## **Executive Summary**

Space security has both military and environmental dimensions that need to be addressed together through equitable rules that build on, but do not replace, the principles and obligations in the Outer Space Treaty. In both dimensions, the central problem involves a need for greater reassurance about how a growing number of state and non-state actors will use increasingly sophisticated technologies that can have both beneficial and harmful uses. On the military side, states want clearer and stronger protections for satellites being used for legitimate purposes and corresponding protections against space being used for hostile purposes. On the environmental side, states want reassurance that other space users will behave in ways that do not create more space debris or pose other unintended threats to their space activities. Both the general utility of arms control and the desirability of specific proposals look very different if the primary objective is to provide mutual reassurance, and not to stabilize deterrence or to achieve a more favorable distribution of war-fighting capabilities.

Given the dual-use nature of most space technology, the core rules needed to enhance space security are more usefully defined in terms of legitimate behavior rather than prohibited capability. A recent Canadian working paper proposes three very valuable rules, but leaves open several critical questions that cannot be answered with reference to existing international law or precedents from other arms control agreements. Therefore, this paper proposes a different type of process to strengthen existing normative protections for peaceful satellites and prohibitions on weapons in space, and to promote more constructive negotiations about additional rules and institutional arrangements to provide much needed reassurance. "Elements of a companion agreement to the OST" is provided in an annex to the paper, and sketches out potential elements of a comprehensive reassurance-based regime as a stimulus for creative thinking about how different initiatives to enhance space security could be expanded and combined into an integrated system.