



Modernize and Invest in National Security Space Infrastructure

AIA RECOMMENDATIONS

- **National security space systems should be seen as an element of U.S. critical infrastructure that includes systems operating in space and other supporting ground systems.**
- **Given our increasing reliance upon space, growing threats, and aging systems, the nation needs to maintain a solid and stable commitment to funding national security space systems to both sustain existing capabilities and modernize systems to meet unsatisfied and emerging needs.**
- **Modernize aging national security space systems while continuing to invest in future systems, including the science and technology and research and development needed to meet growing demands.**

BACKGROUND

Space assets are a critical utility of the 21st century and a vital component of U.S. security in a dangerous world. Rarely recognized by users on the ground, space assets are integrated nearly seamlessly into virtually all aspects of U.S. military and intelligence community operations, including timing and positioning, communications, command and control, and intelligence gathering.

These complex systems provide missile warning and defense; environmental monitoring; secure global communications; position, navigation and timing (PNT); intelligence, surveillance, and reconnaissance (ISR) and other key national security capabilities on which our nation and warfighters rely.

However, many systems are well beyond their design lives and operating in degraded mode. With sophisticated threats to space assets increasingly developing at a time of exploding U.S. demand and reliance on aging space systems, a stable and ongoing investment in national security space is essential to U.S. national security.

KEY POINTS

- **Aging Space Infrastructure. An overview of our key capability areas of PNT; ISR; environmental monitoring satellites; and military satellite communications reveals a startling reality – systems are aging and, in many cases, our programs to replace existing systems and introduce new capabilities have been delayed or could result in gaps in critical coverage. Space systems are in need of modernization at a time when competitors like Russia and China are rapidly modernizing their own space infrastructure, and others nations are establishing space and counter-space capabilities.**
- **Increased Demand for Services. Deployed service members in isolated battlefields in Afghanistan and elsewhere rely on secure, space-based communications to meet wartime requirements. In the coming decade, the Department of Defense expects the demand for both protected and unprotected satellite communications capacity and ISR to jump exponentially.**
- **Increased Threat Environment. Space systems provide our intelligence community with information on America's most dangerous enemies. When nations like Iran launch hostile missiles – space systems provide timely warning to U.S. leaders. In addition, space is becoming more crowded than ever. Tens of thousands of man-made objects are in space and this number is increasing as other nations join the global space community of over 40 countries.**