioweapons? How can these risks be mitigated to prevent potential human rights violations and abuses?
- As Governments and military forces come to rely on computers for an ever-expanding of array of critical tasks, their vulnerabilities to cyberattack will grow— as will the temptation to devise new cyberweapons aimed at their adversaries' vital systems. In this environment, it is essential to assess the impact of cyberattack developments on strategic stability and to consider the enactment of new measures to bolster stability and reduce the risk of inadvertent escalation.
8. In what ways can NTMD contribute to enhancing the precision and accuracy of weapons, minimizing collateral damage, and improving situational awareness and communication during military operations?
- In the fog of war, where human operators are fatigued or emotional, human error may exceed that of an autonomous agent. Machines can also be incredibly adept at minimizing collateral damage.
9. How do States and private entities differ in their roles and responsibilities regarding the design, training, deployment, use, and acquisition of NTMD?
- States are responsible for Instituting norms and guiding principles about human involvement in the use of force, including humans making the ultimate decisions about lethal force.
 - The International Committee of the Red Cross (ICRC) has identified “a need for a genuinely human-centred approach to any use of these technologies in armed conflict. It will be essential to preserve human control and judgment in applications of AI... especially where they pose risks to life.” The ICRC concludes

that “AI and machine-learning systems remain tools that must be used to serve human actors, and augment human decision-makers, not replace them.

- Private industry has a role to play in instituting measures that stem the proliferation of inexpensive off-the-shelf armed drones or at least their efficacy. For example, restrictions baked either into the hardware or software could prevent a drone from crossing certain boundaries — such as into a military base or the grounds of a national leader’s residence.

10. What should be the respective responsibilities of key stakeholders, including United Nations agencies, states, national human rights institutions, civil society, the technical community, academia, and the private sector, in effectively addressing the identified challenges/issues/area of concern related to NTMD? What role do they have in monitoring and limiting the “transfer and trade” of NTMD? What if there is a gap in access to these technologies? What could be the potential consequences?

- Awareness-Building: Efforts to educate policymakers and the general public about the risks posed by the unregulated military use of emerging technologies.
- Diplomacy: Discussions among scientists, engineers, and arms control experts from the major powers to identify the risks posed by emerging technologies and possible strategies for their control.
- Unilateral and Joint Initiatives: Steps taken by the major powers on their own or among groups of like-minded states to reduce the risks associated with emerging technologies in the absence of formal arms control agreements to this end.
- Bilateral and Multilateral Arrangements: Once the leaders of the major powers come to appreciate the escalatory risks posed by the weaponization of emerging technologies, it may be possible for them to reach accord on bilateral and multilateral arrangements intended to minimize these risks.

11. What are the potential risks associated with private entities, as non-state actors, acquiring or misusing NTMD, such as drones, cyberweapons, or biotechnology?

The acquisition of AI-based technologies by nonstate actors threatens to destabilize existing state-nonstate dynamics on the battlefield.

Nonstate actors have already deployed semiautonomous drones that are inexpensive relative to the far costlier and more sophisticated weaponry of states. These actors can maneuver the drones to circumvent the boundaries of vehicle-borne threats, thereby maximizing the destructiveness and giving the actors an asymmetric advantage. Autonomous drones offer additional advantages, allowing nonstate users to preprogram drone activity to pursue particular types of targets in ways that make defense even more challenging in cyberspace.

First, and most prominently, AI can be used to automate specific tasks such as sniping or drone strikes, which could target highvalue individuals for assassination or minority groups within a country. Second, AI can be used to enable and maximize the impact of cyberattacks by leveraging machine learning of large datasets to prey on vulnerable individuals financially or psychologically. Third, AI can be used to

employ algorithms to generate deepfakes or synthetic text to manipulate public opinion.

12. How can both States and private entities effectively establish mechanisms of accountability and responsibility to address the use of NTMD, including AI and ADS, cross-border and long-distance use of force, neurotech and brain interface controls, as well as dual-use technologies employed for both military and civilian purposes?

- Calls for bans on specific applications of AI that might affect nonstate actors have become more common. One of the most visible proposals has been to regulate or ban lethal autonomous weapons; it is presented as the ethical approach for regulating these weapons.
- A solution may also reside in measures societies are taking to be technologically competitive, which is to commit more resources to research and development in the science, technology, engineering, and math fields.
- Addressing emerging technologies' legal and ethical challenges requires collaboration between policymakers, technology developers, legal professionals, and other stakeholders. Multidisciplinary approaches that combine legal expertise, technological knowledge, and ethical considerations are essential to creating comprehensive regulatory frameworks.

13. How can both States and private entities effectively establish mechanisms of accountability and responsibility to address violations and abuses of international human rights law and violations of international humanitarian law committed using NTMD, including AI and ADS, cross-border and long-distance use of force, neurotech and brain interface controls, as well as dual-use technologies employed for both military and civilian purposes? Additionally, how can monitoring the design, development, training, and use of NTMD play a role in ensuring accountability and addressing potential violations and abuses?

- Knowledge has to be combined with the capacity for implementation. Experience shows that inadequate capacity within domestic institutions is often a key factor that perpetuates impunity for the perpetrators of international crimes and gross violations of human rights.
- It is fundamental that States develop or refine their own capacity to investigate and prosecute gross violations of human rights, this means setting up new and specialized institutions that can handle international crimes and gross human rights violations within the scope of NTMD. Any State which finds that violations or crimes may have been committed on its territory or otherwise in its jurisdiction must muster the resources necessary to carry out effective prosecutions, while guaranteeing the full judicial, prosecutorial and investigative independence of these processes. States also need to remove any obstacles to

prosecuting international crimes and gross human rights violations, in particular, legal obstacles such as amnesties or statutes of limitations.

II. States (specific questions)

14. How are new and emerging technologies in the military domain (NTMD) impacting the respect, protection and promotion of human rights in your country? What distinct challenges or advantages does your country possess in addressing this issue?

Violations by Israel, the occupying power, in this regard include training and establishing military bases on Palestinian land, where they also explore and test new technologies and weapons on Palestinian civilians.

The Israeli military industry exploits the occupation of Palestine, and specifically the siege on Gaza, as an arena to battle-test, invest in, and innovate military technology to later be marketed to the international community based on their effectiveness on Palestinian civilians.

We seek to shed the light not only on the military tactics, but the arms developed, used and essentially advertised to prospective international clients during the recent massacre of civilians in Gaza. A lot of evidence and information has been gathered by activists, local and international media, and by testimonies on the ground.

15. What lessons learned or best practices can you share regarding the utilization, development, training, contracting, or renting of military technologies in your country?

Not applicable

16. Are there any regional initiatives on NTMD? Are States members of regional organizations addressing these questions? How could an increased collaboration between the UN and regional initiatives/organizations in the field of NTMD be envisaged?

- The Middle East WMD-Free Zone
- The State of Palestine prepared and submitted a proposal for the Normative and Operational Framework on Autonomous Weapons Systems.