# NATIONAL SPACE POLICY of the UNITED STATES of AMERICA

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# **Table of Contents**

Introductio	on																	. 1	
Principles								•						•	•	•		. 3	}
Goals								•						•	•	•		. 4	ļ
Intersector	Guide	eline	es .					•						•	•	•		. 5	;
Sector Guid	deline	ς																10	)



## Introduction

"More than by any other imaginative concept, the mind of man is aroused by the thought of exploring the mysteries of outer space. Through such exploration, man hopes to broaden his horizons, add to his knowledge, improve his way of living on earth."

— President Dwight Eisenhower, June 20, 1958

"Fifty years after the creation of NASA, our goal is no longer just a destination to reach. Our goal is the capacity for people to work and learn and operate and live safely beyond the Earth for extended periods of time, ultimately in ways that are more sustainable and even indefinite. And in fulfilling this task, we will not only extend humanity's reach in space—we will strengthen America's leadership here on Earth."

— President Barack Obama, April 15, 2010

The space age began as a race for security and prestige between two superpowers. The opportunities were boundless, and the decades that followed have seen a radical transformation in the way we live our daily lives, in large part due to our use of space. Space systems have taken us to other celestial bodies and extended humankind's horizons back in time to the very first moments of the universe and out to the galaxies at its far reaches. Satellites contribute to increased transparency and stability among nations and provide a vital communications path for avoiding potential conflicts. Space systems increase our knowledge in many scientific fields, and life on Earth is far better as a result.

The utilization of space has created new markets; helped save lives by warning us of natural disasters, expediting search and rescue operations, and making recovery efforts faster and more effective; made agriculture and natural resource management more efficient and sustainable; expanded our frontiers; and provided global access to advanced medicine, weather forecasting, geospatial information, financial operations, broadband and other communications, and scores of other activities worldwide. Space systems allow people and governments around the world to see with clarity, communicate with certainty, navigate with accuracy, and operate with assurance.

The legacy of success in space and its transformation also presents new challenges. When the space age began, the opportunities to use space were limited to only a few nations, and there were limited consequences for irresponsible or unintentional behavior. Now, we find ourselves in a world where the benefits of space permeate almost every facet of our lives. The growth and evolution of the global economy has ushered in an ever-increasing number of nations and organizations using space. The now-ubiquitous and interconnected nature of space capabilities and the world's growing dependence on them mean that irresponsible acts in space can have damaging consequences for all of us. For example,

decades of space activity have littered Earth's orbit with debris; and as the world's space-faring nations continue to increase activities in space, the chance for a collision increases correspondingly.

As the leading space-faring nation, the United States is committed to addressing these challenges. But this cannot be the responsibility of the United States alone. All nations have the right to use and explore space, but with this right also comes responsibility. The United States, therefore, calls on all nations to work together to adopt approaches for responsible activity in space to preserve this right for the benefit of future generations.

From the outset of humanity's ascent into space, this Nation declared its commitment to enhance the welfare of humankind by cooperating with others to maintain the freedom of space.

The United States hereby renews its pledge of cooperation in the belief that with strengthened international collaboration and reinvigorated U.S. leadership, all nations and peoples—space-faring and space-benefiting—will find their horizons broadened, their knowledge enhanced, and their lives greatly improved.

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# **Principles**

In this spirit of cooperation, the United States will adhere to, and proposes that other nations recognize and adhere to, the following principles:

- It is the shared interest of all nations to act responsibly in space to help prevent mishaps, misperceptions, and mistrust. The United States considers the sustainability, stability, and free access to, and use of, space vital to its national interests. Space operations should be conducted in ways that emphasize openness and transparency to improve public awareness of the activities of government, and enable others to share in the benefits provided by the use of space.
- A robust and competitive commercial space sector is vital to continued progress in space. The
  United States is committed to encouraging and facilitating the growth of a U.S. commercial
  space sector that supports U.S. needs, is globally competitive, and advances U.S. leadership in
  the generation of new markets and innovation-driven entrepreneurship.
- All nations have the right to explore and use space for peaceful purposes, and for the benefit
  of all humanity, in accordance with international law. Consistent with this principle, "peaceful
  purposes" allows for space to be used for national and homeland security activities.
- As established in international law, there shall be no national claims of sovereignty over outer space or any celestial bodies. The United States considers the space systems of all nations to have the rights of passage through, and conduct of operations in, space without interference. Purposeful interference with space systems, including supporting infrastructure, will be considered an infringement of a nation's rights.
- The United States will employ a variety of measures to help assure the use of space for all
  responsible parties, and, consistent with the inherent right of self-defense, deter others from
  interference and attack, defend our space systems and contribute to the defense of allied space
  systems, and, if deterrence fails, defeat efforts to attack them.

## Goals

Consistent with these principles, the United States will pursue the following goals in its national space programs:

- **Energize competitive domestic industries** to participate in global markets and advance the development of: satellite manufacturing; satellite-based services; space launch; terrestrial applications; and increased entrepreneurship.
- **Expand international cooperation** on mutually beneficial space activities to: broaden and extend the benefits of space; further the peaceful use of space; and enhance collection and partnership in sharing of space-derived information.
- Strengthen stability in space through: domestic and international measures to promote safe
  and responsible operations in space; improved information collection and sharing for space
  object collision avoidance; protection of critical space systems and supporting infrastructures,
  with special attention to the critical interdependence of space and information systems; and
  strengthening measures to mitigate orbital debris.
- Increase assurance and resilience of mission-essential functions enabled by commercial, civil, scientific, and national security spacecraft and supporting infrastructure against disruption, degradation, and destruction, whether from environmental, mechanical, electronic, or hostile causes.
- Pursue human and robotic initiatives to develop innovative technologies, foster new industries, strengthen international partnerships, inspire our Nation and the world, increase humanity's understanding of the Earth, enhance scientific discovery, and explore our solar system and the universe beyond.
- Improve space-based Earth and solar observation capabilities needed to conduct science, forecast terrestrial and near-Earth space weather, monitor climate and global change, manage natural resources, and support disaster response and recovery.

All actions undertaken by departments and agencies in implementing this directive shall be within the overall resource and policy guidance provided by the President; consistent with U.S. law and regulations, treaties and other agreements to which the United States is a party, other applicable international law, U.S. national and homeland security requirements, U.S. foreign policy, and national interests; and in accordance with the Presidential Memorandum on Transparency and Open Government.

# **Intersector Guidelines**

In pursuit of this directive's goals, all departments and agencies shall execute the following guidance:

#### **Foundational Activities and Capabilities**

- Strengthen U.S. Leadership In Space-Related Science, Technology, and Industrial Bases.
   Departments and agencies shall: conduct basic and applied research that increases capabilities and decreases costs, where this research is best supported by the government; encourage an innovative and entrepreneurial commercial space sector; and help ensure the availability of space-related industrial capabilities in support of critical government functions.
- Enhance Capabilities for Assured Access To Space. United States access to space depends in the first instance on launch capabilities. United States Government payloads shall be launched on vehicles manufactured in the United States unless exempted by the National Security Advisor and the Assistant to the President for Science and Technology and Director of the Office of Science and Technology Policy, consistent with established interagency standards and coordination guidelines. Where applicable to their responsibilities departments and agencies shall:
  - Work jointly to acquire space launch services and hosted payload arrangements that are reliable, responsive to United States Government needs, and cost-effective;
  - Enhance operational efficiency, increase capacity, and reduce launch costs by investing in the modernization of space launch infrastructure; and
  - Develop launch systems and technologies necessary to assure and sustain future reliable and efficient access to space, in cooperation with U.S. industry, when sufficient U.S. commercial capabilities and services do not exist.
- Maintain and Enhance Space-based Positioning, Navigation, and Timing Systems. The United States must maintain its leadership in the service, provision, and use of global navigation satellite systems (GNSS). To this end, the United States shall:
  - Provide continuous worldwide access, for peaceful civil uses, to the Global Positioning
     System (GPS) and its government-provided augmentations, free of direct user charges;
  - Engage with foreign GNSS providers to encourage compatibility and interoperability, promote transparency in civil service provision, and enable market access for U.S. industry;
  - Operate and maintain the GPS constellation to satisfy civil and national security needs, consistent with published performance standards and interface specifications. Foreign positioning, navigation, and timing (PNT) services may be used to augment and strengthen the resiliency of GPS; and
  - Invest in domestic capabilities and support international activities to detect, mitigate, and increase resiliency to harmful interference to GPS, and identify and implement, as necessary and appropriate, redundant and back-up systems or approaches for critical infrastructure, key resources, and mission-essential functions.

- Develop and Retain Space Professionals. The primary goals of space professional development and retention are: achieving mission success in space operations and acquisition; stimulating innovation to improve commercial, civil, and national security space capabilities; and advancing science, exploration, and discovery. Toward these ends, departments and agencies, in cooperation with industry and academia, shall establish standards, seek to create opportunities for the current space workforce, and implement measures to develop, maintain, and retain skilled space professionals, including engineering and scientific personnel and experienced space system developers and operators, in government and commercial workforces. Departments and agencies also shall promote and expand public-private partnerships to foster educational achievement in Science, Technology, Engineering, and Mathematics (STEM) programs, supported by targeted investments in such initiatives.
- Improve Space System Development and Procurement. Departments and agencies shall:
  - Improve timely acquisition and deployment of space systems through enhancements in estimating costs, technological risk and maturity, and industrial base capabilities;
  - Reduce programmatic risk through improved management of requirements and by taking advantage of cost-effective opportunities to test high-risk components, payloads, and technologies in space or relevant environments;
  - Embrace innovation to cultivate and sustain an entrepreneurial U.S. research and development environment; and
  - Engage with industrial partners to improve processes and effectively manage the supply chains.
- **Strengthen Interagency Partnerships.** Departments and agencies shall improve their partnerships through cooperation, collaboration, information sharing, and/or alignment of common pursuits. Departments and agencies shall make their capabilities and expertise available to each other to strengthen our ability to achieve national goals, identify desired outcomes, leverage U.S. capabilities, and develop implementation and response strategies.

#### **International Cooperation**

**Strengthen U.S. Space Leadership.** Departments and agencies, in coordination with the Secretary of State, shall:

- Demonstrate U.S. leadership in space-related for and activities to: reassure allies of U.S. commitments to collective self-defense; identify areas of mutual interest and benefit; and promote U.S. commercial space regulations and encourage interoperability with these regulations;
- Lead in the enhancement of security, stability, and responsible behavior in space;
- Facilitate new market opportunities for U.S. commercial space capabilities and services, including commercially viable terrestrial applications that rely on government-provided space systems;
- Promote the adoption of policies internationally that facilitate full, open, and timely access to government environmental data;

- Promote appropriate cost- and risk-sharing among participating nations in international partnerships; and
- Augment U.S. capabilities by leveraging existing and planned space capabilities of allies and space partners.

**Identify Areas for Potential International Cooperation.** Departments and agencies shall identify potential areas for international cooperation that may include, but are not limited to: space science; space exploration, including human space flight activities; space nuclear power to support space science and exploration; space transportation; space surveillance for debris monitoring and awareness; missile warning; Earth science and observation; environmental monitoring; satellite communications; GNSS; geospatial information products and services; disaster mitigation and relief; search and rescue; use of space for maritime domain awareness; and long-term preservation of the space environment for human activity and use.

The Secretary of State, after consultation with the heads of appropriate departments and agencies, shall carry out diplomatic and public diplomacy efforts to strengthen understanding of, and support for, U.S. national space policies and programs and to encourage the foreign use of U.S. space capabilities, systems, and services.

**Develop Transparency and Confidence-Building Measures.** The United States will pursue bilateral and multilateral transparency and confidence-building measures to encourage responsible actions in, and the peaceful use of, space. The United States will consider proposals and concepts for arms control measures if they are equitable, effectively verifiable, and enhance the national security of the United States and its allies.

#### Preserving the Space Environment and the Responsible Use of Space

**Preserve the Space Environment.** For the purposes of minimizing debris and preserving the space environment for the responsible, peaceful, and safe use of all users, the United States shall:

- Lead the continued development and adoption of international and industry standards and policies to minimize debris, such as the United Nations Space Debris Mitigation Guidelines;
- Develop, maintain, and use space situational awareness (SSA) information from commercial, civil, and national security sources to detect, identify, and attribute actions in space that are contrary to responsible use and the long-term sustainability of the space environment;
- Continue to follow the United States Government Orbital Debris Mitigation Standard Practices, consistent with mission requirements and cost effectiveness, in the procurement and operation of spacecraft, launch services, and the conduct of tests and experiments in space;
- Pursue research and development of technologies and techniques, through the Administrator
  of the National Aeronautics and Space Administration (NASA) and the Secretary of Defense, to
  mitigate and remove on-orbit debris, reduce hazards, and increase understanding of the current
  and future debris environment; and

 Require the head of the sponsoring department or agency to approve exceptions to the United States Government Orbital Debris Mitigation Standard Practices and notify the Secretary of State.

**Foster the Development of Space Collision Warning Measures.** The Secretary of Defense, in consultation with the Director of National Intelligence, the Administrator of NASA, and other departments and agencies, may collaborate with industry and foreign nations to: maintain and improve space object databases; pursue common international data standards and data integrity measures; and provide services and disseminate orbital tracking information to commercial and international entities, including predictions of space object conjunction.

#### **Effective Export Policies**

Consistent with the U.S. export control review, departments and agencies should seek to enhance the competitiveness of the U.S. space industrial base while also addressing national security needs.

The United States will work to stem the flow of advanced space technology to unauthorized parties. Departments and agencies are responsible for protecting against adverse technology transfer in the conduct of their programs.

The United States Government will consider the issuance of licenses for space-related exports on a case-by-case basis, pursuant to, and in accordance with, the International Traffic in Arms Regulations, the Export Administration Regulations, and other applicable laws, treaties, and regulations. Consistent with the foregoing space-related items that are determined to be generally available in the global marketplace shall be considered favorably with a view that such exports are usually in the national interests of the United States.

Sensitive or advanced spacecraft-related exports may require a government-to-government agreement or other acceptable arrangement.

#### Space Nuclear Power

The United States shall develop and use space nuclear power systems where such systems safely enable or significantly enhance space exploration or operational capabilities.

Approval by the President or his designee shall be required to launch and use United States Government spacecraft utilizing nuclear power systems either with a potential for criticality or above a minimum threshold of radioactivity, in accordance with the existing interagency review process. To inform this decision, the Secretary of Energy shall conduct a nuclear safety analysis for evaluation by an ad hoc Interagency Nuclear Safety Review Panel that will evaluate the risks associated with launch and in-space operations.

The Secretary of Energy shall:

- Assist the Secretary of Transportation in the licensing of space transportation activities involving spacecraft with nuclear power systems;
- Provide nuclear safety monitoring to ensure that operations in space are consistent with any safety evaluations performed; and

 Maintain the capability and infrastructure to develop and furnish nuclear power systems for use in United States Government space systems.

#### Radiofrequency Spectrum and Interference Protection

The United States Government shall:

- Seek to protect U.S. global access to, and operation in, the radiofrequency spectrum and related
  orbital assignments required to support the use of space by the United States Government, its
  allies, and U.S. commercial users;
- Explicitly address requirements for radiofrequency spectrum and orbital assignments prior to approving acquisition of space capabilities;
- Seek to ensure the necessary national and international regulatory frameworks will remain in place over the lifetime of the system;
- Identify impacts to government space systems prior to reallocating spectrum for commercial, federal, or shared use;
- Enhance capabilities and techniques, in cooperation with civil, commercial, and foreign partners, to identify, locate, and attribute sources of radio frequency interference, and take necessary measures to sustain the radiofrequency environment in which critical U.S. space systems operate; and
- Seek appropriate regulatory approval under U.S. domestic regulations for United States Government earth stations operating with commercially owned satellites, consistent with the regulatory approval granted to analogous commercial earth stations.

#### Assurance and Resilience of Mission-Essential Functions

The United States shall:

- Assure space-enabled mission-essential functions by developing the techniques, measures, relationships, and capabilities necessary to maintain continuity of services;
  - Such efforts may include enhancing the protection and resilience of selected spacecraft and supporting infrastructure;
- Develop and exercise capabilities and plans for operating in and through a degraded, disrupted, or denied space environment for the purposes of maintaining mission-essential functions; and
- Address mission assurance requirements and space system resilience in the acquisition of future space capabilities and supporting infrastructure.

## Sector Guidelines

United States space activities are conducted in three distinct but interdependent sectors: commercial, civil, and national security.

#### **Commercial Space Guidelines**

The term "commercial," for the purposes of this policy, refers to space goods, services, or activities provided by private sector enterprises that bear a reasonable portion of the investment risk and responsibility for the activity, operate in accordance with typical market-based incentives for controlling cost and optimizing return on investment, and have the legal capacity to offer these goods or services to existing or potential nongovernmental customers. To promote a robust domestic commercial space industry, departments and agencies shall:

- Purchase and use commercial space capabilities and services to the maximum practical extent when such capabilities and services are available in the marketplace and meet United States Government requirements;
- Modify commercial space capabilities and services to meet government requirements when
  existing commercial capabilities and services do not fully meet these requirements and the
  potential modification represents a more cost-effective and timely acquisition approach for
  the government;
- Actively explore the use of inventive, nontraditional arrangements for acquiring commercial space goods and services to meet United States Government requirements, including measures such as public-private partnerships, hosting government capabilities on commercial spacecraft, and purchasing scientific or operational data products from commercial satellite operators in support of government missions;
- Develop governmental space systems only when it is in the national interest and there is no suitable, cost-effective U.S. commercial or, as appropriate, foreign commercial service or system that is or will be available;
- Refrain from conducting United States Government space activities that preclude, discourage, or compete with U.S. commercial space activities, unless required by national security or public safety;
- Pursue potential opportunities for transferring routine, operational space functions to the commercial space sector where beneficial and cost-effective, except where the government has legal, security, or safety needs that would preclude commercialization;
- Cultivate increased technological innovation and entrepreneurship in the commercial space sector through the use of incentives such as prizes and competitions;
- Ensure that United States Government space technology and infrastructure are made available
  for commercial use on a reimbursable, noninterference, and equitable basis to the maximum
  practical extent;

- Minimize, as much as possible, the regulatory burden for commercial space activities and ensure that the regulatory environment for licensing space activities is timely and responsive;
- Foster fair and open global trade and commerce through the promotion of suitable standards and regulations that have been developed with input from U.S. industry;
- Encourage the purchase and use of U.S. commercial space services and capabilities in international cooperative arrangements; and
- Actively promote the export of U.S. commercially developed and available space goods and services, including those developed by small- and medium-sized enterprises, for use in foreign markets, consistent with U.S. technology transfer and nonproliferation objectives.

The United States Trade Representative (USTR) has the primary responsibility in the Federal Government for international trade agreements to which the United States is a party. USTR, in consultation with other relevant departments and agencies, will lead any efforts relating to the negotiation and implementation of trade disciplines governing trade in goods and services related to space.

#### **Civil Space Guidelines**

#### **Space Science, Exploration, and Discovery**

The Administrator of NASA shall:

- Set far-reaching exploration milestones. By 2025, begin crewed missions beyond the moon, including sending humans to an asteroid. By the mid-2030s, send humans to orbit Mars and return them safely to Earth;
- Continue the operation of the International Space Station (ISS), in cooperation with its international partners, likely to 2020 or beyond, and expand efforts to: utilize the ISS for scientific, technological, commercial, diplomatic, and educational purposes; support activities requiring the unique attributes of humans in space; serve as a continuous human presence in Earth orbit; and support future objectives in human space exploration;
- Seek partnerships with the private sector to enable safe, reliable, and cost-effective commercial spaceflight capabilities and services for the transport of crew and cargo to and from the ISS;
- Implement a new space technology development and test program, working with industry, academia, and international partners to build, fly, and test several key technologies that can increase the capabilities, decrease the costs, and expand the opportunities for future space activities;
- Conduct research and development in support of next-generation launch systems, including new U.S. rocket engine technologies;
- Maintain a sustained robotic presence in the solar system to: conduct scientific investigations of
  other planetary bodies; demonstrate new technologies; and scout locations for future human
  missions;
- Continue a strong program of space science for observations, research, and analysis of our Sun, solar system, and universe to enhance knowledge of the cosmos, further our understanding

- of fundamental natural and physical sciences, understand the conditions that may support the development of life, and search for planetary bodies and Earth-like planets in orbit around other stars; and
- Pursue capabilities, in cooperation with other departments, agencies, and commercial partners, to detect, track, catalog, and characterize near-Earth objects to reduce the risk of harm to humans from an unexpected impact on our planet and to identify potentially resource-rich planetary objects.

#### **Environmental Earth Observation and Weather**

To continue and improve a broad array of programs of space-based observation, research, and analysis of the Earth's land, oceans, and atmosphere:

- The NASA Administrator, in coordination with other appropriate departments and agencies, shall conduct a program to enhance U.S. global climate change research and sustained monitoring capabilities, advance research into and scientific knowledge of the Earth by accelerating the development of new Earth observing satellites, and develop and test capabilities for use by other civil departments and agencies for operational purposes.
- The Secretary of Commerce, through the National Oceanic and Atmospheric Administration (NOAA) Administrator, and in coordination with the NASA Administrator and other appropriate departments and agencies, shall, in support of operational requirements:
  - Transition mature research and development Earth observation satellites to long-term operations;
  - Use international partnerships to help sustain and enhance weather, climate, ocean, and coastal observation from space; and
  - Be responsible for the requirements, funding, acquisition, and operation of civil operational
    environmental satellites in support of weather forecasting, climate monitoring, ocean and
    coastal observations, and space weather forecasting. NOAA will primarily utilize NASA as the
    acquisition agent for operational environmental satellites for these activities and programs.
- The Secretary of Commerce, through the NOAA Administrator, the Secretary of Defense, through the Secretary of the Air Force, and the NASA Administrator shall work together and with their international partners to ensure uninterrupted, operational polar-orbiting environmental satellite observations. The Secretary of Defense shall be responsible for the morning orbit, and the Secretary of Commerce shall be responsible for the afternoon orbit. The departments shall continue to partner in developing and fielding a shared ground system, with the coordinated programs operated by NOAA. Further, the departments shall ensure the continued full sharing of data from all systems.

#### **Land Remote Sensing**

The Secretary of the Interior, through the Director of the United States Geological Survey (USGS), shall:

• Conduct research on natural and human-induced changes to Earth's land, land cover, and inland surface waters, and manage a global land surface data national archive and its distribution;

- Determine the operational requirements for collection, processing, archiving, and distribution of land surface data to the United States Government and other users; and
- Be responsible, in coordination with the Secretary of Defense, the Secretary of Homeland Security, and the Director of National Intelligence, for providing remote sensing information related to the environment and disasters that is acquired from national security space systems to other civil government agencies.

In support of these critical needs, the Secretary of the Interior, through the Director of the USGS, and the NASA Administrator shall work together in maintaining a program for operational land remote sensing observations.

The NASA and NOAA Administrators and the Director of the USGS shall:

- Ensure that civil space acquisition processes and capabilities are not unnecessarily duplicated;
   and
- Continue to develop civil applications and information tools based on data collected by Earth
  observation satellites. These civil capabilities will be developed, to the greatest extent possible,
  using known standards and open protocols, and the applications will be made available to the
  public.

The Secretary of Commerce, through the Administrator of NOAA, shall provide for the regulation and licensing of the operation of commercial sector remote sensing systems.

#### **National Security Space Guidelines**

The Secretary of Defense and the Director of National Intelligence, in consultation with other appropriate heads of departments and agencies, shall:

- Develop, acquire, and operate space systems and supporting information systems and networks to support U.S. national security and enable defense and intelligence operations during times of peace, crisis, and conflict;
- Ensure cost-effective survivability of space capabilities, including supporting information systems and networks, commensurate with their planned use, the consequences of lost or degraded capability, the threat, and the availability of other means to perform the mission;
- Reinvigorate U.S. leadership by promoting technology development, improving industrial capacity, and maintaining a robust supplier base necessary to support our most critical national security interests;
- Develop and implement plans, procedures, techniques, and capabilities necessary to assure
  critical national security space-enabled missions. Options for mission assurance may include
  rapid restoration of space assets and leveraging allied, foreign, and/or commercial space and
  nonspace capabilities to help perform the mission;
- Maintain and integrate space surveillance, intelligence, and other information to develop accurate and timely SSA. SSA information shall be used to support national and homeland

- security, civil space agencies, particularly human space flight activities, and commercial and foreign space operations;
- Improve, develop, and demonstrate, in cooperation with relevant departments and agencies and commercial and foreign entities, the ability to rapidly detect, warn, characterize, and attribute natural and man-made disturbances to space systems of U.S. interest; and
- Develop and apply advanced technologies and capabilities that respond to changes to the threat environment.

#### The Secretary of Defense shall:

- Be responsible, with support from the Director of National Intelligence, for the development, acquisition, operation, maintenance, and modernization of SSA capabilities;
- Develop capabilities, plans, and options to deter, defend against, and, if necessary, defeat efforts to interfere with or attack U.S. or allied space systems;
- Maintain the capabilities to execute the space support, force enhancement, space control, and force application missions; and
- Provide, as launch agent for both the defense and intelligence sectors, reliable, affordable, and timely space access for national security purposes.

#### The Director of National Intelligence shall:

- Enhance foundational intelligence collection and single- and all-source intelligence analysis;
- Develop, obtain, and operate space capabilities to support strategic goals, intelligence priorities, and assigned tasks;
- Provide robust, timely, and effective collection, processing, analysis, and dissemination of information on foreign space and supporting information system activities;
- Develop and enhance innovative analytic tools and techniques to use and share information from traditional and nontraditional sources for understanding foreign space-related activities;
- Identify and characterize current and future threats to U.S. space missions for the purposes of enabling effective protection, deterrence, and defense;
- Integrate all-source intelligence of foreign space capabilities and intentions with space surveillance information to produce enhanced intelligence products that support SSA;
- Support national defense and homeland security planning and satisfy operational requirements as a major intelligence mission;
- Support monitoring, compliance, and verification for transparency and confidence-building measures and, if applicable, arms control agreements; and
- Coordinate on any radiofrequency surveys from space conducted by United States Government departments or agencies and review, as appropriate, any radiofrequency surveys from space conducted by licensed private sector operators or by state and local governments.