

Highlights of GAO-05-442T, a testimony before the Subcommittee on Airland, Committee on Armed Services, U.S. Senate

## Why GAO Did This Study

FCS is the core of Army efforts to create a lighter, more agile and capable force: a \$108 billion investment to provide a new generation of 18 manned and unmanned ground vehicles, air vehicles, sensors, and munitions linked by an information network. Although system development and demonstration began in May 2003, the program was restructured in July 2004, including processes to make FCS capabilities available to current forces.

GAO has been asked to assess (1) FCS technical and managerial challenges; (2) prospects for delivering FCS within cost and scheduled objectives; and (3) options for proceeding.

## DEFENSE ACQUISITIONS

## Future Combat Systems Challenges and Prospects for Success

## What GAO Found

In its unprecedented complexity, FCS confronts the Army with significant technical and managerial challenges in its requirements, development, finance, and management. Technical challenges include the need for FCS vehicles to be smaller, weigh less, and be as lethal and survivable as current vehicles, which requires (1) a network to collect and deliver vast amounts of intelligence and communications information and (2) individual systems, such as manned ground vehicles, that are as complex as fighter aircraft. Its cost will be very high: its first increment—enough to equip about one-third of the force—will cost over \$108 billion, with annual funding requests running from \$3 billion to \$9 billion per year. The program's pace and complexity also pose significant management challenges. The Army is using a Lead System Integrator to manage FCS and is using a contracting instrument—Other Transaction Agreement—that allows for more flexible negotiation of roles, responsibilities, and rights with the integrator.

FCS is at significant risk for not delivering required capability within budgeted resources. Currently, about 9½ years is allowed from development start to production decision. DOD typically needs this period of time to develop a single advanced system, yet FCS is far greater in scope. The program's level of knowledge is far below that suggested by best practices or DOD policy: Nearly 2 years after program launch and with \$4.6 billion invested, requirements are not firm and only 1 of over 50 technologies is mature. As planned, the program will attain the level of knowledge in 2008 that it should have had in 2003. But things are not going as planned. Progress in critical areas—such as the network, software, and requirements—has in fact been slower, and FCS is therefore likely to encounter problems late in development, when they are very costly to correct. Given the scope of the program, the impact of cost growth could be dire.

To make FCS an effective acquisition program, different approaches must be considered, including (1) setting the first stage of the program to demonstrate a worthwhile military capability, mature technology, and firm requirements; and (2) bundling its other capabilities into advanced technology demonstrations until they can be put into a future stage, which will provide guidance for decisions on requirements, lower the cost of development, and make for more reasonable cost and schedule estimates for future stages.

www.gao.gov/cgi-bin/getrpt?GAO-05-442T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Paul Francis at (202) 512-2811 or francisp@gao.gov.