Analysis of the draft treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects (PPWT)

The draft treaty does not settle all of the questions government and non-government experts have asked over the years, such as:

What implications will the current militarization of space have for this treaty? Space has been militarized since the earliest communication satellites were launched; today, militaries all over the world rely heavily on satellites for command and control, communication, monitoring, early warning, and navigation. Most states accept that “peaceful purposes of outer space” include military uses, even those which are not at all peaceful—such as using satellites to direct bombing raids or to orchestrate a “prompt global strike” capability. The use of space objects to conduct war on Earth is not addressed by this treaty.

The militarization of space also presents many problems of “dual use technologies”—some space objects can be used for commercial or military purposes or as weapons. The draft treaty does not address how it will deal with dual-use space-based objects. Would any space object that can be maneuvered to intentionally crash into another space object be considered a space weapon? It is advertised as an autonomous rendezvous space-based object intended to fix other space objects, but its capacity to maneuver around another satellite also allows it to disable or destroy its target.

Many experts have asserted a treaty should also ban ground-based weapons aimed at attacking space assets, including ground-based ballistic missile defense systems. However, intercontinental ballistic missiles and missile interceptors, which could be used to attack space objects, travel on a sub-orbital trajectory. While some might travel through space, they never maintain sufficient velocity to achieve orbit. The draft treaty says states parties shall not “resort to the threat or use of force against outer space objects,” but it does not restrict the development, testing, or deployment of missile defense systems or other ground-based anti-satellite systems, only systems placed in orbit or installed on structures or bodies in outer space.

The draft treaty does not ban development or testing of space weapons, only their use. So then, would China’s test in January 2007 of an anti-satellite weapon or the US shoot-down of a failed satellite in 2008 be considered a violation of the treaty? If states are allowed to continue developing and testing weapons, won’t this defeat the stated purpose of the treaty—which is ostensibly “strategic stability” and “political equilibrium”.

There are many diverging opinions on verification of a PPWT: some have argued for a normative treaty without verification provisions, others say it cannot be effectively verified, and some argue that verification should not be separated from other aspects of the treaty and that it should be addressed in the course of negotiations. The indication that verification “may” be covered by an additional protocol suggests the possibility of no or limited verification measures.