

# GAO Highlights

Highlights of [GAO-20-389](#), a report to congressional committees

## Why GAO Did This Study

The Air Force's ABMS is a family of systems intended to replace the command and control capabilities of aging legacy programs and develop a network of intelligence, surveillance, and reconnaissance sensors. Air Force officials stated ABMS has received \$172 million in funding through fiscal year 2020 for efforts related to ABMS. The Air Force is not designating ABMS as a major defense acquisition program or a middle tier acquisition program.

Congress included a provision in statute for GAO to review the status of ABMS. This report examines the extent to which the Air Force has (1) established a plan for ABMS development and (2) defined management and decision-making authorities for ABMS efforts. To conduct this assessment, GAO reviewed ABMS program documentation and interviewed Air Force officials.

## What GAO Recommends

GAO is making four recommendations, including that the Air Force should develop and brief the Congress quarterly on a plan to mature technologies, a cost estimate, and an affordability analysis. In addition, the Air Force should formalize the ABMS management structure and decision-making authorities. The Air Force concurred with the four recommendations. GAO will continue to monitor the Air Force's actions to address these recommendations.

View [GAO-20-389](#). For more information, contact Marie A. Mak at (202) 512-4841 or [makm@gao.gov](mailto:makm@gao.gov).

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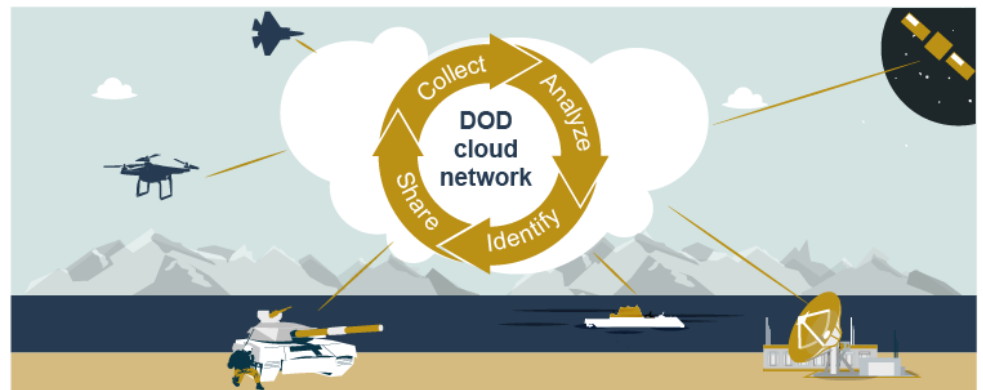
## DEFENSE ACQUISITIONS

### Action Is Needed to Provide Clarity and Mitigate Risks of the Air Force's Planned Advanced Battle Management System

#### What GAO Found

The Air Force's Advanced Battle Management System (ABMS) is intended to establish a network to connect sensors on aircraft, drones, ships, and other weapon systems to provide a real-time operational picture on threats across all domains, as depicted below.

#### Concept of Advanced Battle Management System



Source: GAO analysis of Department of Defense information. | GAO-20-389

According to Air Force officials, the department will take a nontraditional approach to develop ABMS through short-term efforts that will enable it to rapidly field capabilities. As a result of this approach, ABMS requirements will change over time as development progresses. The Air Force started ABMS development without key elements of a business case, including:

- **firm requirements** to inform the technological, software, engineering, and production capabilities needed;
- **a plan to attain mature technologies** when needed to track development and ensure that technologies work as intended;
- **a cost estimate** to inform budget requests and determine whether development efforts are cost effective; and
- **an affordability analysis** to ensure sufficient funding is available.

GAO's previous work has shown that weapon systems without a sound business case are at greater risk for schedule delays, cost growth, and integration issues. Congress has kept a close eye on the effort and required quarterly briefings on its status, as well as a list of certain ABMS requirements by June 2020. However, given the lack of specificity that remains regarding the Air Force's ABMS plans, Congress would benefit from future briefings that address the missing business case elements.

While the Air Force has taken some steps to establish an ABMS management structure, the authorities of Air Force offices to plan and execute ABMS efforts are not fully defined. Unless addressed, the unclear decision-making authorities will hinder the Air Force's ability to effectively execute and assess ABMS development across multiple organizations.