

GAO Highlights

Highlights of [GAO-22-104537](#), a report to the Committee on Energy and Commerce, House of Representatives

Why GAO Did This Study

Almost all spectrum has been allocated for the federal government, commercial sector, or other nonfederal use. However, the demand for spectrum continues to grow, especially from the commercial sector as it seeks to deploy and improve 5G mobile service. NTIA is responsible for managing the federal government's spectrum use and plays a key role alongside the Federal Communications Commission (FCC) and other federal agencies in helping to reallocate federal spectrum for commercial use.

GAO was asked to review NTIA's spectrum management activities. This report examines, among other objectives, the extent to which NTIA (1) has developed a planning process for spectrum reallocations and (2) identified and assessed the competencies needed to manage federal spectrum's use. GAO reviewed relevant NTIA documentation and compared it with applicable leading practices. GAO interviewed officials from NTIA and other agencies, representing a variety of non-generalizable viewpoints.

What GAO Recommends

GAO is making three recommendations, including that NTIA should develop plans for executing spectrum reallocations and assess its workforce for competency gaps in key spectrum management occupations. The Department of Commerce concurred with the recommendations.

View [GAO-22-104537](#). For more information, contact Andrew Von Ah at (202) 512-2834 or vonaha@gao.gov.

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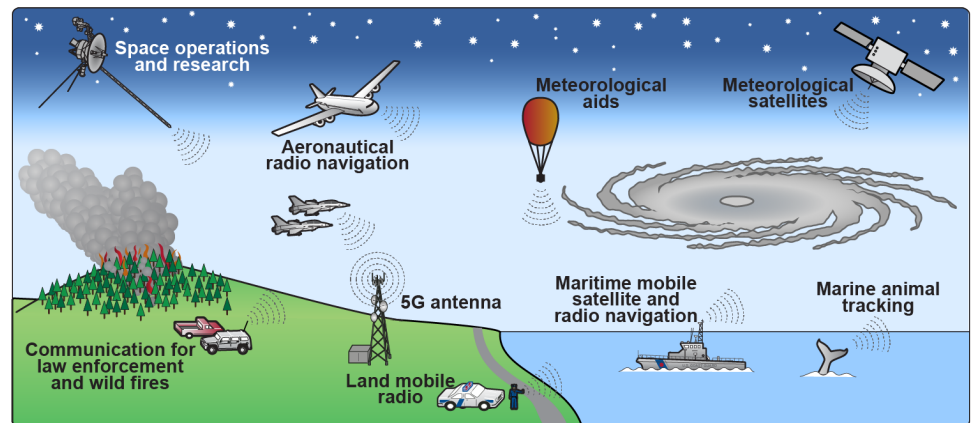
SPECTRUM MANAGEMENT

NTIA Should Improve Spectrum Reallocation Planning and Assess Its Workforce

What GAO Found

Spectrum is a finite natural resource that enables wireless communications and critical government operations, such as those shown in the figure below. Within the Department of Commerce, the National Telecommunications and Information Administration (NTIA) works with other agencies to execute spectrum reallocations, which involve making spectrum used by the federal government available to nonfederal users. However, GAO found NTIA lacks a formalized planning process for these reallocations, even though they can be complex, often lengthy undertakings involving many stakeholders and steps. For reallocations, NTIA typically collects input from those agencies whose use of spectrum would be affected by a proposed reallocation. NTIA may also help agencies conduct technical evaluations of a reallocation's potential effects on the agencies' spectrum-dependent operations. While NTIA follows some usual steps in conducting reallocations, GAO found that NTIA lacks plans with objectives and targets, integrated master schedules, and risk assessments. By following leading practices in program management, NTIA may be able to more effectively implement reallocations by considering necessary steps, risks, and the likely timeframes involved.

Examples of Federal and Nonfederal Spectrum Uses



Source: GAO analysis of National Telecommunications and Information Administration information. | GAO-22-104537

NTIA has identified the competencies needed to manage federal spectrum's use, but it has not fully assessed its workforce for competency gaps. NTIA relies on a highly skilled and specialized workforce to undertake its spectrum management responsibilities and especially relies on electronic engineers and telecommunications specialists. NTIA officials told GAO that NTIA annually assesses whether there are competency gaps for individual positions. However, NTIA does not aggregate individual-level competency assessments to determine whether gaps exist on an organization level, as called for by leading practices. By assessing organization-level gaps in critical competencies on a recurring basis and then addressing them through hiring, training, or other strategies, NTIA could better ensure its spectrum management workforce is capable of successfully achieving NTIA's mission.