



## Medium Extended Air Defense System (MEADS)

Medium Extended Air Defense System (MEADS) program is a cooperative effort between the United States, Germany, and Italy to develop an air and missile defense system that is mobile and transportable. It will be capable of countering ballistic missiles and air-breathing threats such as aircraft, unmanned aerial vehicles, and cruise missiles. MEADS will improve the limited area defense of vital assets, both civilian and military, defend troops and fixed assets, as well as provide capability to move with and protect the maneuver of forces.

Using the combat-proven Patriot Advanced Capability-3 (PAC-3), MEADS role in ballistic missile defense will be to bridge the gap between man-portable systems like the Stinger missile and the higher levels of the Ballistic Missile Defense System (BMDS), such as the Theater High Altitude Area Defense (THAAD) system, while providing continuous coverage for rapidly advancing maneuver forces. MEADS also offers the opportunity for U. S. forces to work in conjunction with the allied forces. As U. S., Germany and Italy are planning to co-develop and use MEADS, its commonality of system design will contribute to the interoperability of U. S. and allied forces ballistic missile defense systems.

MEADS will be a mobile surface to air missile (SAM) system designed to provide a short-range defense for troops and installations against several sophisticated threats. Mounted on a wheeled vehicle, MEADS will use a vertical launcher capable of holding several interceptors and contain advanced radars that provide 360-degree coverage. The interceptor missile will be hit-to-kill, (directly hitting the target to destroy it), and have an enhanced warhead for use against air breathing targets.



All components will be linked to state of the art communications, including access to a broad range of sensors from other systems and services. These capabilities will ensure that MEADS is part of the overall BMDS and compatible with other Army, joint, and allied systems. The system is also designed to decrease U. S. transportation requirements for deployment of missile defense systems.

The international nature of MEADS increases the potential for the program to promote interoperability of U. S. and allied forces and to aid trans-Atlantic defense cooperation.

The MEADS project will pass through three (3) phases: The participating countries will negotiate a Memorandum of Understanding for each of these phases, Product Definition/Validation (PD/V), Design and Development (D&D), and Production. MEADS is currently in the first stage, PD/V. In 1999, MEADS was restructured to add a Risk Reduction Effort (RRE) to the PD/V phase. The primary objectives of MEADS RRE are to: (1) demonstrate an integrated MEADS system concept incorporating the PAC-3 missile, (2) reduce the overall program's technical, schedule, and cost risk, and (3) develop the international cost and schedule consensus for the MEADS program.

On April 30, 2003 at a meeting of the Defense Acquisition Board (DAB), DoD approved the Army's plan to pursue a combined PATRIOT and MEADS evolutionary development plan. This plan addresses the evolution from the current fire units configured for PAC-2/Guidance Enhanced Missile (GEM) and GEM Plus to an integrated PAC-3/MEADS capability.