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Highlights

Highlights of [GAO-06-236](#), a report to congressional committees

Why GAO Did This Study

The radio-frequency spectrum is a natural resource used to provide an array of wireless communications services, such as television broadcasting, which are critical to the U.S. economy and national security. In 1993, the Congress gave the Federal Communications Commission (FCC) authority to use competitive bidding, or auctions, to assign spectrum licenses to commercial users.

The Commercial Spectrum Enhancement Act required GAO to examine FCC's commercial spectrum licensing process. Specifically, GAO examined the (1) characteristics of the current spectrum allocation process for commercial uses; (2) impact of the assignment process—specifically the adoption of auctions to assign spectrum licenses—on end-user prices, infrastructure deployment, competition, and entry and participation of small businesses; and (3) options for improving spectrum management.

What GAO Recommends

In 2003, GAO recommended that an independent commission examine spectrum management. In this report, GAO recommends that the Congress consider extending FCC's auction authority beyond the current expiration date of September 30, 2007. FCC provided technical comments on this report and OMB generally agreed with the report.

www.gao.gov/cgi-bin/getrpt?GAO-06-236.

To view the full product, including the scope and methodology, click on the link above. For more information, contact JayEtta Z. Hecker at (202) 512-2834 or heckerj@gao.gov.

TELECOMMUNICATIONS

Strong Support for Extending FCC's Auction Authority Exists, but Little Agreement on Other Options to Improve Efficient Use of Spectrum

What GAO Found

The current spectrum allocation process is largely characterized as a “command-and-control” process, in which the government largely dictates how the spectrum is used. Many stakeholders we spoke with, along with panelists on our expert panel, identified a number of weaknesses of the existing spectrum allocation process, including that the current process is slow and leads to underutilization of the spectrum. FCC staff have identified two alternative allocation models: the “exclusive, flexible rights” model—which would extend the existing process by providing greater flexibility to spectrum license holders—and the “open-access” (or “commons”) model—which would allow an unlimited number of unlicensed users to share spectrum. While little consensus exists about fully adopting either alternative model, FCC staff, as well as many stakeholders and panelists on our expert panel, recommend a balanced approach that would combine elements of the current process and the two alternative models.

FCC's use of auctions to assign spectrum appears to have little to no negative impact on end-user prices, infrastructure deployment, and competition; evidence on how auctions impact the entry and participation of small businesses is less clear. Additionally, FCC's implementation of auctions has mitigated problems associated with comparative hearings and lotteries, which FCC previously used to assign licenses. In particular, auctions are quicker, less costly, and more transparent. Finally, secondary markets provide an additional mechanism for companies to acquire licenses and gain access to spectrum, and FCC has undertaken actions to facilitate secondary-market transactions, such as streamlining the approval process for leases.

Industry stakeholders and panelists on our expert panel offered a number of options for improving spectrum management. The most frequently cited options include (1) extending FCC's auction authority, (2) reexamining the use and distribution of spectrum—such as between commercial and governmental use—to enhance the efficient and effective use of this important resource, and (3) ensuring flexibility in commercially licensed spectrum bands. Stakeholders and panelists on our expert panel overwhelmingly supported extending FCC's auction authority; however, there was little consensus on the other identified options for improvement.

Images Depicting Common Uses of Spectrum



Source: GAO.