

Commercial Space Competitiveness Strategy for the 21st Century



The United States was the leader in space for much of the early Space Age after initial Soviet successes. From the development of the Saturn V rocket and the Apollo Lunar landing program, to development of the first communications satellites and the Global Positioning System, the U.S. has been the primary driver of both the exploration and commercial utilization of space.

In the 21st Century however, space is a global enterprise. Other nations are aggressively seeking to grow their space economies. Countries that have seen the benefits derived from developing space-related products and services are creating their own space assets to advance national causes and grow their space industrial base. These countries also look to commercial entities, both U.S. and foreign, to provide the goods and services to take their respective nations to space. Global companies are aggressively seeking technical solutions to reduce the cost of space access for the world market.

To become the commercial space leader, we must acknowledge the next generation of space innovation is being driven by the global commercial space environment. Just as our nation did after initial Soviet successes, we must set the pace in space by out-innovating and out-competing the global competition. We must also be prepared to work with potential partners to grow the worldwide space economy.

To compete effectively in this promising new market domain, our nation needs a **21st Century Commercial Space Competitiveness Strategy** to ensure the U.S. is the commercial space leader for the next century. The U.S. will ensure its position as the first-choice provider of space-related goods and services by creating the conditions necessary to compete in the global commercial space marketplace and lead in areas like technology development, workforce training, exports, and innovation.

Elements of a 21st Century Commercial Space Competitiveness Strategy

A **21st Century Commercial Space Competitiveness Strategy** should include regulatory, policy and advocacy elements such as the following:

REGULATORY

- > **Export Control - Category XV:** Immediate publication of the final rules for Category XV (Space Systems) of the U.S. Munitions List. These final rules should include revisions that raise the limits of allowable aperture size under the Export Administration Regulations. The final rules should also complete the regulatory rulemaking related to dual-use commercial satellites
- > **Spectrum:** Maintain and expand globally harmonized spectrum, which enhances global exports of satellites. The U.S. should avoid disrupting these globally harmonized spectrum bands, including the Ka-bands, for future global satellite systems
- > **Orbital Debris Mitigation:** Propose forwarding-leaning policy on orbital debris mitigation. These policy proposals would be consistent with accepted best practices backed by transparency and confidence building measures. This will ensure freedom of access to space while asserting U.S. leadership among the burgeoning members of the global space community

POLICY

- > **Hosted payloads:** Develop a national policy on hosted payloads on satellites, especially as they relate to national security vs. non-national security-related satellites
- > **Sector-specific metrics:** Focus on sector-specific elements of the space industrial base and establish measurable space trade / export objectives in each of those sectors
- > **New space applications:** Support and advance a national effort on support for the development and fielding of new space applications and technologies for the commercial market (e.g., wi-fi from space; power generation)
- > **NASA trade promotion:** Evaluate the concept of adding trade promotion responsibility to NASA's mission

ADVOCACY

- > **Global commercial space leadership:** Establish a bipartisan national consensus on the need for U.S. international commercial space leadership by growing commercial space opportunity capture and developing a portfolio of affirmative measures to objectively establish and sustain this objective
- > **Export-Import Bank:** Institute a specific focus to expand the Export-Import Bank's support for financing space exports
- > **Enhanced supplier and customer training:** Initiate dedicated outreach to U.S. space industrial base suppliers and their customers on space export control reform changes, and provide comprehensive training as the new regulations are promulgated and implemented
- > **Trade promotion:** Secure focused U.S. Government promotion and advocacy of U.S. space products to foreign customers under the leadership of the Department of Commerce's International Trade Administration (ITA)
- > **Department of Commerce space asset evaluation:** Evaluate the current alignment of the Office of Space Commerce as it relates to the National Oceanic and Atmospheric Administration and the International Trade Administration to ensure maximum focus on industry advocacy and promotion