

**§ 18388. Space weather****(a) Findings**

The Congress finds the following:

(1) Space weather events pose a significant threat to modern technological systems.

(2) The effects of severe space weather events on the electric power grid, telecommunications and entertainment satellites, airline communications during polar routes, and space-based position, navigation and timing systems could have significant societal, economic, national security, and health impacts.

(3) Earth and Space Observing satellites, such as the Advanced Composition Explorer, Geostationary Operational Environmental Satellites, Polar Operational Environmental Satellites, and Defense Meteorological Satellites, provide crucial data necessary to predict space weather events.

**(b) Action required**

The Director of OSTP shall—

(1) improve the Nation's ability to prepare, avoid, mitigate, respond to, and recover from potentially devastating impacts of space weather events;

(2) coordinate the operational activities of the National Space Weather Program Council members, including the NOAA Space Weather Prediction Center and the U.S. Air Force Weather Agency; and

(3) submit a report to the appropriate committees of Congress within 180 days after October 11, 2010, that—

(A) details the current data sources, both space- and ground-based, that are necessary for space weather forecasting; and

(B) details the space- and ground-based systems that will be required to gather data necessary for space weather forecasting for the next 10 years.

(Pub. L. 111–267, title VIII, § 809, Oct. 11, 2010, 124 Stat. 2834.)

SUBCHAPTER VIII—AERONAUTICS AND  
SPACE TECHNOLOGY

**§ 18401. Aeronautics research goals**

The Administrator should ensure that NASA maintains a strong aeronautics research portfolio ranging from fundamental research through systems research with specific research goals, including the following:

**(1) Airspace capacity**

NASA's Aeronautics Research Mission Directorate shall address research needs of the Next Generation Air Transportation System, including the ability of the National Airspace System to handle up to 3 times the current travel demand by 2025.

**(2) Environmental sustainability**

The Directorate shall consider and pursue concepts to reduce noise, emissions, and fuel consumption while maintaining high safety standards and shall pursue research related to alternative fuels.

**(3) Aviation safety**

The Directorate shall proactively address safety challenges with new and current air ve-

hicles and with operations in the Nation's current and future air transportation system.

(Pub. L. 111–267, title IX, § 902, Oct. 11, 2010, 124 Stat. 2835.)

**§ 18402. Research collaboration****(a) Department of Defense**

The Administrator shall continue to coordinate with the Secretary of Defense, through the National Partnership for Aeronautics Testing, to develop and implement joint plans for those elements of the Nation's research, development, testing, and engineering infrastructure that are of common interest and use.

**(b) Federal Aviation Administration**

The Administrator shall continue to coordinate with, and work closely with, the Administrator of the Federal Aviation Administration, under the framework of the Senior Policy Council, in development of the Next Generation Air Transportation Program. The Administrator shall encourage the Council to explore areas for greater collaboration, including areas where NASA can help to accelerate the development and demonstration of NextGen technologies.

(Pub. L. 111–267, title IX, § 903, Oct. 11, 2010, 124 Stat. 2835.)

**§ 18403. Goal for Agency space technology**

It is critical that NASA maintain an Agency space technology base that helps align mission directorate investments and supports long term needs to complement mission-directorate funded research and support, where appropriate, multiple users, building upon its Innovative Partnerships Program and other partnering approaches.

(Pub. L. 111–267, title IX, § 904, Oct. 11, 2010, 124 Stat. 2836.)

**§ 18404. National space technology policy****(a) In general**

The President or the President's designee, in consultation with appropriate Federal agencies, shall develop a national policy to guide the space technology development programs of the United States through 2020. The policy shall include national goals for technology development and shall describe the role and responsibilities of each Federal agency that will carry out the policy. In developing the policy, the President or the President's designee shall utilize external studies that have been conducted on the state of United States technology development and have suggested policies to ensure continued competitiveness.

**(b) Content**

(1) At a minimum, the national space technology development policy shall describe for NASA—

(A) the priority areas of research for technology investment;

(B) the basis on which and the process by which priorities for ensuing fiscal years will be selected;

(C) the facilities and personnel needed to carry out the technology development program; and