King & Spalding

# Client Alert

International Arbitration and Litigation | Aerospace/Defense Industry

**MARCH 5, 2024**


For more information, contact:

Steve Cave
+1 703 245 1017
scave@kslaw.com

Elizabeth Silbert
+1 404 572 3570
esilbert@kslaw.com

Viva Dadwal
+1 212 556 2223
vdadwal@kslaw.com

Carson W. Bennett
+1 404 572 4611
cbennett@kslaw.com

Mark Villapando
+1 703 245 1023
mvillapando@kslaw.com

King & Spalding

Washington, D.C.
1700 Pennsylvania Ave, NW
Suite 900
Washington, D.C. 20006

Atlanta
1180 Peachtree Street, NE
Suite 1600
Atlanta, Georgia 30309

Northern Virginia
1650 Tysons Blvd
Suite 400
McLean, Virginia 22102


# Anti-Satellite Tests and the Growing Demand for Space Debris Mitigation

The threat of anti-satellite (ASAT) weapons is once again front and center in the news, raising questions about norms for responsible state behavior in space. ASAT tests are used by countries to destroy or incapacitate satellites, including through their physical destruction. ASAT tests are a major source of space debris and increase the risk of collisions of on-orbit space objects, compromising the safety of space assets. The U.S. and its allies have been promoting norms that would limit activities that create space debris, including by pursuing bans on direct ASAT tests and legislative proposals aimed at the elimination of "space junk."

## LATEST THREATS OF AN ASAT EVENT

U.S. lawmakers and national security officials recently confirmed that Russia was developing a new ASAT capability. While the specter of ASAT missions are not new, they are a growing threat to the safety, security, sustainability and stability of outer-space activities, including for commercial actors operating in low-earth orbit.

In 2021, Russia used an ASAT weapon to destroy a defunct satellite. The explosion created 1,500 pieces of space debris large enough to be tracked, as well as hundreds of thousands of smaller fragments, according to the U.S. State Department. The shrapnel-like debris cloud sent the International Space Station (ISS) into crisis mode—requiring the astronauts and cosmonauts on board to carry out emergency procedures and shelter in their spacecraft. This is just part of the now 27,000+ pieces of space debris that currently clutter low-earth orbit.

In response, in 2022, the United States committed not to conduct destructive direct ASAT testing, as a means to establish a new international norm for responsible behavior in space. Later that year, the U.N. General Assembly passed a U.S.-led resolution on "Destructive

direct-ascent anti-satellite missile testing." The resolution calls on countries to commit not to conduct destructive direct-ascent anti-satellite missile tests.

## NEED FOR SPACE DEBRIS MITIGATION

Last year, U.S. policymakers introduced several initiatives to target space debris. In October 2023, the United States Senate unanimously passed the proposed Orbital Sustainability Act to "reduce the amount of space junk in orbit" ("ORBITS Act"). The ORBITS Act was intended to make the United States the first international actor to take formal action to reduce existing space junk. The bipartisan bill instructed NASA, in conjunction with other federal agencies, to pursue several initiatives, including to:

- Create a list of orbital debris that should be eliminated;
- Establish a demonstration project with "competitive rewards" for the "development, and demonstration of technologies leading to the remediation of selected orbital debris";
- Research and develop technologies necessary to remediate orbital debris;
- Evaluate proposals from commercial entities for a demonstration mission to remediate orbital debris;
- Acquire services for the remediation of orbital debris, whenever practicable, through fair and open competition in accordance with the Federal Acquisition Regulation; and
- Update current Orbital Debris Mitigation Standard Practices.

In November 2023, members of the U.S. House of Representatives also introduced the Commercial Space Act of 2023 to update and modernize oversight of commercial space activities. This legislation addresses orbital debris by requiring commercial space operators to provide a plan for mitigating space debris as part of their application and promoting research and development at NASA on how to improve U.S. space situational awareness activities. The Act also requires Federal agencies to assess, develop, or acquire technologies that will decrease the risks associated with orbital debris.

Subsequently, in December 2023, the White House released the Novel Space Activities Authorization and Supervision Framework, which invites the U.S. Secretaries of Commerce and Transportation to "consider whether to require measures to protect the sustainable use of outer space in their regulations, to include the mitigation and remediation of orbital debris and consideration of impacts to the space operational environment." The framework also notes that the United States Government Orbital Debris Mitigation Standard Practices (ODMSP) are the standard that should be referenced by regulatory agencies when regulating private sector space debris issues (to be evaluated every two years).

These U.S. legislative and executive initiatives follow in the footsteps of the European Union, which in June 2023 introduced an initiative to ensure reduction and proper retirement of new objects entered into space by 2030. Specifically, the European Union finalized a non-binding "Zero Debris Charter" focused on developing improved end-of-life disposal techniques and active debris removal with involvement from major European space companies.

In conjunction with new Space Debris Mitigation guidelines and an updated Space Debris Mitigation Policy, the charter imposes stricter requirements such as:

- Successful disposal guarantees;
- Improved orbital clearance;

- Avoidance of in-orbit collisions;
- Avoidance of internal breakups;
- Prevention of intentional release of space debris;
- Improved on-ground casualty risk assessment;
- Guaranteed dark and quiet skies; and
- Extended protected regions.

Unlike the Zero Debris Charter, the ORBITS Act and the Commercial Space Act of 2023 remain prospective. The ORBITS Act was not taken up by the U.S. House of Representatives prior to their final session of the year, and thus the bill will need to be reintroduced in 2024. The Commercial Space Act of 2023 will be reported on in full chamber and be considered further. The bi-partisan support for space debris mitigation nevertheless suggests the issue will no doubt be revisited in the coming year.

While an international agreement on the use of ASAT tests remains unclear, global regulatory initiatives targeting space debris should target a less congested and therefore safer space environment. Companies engaged in aerospace activities are advised to follow developments in the United States for new opportunities and requirements.