DEFENSE ACQUISITIONS:

Key Considerations for Planning Future Army Combat Systems

What GAO Found

The Army will be challenged to demonstrate the knowledge needed to warrant an unqualified commitment to the FCS program at the 2009 milestone review. While the Army has made progress, knowledge deficiencies remain in key areas. Specifically, all critical technologies are not currently at a minimum acceptable level of maturity. Neither has it been demonstrated that emerging FCS system designs can meet specific requirements or mitigate associated technical risks. Actual demonstrations—versus modeling and simulation results—have been limited, with only small scale warfighting concepts and limited prototypes demonstrated. Network performance is also largely unproven. These deficiencies do not necessarily represent problems that could have been avoided; rather, they reflect the actual maturity of the program. Finally, there is an existing tension between program costs and available funds that will likely worsen, as FCS costs are likely to increase at the same time as competition for funds intensifies between near- and far-term needs in DOD and between DOD and other federal agencies.

DOD could have at least three programmatic directions to consider for shaping investments in future capabilities, each of which presents challenges. First, the current FCS acquisition strategy is unlikely to be executable with remaining resources and calls for significant production commitments before designs are demonstrated. To date, FCS has spent about 60 percent of its development funds, even though the most expensive activities remain to be completed before the production decision. In February 2010, Congress will be asked to consider approving procurement funding for FCS core systems before most prototype deliveries, the critical design review, and key system tests have taken place. Second, the program to spin out early FCS capabilities to current forces operates on an aggressive schedule centered on a 2009 demonstration that will employ some surrogate systems and preliminary designs instead of fully developed items, with little time for evaluation of results. Third, the Army is currently considering an incremental FCS strategy—that is, to develop and field capabilities in stages versus in one step. Such an approach is generally preferable, but would present decision makers with a third major change in FCS strategy to consider anew. While details are yet unavailable, it is important that each increment be justifiable by itself and not dependent on future increments.

What GAO Recommends

In its March 2009 report, GAO suggested Congress consider not approving full funds for the program until several conditions are met, such as preparation of a complete budget for any program emerging from the milestone review. GAO also recommends the Secretary of Defense, among other things, ensure the program that emerges conforms to current defense acquisition policy, such as technology maturity; any spin out approach is based on fully tested results; and any incremental strategy involves free standing, justifiable increments.

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Highlights

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