



Highlights of [GAO-06-327](#), a report to congressional committees

## DEFENSE ACQUISITIONS

# Missile Defense Agency Fields Initial Capability but Falls Short of Original Goals

### Why GAO Did This Study

The Department of Defense (DOD) has spent nearly \$90 billion since 1985 to develop a Ballistic Missile Defense System (BMDS). In the next 6 years, the Missile Defense Agency (MDA), the developer, plans to invest about \$58 billion more. MDA's overall goal is to produce a system that is capable of defeating enemy missiles launched from any range during any phase of their flight. MDA's approach is to field new capabilities in 2-year blocks. The first—Block 2004—was to provide some protection by December 2005 against attacks out of North Korea and the Middle East.

Congress requires GAO to assess MDA's progress annually. This year's report assesses (1) MDA's progress during fiscal year 2005 and (2) whether capabilities fielded under Block 2004 met goals. To the extent goals were not met, GAO identifies reasons for shortfalls and discusses corrective actions that should be taken.

### What GAO Recommends

To better ensure the success of future development efforts, GAO recommends that MDA implement a knowledge-based acquisition strategy for future missile defense efforts, assess whether such a strategy is compatible with a 2-year block strategy, and adopt more transparent criteria for reporting significant departures from plans. DOD did not agree to take any of the actions we recommended.

[www.gao.gov/cgi-bin/getrpt?GAO-06-327](http://www.gao.gov/cgi-bin/getrpt?GAO-06-327).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Paul L. Francis at (202) 512-4841 or francisp@gao.gov.

### What GAO Found

MDA made good progress during fiscal year 2005 in the development and fielding of two of the seven elements reviewed. Most of the others encountered problems that slowed progress. Meanwhile, contractors for the seven elements exceeded their fiscal year budget by about \$458 million, or about 14 percent, most of which was attributable to cost overruns in developing the Ground-based Midcourse Defense (GMD) element.

Accelerating Block 2004 allowed MDA to successfully field missile defense assets faster than planned. But, MDA delivered fewer quantities than planned and exceeded the cost goal of \$6.7 billion by about \$1 billion. The increased cost is primarily the added cost of sustaining fielded assets. However, the increase would have been greater if some development and other activities had not been deferred into Block 2006. Also, MDA has been unable to verify actual system performance because of flight test delays.

**Block 2004 Goals, as of February 2003, Compared with Fielded Assets, as of December 2005**

Activities	Planned	Fielded
Ground-based Midcourse Defense interceptors	20 interceptors	10 interceptors
Aegis missiles	Up to 20 missiles	9 missiles
Aegis destroyer upgrade	15 destroyers	10 destroyers
Aegis cruiser upgrade	3 cruisers	2 cruisers
Command, control, battle management, and communications software	Development and testing of upgrades	Testing of final upgrade incomplete

Source: MDA (data); GAO (presentation and analysis).

Time pressures caused MDA to stray from a knowledge-based acquisition strategy. Key aspects of product knowledge, such as technology maturity, are proven in a knowledge-based strategy before committing to more development. MDA followed a knowledge-based strategy with elements not being fielded, such as Airborne Laser and Kinetic Energy Interceptor. But it allowed the GMD program to concurrently mature technology, complete design activities, and produce and field assets before end-to-end testing of the system—all at the expense of cost, quantity, and performance goals. For example, the performance of some GMD interceptors is questionable because the program was inattentive to quality assurance. If the block approach continues to feature concurrency as a means of acceleration, MDA's approach may not be affordable for the considerable amount of capability that is yet to be developed and fielded. MDA has unusual flexibility to modify its strategies and goals, make trade-offs, and report on its progress. For example, MDA's Director may determine when cost variations are significant enough to report to Congress.

MDA is taking actions to strengthen quality control. These actions are notable, but they do not address the schedule-induced pressures of fielding or enhancing a capability in a 2-year time frame or the need to fully implement a knowledge-based acquisition approach.