

**HOLD UNTIL RELEASED BY THE
SENATE ARMED SERVICES COMMITTEE**

STATEMENT OF

DAVID G. AHERN

DIRECTOR, PORTFOLIO SYSTEMS ACQUISITION

**OFFICE OF THE UNDER SECRETARY OF DEFENSE
(ACQUISITION, TECHNOLOGY, AND LOGISTICS)**

BEFORE THE

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Army Acquisition, Reset, and Modernization Programs
David G. Ahern
Director, Portfolio Systems Acquisition
Office of the Under Secretary of Defense
(Acquisition, Technology, and Logistics)

Good morning Mr. Chairman, Senator Thune, and Members of the Committee.

Thank you for the opportunity to appear before you today to discuss Army modernization and the management of the Future Combat Systems (FCS) program as you review the Fiscal Year 2010 budget requests.

The FCS program decisions reflected in the President's Fiscal Year 2010 defense budget address two priorities of the Secretary of Defense:

- Rebalancing the Department's programs in order to institutionalize and enhance our capabilities to fight the wars we are in today and the scenarios we are most likely to face in the years ahead, while at the same time providing a hedge against other risks and contingencies.
- Reforming how and what the Department buys, a fundamental overhaul of our approach to procurement, acquisition, and contracting.

In Fiscal Year 2010, the FCS budget line will remain the Army's largest research and development investment at three billion dollars as we rebalance the Army modernization priorities. We will accelerate the fielding of early increments of specific FCS capabilities that have demonstrated success, such as unmanned ground and air vehicles and unattended sensors, to enhance our ability to address counterinsurgency and close quarter combat, such as what we are seeing in operations today. We will cancel the

FCS manned ground vehicle effort as we fully assess the Department's ground combat vehicle capability needs for full spectrum operations, informed by operations today and analysis on the appropriate mix of vehicles.

In 2010 we will transition the single FCS acquisition program (a Major Defense Acquisition Program (MDAP)) into multiple acquisitions established on solid capability definition, technology maturity, realistic cost estimates, and sound contracting strategies. The Department will implement our full complement of acquisition reform initiatives as the foundation for establishing these new programs. The importance of meeting the Army modernization needs and the magnitude of the investment dictate that we get these acquisitions right – and we must do it expeditiously.

The Secretary of Defense has directed that these new modernization efforts be fully funded in the outyears as we accelerate FCS spin-off capabilities, across the Army's combat brigades. To properly address the questions you asked in your letter of invitation, I would like to briefly review the history of the FCS program, describe the FCS investment as presented in the Fiscal Year 2010 budget, briefly discuss how we plan to implement those changes, and finally address significant lessons learned from the FCS program.

2003-2009 FCS BRIGADE COMBAT TEAM (BCT) ACQUISITION

In 2003, the Department approved Milestone B for the FCS Brigade Combat Team (BCT) acquisition. This decision approved a baseline for development and procurement of 15 BCTs. The Army contracted with Boeing/SAIC to develop a "system-of-systems"

design for the FCS BCT. The current contract relationship with Boeing is as a prime contractor for the Systems Design and Development phase of the FCS program, whereby Boeing, in some cases, is required to perform lead systems integrator-type functions as defined by the terms and conditions of the contract. Although the FCS contract uses the term "lead system integrator," Boeing does not meet the statutory definition of a Lead System Integrator (LSI) as defined by section 805 of the National Defense Authorization Act for Fiscal Year 2006, (Pub. L. 109-163). Boeing performs a substantial portion of the development work for the program by providing the System of System Common Operating Environment software and Warrior-Machine Interface.

The FCS contract is a Cost Plus Fixed Fee/Award/Incentive-type contract to develop manned and unmanned ground vehicles, unmanned air systems, unattended ground sensors and to integrate these, and a number of complementary systems – such as JTRS and WIN-T – into a BCT that delivers the capability defined by the FCS Operational Requirements Document.

Over the six years of development to date the program has been modified to accommodate changes in the brigade structure (for instance reducing the types of unmanned air systems and removing capability that was not technologically mature like the unmanned armed reconnaissance vehicle) and to “spin-out” early increments of FCS capabilities to the current force brigades.

The FCS Spin-Out is illustrative of how we have utilized a knowledge based process to inform our acquisition decisions. In 2006 the Department approved the Army’s approach to initiate actions to field FCS capabilities such as the unattended

ground sensors, Non-Line of Sight Launch System, and an early instantiation of the FCS network to other combat brigades. The Spin-Out approach was updated in 2008, adding unmanned air and ground systems to capabilities ready for consideration for production. The decision was then made to provide the initial increments of capability to the Infantry Brigades. A Capabilities Production Document has been approved defining the expected performance for this initial increment of capability. The systems engineering work, to include Preliminary and Critical Design Reviews, testing of prototypes to demonstrate capability, and cost and technology assessments are all underway to inform a Milestone C decision for this Spin-Out Early Infantry BCT this fall.

While the system-of-systems umbrella for the FCS BCT acquisition provided a unique opportunity to optimize capabilities across the brigade, the complexity involved in applying the system of systems approach offered many challenges for acquisition management and oversight.

The FCS contract, initially capitalizing on the early efforts undertaken by DARPA, has undergone major changes yearly. It has transitioned from an Other Transactions Authority agreement to a Federal Acquisition Regulation-based contract, modified to support changes in the brigade structure, and also modified to accommodate the “spin-out” of capability to the current force brigades. The means to effectively deliver integrated capabilities, particularly in the areas of network and battle command, is an area of continued attention for the Service and the Department, to include identifying the correct balance between contractor and government responsibilities.

The Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) has reviewed the program at least yearly, providing acquisition direction to keep the program on track to deliver an FCS Brigade capability. Our direction for the FCS BCT focused on continued attention to the capability definition, technology maturity, and current cost estimates. Additionally, we have provided our expectations for spin-out development, exit criteria, and specified actions to address concerns regarding the FCS contract fee structure.

Section 214 of the John Warner National Defense Authorization Act for Fiscal Year 2007, as amended by section 211 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, required a Defense Acquisition Board (DAB) milestone review of the FCS program and a report on that review. As a result of the FCS decisions leading up to the FY 2010 President's Budget we have determined a DAB milestone review is no longer applicable. Nonetheless, in satisfaction of the Fiscal Year 2007 and 2009 Authorization Act provisions, we will provide to the congressional defense committees a report that reflects the Department's FCS decision.

2010 INVESTMENT FOR ARMY MODERNIZATION:

In Fiscal Year 2010, FCS will remain the Army's largest research and development investment; however, we plan to transition from the FCS BCT acquisition program to instead establish at least four acquisition programs that will leverage the FCS investment to-date and deliver realistically defined, cost effective and timely capability to

modernize the Army's ground forces. These new integrated Army Modernization programs will include, as a minimum, the following:

- The planned Early-Infantry BCT acquisition
- Follow-On BCT modernization
- Ground combat vehicle modernization
- Incremental ground tactical network capability

IMPLEMENTATION PLANS

We will continue efforts to-date to further develop, produce, and field FCS developed capabilities in the form of early spin-outs to seven Infantry BCTs. This MDAP will start with a Milestone C decision scheduled in the first quarter of Fiscal Year 2010 following a Limited User Test this summer. Input for this decision will be in accordance with DoD Instruction 5000.02, to include an approved Acquisition Strategy, a Capability Production Document, a Technology Readiness Assessment, and an Independent Cost Estimate. Robust systems engineering work ongoing will support the critical design review and production readiness review we need to support a low-rate production decision. Testing will inform us of both the maturity of the individual systems (the small unmanned ground vehicle, the class I unmanned air vehicle, the unattended ground sensors, and the Non-Line of Sight Launch System) as well as network components used to integrate these capabilities into the brigade.

Follow-On BCT modernization acquisition program(s) will follow to expand delivery of these capabilities to the remaining Army combat brigades by 2025. The

Army will develop an acquisition plan to support acquiring these capabilities and present that plan for USD(AT&L) review in the Fall of 2009.

The acquisition for ground combat vehicles will proceed subsequent to a capability assessment by the Army, working with the Marine Corps. The assessment will include an evaluation of ground combat vehicle missions across the spectrum of operations, a review of the capabilities of the current combat vehicle fleet, identification of joint capability gaps, and incorporation of any lessons learned from ongoing operations. This ground combat vehicle capability assessment will support the development of requirements for a new Ground Combat Vehicle program, and we are planning for a Materiel Development Decision in 2010.

Incremental delivery of ground tactical network capability is another critical element for Army modernization. Initial planning for the continued development and delivery of integrated networking and battle command capability is ongoing.

As we move from a single FCS acquisition to these targeted modernization acquisitions we will focus on buying the right thing, buying it the right way, and managing it effectively.

Buy the right thing: A clear understanding of our capability needs will be a focus area as we move forward. We will stop development of the current FCS manned ground vehicles as we reevaluate the requirements, technology, and acquisition approach. We will conduct a thorough capability assessment for ground combat vehicles, informed by current operations, full spectrum operational needs, existing available capability, and force structure changes. Additionally, the Army will identify the sensor and unmanned

capabilities needed for all combat brigades and will define requirements for the incremental delivery of battle command network and software. We in the acquisition community will work closely with the Joint Staff to expeditiously establish a solid requirements baseline for achievable delivery of capability.

Buy it the right way: In the short term, the FCS contract will be restructured to address concerns with the current fee structure and to continue the integration and development efforts in the network until the new acquisitions are established. The fundamental issue with the FCS contract structure is that there is an insufficient amount of fee associated with objective contract performance. Changes in the FCS contract will address the Department's concerns regarding a fee structure that gives the government little leverage to promote cost efficiency. We will make changes to the contract structure to more closely tie fee to performance.

As acquisition plans for the future programs mature, we will employ contracting strategies that consider competition, competitive prototyping, and fixed price development. As the Army expands its contracting and management workforce, government personnel in the program management office will take on an expanded role, particularly in contract management and oversight, systems engineering, and integration. All these efforts will contribute to protecting the Government's interests through the effective use of taxpayer funds to deliver to our soldiers the equipment they need.

Details on plans to modify the contract will be developed over the next few months as we prepare to implement the decisions reflected in the Fiscal Year 2010 budget. The near term contracting approach for acquiring the early spin-out systems will also include

competition, fee structures to incentivize performance, and fixed price contracts when appropriate.

Manage it effectively: This fall we will conduct a Defense Acquisition Executive-level review of the FCS program restructure to address the implementation of the Fiscal Year 2010 budget decisions and transition to multiple acquisitions. This will ensure we are appropriately leveraging the FCS investment to-date. Each new acquisition will be established with a solid capability definition, appropriate technology maturity, realistic cost estimates, and sound contracting strategies. We will utilize Configuration Steering Boards, Independent Cost Estimates, Technology Readiness Assessments, and other management tools to ensure capability is delivered on time and within budget. We must continuously challenge our processes to get to timely, supportable decisions that deliver needed capability in a timely, cost effective manner.

LESSONS LEARNED

There are numerous lessons learned from the FCS BCT acquisition – spanning the areas of capability definition, system-of-systems integration, acquisition and program management, costing, and contracting.

Capability definition: We must be more disciplined in our desire for more and better capability. Successfully defining achievable expectations for emerging capability requires our continued, focused attention. Capability definition in battle command and control, networking, communications, and sensor integration were not of sufficient fidelity when the FCS program started. The FCS network development effort has helped

frame what capabilities are important in a tactical ground network. To “buy the right thing” requires clear understanding on the part of the capability developers of what is realistically possible at what cost. As we move forward we in the acquisition community must work closer with the capability developers for a shared understanding of requirements in these areas. We will use evolutionary acquisition strategies to translate these requirements to grow capability incrementally for the ground tactical network, sensor systems, and vehicles.

System-of-Systems Integration: The investment in the FCS acquisition has provided us with significant advances in understanding both the boundaries and potential for integrated capability. The recently completed System-of-Systems Preliminary Design Review highlighted two significant force multipliers: 1) a reliable, working tactical ground network over broad areas of operation and 2) sensors and systems providing timely and reliable information to that network. These findings are consistent with lessons learned in operations in Iraq and Afghanistan. These key enablers are the targets of opportunity we will emphasize as we transition to multiple Army Modernization acquisitions. Clearly the significant Research & Development investments by the FCS program set the stage for fielding a robust integrated capability, beginning with early IBCT units.

Acquisition and Program Management: The acquisition and program management lessons learned in FCS are consistent with those learned from other Department acquisition programs. These include ensuring our investments are affordable and consistent with warfighter priorities; realizing predictable cost and schedule outcomes by

accepting and approving requirements based on mature, demonstrated technologies; and establishing programs with realistic cost and schedule estimates. An Acquisition Program Baseline based on achievable performance criteria, an Independent Cost Estimate, and a realistic execution schedule are critical to acquisition success. During development, the use of rapid prototyping and demonstrations provide early and valuable insights to drive effective decision making to keep programs on track. Configuration Steering Boards are needed to effectively communicate what capability the acquisition program can achieve, limit changes in requirements that drive adverse cost and schedule impacts, and to provide the basis for effective tradeoff decisions. Additionally, as part of the Secretary's initiative to revitalize the acquisition workforce, the Department will increase the overall size of the government acquisition workforce by 20,000 through Fiscal Year 2015, significantly improving the capability and capacity of the Defense acquisition workforce to oversee and execute these important defense programs. The objective is straight forward: ensure the Department has the right acquisition capability to produce best value for the American taxpayer and for the soldiers, sailors, airmen, and marines who depend on the weapons, products and services we buy.

Costing: The independent cost estimates done for the FCS acquisition were invaluable for informing decisions. Executable acquisition approaches must be developed to address the cost risks identified in the cost estimate. Significant attention to "descoping" options is needed for properly informed cost-performance trade-off decisions. The ability of the requirements community to take into account the cost of

capability is also an area that needs attention – particularly in the network and sensor arenas.

Contracting: Contracting for the development of System-of-Systems capability proved to be complex and challenging. In the contracting arena, we will ensure competition and appropriately incentivize our contractors to control costs. A thorough, risk-based analysis of multiple contracting approaches for delivery of capability will be undertaken prior to approving future contracting strategies.

With these insights gained from the FCS BCT acquisition, in conjunction with the Department's acquisition reform efforts, we will ensure the Department effectively and efficiently acquires the vehicles, unmanned systems, sensors, and networks needed for Army combat brigade modernization.

CONCLUSION

The FCS element of the Fiscal Year 2010 budget reflects the Secretary's priorities. His decisions were based on a combination of the currency of requirements given ongoing operations, the maturity of the development efforts within the FCS acquisition program, modernization priorities, and affordability. The Department's Fiscal Year 2010 FCS development budget will facilitate a timely, in stride, transition from the previous plan to acquire 15 FCS Brigade Combat Teams to multiple major modernization programs. These new modernization acquisitions will deliver much needed sensor, networking, and vehicle capability to the Army, and we are intent on expeditiously leveraging the FCS development efforts to date to deliver that capability.

We are grateful for the continued support of Congress which has been critical to ensuring our soldiers are the best trained and best equipped in the world. Thank you for this opportunity to testify on the Department's plans to continue to equip them for today's wars and tomorrow's challenges. I look forward to answering any questions you may have.