Joint Effects Model (JEM)

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

DESCRIPTION
The Joint Effects Model (JEM) is a Web-based 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 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 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 supports planning to mitigate the effects of Weapons of Mass Destruction and to provide rapid estimates of hazards and effects integrated into the Common Operational Picture. JEM interfaces and communicates with the Joint Warning and Reporting Network (JWARN), associated weather systems, intelligence systems, and various databases.

SYSTEM INTERDEPENDENCIES
In this Publication
Global Command and Control System-Army (GCCS-A), Joint Warning and Reporting Network (JWARN)

Other Major Interdependencies
Global Command and Control System-Joint, Joint Tactical Common Operational Picture Workstation (JTCW)/Command and Control Personal Computer (C2PC), Meteorological Data Server

PROGRAM STATUS
• FY11: Continued Increment 1 deployment
• 2QFY11: Increment 2 Milestone A

PROJECTED ACTIVITIES
• FY12-FY14: Continue Increment 1 production and deployment
• 4QFY13: Increment 2 Milestone B
• 4QFY14: Increment 2 Milestone C
Joint Effects Model (JEM)

FOREIGN MILITARY SALES
Pending

CONTRACTORS
Northrop Grumman Mission Systems (San Diego, CA)