



Highlights of [GAO-09-793T](#), a report to Subcommittee on Airland, Committee on Armed Services, U.S. Senate

Why GAO Did This Study

Future Combat System (FCS) has been at the center of the Army's efforts to become a lighter, more agile, and more capable combat force by replacing existing combat systems with a family of manned and unmanned vehicles and systems, linked by an advanced information network. To meet the challenges of FCS's scope and schedule, the Army contracted with Boeing to be lead systems integrator (LSI), to help define, develop, and integrate FCS systems.

Earlier this year, the Secretary of Defense proposed restructuring FCS to lower risk and address more near-term needs, shortly before FCS was to undergo a congressionally-mandated review to determine its future. The Department of Defense (DOD) and the Army have already begun to make programmatic and budgetary adjustments to FCS. This statement reviews aspects of FCS that should be considered for inclusion in future efforts, aspects that were problematic and need re-examination, and considerations for shaping future Army ground force modernization.

The testimony is drawn from GAO's body of work on FCS management and acquisition strategy, including knowledge gaps, cost, affordability, oversight, and the Army/LSI relationship. GAO has made numerous recommendations aimed at managing FCS risks, but it is not making any new recommendations in this testimony.

View [GAO-09-793T](#) or key components. For more information, contact Paul Francis at (202) 512-4841 or francisp@gao.gov.

DEFENSE ACQUISITIONS

Issues to be Considered for Army's Modernization of Combat Systems

What GAO Found

FCS has many good features that should be considered in future efforts, including a holistic vision of the future force, government insight into subcontractor selection and management, a focus on leveraging capabilities through an information network, and establishment of organizations to train with and evaluate technologies to be spun out to current forces.

Other more difficult lessons from FCS must also be used to put future modernization efforts on the soundest footing possible. FCS was not executable within reasonable bounds of technical, engineering, time, or financial resources. From the start, the program was immature and unable to meet DOD's own standards for technology and design. Although adjustments were made, including adding time and trading off requirements, vehicle weights and software code grew, key network systems were delayed, and technologies took longer to mature. By 2009, it was still not known that the FCS concept would work. Oversight has been extremely challenging, given the program's vast scope and the innovative, but close, partner-like relationship between the Army and the LSI. Oversight by the Office of the Secretary of Defense did not compensate for these risks early in the program. Oversight was further challenged by the fact that the planned schedule for making decisions outpaced demonstrated knowledge—major production commitments were to be made before basic designs were demonstrated.

As the Army proceeds with a different approach to modernization, there will be a number of important factors to consider. Rather than a single FCS program going forward, several programs with more targeted objectives may emerge. These programs need to be based on principles such as knowledge-based acquisition, sound cost estimating, and transparency and accountability for oversight. Beyond these principles, the Army will have to tailor its approaches to the needs of the individual programs. For example, the acquisition approach for spinning out mature technologies to current forces would differ from the approach needed to develop an information network. Several issues with transitioning from FCS will have to be addressed, including: closing out or restructuring current contractual arrangements; transferring FCS knowledge to emergent programs; transitioning the FCS information network to current Army forces; placing early emphasis on key design considerations such as sustainability; and balancing investments between future capabilities and keeping fielded systems capable.

The Army's experience with FCS has been productive. The key in going forward will be to take the best from both positive and negative lessons learned and apply them to the ground force modernization efforts that will succeed FCS. The Army and DOD should continue to be innovative as to concepts and approaches, but anchored in knowledge-based strategies when it comes to proposing a specific system development effort.