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# SPACE RESEARCH

## Content and Coordination of Space Science and Technology Strategy Need to Be More Robust

GAO Accountability * Integrity * Reliability

Highlights

Highlights of GAO-11-722, a report to congressional committees

### Why GAO Did This Study

Each year, the United States spends billions of dollars on space-based systems to support national security activities. The National Defense Authorization Act for Fiscal Year 2010 requires the Department of Defense (DOD) and the Director of National Intelligence (DNI) to develop and issue a space science and technology (S&T) strategy every 2 years addressing S&T goals and a process for achieving these goals, among other requirements. As GAO is required to assess the strategy, this report addresses (1) the extent to which the strategy meets the statutory requirements, (2) if other approaches could be used to enhance the usefulness of the strategy, and (3) the extent of coordination efforts used in developing the strategy. GAO reviewed the strategy for sufficiency with statutory requirements and met with DOD and DNI officials to discuss the analyses and coordination used to support the content of the strategy. GAO also compared the strategy to strategic planning best practices to see if there are ways it could be improved.

### What GAO Recommends

GAO recommends that DOD and DNI develop a more specific implementation plan; include additional information and prioritization, ways to measure progress, and processes for revision when establishing strategic planning goals; and enhance coordination among the DOD S&T community, the intelligence community, NASA, and NOAA. DOD concurred with the recommendations and DNI had no comment.

View GAO-11-722 or key components. For more information, contact Cristina Chaplain at (202) 512-4841 or chaplainc@gao.gov.

### What GAO Found

The space science and technology strategy addresses eight statutory requirements, and DOD plans to address the two remaining requirements. While the statutory requirements were addressed, additional information that could have enhanced the strategy was not always included. For example, in relation to the strategy's goals, a newly developed implementation plan for the achievement of the goals was not established. Instead, the strategy describes a plan for implementation where DOD components implement the strategy as a routine element of their existing budgetary process. Also, the strategy's new goals were established without any prioritization, and while this was not required, given the breadth and scope of space S&T development activities, it is important that goals be prioritized. For the statutory requirements involving strategy implementation, officials explained that while the requirements to identify S&T projects with associated funding and schedule information were not addressed in the strategy, components and research laboratories conduct these activities as part of the normal DOD budgetary process.

While the content of the strategy addresses statutory requirements, it does not address fundamental challenges facing the space S&T community. These challenges have been identified in high-level studies and prior GAO reports and include human capital shortages, growing fiscal pressures, and the difficulty in transitioning space S&T to acquisition programs. In this assessment, GAO identified some strategic planning best practices that, if used, could improve future strategy versions by addressing these fundamental challenges and thereby potentially enhancing the usefulness of the strategy. These practices include identifying required human capital; identifying required funding; prioritizing initiatives; establishing ways to measure progress; and establishing processes for revising goals in the future.

Organizations involved in development of the strategy participated in creating its short- and long-term goals; however, their participation in developing other aspects of the strategy was more limited. DOD and DNI officials told GAO that their interpretation of the 2009 statute directing development of the strategy was that it did not require that the intelligence community be involved to the full extent in some aspects of the strategy. Moreover, the National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration (NOAA) together with the intelligence community, conduct a significant amount of space S&T. Although NASA and NOAA participation is not required, DOD may have missed an opportunity to leverage these agencies' activities and optimize its own S&T spending by involving them in strategy development. GAO was also required to evaluate the effectiveness of the coordination mechanisms planned to implement the strategy. However, because the strategy has only recently been issued, it is too early to make such an evaluation.