Why GAO Did This Study

The Department of Defense (DOD) is developing an enterprise architecture, or corporate modernization blueprint, to guide and constrain its ongoing and planned business system investments. GAO was asked to review DOD's processes and controls for developing the enterprise architecture and ensuring that ongoing IT investments are consistent with its enterprise architecture development efforts.

What GAO Recommends

To assist DOD in successfully developing an enterprise architecture and using it to gain control over its ongoing business system investments, we are making recommendations to the Secretary of Defense to ensure that DOD (1) expands its use of effective architecture development processes and controls and (2) strengthens controls over its ongoing business systems investments.

DOD concurred with our recommendations and described recently completed, ongoing, and planned efforts to address them.

DOD BUSINESS SYSTEMS MODERNIZATION

Improvements to Enterprise Architecture Development and Implementation Efforts Needed

What GAO Found

DOD has undertaken a challenging and ambitious task to, within 1 year, develop a departmentwide blueprint for modernizing its over 1,700 time-worn, inefficient, and nonintegrated business processes and supporting information technology (IT) assets. Such a blueprint, commonly called an enterprise architecture, is an essential modernization management tool. We support the Secretary of Defense's decision to develop an architecture and the department's goal of acquiring systems that provide timely, reliable, and relevant information.

Successfully doing so requires the application of effective enterprise architecture and IT investment management processes and controls. While DOD is following some of these enterprise architecture practices, it is not following others, in part because it is focused on meeting its ambitious schedule. More specifically, with respect to developing the architecture, DOD has yet to (1) establish the requisite architecture development governance structure and process controls needed to ensure that ownership of and accountability for the architecture are vested with senior leaders across the department, (2) clearly communicate to intended architecture stakeholders the purpose, scope, and approach to developing the initial and subsequent versions of the architecture, and their roles and responsibilities, and (3) define and implement an independent quality assurance process. Until it follows these practices, DOD increases the risk of developing an architecture that will be limited in scope, be resisted by those responsible for implementing it, and will not support effective systems modernization.

DOD has taken initial steps aimed at improving its management of ongoing business system investments. However, DOD has yet to establish the necessary departmental investment governance structure and process controls needed to adequately align ongoing investments with its architectural goals and direction. Instead, DOD continues to allow its component organizations to make their own parochial investment decisions, following different approaches and criteria. This stovepiped decision-making process has contributed to the department's current complex, error-prone environment of over 1,700 systems. In particular, DOD has not established and applied common investment criteria to its ongoing IT system projects using a hierarchy of investment review and funding decision-making bodies, each composed of representatives from across the department. DOD also has not yet conducted a comprehensive review of its ongoing IT investments to ensure that they are consistent with its architecture development efforts. Until it takes these steps, DOD will likely continue to lack effective control over the billions of dollars it is currently spending on IT projects.