



Canadian Submission to the report of the Secretary-General on Resolution 76/230 on Further practical measures for the prevention of an arms race in outer space

The present submission provides Canada's views on General Assembly resolution 76/230, entitled "Further practical measures for the prevention of an arms race in outer space". It responds to a note verbale from the Office for Disarmament Affairs sent pursuant to paragraphs 7 of the above-mentioned resolution, in which the Assembly requests the Secretary-General to seek the views of Member States. Canada was honored to submit our views previously on General Assembly resolution 75/36, entitled "Reducing space threats through norms, rules and principles of responsible behaviour". This submission below should be viewed as building on those remarks.

Importance of Enhanced Space Security

The number of satellites in space is growing, as is the number of people benefiting from those satellites. From financial transactions to emergency response, space technology is integrated into almost every facet of our day-to-day lives. These space systems are intrinsically linked to our economy, development, and security. Yet, they are highly vulnerable to both natural and human-made threats. The adverse actions of even one state can compromise these assets and jeopardize access to space for all.

Canada remains convinced that the long-term viability of peaceful human activities in space will remain precarious unless the security dimension of outer space is effectively addressed. While Canada has actively participated in discussions at the Conference on Disarmament on the Prevention of an Arms Race in Outer Space (PAROS), we recognize the need to move beyond the narrow focus on capabilities and widen considerations to behaviours and actions that increase tensions between states, can fuel an arms race, and increase the potential for conflict. In addition, Canada supports preserving the space environment by developing measures to curb threats against all aspects of space systems, which includes satellites, the ground infrastructure, and the data links connecting them to satellites.

Factors that Undermine Space Security

Canada recognizes that threats to the stability and security of outer space are driven by more than just military capabilities.

Lack of trust: Security is not simply a matter of weaponry. It is also driven by perceptions of others behaviours and actions. An environment where there is a low level of confidence between states fuels uncertainty regarding the intended use of military capabilities.

Miscalculation: States can have different assessments over the degree to which they perceive certain actions or activities as threatening. This discrepancy can lead states miscalculating the risk associated with and consequences of their actions.

Misunderstanding: The dual-use nature of space technology creates the possibility that states will misunderstand the intentions of other states. This is further compounded by the unique nature of the space domain in which knowledge of the operating environment is inherently difficult. This can lead to unintentional escalations.



Provisions of Guarantee to Enhance Space Security

Canada views provision of guarantees as those measures that, in combination and over time, would limit the drivers of an arms race and promote the safety, security, and sustainability of outer space. No single mechanism, binding or voluntary, can guarantee PAROS. Rather, a combination of pragmatic, reliable and holistic measures offers the best chance of achieving that objective.

Instruments

Since the concept of PAROS was first introduced at the First Special Session of UN General Assembly devoted to disarmament in 1978, it has never mandated a particular instrument. As such, when considering measures that would enhance space security, we should not limit ourselves in the mechanisms at our disposal. It is important to note that these instruments are not mutually exclusive and do not rule out the eventual adoption of stronger measures in the future.

Existing international law: Canada remains fully committed to the international legal framework governing the use of space. Ratification, national implementation, and adherence to key space treaties and other international instruments contribute to a more predictable space environments.

Sanctions and Export control laws: These foreign policy tools can be effective and appropriate measures in restricting the proliferation of certain technologies, thereby contributing to the stability of space.

Politically binding instruments: Voluntary and non-binding norms, rules and principles can provide a pragmatic first step to developing consensus on responsible behaviours in space, and form the basis for future legally binding measures. By supporting security and stability in space, they also create the environment of trust conducive for more ambitious negotiations between states.

Transparency and Confidence Building Measures: TCBMs are useful mechanisms that can help avoid misunderstandings and miscalculations. Given the dual-use nature of many space assets, TCBMs can help alleviate misperceptions regarding how capabilities are being used. For instance, the exchange of information is a simple and effective way to ensure transparency regarding space activities, and good communication is key to building trust.

Legally Binding Instruments: International treaties can codify accepted behaviours and standards between states into law. While it signifies a stronger commitment by states, it does not necessarily guarantee a more effective outcome or greater compliance than other instruments.

Criteria of effective provisions:

Reaching consensus on an agreement, binding or non-binding, does not guarantee PAROS or increased space security. Canada has long reiterated that agreement must meet the following standards:

Precise Definitions: The terms of an agreement must be defined with reasonable precision so as to minimize ambiguity and contradictory interpretations of the rules. While some have argued “constructive” ambiguity may be necessary to foster consensus and the eventual adoption of an



agreement, such an approach should be used cautiously. It is essential to come to a shared understanding of the nature of an obligation —a commonality of mind— in order to ensure that parties apply the same standards when judging the compliance of others.

Comprehensive Scope: The best way for a mechanism to increase space security is for the scope of the agreement to holistically address all threats. It is important to highlight that space systems include not just satellites in space but all the elements needed to function such as ground infrastructure and data links. They are vulnerable to a broad range of traditional and emerging threats originating on earth or in space. A narrow focus on certain technology or locations alone cannot ensure stability if other threats to space systems and actors remain unaddressed.

Effective provisions for verification: States will only agree to restraints if they can be provided assurances that all parties are equally living up to the commitment. The terms of the agreement should use precise language to specify what compliance and non-compliance would look like and how it would be measured within the constraints of currently available technology. Verification measures should be practical and effective. When compliance is called into question and verification provisions are inadequate, the confidence in the system declines and our ability to meet PAROS diminishes.

Recommendations to Enhance Space Security

Canada views the development of norms of responsible behaviour as the most effective approach to enhancing space security and PAROS. In this regard there are some positive developments. In response to UN General Assembly resolution 76/231, states are actively participating in the newly established Open Ended Working Group on reducing space threats through norms, rules and principles of responsible behaviours. Canada views this as a pragmatic way to advance the international dialogue on space security issues. The challenges to treaty-making efforts is the lack of understanding amongst states about what conduct leads to the misunderstanding that could fuel an arms race or conflict. Once that is established, translating this understanding into a treaty will be greatly facilitated. This is a proven approach, as demonstrated by the establishment of the 1967 Outer Space Treaty, whereby a global consensus on norms was eventually codified into law.

Conclusion

Decades of discussion on PAROS has not yielded tangible outcomes. It is time to shift the focus to a more holistic approach that encompasses a number of different mechanisms to establish responsible behaviours, thereby resulting in long-term space security. By fostering greater confidence and transparency in the space environment, we can create the climate of confidence necessary to develop future measures that could govern space. Canada looks forward to further engagement with states on this important issue.