

# **Draft report of the Open-ended working group on reducing space threats through norms, rules and principles of responsible behaviours**

## **Comments by the International Committee of the Red Cross (ICRC)**

25 August 2023

The ICRC commends Mr. Hellmut Lagos, Chair of the Open-ended working group on reducing space threats through norms, rules and principles of responsible behaviours (OEWG), for the Draft Report of the OEWG (A/AC.294/2023/CRP.1) dated 18 August 2023.

In the ICRC's view, the Draft Report summarizes the discussion at the OEWG and proposals made by delegations in a comprehensive and well-balanced manner. The Draft Report also provides a good basis for the deliberation and adoption of a report to be submitted to the United Nations (UN) General Assembly at its seventy-eighth session pursuant to the General Assembly Resolution 76/231.<sup>1</sup>

Ahead of its fourth session taking place from 28 August to 1 September 2023, the ICRC submits this non-paper to the OEWG with a view to assisting States with its expertise. In the paper, the ICRC outlines its general comments on the Draft Report and specific comments on selected paragraphs of the text. In line with its humanitarian mission and its mandate to promote and strengthen international humanitarian law (IHL), the ICRC's comments, building upon its previous contributions to the OEWG,<sup>2</sup> focus on those parts of the Draft Report related to the potential human cost for the civilian population on earth of the use of weapons and other military operations in or in relation to outer space, and the regulations and restrictions of these military operations under international law.

## **I. General comments**

### **Reaffirm the applicability of international law, including the UN Charter, treaties on Outer Space and IHL, to threats arising from State behaviours with respect to outer space**

The continued militarization and the possible weaponization of outer space raise serious concerns over international peace and security, and risk transforming outer space "into a domain of active hostilities" (paragraph 21 of the Draft Report). Against this backdrop, the importance of reaffirming the applicability of relevant international law, including the UN

---

<sup>1</sup> UN General Assembly, Resolution [76/231](#) "Reducing space threats through norms, rules and principles of responsible behaviours", UN Doc. A/RES/76/231, 24 December 2021, para 6(d).

<sup>2</sup> Notably ICRC, working paper on [Preliminary recommendations on possible norms, rules and principles of responsible behaviours relating to threats by States to space systems](#), A/AC.294/2023/WP.7, 27 January 2023, and ICRC, working paper on [Constraints under International Law on Military Operations in Outer Space during Armed Conflicts](#), A/AC.294/2022/WP.4, 8 April 2022.

Charter, treaties on Outer Space, international treaties in the field disarmament and arms control, IHL and the law of State responsibility, where relevant, to outer space cannot be overstated. It must be borne in mind that military operations in, or in relation to, outer space – be it through kinetic or non-kinetic means - do not occur in a legal vacuum, but are constrained by existing international law. Notably, the UN Charter, the Outer Space Treaty and IHL prohibit certain military activities in outer space. IHL in particular offers protection for the civilian population and civilian objects on earth against the effects of hostilities in, or in relation to, outer space.

A clear and strong reaffirmation of the applicability of relevant international law to threats arising from State behaviours with respect to outer space is in particular critical to fulfilling the mandate of the OEWG, because any recommendation on the possible development of norms, principles and rules of responsible space behaviours must be consistent with, and should build on and strengthen, the existing legal framework, including IHL.<sup>3</sup>

In this connection, we welcome the Draft Report reaffirms the applicability of relevant treaty and customary international law to threats arising from States behaviors with respect to outer space, notably the UN Charter (paragraphs 4 and 12), the law of State responsibility (paragraph 4), treaties on Outer Space (paragraphs 6, 8-11) and international treaties in the field of disarmament and arms control (paragraph 7).

The ICRC also welcomes the Draft Report reaffirms that international humanitarian law applies in situations of international armed conflict and non-international armed conflict and reiterates that the discussion on IHL application or further elaboration does not legitimize nor authorize the use of force (paragraph 13). On this basis, the ICRC recommends States to consider further strengthening the language of the report to explicitly reaffirm the applicability of IHL to outer space, notably in paragraphs 4, 34 and 36(m) (see below Part II Specific comments and suggestions on these paragraphs). This would strengthen the report's contribution to fulfilling the OEWG's mandate to "take stock of the existing international legal and other normative frameworks",<sup>4</sup> in view of the concerning trend identified in paragraph 21 as mentioned above.

The specific characteristics of the space environment and the accelerated development of the space sector raise challenges to the interpretation and application of existing international law or parts thereof to outer space. In this light, reaffirming the applicability of the above-mentioned relevant international law to outer space is an important first step towards respect for and compliance with international law. The ICRC recommends States to further study and discuss how international law applies in outer space, because such study and discussion would contribute to the compliance with international law and help reduce the risks of misperception, miscalculation and unintended escalation (see below Part II Specific comments and suggestions on paragraph 36(m)).

---

<sup>3</sup> UN General Assembly, Resolution 76/231 "Reducing space threats through norms, rules and principles of responsible behaviours", paras 6(a) and (c), *supra* note 1.

<sup>4</sup> *Ibid.*, para 6(a).

Finally, the ICRC recommends States to consider further clarifying and strengthening that the violation of the UN Charter or other applicable bodies of international law cannot be deemed as responsible behaviour (see below Part II Specific comments and suggestions on paragraph 29).

**Acknowledge the importance of space systems to civilian life and the significant risk of civilian harm arising from threats to these systems**

In line with its humanitarian mandate and mission, the ICRC is concerned primarily with the potential human cost for civilians on earth of the use of weapons and other military operations in, or in relation to, outer space. Given the increasingly indispensable role of space systems in the provision of essential civilian services, humanitarian considerations should be one cornerstone of any multilateral discussion and of any normative development with regard to space security.

We commend the Draft Report for acknowledging the importance of the provision of critical space-based services to civilians and taking into account the significant risk of civilian harm posed by threats to space systems and/or irresponsible space behaviours. Such considerations are notably reflected in paragraphs 24, 29, 33(i) and 35(g).

The issue of space debris is also of humanitarian concern, given the risk of debris damaging or destroying other space objects – especially if in increasingly congested orbits – including those space objects necessary for the delivery of essential civilian services. We therefore welcome that the Draft Report considers various specific behaviors that could result in the creation of large amounts of debris as threatening, including notably the development, acquisition, deployment, testing or use of counter-space capabilities that risk damaging or destroying space systems, the placement of co-orbital weapons and satellites equipped with armaments in space, and the development, testing or use of destructive direct-ascent anti-satellite missiles (paragraphs 33(a)-(e)).

In this regard, in relation to the risk of space debris, the ICRC recommends that paragraph 20 of the Draft Report can be clarified to avoid any possible misperception that the deliberate creation of debris is unregulated under international law (see below Part II Specific comments and suggestions on paragraph 20).

**Minimize the risk of civilian harm related to threats arising from State behaviours with respect to outer space**

In light of the above, a solid and meaningful report of the OEWG should contain recommendations on concrete measures and commitments to minimize the risk of civilian harm arising from threats to space systems and to strengthen the protection of civilians from harmful effects of military space operations.

In the ICRC's view, concrete measures for the OEWG to take further consideration should include: ensuring the protection of space systems necessary for essential civilian services and

specifically protected persons and objects under international law, including by identifying, marking, announcing or otherwise indicating these space systems and when feasible, by physically or technically separating or segmenting the civilian use from the military use of space systems; mitigating the risk of space debris by imposing moratorium on the development, testing and use of kinetic counterspace capabilities and other harmful operations of similar effects; and enhancing international cooperation to increase the resilience of space-based services that humanitarian relief and emergency response rely on.<sup>5</sup>

In this regard, we commend the Draft Report for including in its Part IV on Recommendations proposed measures to protect space systems that provide critical space-based services for civilians, notably in paragraphs 36(e) regarding avoiding space activities that endanger human life, (f) regarding refraining from impairing the provision of critical space-based services to civilians, and (g) regarding registering, marking or otherwise indicating protected space objects. In addition, we strongly recommend States to consider further strengthening the text, notably by adding a proposed measure regarding the physical or technical separation or segmentation of space systems for civilian purposes from military ones, and by including measures to enhance resilience of space-based services employed by humanitarian relief and emergency response (see below Part II Specific comments and suggestions on paragraphs 36 (e), (g) and (i)).

Last but not the least, regarding measures to mitigate risks of space debris, considering that kinetic counterspace operations risk creating far more debris than other space activities, we welcome the inclusion of recommended measures that aim to refrain from any act that causes damage or destruction of space objects or from any use of space objects as weapons (paragraph 36(a)), and refrain from developing, producing, testing or deploying weapons in space (paragraph 36(b)).

## II. Specific comments and suggestions

In furtherance to the above general comments, we wish to invite States to consider addressing the specific comments and suggestions on the following paragraphs of the Draft Report:

---

<sup>5</sup> A detailed elaboration on these recommended measures can be found in ICRC, working paper on Preliminary recommendations on possible norms, rules and principles of responsible behaviours relating to threats by States to space systems, *supra* note 2.

Paragraph 4:

*The working group reaffirmed the applicability of international law, including the Charter of the United Nations, to activities in the exploration and use of outer space. The working group recalled that this principle was first recognized by the General Assembly in its resolution 1721 (XVI) of 20 December 1961 and reflected in article III of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (the “Outer Space Treaty”). It was also noted that applicable international law includes other relevant international treaties, and customary international law, such as the law of State responsibility and international humanitarian law, as well as other bodies of international law.*

---

Comment:

- As elaborated above in Part I General Comments of this paper, the importance of reaffirming the applicability of relevant international law, including IHL, to outer space cannot be overstated. A clear and explicit reaffirmation of the applicability of IHL to outer space in this paragraph would strengthen the report as an effective contribution to “take stock of the existing international legal and other normative frameworks concerning threats arising from State behaviours with respect to outer space” (UNGA Resolution 76/231, para 6(a)).
  - Alternatively, States could consider aligning the first sentence of this paragraph with language from the preamble of UNGA Resolution A/RES/77/41 (para 2 in the Preamble: “[r]eaffirming the applicability of international law, including international humanitarian law and the Charter of the United Nations, to activities in outer space”).
- 

Paragraph 20:

*It was observed that the deteriorating international security situation and increasing strategic competition between States, together with a growing number of space actors and space objects, is heightening the risk of misunderstanding and miscalculation. Similarly, the large and growing population of orbital debris increased the risk of collisions involving space objects. In this regard, while the mitigation of debris has been addressed in the Committee on the Peaceful Uses of Outer Space and the Inter-Agency Space Debris Coordination Committee, there was no international obligation that specifically prohibits the creation of debris caused by deliberate hostile acts or by the destructive testing of anti-satellite weapons. Relevant rules of international law may nevertheless prohibit or restrict behaviours prone to the creation of debris.*

---

Comment:

- Debris can be created by a number of different space activities. These activities include, in particular, kinetic military operations against space objects, which risk causing far more debris than many other space activities, and might damage or destroy in an unpredictable manner other space objects and cause long-term harm to the space environment.
  - It is important to underline that the deliberate creation of debris by hostile acts or anti-satellite weapons testing remains governed by international law. Relevant international law includes, among others, the prohibition of threat or use of force in international relations, the prohibition on indiscriminate weapons and on weapons causing superfluous injury or unnecessary suffering, and the protection of the natural environment.
  - However, the last sentence of this paragraph gives the impression that the creation of debris by deliberate acts is totally unregulated. In this light, we recommend States to consider strengthening the report and clarifying this point.
- 

Paragraph 29:

*Criteria for determining whether a behaviour was irresponsible ~~could~~ include whether it violates the Charter of the United Nations or other bodies of international law. Other criteria could include its consequences on safety, sustainability and security in outer space, its consequences on the civilian population and civilian objects, its impact on international peace and security, as well as whether it follows an understood pattern of action. It was noted that determining what actions, activities or omissions could be perceived as a threat by another State was useful as these actions, activities or omissions may not necessarily be unlawful. A view was also expressed that the working group should limit its consideration to actions, activities or omissions that should be regarded as unlawful. Another view was expressed that determining the lawfulness of an action was highly dependent on the circumstances. It was also noted that irresponsible behaviours affecting space systems could negatively impact a number of areas, including freedom of access to outer space, transportation safety, scientific research and development, climate change adaptation and mitigation, disaster risk prediction and management, emergency and rescue and other essential civilian services as well as international peace, security and stability.*

---

Comment:

An act that violates the UN Charter or other applicable bodies of international law cannot be deemed as responsible behaviour. However, the word “could” in the first sentence of this paragraph leaves open the possibility that a violation of the UN Charter or international law could be determined as responsible. We recommend States to clarify this point.

---

Paragraph 34:

*The working group stressed the importance of ensuring that all activities by States in outer space are carried in accordance with international law, including, among others, the Charter of the United Nations, treaties on Outer Space, international treaties in the field disarmament and arms control, international humanitarian law and the law of State responsibility, where relevant, and with due regard to the corresponding interests of other States. The working group also stressed the importance of ensuring that armed conflict does not extend into outer space. The working group recognized that non-legally binding measures applicable to outer space activities, while not a substitute for legally binding arms control measures, could contribute to the consideration of concepts and proposals for such measures as well as verification protocols included in legally binding international instruments, including on the prevention of an arms race in outer space.*

---

Comment:

As the first paragraph of Part IV on Recommendations of the Draft Report, this paragraph aims to stress the importance of respecting existing international law in the development of non-legally binding measures. In this light, it would be essential to outline the scope of the applicable international law to space security, with a focus on those bodies of international law referred to in paragraphs 4 to 7, 12 and 13.

---

Paragraph 36 (e):

*States should avoid activities that would endanger the lives of humans in space and civilians on Earth.*

---

Comment:

We wish to stress that certain space activities may risk not only endangering the lives of humans in space, but their harmful effects may also extend to civilians on earth, therefore we recommend States to consider strengthening the report on this point.

---

Paragraph 36(q):

*States should consider registering, marking or otherwise indicating space objects that that provide critical space-based services to civilians and to exchange information in this regard, including through the Registration Convention.*

*(q)bis States should, wherever feasible, physically or technically separate or segment space systems that are used for military purposes from civilian ones, particularly with regard to systems necessary for the provision of essential civilian services and for the protection and functioning of persons and objects specifically protected under international law.*

---

Comment:

- We recommend States to consider inserting a new paragraph 36(g)bis, in the view that existing international law (in particular Article 58, Additional Protocol I to the Geneva Conventions and customary international law) requires States to take all feasible precautions to protect civilians and civilian objects from the effects of military operations. This is an obligation that needs to be implemented in peacetime already.
  - In this regard, with a view to protecting civilians and civilian objects from the harmful effects of threats against space systems, one important measure is, where feasible, to segment or separate - physically or technically - space systems used for military purposes from civilian ones, including satellites, ground stations and communication links.
- 

Paragraph 36(i):

*States with significant space technologies could consider international cooperation such as providing assistance and training and transferring technology, data and material to requesting States for the equitable and mutual benefit of and taking into account the legitimate rights and interest of all parties concerned, in particular the needs of developing countries, noting that the disparity in space capabilities of States, the inability of most States to participate in space activities without the assistance of others, uncertainty concerning sufficient transfer of Space technologies between State and the inability of many States to acquire significant space-based information are factors contributing to a lack of confidence among States. States should work towards increasing the resilience of space-based services that humanitarian relief and emergency response rely on.*

---

Comment:

- Humanitarian workers and first responders today also rely on space systems, in particular weather, navigation, communications and earth imagery satellites, to conduct humanitarian or emergency response operations both in armed conflicts and natural disasters. There is a need to ensure the availability of satellite services critical to humanitarian relief operations.
  - In this light, an important aspect of international cooperation would be for States to work towards increasing the resilience of space-based services for humanitarian operations in all types of emergencies, in particular by providing humanitarian workers and first responders uninterrupted multi-system access to satellite services to avoid the negative impact on humanitarian operations of disrupting services of a specific satellite system.
-



Paragraph 36(m):

*States should promote the universalization of, and compliance with, existing international law applicable to outer space activities, including all relevant treaties and applicable bodies of law, among others, the Charter of the United Nations, treaties on Outer Space, international treaties in the field of disarmament and arms control, international humanitarian law and the law of State responsibility, where relevant. States recognize the need for further study and discussion on how existing international law applies to outer space activities. None of the proposed norms, rules and principles, and affirming that none of these norms, rules and principles listed in this document can be construed as legitimizing or authorizing any act of aggression or any other threat or use of force inconsistent with the Charter of the United Nations.*

---

Comment:

- Similar to the comment above on paragraph 34, we recommend States to consider clarifying the scope of applicable international law to space security, with a focus on those bodies of law explicitly referred to in paragraphs 4 to 7, 12 and 13.
  - The specific characteristics of the space environment and the accelerated development of the space sector raise challenges to the interpretation and application of existing international law or parts thereof to outer space. Further study and discussion of how international law applies in outer space would contribute to the compliance by States with international law and help reduce the risks of misperception, miscalculation and unintended escalation.
-