

# GAO Highlights

Highlights of [GAO-14-382T](#), a testimony before the Subcommittee on Strategic Forces, Committee on Armed Services, U.S. Senate

## Why GAO Did This Study

Each year, DOD spends billions of dollars to acquire space-based capabilities that support military and other government operations. The majority of DOD's space programs were beset by significant cost and schedule growth problems during their development. Most programs are now in production, however, and acquisition problems are not as widespread and significant as they were several years ago. In prior years, GAO has identified a number of actions DOD is taking to improve management and oversight of space program acquisitions. Facing constrained budgets and concerns about the resiliency of its satellites, DOD is considering potential changes to how it acquires space systems.

This testimony focuses on (1) the current status and cost of major DOD space systems acquisitions, (2) recent actions taken to further improve space systems acquisitions, and (3) potential impacts of the direction DOD is taking on upcoming changes to the acquisition of DOD space systems. This testimony is based on previously issued GAO products, ongoing GAO work on disaggregated architectures, interviews with DOD officials, and an analysis of DOD funding estimates from fiscal years 2013 through 2018.

## What GAO Recommends

GAO is not making recommendations in this testimony. However, in previous reports, GAO has generally recommended that DOD adopt best practices for developing space systems. DOD has agreed and is in the process of implementing such practices.

View [GAO-14-382T](#). For more information, contact Cristina Chaplain at (202) 512-4841 or [chaplainc@gao.gov](mailto:chaplainc@gao.gov).

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## SPACE ACQUISITIONS

### Acquisition Management Continues to Improve but Challenges Persist for Current and Future Programs

#### What GAO Found

Most of the Department of Defense's (DOD) major satellite acquisition programs are in later stages of acquisition, with the initial satellites having been designed, produced, and launched into orbit while additional satellites of the same design are being produced. A few other major space programs, however, have recently experienced setbacks. For example: the Missile Defense Agency's Precision Tracking Space System, which was intended to be a satellite system to track ballistic missiles, has been cancelled due to technical, programmatic and affordability concerns; the Air Force's Space Fence program, which is developing a ground-based radar to track Earth-orbiting objects, continues to experience delays in entering development; and the first launch of the new Global Positioning System satellites has been delayed by 21 months.

Congress and DOD continue to take steps they believe will improve oversight and management of space systems acquisitions. In the past year, for example, DOD has updated its major acquisition policy with the goal of improving efficiency and productivity in defense spending. Among other things, the policy change adds a requirement for independent development testing for DOD acquisition programs, which officials believe will provide an independent voice on programs' development. However, DOD still faces significant oversight and management challenges, including (1) leadership of a space community that is comprised of a wide variety of users and stakeholders with diverse interests and (2) alignment of the delivery of satellites with corresponding ground systems and user terminals. For instance, in some cases, gaps in delivery can add up to years, meaning that a satellite is launched but not effectively used for years until ground systems become available. One reason DOD has been unable to align the delivery of space system components is because budgeting authority for the components is spread across the military services.

While most DOD major space system acquisitions have overcome development challenges and are currently being produced and launched, past problems involving large, complicated systems, coupled with the recent fiscal climate of reduced funds, has led DOD to consider efforts that could signal significant changes to the way it acquires and conducts space activities. DOD is considering moving away from its current approach in satellite development—building small numbers of large satellites over a decade or more that meet the needs of many missions and users—toward a more disaggregated architecture involving less complex, smaller, and more numerous satellites. GAO has found that DOD does not yet have sufficient information to make decisions on whether to disaggregate, but it is in the process of gathering that information. In addition, in response to predictions of dramatic increases to the price of launching its satellites, coupled with restrained budgets, DOD has made changes to the way it procures launch vehicles, and is moving forward with plans to allow competition for launch services—a significant shift from past ways of doing business. According to the Air Force, other recent steps in launch acquisitions, including gaining significant insight into launch services cost drivers, have enabled it to achieve significant savings.