Maneuver Control System (MCS)

The Maneuver Control System (MCS) is the command and control system for Army maneuver elements in battalion through corps echelons. MCS consists of a network of computer workstations that integrate information from subordinate maneuver units with those from other Army Battle Command System (ABCS) battlefield functional areas to create a joint common database referred to as the Common Tactical Picture. Tactical information products, such as situation maps and reports, allow the display and manipulation of this information. MCS also provides a means to create, coordinate, and disseminate operational plans and orders. MCS's role in communicating battle plans, orders, and enemy and friendly situation reports makes it a central component of the Army's ongoing effort to digitize the battlefield. MCS capabilities are being developed in blocks. The MCS Block III initiated, and the current Block IV increases, the integration between the ABCS components: All Source Analysis System, Forward Area Air Defense C3I System, Advanced Field Artillery Tactical Data System, Combat Service Support Control System, and Force XXI Battle Command, Brigade and Below.

The Army conducted the MCS Block III Initial Operational Test and Evaluation (IOT&E) in June 1998. DOT&E concluded that MCS Block III was neither operationally effective nor operationally suitable. The Army subsequently restructured the MCS program, did not field the Block III, and designated the Block IV as the version planned for testing in an IOT&E to support the full-rate production decision. In 2002, the Army reviewed the operational requirements for all of the ABCS components to better support the Army transformation to the objective force and the Future Combat System. The resulting requirements support the MCS Block IV testing and the planning for development of future MCS versions.

TEST & EVALUATION ACTIVITIES

The MCS completed several developmental test events including a series of System Stress Tests and Field Test 5 in September 2002. The System Segment Acceptance Test originally scheduled for December 2002 has been delayed due to real-world operations. The Army has also indefinitely postponed the IOT&E, scheduled for April/May 2003.

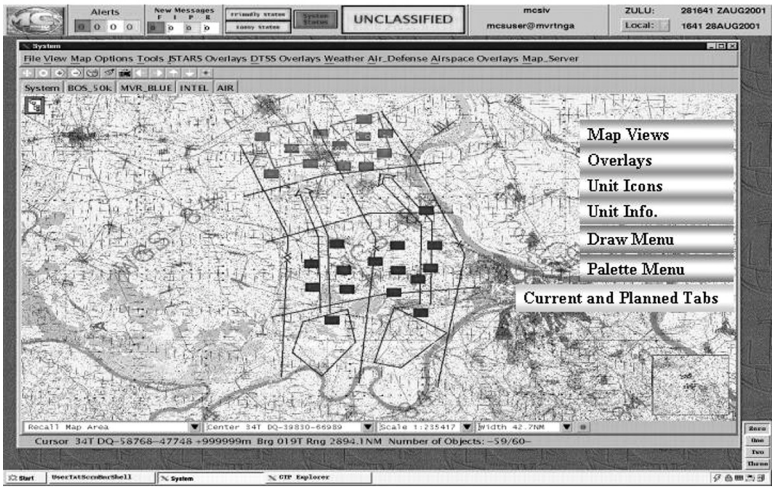
The Army is waiting for Joint Requirements Oversight Council approval of the revised Operational Requirements Document.

Due to recent changes in test scheduling, the MCS Test and Evaluation Master Plan has not been submitted to OSD for approval.

TEST & EVALUATION ASSESSMENT

The MCS Block IV effort is complex and requires developing and integrating diverse software components including commercial and government furnished foundation products and software from the other ABCS programs. The completed Army review of MCS operational requirements, operational concepts, and acquisition strategy resulted in requirements that reflect the capabilities of the MCS Block IV.

The development testing completed in 2002 demonstrated significant progress in stability and functionality from the performance



The Maneuver Control System is the command and control system for Army maneuver elements in battalion through corps echelons. MCS integrates information to create a joint common database referred to as the Common Tactical Picture, making it a central component of the digital battlefield.

observed in 2001. The ability of the MCS to meet the entrance criteria to enter the IOT&E remains uncertain however.

The MCS; Force XXI Battle Command, Brigade and Below; and the Integrated System Control Version 4 IOT&Es were to be conducted as a combined event. Combining the tests provides a realistic and robust environment to assess these systems at a cost savings compared to three separate tests. However, planning and coordinating a test event of this scope are a significant challenge. Significant concerns included the unit architecture (numbers and types of systems) and the extent of electronic warfare and information warfare during the operational test.

In October the Army announced it was postponing the combined IOT&E indefinitely due to preparations for real-world operations. No alternative plans have been developed.

Testing of the individual programs comprising the ABCS requires that all of the other programs participate because of the interdependencies required to create a coherent command and control structure. However, developing and funding the components such as MCS as independent acquisition programs continue to complicate the ability to efficiently support and synchronize tests and acquisition decisions for these acquisition programs. A continuing issue is whether the failure of one component to be ready constitutes the need to delay an event or decision for other components. For instance, can the MCS proceed to operational testing and fielding if another of the ABCS component systems is not ready? The Department needs capstone approaches to development, testing, and acquisition to efficiently support and synchronize the ABCS programs such as the MCS that currently are developed and funded as independent programs.