

Why GAO Did This Study

Commercial satellites are used by the U.S. government to provide a variety of fixed satellite services, such as military communications. However, the number of satellite operators providing such service has declined since 2000. Further, until recently, three vendors, known as satellite service providers, had sole authority to contract with the Department of Defense (DOD) under its primary satellite contract.

Among other things, GAO was asked to describe (1) changes that have occurred in the fixed satellite services industry since 2000 and the effects these changes could have on the relationship between satellite operators and service providers; (2) the technological, regulatory, and other factors that affect competition in the fixed satellite services industry; and (3) how costs for DOD to acquire fixed satellite services have changed since 2000 and contracting officials' views on the effects of changes in the industry and contracts on costs. To address these objectives, GAO reviewed demand and capacity data, economic literature, and international regulations; analyzed DOD commercial satellite procurement data; and interviewed satellite industry stakeholders.

The Federal Communications Commission, DOD, General Services Administration, and the Departments of Justice and State reviewed a draft of this report. The agencies provided technical comments that GAO incorporated into the report as appropriate.

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TELECOMMUNICATIONS

Competition, Capacity, and Costs in the Fixed Satellite Services Industry

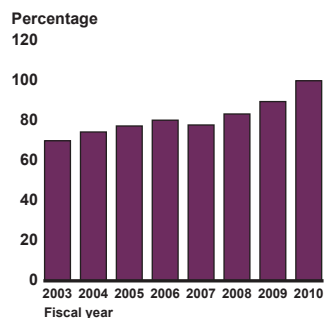
What GAO Found

Since 2000, integration in the fixed satellite services industry has occurred, altering the relationships between satellite operators (owners of satellites) and service providers (resellers of satellite services). Mergers within the industry have resulted in two primary operators—Intelsat and SES—providing service to the United States. In addition, these two satellite operators also acquired U.S. subsidiaries, allowing them to compete against the service providers for government contracts. According to service providers, this change could result in an operator charging a higher price for capacity to the service provider than to its subsidiary, placing the service provider at a competitive disadvantage. Alternatively, the operator may be able to provide capacity more efficiently and at a lower cost than if the customer, such as the U.S. government, acquired the capacity indirectly through a service provider.

A limited number of orbital locations and enforcement mechanisms in international regulations constrain entry into the fixed satellite services industry. A finite number of orbital locations limit the number of satellites in orbit. International regulations have processes in place to promote equitable and efficient access to orbital resources, but the International Telecommunication Union, a United Nations specialized agency, does not have the ability to monitor and enforce these regulations. As a result, administrations (countries) file numerous applications for orbital locations that may not result in the launch of a satellite, preventing other operators from entering the industry due to limited overall slots.

DOD's costs to acquire fixed satellite services have increased significantly since 2003, but contracting officials expect a new contract to increase competition. According to GAO's analysis of DOD data, the real cost per megahertz of bandwidth was 30 percent lower in fiscal year 2003, and lower in all intervening years, than in fiscal year 2010. Contracting officials attribute the higher costs to market factors, such as demand and availability of bandwidth, and expect a new government contract to increase competition, which may exert downward pressure on the government's costs.

Estimated Real Cost per Megahertz of Bandwidth for DOD Task Orders as a Percentage of Estimated Costs for Fiscal Year 2010



Source: GAO analysis of DOD data.

Note: GAO derived these estimates from a regression model using data from 2001 through March 2011. Data for 2001, 2002, and 2011 were omitted from this figure as the estimates were not statistically significant at the 5 percent confidence level.