



Highlights of [GAO-06-955](#), a report to congressional committees

Why GAO Did This Study

In 1997, the Department of Defense (DOD) initiated the Joint Tactical Radio System (JTRS) program, a key element of its effort to transform military operations to be network centric. Using emerging software-defined radio technology, the JTRS program plans to develop and procure hundreds of thousands of radios that give warfighters the capability to access maps and other visual data, communicate via voice and video, and obtain information directly from battlefield sensors.

The JTRS program has encountered a number of problems, resulting in significant delays and cost increases. The program is currently estimated to total about \$37 billion. Given the criticality of JTRS to DOD's force transformation, Congress directed GAO to continue its ongoing review of the JTRS program. This report (1) assesses whether a recent restructuring puts the program in a better position to succeed and (2) identifies any risks that challenge the successful fielding of JTRS.

What GAO Recommends

GAO is making recommendations aimed at ensuring that the activities required for completing the JTRS restructuring reflect stable requirements, knowledge-based acquisition strategies, realistic costs, and comprehensive test plans, as well as to develop plans for fielding JTRS radios. In commenting on a draft of this report, DOD agreed with these recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-06-955.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Paul L. Francis at (202) 512-4841 or francisp@gao.gov.

DEFENSE ACQUISITIONS

Restructured JTRS Program Reduces Risk, but Significant Challenges Remain

What GAO Found

The proposed JTRS restructuring—a plan DOD approved in March 2006—appears to address and reduce program risks that GAO and others have documented in recent years. While still meeting key requirements, including those related to DOD's network centric transformation effort, the revised approach is expected to develop and field capabilities in increments rather than attempting to develop and field the capabilities all at once. Costly and non-transformational requirements will be deferred to later increments. Deferring these requirements will allow more time to mature critical technologies, integrate components, and test the radio system before committing to production. JTRS program management has also been strengthened through the establishment of a Joint Program Executive Office (JPEO). The more centralized management structure should help the program improve oversight and coordination of standards, system engineering, and development of the radios.

The real test will be in execution, and, for that, several management and technical challenges remain. First, JPEO must finalize the details of the restructuring, including formal acquisition strategies, independent cost estimates, and test and evaluation plans. DOD also needs to develop migration and fielding plans for how JTRS networking capabilities will be used. Completing and obtaining DOD's approval of these activities is needed to ensure the JTRS program is executable. There are also a number of longer-term technical challenges that the JTRS program must address. For example, the proposed interim solutions for enabling network interoperability among different JTRS variants have yet to be developed. In addition, integrating the radio's hardware onto diverse platforms and meeting respective size, weight, and power limitations has also been a long-standing challenge that must be overcome. Furthermore, operating in a networked environment open to a large number of potential users has generated an unprecedented need for information assurance. This need has resulted in a lengthy, technically challenging, and still evolving certification process from the National Security Agency. At the same time, the program must address the need to obtain and sustain commitments and support from the military services and other stakeholders—a challenge that has often hampered joint development efforts in the past. The extent to which DOD overcomes these challenges will determine the extent to which the program manages cost, schedule, and performance risks and supports JTRS-dependent military operations.