

Highlights of GAO-18-324, a report to congressional committees

## Why GAO Did This Study

Since 2002, MDA has been developing a Ballistic Missile Defense System that can identify and intercept enemy threats. MDA has received approximately \$132 billion and is planning to spend an additional \$47.8 billion through fiscal year 2022 to continue its efforts.

The National Defense Authorization Act for Fiscal Year 2012 included a provision that GAO annually assess and report on the extent to which MDA has achieved its acquisition goals and objectives. This report addresses (1) the progress MDA made in achieving fiscal year 2017 goals; (2) the extent to which MDA uses contracting vehicles known as undefinitized contract actions; and (3) the extent to which models provide credible information about the system's operational performance. To do this work, GAO reviewed planned fiscal year 2017 baselines and other documentation and assessed them against baseline reviews and GAO's acquisition best practices guides. In addition, GAO interviewed relevant officials.

#### What GAO Recommends

GAO is making six recommendations to, among other things, improve the way MDA communicates capability deliveries; better report information about MDA's use of undefinitized contract actions: and address the challenges MDA has encountered with certifying its test models and communicating limitations of those models. DOD partially concurred with the first recommendation and concurred with the other five. GAO continues to believe the recommendations are valid as discussed in the report.

View GAO-18-324. For more information. contact Cristina Chaplain at (202) 512-4841 or chaplainc@gao.gov.

# MISSILE DEFENSE

# The Warfighter and Decision Makers Would Benefit from Better Communication about the System's **Capabilities and Limitations**

### What GAO Found

In fiscal year 2017, the Missile Defense Agency (MDA) made mixed progress in achieving its delivery and testing goals.

- MDA continued to deliver assets to the military services. However, systemlevel integrated capabilities, such as some discrimination and integrated cyber defense improvements, were delayed and delivered with performance limitations.
- Several programs achieved notable firsts, including the first intercept of an Intercontinental Ballistic Missile. However, one program experienced a failure, and other tests were delayed or deleted.

Moreover, GAO found challenges in MDA's processes for communicating the extent and limitations of integrated capabilities when they are delivered. As a result, warfighters do not have full insight into the capabilities MDA delivers.

GAO found that the average length of the undefinitized period and the not-toexceed price of MDA's undefinitized contract actions, which authorize contractors to begin work before an agreement on terms, specifications, or price have been agreed upon, have increased over the past 5 years. While MDA policy permits use of undefinitized contracts on a limited basis, GAO and others have found that they can place unnecessary cost risks on the government.

MDA does not completely assess BMDS performance using traditional flight tests. Instead, MDA relies on models, some of which produce data with limited credibility. According to Department of Defense and MDA policy, models used to operationally assess weapons systems must be accredited to ensure they reflect the real-world system. In addition, using unaccredited models increases the risk that test results could be distorted, and leaves decision makers without key information on how the system will perform. While MDA has taken steps to improve its models, it has used many models in system operational ground tests that were not certified for that use (see figure). Additionally, MDA does not communicate model limitations to some decision makers.

December 2015	March 2017	Expected second quarter fiscal year 2018
23% Accredited models	14% Accredited models	33% Accredited models
= Accredited model	= Unaccredited model	

Defense System Operational Testing Agency data. | GAO-18-324