

Highlights of GAO-13-711, a report to the Subcommittee on Tactical Air and Land Forces, Committee on Armed Services, House of Representatives

Why GAO Did This Study

In 2011, the Army began a major undertaking to modernize its tactical network to improve communication and provide needed information to soldiers on the battlefield. The Army has identified the network as its number one modernization priority requiring approximately \$3 billion per year indefinitely. NIEs provide semi-annual assessments of newly developed systems. Given the importance of the network, GAO was asked to examine elements of the process the Army is using to acquire network capabilities. This report examines (1) the results of the NIEs conducted to date and the extent to which the Army has procured and fielded network solutions, and (2) Army actions to enhance the NIE process. To conduct this work, GAO analyzed key documents, observed testing activities, and interviewed acquisition and testing officials.

What GAO Recommends

To improve outcomes for the Army's network modernization strategy, GAO recommends that the Secretary of Defense direct the Army to (1) require successful developmental testing before moving to operational testing at an NIE, (2) correct issues identified during testing at NIEs prior to buying and fielding systems, (3) provide results to industry on Army's efforts to rapidly acquire emerging capabilities, and (4) pursue additional opportunities for collaboration with the test community on the NIEs. DOD agreed with the recommendations to varying degrees, but generally did not offer specific actions to address them. GAO believes all recommendations remain valid.

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ARMY NETWORKS

Opportunities Exist to Better Utilize Results from Network Integration Evaluations

What GAO Found

Since 2011, the Army has conducted five Network Integration Evaluations (NIE), which have provided extensive information and insights into current network capabilities and potential solutions to fill network capability gaps. According to senior Department of Defense (DOD) test officials, the NIE objective to test and evaluate network components together in a combined event is sound, as is the opportunity to reduce overall test and evaluation costs by combining test events. Further, the NIEs offer the opportunity for a more comprehensive evaluation of the broader network instead of piecemeal evaluation of individual network components. However, the Army is not taking full advantage of the potential knowledge that could be gained from the NIEs, and some resulting Army decisions are at odds with knowledge accumulated during the NIEs. For example, despite poor results in developmental testing, the Army moved forward to operational testing for several systems during the NIEs and they demonstrated similarly poor results. Yet the Army plans to buy and field several of these systems. Doing so increases the risk of poor performance in the field and the need to correct and modify deployed equipment. On the other hand, the Army has evaluated many emerging network capabilities—with generally favorable results—but has bought very few of them, in large part because it did not have a strategy to buy these promising technologies. Army officials have stated that the success of network modernization depends heavily on industry involvement but, with few purchases, it is unclear whether industry will remain interested. Finally, the Army has not yet developed metrics to determine how network performance has improved over time, as GAO recommended in an earlier report.

The Army has several actions under way or planned to enhance the NIE process and has further opportunities to collaborate with the test community. The Army has identified issues in the NIE process and its network modernization strategy that were causing inefficiencies or less-than-optimal results and has begun implementing actions to mitigate some of those issues. For example, the Army has begun performing technology evaluations, and integration of vendor systems in a lab environment to weed out immature systems before they get to the NIE. The Army has also developed a strategy and has an acquisition plan to address requirements, funding, and competition issues that will help enable it to buy emerging capabilities rapidly. However, the Army will need to validate the new strategy and plan and provide results to industry, which could help to manage industry expectations about how many of and how quickly it can buy these capabilities. DOD has started to identify and evaluate network metrics and to refocus NIEs to gather additional data and insights. Taking these actions will ultimately allow the periodic review and evaluation of the actual effectiveness of network capabilities and the likely effectiveness of proposed investments. The test community has worked closely with the Army on the NIEs but has also voiced various concerns about the NIEs including their being a schedule-driven event. Tension between the acquisition and test communities has been long-standing. Additional opportunities exist for Army leadership and the test community to work together to further improve NIE execution and results and to reduce tensions between the two communities. A good starting point for the Army would be to take a fresh look at the test community observations and recommendations from previous NIEs.