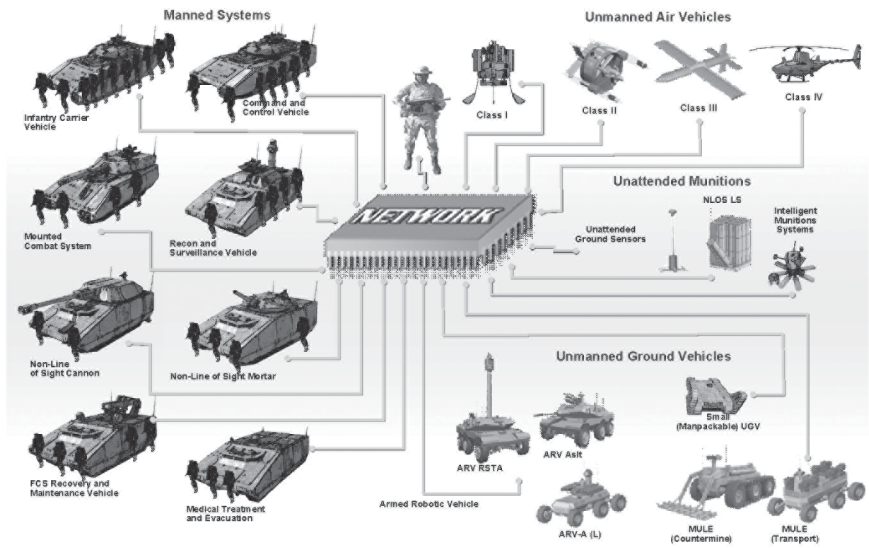


ARMY PROGRAMS

Future Combat System (FCS)

SUMMARY

- The Future Combat System (FCS) Increment I consists of 18 systems and the network (18+1). The systems include:
 - Unattended ground sensors
 - Two unattended munitions:
 - Non-Line of Sight – Launch System
 - Intelligent Munitions System
 - Four classes of unmanned aerial vehicles organic to platoon, company, battalion, and the Unit of Action
 - Three classes of unmanned ground vehicles:
 - Armed Robotic Vehicle
 - Small Unmanned Ground Vehicle
 - Multifunctional Utility/Logistics and Equipment Vehicle
 - Eight manned ground vehicles
- The Army recently restructured the FCS program so that it will produce capabilities in four spirals.
- The Army is currently revising the FCS Milestone B Test and Evaluation Master Plan (TEMP) to accommodate program restructuring.



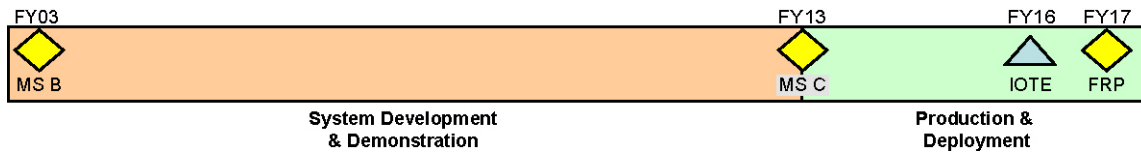
The FCS is composed of a family of networked air and ground based maneuver, maneuver support, and sustainment systems that will include manned and unmanned platforms.

SYSTEM DESCRIPTION AND MISSION

The FCS is composed of a family of networked air and ground based maneuver, maneuver support, and sustainment systems that will include manned and unmanned (MUM) platforms. FCS is networked via a Command, Control, Communications, and Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) architecture that include networked communications, network operations, sensors, battle command system, and MUM reconnaissance and surveillance capabilities. FCS will operate as a system-of-systems that will network existing systems, systems under development, and systems yet to be developed. FCS provides force capability that will improve intelligence, surveillance, and reconnaissance, enhance analytical tools, provide Joint Service exchange of friendly and enemy force tracking down to the tactical level, battle command, real time sensor-shooter linkages, and increase synergy between echelons and within small units. FCS will enable the networked combat unit of action (UA) to develop the situation in and out of contact, set conditions, maneuver to positions of advantage, and close with and destroy the enemy through standoff attack and combat assault.

ARMY PROGRAMS

TEST AND EVALUATION ACTIVITIES



The TEMP was approved on April 25, 2003, and will be updated in FY05 to reflect program restructuring. A single TEMP will guide all developmental and operational testing. FCS TEMP Annexes will cover Spiral Out testing. FCS platforms will be tested and evaluated individually. The Army plans to designate a brigade as the “Evaluation Brigade Combat Team.” Plans call for this unit to conduct operational testing for each of the four Spiral Out packages. The precise details on the number, timing, and scope of test events are still being developed.

Operational testing for the FCS UA will begin with a series of four Limited User Tests beginning in FY11. The Initial Operational Test and Evaluation (IOT&E) will occur in FY15. FCS Live Fire Test and Evaluation will be complete before the full-rate production decision, scheduled in FY16.

TEST AND EVALUATION ASSESSMENT

Restructuring the FCS program should help mitigate the risks associated with such an ambitious program scale and schedule. The test and evaluation methodology changed from a “big bang” approach to a “build a little, test a little” approach. While this new iterative strategy accelerates select FCS capabilities to the current Force, these incremental improvements will need to be tested and evaluated in both the Evaluation Brigade Combat Team and the current Force units receiving this equipment. In addition, the Army’s FCS concept rests upon a network of sensors, platforms, and command nodes linked by reliable high-bandwidth and high-speed communications – all capabilities that do not yet exist. Finally, advanced modeling and simulation is expected to support both the execution of live operational testing and FCS ballistic survivability evaluations. In order for modeling and simulation to be useful in assessing overall effectiveness, suitability, and survivability, the FCS test program will need to balance modeling and simulation with physical testing to support the FCS evaluation.