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**Open-ended working group on the prevention  
of an arms race in outer space in all its aspects**  
**Second session**  
Geneva, 21 – 25 July 2025

## **Bridging Gaps: Strengthening Civilian Protection and Inclusivity in Space Security Governance**

**Submitted by Project Ploughshare (Canadian Council of Churches),  
July 2025**

### **I. Introduction**

1. This submission to the UN Open-Ended Working Group on the prevention of an arms race in outer space in all its aspects (OEWG on PAROS) highlights often overlooked but essential dimensions of space security and arms control: the protection of civilian infrastructure, the broad societal impacts of space threats, and the need for all relevant stakeholders to be included in governance processes. Drawing on recent research and consultations led by Project Ploughshare, our paper outlines practical steps that the OEWG and its Chair can take to better respond to these security concerns, which also align with the working group's mandate to submit recommendations on the prevention of an arms race in outer space in all its aspects.

2. As the use of outer space becomes more integrated with daily life on Earth for most of the world's citizens, the human risks associated with both conflict and disruption in orbit are increasingly global and cross-sectoral. But even though civilian populations, humanitarian actors, and under-resourced communities often bear the brunt of harmful space activities, perspectives on these realities remain underrepresented in arms control forums.

### **II. Summary of proposed actions**

3. To support the OEWG in strengthening space security governance, this paper proposes these five practical steps:

- (a) Reaffirm the relevance of legal obligations, such as the duty of due regard, to protect civilian and humanitarian infrastructure.
- (b) Dedicate dialogue to the clarification of key concepts, including “harmful interference” and “peaceful purposes.”
- (c) Strengthen communication measures that reduce risks to shared space systems and improve collective understanding of potentially harmful behaviours.
- (d) Convene a civil-society consultation that encompasses diverse perspectives and broadens participation in space security discussions.
- (e) Promote coherence across governance frameworks, including informal coordination with COPUOS and space safety experts.

### III. Context and rationale

4. As the international community grapples with growing risks of conflict and miscalculation in outer space, the OEWG on PAROS provides a vital platform for advancing norms, measures, and frameworks that promote stability, restraint, and cooperation. While previous PAROS discussions have, understandably, focused on military dynamics and state-based threats, space security is not solely a strategic issue. It also has profound implications for human safety, access to essential services, and global development.

5. Space systems underpin daily life for people around the world. Space-enabled capabilities from communications and disaster response to navigation and environmental monitoring are integral to civilian well-being and humanitarian efforts. Harmful activities in outer space — including both destructive actions and non-kinetic interference — can disrupt these systems and disproportionately harm populations that are already subjected to a harsh environment, infrastructure limitations, and/or socioeconomic deprivations.

6. These impacts are not evenly distributed, and different communities face varying levels and types of risk. Greater attention is needed to how space-based threats — both physical and non-physical — can undermine civilian protection, widen global disparities, and exacerbate existing vulnerabilities.

7. These observations echo findings from a 2024 consultation convened by Canadian peace research institute Project Ploughshares, which examined the connections between space security and human well-being. The report, *Hidden Harms: Human (In)Security in Outer Space*,<sup>1</sup> identifies how certain threats — particularly non-kinetic actions and disruptions to infrastructure — have unequal and underrecognized impacts on civilian populations. It highlights the need for more inclusive governance practices and comprehensive assessments of space-related risks.

8. The OEWG on PAROS is well placed to help address these important concerns. As noted in Canada's submissions to both the OEWG and the Group of Governmental Experts (GGE) on PAROS, effective arms control must take into account the full spectrum of impacts resulting from space activities.<sup>2</sup> As well, the final report of the Group of Governmental Experts on Further Practical Measures for the Prevention of an Arms Race in Outer Space (GGE on PAROS) emphasizes the importance of preventing harmful interference with space systems and infrastructure, much of which supports essential civilian and humanitarian services. The principle of "due regard" in Article IX of the Outer Space Treaty offers a legal foundation for addressing these risks, particularly when interpreted — as Canada and the Philippines have proposed — to include obligations to avoid interference with critical civilian infrastructure.<sup>3</sup>

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<sup>1</sup> See, Jessica West and Vaishnavi Panchanadam, *Hidden Harms: Human (In)Security in Outer Space*, Project Ploughshares, 2024, <https://ploughshares.ca/publications/hidden-harms-human-insecurity-in-outer-space>.

<sup>2</sup> Canada, *Working Paper submitted to the Open-Ended Working Group on Reducing Space Threats*, A/AC.294/2023/WP.8, Geneva, 2023, <https://docs.un.org/en/A/AC.294/2023/WP.8>.

<sup>3</sup> Canada, *Principles of International Law Applicable to Outer Space Security*, Working Paper submitted to the Group of Governmental Experts on Further Practical Measures for the Prevention of an Arms Race in Outer Space, WP.14, 2023, [https://docs-library.unoda.org/Group\\_of\\_governmental\\_experts\\_on\\_further\\_practical\\_measures\\_for\\_the\\_prevention\\_of\\_an\\_arms\\_race\\_in\\_outer\\_space\\_-\\_282023%29/WP.14.pdf](https://docs-library.unoda.org/Group_of_governmental_experts_on_further_practical_measures_for_the_prevention_of_an_arms_race_in_outer_space_-_282023%29/WP.14.pdf); Philippines, *Duty of Due Regard in the Outer Space Treaty*, Working Paper submitted to the Open-Ended Working Group on Reducing Space Threats, A/AC.294/2022/WP.12, 2022, <https://documents.un.org/en/A/AC.294/2022/WP.12>; and Philippines, *The Duty of Due Regard in the Context of PAROS*, Working Paper submitted to the Group of Governmental Experts on Further Practical Measures for the Prevention of an Arms Race in Outer Space, WP.6, 2023, [https://docs-library.unoda.org/Group\\_of\\_governmental\\_experts\\_on\\_further\\_practical\\_measures\\_for\\_the\\_prevention\\_of\\_an\\_arms\\_race\\_in\\_outer\\_space\\_-\\_282023%29/WP.6.pdf](https://docs-library.unoda.org/Group_of_governmental_experts_on_further_practical_measures_for_the_prevention_of_an_arms_race_in_outer_space_-_282023%29/WP.6.pdf).

9. Further, previous PAROS discussions as well as our own consultations have underscore the need to move beyond institutional silos.<sup>4</sup> Today's space environment is shaped by dual- and multi-use technologies, commercial actors, and the increasing interdependence of civilian and military systems. The traditional separation between "peaceful uses" (governed through COPUOS) and "security threats" (addressed in PAROS) no longer reflects operational realities. Integrating governance is essential to building a coherent, credible, and forward-looking framework for space security.

10. Project Ploughshares encourages the OEWG to advance a broader understanding of space security, which reflects global, human, and societal dimensions. Such efforts will help to prevent conflict, reduce harmful actions, and promote cooperation across the space domain. Preventing an arms race in outer space is not only a strategic necessity but an opportunity to safeguard shared infrastructure and services on which people and communities everywhere depend.

## IV. Recommendations

11. Because of the evolving space environment, with its increasingly broad societal impacts, efforts to prevent an arms race in outer space must reflect the full spectrum of risks—including those experienced by civilians and other non-traditional actors. The OEWG is well placed to take practical steps that enhance communication, clarify legal principles, and broaden participation in multilateral space security governance. This approach builds on the work of the GGE on PAROS and reinforces the importance of coherence among legal, safety, and technical frameworks.

12. Project Ploughshares recommends that the OEWG on PAROS.

### A. Recognize the relevance of legal obligations to civilian protection

13. The OEWG should reaffirm that existing legal principles—such as the duty of due regard found under Article IX of the Outer Space Treaty—can serve as a basis for preventing harm to space systems that support essential civilian and humanitarian services. This interpretation reflects a growing concern over the risks posed by both kinetic and non-kinetic activities to infrastructures that underpin civilian safety, development, and public well-being.

14. **Action:** Advance language that interprets "due regard" as including the avoidance of interference with space systems that underpin essential non-military services.

### B. Dedicate dialogue to the clarification of key concepts

15. The OEWG should encourage participating states to clarify their interpretation of key security terms, such as "harmful interference," and "peaceful purposes," particularly in relation to space systems and services that supports civilian needs. A shared understanding of these terms would reduce ambiguity and strengthen the basis for future normative or legal measures.

16. **Action:** Recommend the establishment of a technical or legal dialogue among or alongside the activities of the OEWG, with input from legal experts and operational stakeholders.

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<sup>4</sup> Almudena Azcárate Ortega and Sarah Erickson, *Recap Report: Open-Ended Working Group on Reducing Space Threats through Norms, Rules and Principles of Responsible Behaviours*, UNIDIR, March 2024, [https://unidir.org/wp-content/uploads/2024/03/unidir\\_oewg\\_on\\_reducing\\_space\\_threats\\_recap\\_report.pdf](https://unidir.org/wp-content/uploads/2024/03/unidir_oewg_on_reducing_space_threats_recap_report.pdf); West and Panchanadam.

**C. Strengthen communication that reduce risks to civilian infrastructure**

17. The OEWG should encourage practical communication measures — such as pre-launch notifications, post-event briefings, and the exchange of space situational awareness (SSA) information — particularly for activities that could affect shared orbital environments or systems that support civilian and humanitarian services. These efforts can reduce the risk of misperception or conflict escalation and support more inclusive access to information about space operations.

18. **Action:** Invite states to develop voluntary practices or guidelines for sharing information bilaterally, regionally, or through multilateral channels, with attention to the needs of actors that may lack independent access to technical data or systems.

**D. Convene a dedicated civil-society consultation**

19. The Chair should initiate an intersessional online consultation with civil society that focuses on perspectives that have been historically underrepresented in space security diplomacy. Included should be views from the Global South, women, Indigenous communities, and persons with disabilities. Incorporating diverse viewpoints can improve the legitimacy, equity, and effectiveness of future arms control efforts.

20. **Action:** Organize a virtual consultation during the intersessional period and produce a summary report of key themes for inclusion in the Chair's synthesis or to be shared with OEWG participants as an official background input.

**E. Promote coherence across governance frameworks that relate to safety, sustainability, and security**

21. The OEWG should acknowledge that distinguishing among space safety, sustainability, and security governance is increasingly difficult in a context in which most space systems are dual- or multi-use, operating across military, commercial, and civilian domains. Fragmented governance can create blind spots that undermine both conflict prevention and the protection of shared infrastructure. Promoting informal coordination among relevant institutions would help to align parallel efforts.

22. **Action:** The Chair could propose an informal joint briefing or side session with COPUOS actors, space safety experts, and legal practitioners to identify cross-cutting risks — such as debris-generating activities, proximity operations, and dual-use SSA — and explore opportunities for coherence across governance tracks.

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