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GAO
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Highlights

Highlights of GAO-13-179, a report to congressional requesters

ARMY NETWORKS

Size and Scope of Modernization Investment Merit Increased Oversight

Why GAO Did This Study

For nearly 20 years, the Army has had limited success in developing an information network—sensors, software, and radios—to give soldiers the exact information they need, when they need it, in any environment. Such a network is expected to improve situational awareness and decision making in combat. Under its network modernization strategy, the Army is implementing a new agile process intended to leverage industry technology solutions. The Army estimates that it will require about $3.8 billion in fiscal 2013. As requested, this report addresses the extent to which (1) the Army's network strategy and agile process addresses cost, technology maturity, security, and readiness; and (2) the Army's strategy faces other risks and challenges. To conduct this work, GAO analyzed key documents, observed testing activities, and interviewed acquisition officials.

What GAO Recommends

To help ensure adequate oversight, GAO recommends that the Secretary of Defense (1) define quantifiable outcome-based performance metrics for network equipment; (2) develop a plan for future network evaluations to determine if those measures have been met; and (3) evaluate fielded network performance and make recommendations for adjustments, as necessary. GAO also recommends that the Secretary of Defense consolidate Army tactical network budget elements and justifications into a single area of the Army budget submittal. DOD generally concurred with these recommendations and stated that it has initiated actions to address several of the challenges identified in the report.

View GAO-13-179. For more information, contact Belva M. Martin at (202) 512-4841 or martinb@gao.gov.

What GAO Found

The Army has taken a number of steps to begin executing its network strategy and agile process, including establishing a baseline network architecture for Army communications. The Army's agile process involves seven phases and three decision points to allow officials to quickly evaluate emerging networking technologies to determine if they address capability gaps and can be deployed to the field. However, the network strategy is still evolving and the Army has not yet executed one full cycle of the agile process. The Army's strategy addresses some aspects of cost, technology maturity, security, and readiness, but as implementation is still under way, data for assessing progress are not available at this time. Nevertheless, the Army is beginning to spend billions of dollars netting together dozens of disparate systems to form a network that is intended to enhance warfighter effectiveness and survivability. Specifically, the Army has identified that over $3 billion will be needed each year on an indefinite basis for investments in networking capabilities, potentially making it one of the Army's most costly investments. To help determine that technologies meet prescribed levels of technical maturity, the Army has established a laboratory-based screening process for evaluating technologies, and those that show promise move to evaluations in a realistic environment with soldiers and testers. To help provide security and information assurance, the Army is working with contractors and the National Security Agency to obtain appropriate certifications prior to fielding new networking technologies. Furthermore, the Army is attempting to align the procurement and fielding of networking systems with the relatively fixed schedules for equipping and training units before they are deployed. The challenge will be to ensure that the equipment being sent to the field has been thoroughly demonstrated and that fielding decisions are not made solely to accommodate deployment cycles.

The overall scope and cost of the Army's new network strategy, as well as other factors unique to the strategy, present significant risks and challenges and deserve high-level oversight attention by both the Army and the Department of Defense (DOD). For example, the Army wants to field smaller quantities with greater frequency to be able to take advantage of new and improved capabilities as they become available, thus avoiding long-term procurements of outdated technology and potentially helping to realize savings in development, testing, and maintenance costs. However, the Army is still weighing funding and contracting options that would allow it to accomplish this goal while adhering to established acquisition and budget processes that may require long lead time to acquire these technologies. DOD guidance calls for measuring actual contributions of information technology portfolios, which includes the Army network, against established outcome-based performance measures to determine improved capability and allow for adjustments in the mix of portfolio investments. Senior DOD officials provided extensive input on the soundness of individual network components and the schedule for fielding equipment and have offered that future evaluations in an operational environment present a good opportunity to evaluate the overall performance of the network. However, the Army and DOD have not yet fully defined quantifiable network performance measures or plans to periodically review and evaluate the actual effectiveness of new Army network capabilities. Inadequate oversight of the portfolio could put the investment at risk. Finally, budget justification and other planning materials for network equipment—over 50 research and development and procurement budget elements—are not organized to provide insight into the budget for and affordability of the entire network. Given the magnitude and financial commitment envisioned, a consolidated reporting and budgeting framework could yield more consistency and clarity in the justifications for Army network initiatives and facilitate congressional oversight.