or debris-generating activities) while allowing some forms of temporary, reversible, and localized interference (e.g., electro-optical sensor dazzling or radio-frequency jamming) when it would be consistent with U.N. Charter rules for the use of force and other international law. Meanwhile, the U.N. Committee on the Peaceful Uses of Space (COPUOS) would do parallel work on best practices and coordinating mechanisms so that the number and diversity of space activities could continue to increase without a corresponding rise in inadvertent dangers (e.g., space traffic accidents or safety hazards posed by satellites falling to earth). Implicit in the Canadian paper is the need to develop refined rules to determine when activities that do not damage or destroy satellites constitute irresponsible behavior or improper interference with the right to use space for peaceful purposes, and when they would be legitimate for self-defense or other compelling reasons.

As the Canadian paper notes, the OST was the best space security agreement that could have been negotiated in the 1960s, given the adversarial nature of the superpower relationship, the early stage of space technology, and the embryonic state of arms control.[16] The OST established that all states were free to use space "on a basis of equality…in accordance with international law…and in the interests of maintaining international peace and security." It foreclosed a few undesirable avenues for competition (orbiting weapons of mass destruction and conducting military activities on celestial bodies) and tacitly legitimated satellite reconnaissance. It also urged states to consider other space users' interests and to consult about any activities that might cause harmful interference. The central idea behind the OST—that the best way to protect vulnerable satellites was to connect rights to responsibilities and restraints on terms that applied equally to all space-faring countries—remains as valid today as when the treaty was negotiated.

Much has changed, though, since the early years of the space age when the principles and policy declarations that formed a basis for the OST were developed.[17] The Canadian paper focuses on the technological advances that could lead to more widespread ASAT capabilities, particularly the growing number of countries that have, or could soon develop, ballistic missiles, hit-to-kill missile defense interceptors, and small maneuverable satellites. Depending on their level of technological sophistication, numerous countries and even some non-state actors have many ways they could—in theory at least—interfere with the normal functioning of satellites.[18]

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[16] Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies, 601 U.N.T.S. 206 (1967).

[17] The United States made a concerted effort to establish the peaceful nature of its space program and the legitimacy of reconnaissance satellites, including a series of choices that led to the Soviet Union becoming the first country to launch a satellite. The two broadest security principles in the OST – that international law applies to outer space and that outer space is free for all states to use in conformity with international law – were first adopted by the UNGA in 1961, then elaborated by COPUOS into the declaration of legal principles adopted by the UNGA in December 1963. One of the OST's two specific prohibitions on military uses of space, its ban on weapons of mass destruction in orbit or on celestial bodies, began as parallel unilateral declarations of restraint made by the superpowers and endorsed by the UNGA in October 1963.

[18] Options for interfering with satellites are evaluated in much more detail in David Wright, Laura Grego, and Lisbeth Gronlund, *The Physics of Space Security*, American Academy of Arts and Sciences Occasional Paper (2005), pp. 125-128, at http://www.amacad.org/publications/Physics_of_Space_Security.pdf.