

Joint Effects Model (JEM)

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance



MISSION

Provides enhanced operational and tactical-level situational awareness of the battlespace and provides real-time hazard information during and after an incident to influence and minimize effects on current operations.

DESCRIPTION

Joint Effects Model (JEM) is an Acquisition Category III software program. It is the only accredited DoD computer-based tactical and operational hazard prediction model capable of providing common representation of chemical, biological, radiological, nuclear (CBRN) and toxic industrial chemicals/toxic industrial material (TIC/TIM) hazard areas and effects. It may be used in two variants: as either a standalone system, or as a resident application on host command, control, communications, computers, and intelligence (C4I) systems. It is capable of modeling hazards in various scenarios, including counterforce, passive defense, accidents, incidents, high-altitude releases, urban environments, building interiors, and human performance degradation.

JEM will follow an evolutionary acquisition approach. The JEM program will deliver a full-capability system in three increments, each retaining the functionality of the preceding increment(s). JEM will also support planning to mitigate the effects of weapons of mass destruction.

Chemical staff sections at the battalion, brigade, division, corps and echelons-above-corps levels, as well as Special Forces chemical recon detachments, will use JEM. Brigade, division, and corps-level CBRN staff planners will also have a reconnaissance version of JEM.

SYSTEM INTERDEPENDENCIES

In this Publication

Global Command and Control System–Army (GCCS-A), Joint Warning and Reporting Network (JWARN)

Other Major Interdependencies

Battle Command Common Services (BCCS), Command Post of the Future (CPOF), Maneuver Control System (MCS)

PROGRAM STATUS

- **3QFY10:** JEM 1.0 full deployment decision (GCCS-A, GCCS-J, C2PC, JWARN)
- **4QFY10:** JEM 1.0 production and deployment

PROJECTED ACTIVITIES

- **FY11:** Continue production and deployment
- **FY11-12:** Continue JEM 2.0 software development and testing

ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

Joint Effects Model (JEM)

FOREIGN MILITARY SALES

None

CONTRACTORS

Northrop Grumman Mission Systems
(San Diego, CA)

