was likely, it would not violate customary international law to deny an adversary the "high ground" of space by launching a debris cloud into orbit or detonating a high-altitude nuclear explosion.³¹

While all international law is underdeveloped compared with domestic law, international rules and governance mechanisms for space security confront particular complications that must be overcome in order for space rules to catch up with the rate of technological change and the spread of capability. One complication involves the historical separation of forums for discussing the military/arms control side of space security (primarily the CD) and the non-military/environmental side (e.g. the COPUOS). This separation is problematic because the same technology, indeed the same satellites, can often be used for both military and non-military applications. Another complication is the mismatch between the main international agreements and negotiating bodies for space (where states have the rights, responsibilities, and decision-making powers), and the current global space environment—in which commercial firms and non-state actors have comparable overall levels of space activity to governments, and where the same commercial or civilian satellite can be associated with different governments or customers. For instance, the OST assumes that a State Party will authorize and supervise all non-governmental space activities and that every object launched into space will be publicly registered to a State Party that controls it and accepts responsibility for any damage it might cause—yet actual practice has been far less orderly.32

These complicating features of space governance begin to demonstrate why traditional arms control models cannot be easily applied to space security. Most arms control accords have typically been designed to prohibit or regulate a type of weapon or weapons-related activity that can be segregated from permissible civilian or commercial uses of that same technology. The separation is sharpest in the nuclear case. But even in the case of chemical and biological agents and equipment with both legitimate and prohibited uses, the logic of their corresponding conventions assumes that signatories can differentiate between prohibited weapons-related activities and permitted or prophylactic ones based primarily on criteria such as the quantity of material and the characteristics of the owner (whether its commercial, scientific, or military).

³¹ Schmitt, "International Law," p. 117. The International Committee of the Red Cross, considered an authority on customary international humanitarian law, has asserted that customary international law would categorically ban any war fighting action that inflected "widespread, long-term and severe damage to the natural environment" including space, but the United States has countered that such actions could be justified as proportionate if sufficient military advantage could thereby be achieved. See Koplow, "ASAT-isfaction," pp. 88-90.

³² In recognition of this problem, the General Assembly has recently passed two related resolutions. Res. 59/115 (December 2004) encourages launching states to "consider enacting and implementing national laws" authorizing and supervising the space activities of non-governmental entities under their jurisdiction. It also recommends that they volunteer information about their current practices regarding on-orbit transfer of ownership for space objects, and that States consider harmonizing their transfer practices. Res. 62/101 (December 2007) contains recommendations for improving the quantity, quality, and usefulness of information reported under the Convention on Registration of Objects Launched into Outer Space.