

GAO Highlights

Highlights of [GAO-16-488](#), a report to congressional committees.

Why GAO Did This Study

Patriot is a mobile Army surface-to-air missile system deployed worldwide to defend critical assets and forces. To respond to emerging threats and address a diverse set of capability needs, the Army has spent nearly \$1.1 billion and requested \$1.8 billion over the next 5 years to upgrade Patriot, begin developing a long-term radar solution, and integrate Patriot components into a central network and command and control system—the Integrated Air and Missile Defense.

A House report included a provision for GAO to assess, among other things, the status of the Patriot system and the Army's strategy for completing the upgrades. Among other things, this report examines (1) the extent to which the latest upgrades will address Patriot capability needs and (2) the level of oversight and accountability provided for the upgrade efforts. To conduct this review, GAO examined Army and program documents including test plans and schedules. GAO also interviewed Department of Defense (DOD) and other relevant officials.

What GAO Recommends

GAO recommends that the Secretary of Defense direct the Army to establish oversight mechanisms, similar to those for major defense acquisition programs, if additional development is required for upgrades operationally tested with PDB-8 and PDB-8.1. DOD partially concurred, focusing its response on plans to track other MDAPs, but did not clarify how or if it would track current PDB-8 and PDB-8.1 progress. GAO maintains DOD should provide oversight for any additional PDB-8 and PDB-8.1 development.

View [GAO-16-488](#). For more information, contact Cristina Chaplain at (202) 512-4841 or chaplainc@gao.gov.

August 2016

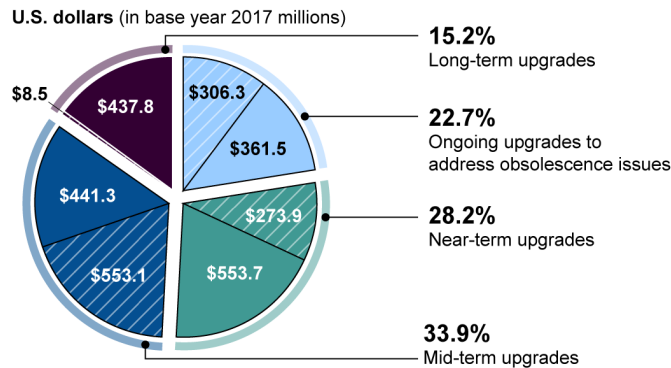
PATRIOT MODERNIZATION

Oversight Mechanism Needed to Track Progress and Provide Accountability

What GAO Found

While the currently fielded version of the Army's Patriot surface-to-air missile system is an improvement over prior versions, the Army currently plans to spend about \$2.9 billion between fiscal years 2013 and 2021 on an upgrade strategy to address a variety of capability needs. These efforts are intended to improve the system's performance, reliability, and communications as well as address obsolescence and sustainment issues. The figure below shows planned costs for ongoing efforts, near-term upgrades which begin fielding prior to fiscal year 2017, mid-term upgrades which begin fielding between fiscal years 2017 and 2021, and long-term upgrades—including a long-term radar solution. Key among the mid-term efforts are major software upgrades called Post Deployment Build-8 (PDB-8) and PDB-8.1, which are intended to improve communications and system capabilities against threats. The Army plans to begin operational testing for PDB-8 and PDB-8.1 in fiscal years 2016 and 2019, respectively. These testing results will reveal the extent to which the near and mid-term upgrades work as intended.

Breakdown of \$2.9 Billion between Fiscal Years 2013 and 2021 for Army Strategy to Address Patriot Capability Needs



Source: GAO analysis of DOD and Army budget data. | GAO-16-488

Note: Long-term upgrade costs include \$364 million for the long-term radar solution which will be a separate major defense acquisition program.

Although the Army estimated in 2013 that costs for Patriot upgrades would meet the threshold to be considered a major defense acquisition program (MDAP), the Army chose to incorporate the Patriot upgrade efforts into the existing Patriot program which made certain oversight mechanisms inapplicable. Further, it decided not to put a mechanism in place to track or report the upgrades' progress against initial cost, schedule, or performance estimates, similar to those generally required of MDAPs, which GAO considers essential for program oversight. Operational testing for PDB-8 and PDB-8.1 provides the Army with an opportunity to increase oversight. If performance shortfalls indicate a need for further development, the Army will have an opportunity to track progress on these upgrades to provide the oversight tools decisionmakers need to make important investment decisions.