

GAO Highlights

Highlights of [GAO-24-106634](#), a report to congressional committees

Why GAO Did This Study

Use of the radio-frequency spectrum is vital to a wide variety of commercial and government activities. To manage use for the federal government, NTIA relies on multiple, spectrum-related IT systems, that, according to agency officials, are out-of-date and ineffective. The William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (FY21 NDAA) required NTIA to submit to Congress a plan to modernize its spectrum-related IT. Other agencies with their own required spectrum-related IT modernization plans are expected to coordinate with NTIA to help ensure interoperability among systems.

The FY21 NDAA also includes a provision for GAO to biennially review NTIA's and other agencies' efforts to modernize their spectrum-related IT. This report examines (1) the status of NTIA's and selected agencies' efforts to modernize their spectrum-related IT and (2) the extent to which NTIA's IT modernization project planning aligns with selected leading practices. GAO reviewed IT modernization plans and other agency documentation; and assessed NTIA's project planning efforts against selected leading practices.

What GAO Recommends

GAO is making four recommendations to NTIA to develop a reliable cost estimate, develop an integrated project schedule, finalize its stakeholder management plan, and establish performance measures. NTIA concurred with GAO's four recommendations and described activities it would undertake to implement them.

View [GAO-24-106634](#). For more information, contact Andrew Von Ah at (202) 512-2834 or VonahA@gao.gov.

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SPECTRUM IT MODERNIZATION

Incorporating Leading Practices Could Improve Planning Effort

What GAO Found

The National Telecommunications and Information Administration (NTIA) manages federal use of spectrum, a scarce natural resource. NTIA and selected federal agencies and agency components have planning underway to modernize the outdated IT systems used to manage spectrum. NTIA has issued an initial high-level modernization plan, identified the IT systems to modernize, and placed a contract order for acquisition planning support. Before proceeding to the next phase on design, NTIA has to complete a number of activities including finalizing a concept of operations, assessing alternatives, and developing project management plans. Four other agencies and components are in the planning or pre-planning phases of modernizing their own spectrum-related IT. For example:

- Department of Defense officials told us they awarded a contract to analyze the department's spectrum IT and identify ways to improve it.
- National Science Foundation officials said they have funded a project to streamline the processing of spectrum use requests.
- The Federal Aviation Administration and National Aeronautics and Space Administration do not plan to begin modernization planning until more details become available from NTIA.

GAO's analysis of NTIA's modernization planning found that its efforts aligned with several leading practices but did not align for practices on developing cost estimates, developing a project schedule, communicating with stakeholders, and establishing performance measures.

Extent to Which NTIA Spectrum-Related IT Modernization Project Planning Efforts Aligned with Selected Leading Practices

Leading practice	GAO assessment
Designate leadership and establish an implementation team	✓
Secure a funding source	✓
Establish outcome-oriented goals	✓
Establish processes for adapting plans and reporting progress to management	✓
Develop cost-estimates	✗
Develop a project plan and timelines	✗
Involve and communicate with external stakeholders in appropriate time intervals	✗
Establish performance measures	✗

✓ **Aligned:** An effort is aligned if the underlying activities generally reflected all or almost all of the key elements in the leading practice.

✗ **Not Aligned:** An effort is not aligned if the underlying activities did not generally reflect all or almost all of the key elements in the leading practice or if the underlying activities were not fully completed.

Source: GAO analysis of National Telecommunications and Information Administration (NTIA) documentation. | GAO-24-106634

NTIA officials acknowledged that additional work was needed to implement the practices and complete other required planning steps. Effectively doing so would position the agency to implement a successful modernization.