

# GAO Highlights

Highlights of [GAO-15-345](#), a report to congressional committees

## Why GAO Did This Study

Since 2002, MDA has spent approximately \$105 billion, and it plans to spend about \$38 billion more by 2019, to defend against enemy ballistic missiles. MDA is developing a BMDS comprised of a command and control system, sensors that identify incoming threats, and intercepting missiles. For over a decade, GAO has reported on MDA's progress and challenges in developing and fielding the BMDS. GAO is mandated by law to assess the extent to which MDA has achieved its acquisition goals and objectives, as reported through its acquisition baselines, and to report on other acquisition issues as appropriate. This, GAO's 12<sup>th</sup> annual report, examines progress and challenges in fiscal year 2014 associated with MDA's: (1) individual element testing and asset delivery goals, (2) efforts to reduce acquisition risks, and (3) reporting on the BMDS integrated capability. GAO examined MDA's acquisition reports and assessed them against GAO's acquisition best practices, analyzed baselines reported to discern progress, and interviewed DOD and MDA contractor officials.

## What GAO Recommends

GAO recommends that, in order to reduce acquisition risk, MDA align future efforts for Aegis BMD and GMD with GAO's knowledge-based acquisition practices. GAO also recommends that the Secretary of Defense direct MDA to report annually to Congress and DOD on the progress it has made in achieving an integrated capability. DOD concurred or partially concurred with all of our recommendations. GAO continues to believe the recommendations are valid as discussed in this report.

View [GAO-15-345](#). For more information, contact Cristina Chaplain at (202) 512-4841 or [chaplainc@gao.gov](mailto:chaplainc@gao.gov).

May 2015

## MISSILE DEFENSE

### Opportunities Exist to Reduce Acquisition Risk and Improve Reporting on System Capabilities

## What GAO Found

In fiscal year 2014, the Missile Defense Agency (MDA) made some progress in achieving its testing and delivery goals for individual elements of the Ballistic Missile Defense System (BMDS), but was not able to complete its planned fiscal year goals for testing. MDA conducted two intercept tests demonstrating an increased capability. However, it did not complete six planned flight tests for a variety of reasons, including test delays and retests to address previous failures, which limit the knowledge gained in fiscal year 2014. Additionally, several BMDS elements delivered assets in fiscal year 2014 without completing planned testing, which increases cost and schedule risks for an individual system and the BMDS as a whole. In one instance, the Terminal High Altitude Area Defense element delivered assets although its capability has not been demonstrated through flight testing.

Potential also exists to reduce acquisition risks for several MDA efforts that are pursuing high-risk approaches that do not adhere to an approach which encourages accumulating more knowledge before program commitments are made and conducting testing before production is initiated. Specifically:

- Aegis Ballistic Missile Defense (BMD)—MDA demonstrated that it had matured the Aegis Standard Missile-3 (SM-3) Block IIA interceptor's design prior to starting production, a best practice. However, Aegis BMD is still addressing issues in the Aegis SM-3 Block IB interceptor revealed through prior test failures and is planning to award a multiyear procurement contract prior to flight testing the final design. If design changes are later needed, the cost, schedule, and performance impact could be significant.
- Ground-based Midcourse Defense (GMD) system—MDA reduced risk by adding a non-intercept flight test in fiscal year 2015 which allows the program to collect valuable data on redesigned components. However, GMD increased risk to the warfighter by prioritizing new interceptor production over fixing previously deployed interceptors and resolving known issues. In addition, MDA has decided to redesign the GMD kill vehicle prior to determining whether the effort is the most cost-effective solution.

Unless MDA aligns its future efforts for Aegis and GMD with acquisition best practices, the agency's acquisition outcomes may be on a similar trajectory to that of prior years, incurring both cost growth and schedule delays.

MDA is working to increase the extent to which the various elements of the BMDS are capable of working as one integrated system, but the agency reports limited information to Congress regarding its integration goals and its progress against these goals. Integration of the BMDS is important because it improves the system performance beyond the abilities of individual elements. Although MDA is not required to provide this information in its reports and briefings to Congress, congressional decision makers have limited insight into the planned BMD system-level capabilities, the supporting element-level upgrades, and how element-level efforts are synchronized to ensure timely delivery.