

GAO Highlights

Highlights of [GAO-23-105611](#), a report to congressional committees

Why GAO Did This Study

DOD has made efforts to modernize its approaches to developing and acquiring software for its software-intensive systems—such as weapon and IT systems. However, it faces challenges executing approaches to rapidly deliver software. The DSB and DIB published reports in 2018 and 2019, respectively, which made recommendations to improve DOD’s software practices.

Congress included a provision in statute for GAO to examine DOD’s implementation of DSB and DIB recommendations. This report assesses (1) the extent to which DOD addressed DSB and DIB recommendations; and (2) the extent to which DOD is positioned to implement its future software modernization plans.

GAO reviewed DOD documents related to ongoing and future software reform initiatives and interviewed relevant officials. GAO then compared this information to DIB and DSB recommendations and key practices from past GAO work.

What GAO Recommends

GAO is making seven recommendations, including that DOD finalize implementation plans for future software modernization efforts and develop a software workforce plan. DOD concurred with four recommendations and partially concurred with three recommendations. GAO continues to believe that all of its recommendations are warranted.

View [GAO-23-105611](#). For more information, contact Shelby S. Oakley at (202) 512-4841 or oakleys@gao.gov.

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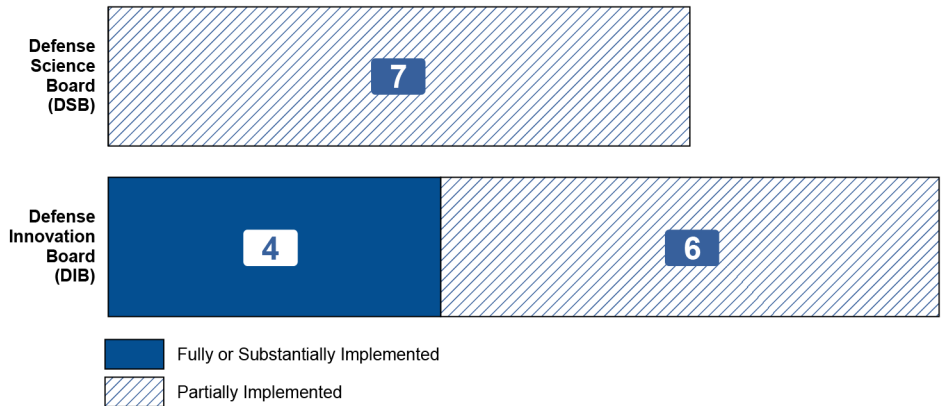
SOFTWARE ACQUISITION

Additional Actions Needed to Help DOD Implement Future Modernization Efforts

What GAO Found

The Department of Defense’s (DOD) response to evolving threats is increasingly determined by its ability to rapidly develop and deploy systems that heavily rely on software, such as weapons or information technology (IT) systems. DOD has taken many steps in the past few years to modernize its approach to developing and acquiring software. DOD’s efforts at least partially implement all 17 Defense Science Board (DSB) and Defense Innovation Board (DIB) recommendations, some of which include multiple recommended actions. For example, DOD substantially implemented two DIB recommendations by streamlining software acquisition processes and piloting a new funding approach to deliver software faster.

DOD Has at Least Partially Implemented All of the DIB and DSB Recommendations



Source: GAO analysis of Department of Defense (DOD) information and interviews with DOD officials. | GAO-23-105611

However, for 13 of the 17 recommendations, DOD has yet to take certain actions outlined in the recommendations. For example, while DOD enhanced training for its software workforce, it has yet to establish a cadre of software developers. DOD officials stated that they have addressed the intent of the recommendations and do not plan to fully implement all recommended actions, in part, because certain actions may be impractical or outdated.

DOD has outlined transformational plans to continue software modernization. According to DOD, its plans will require a cohesive department-wide effort that will take time to fully implement. However, DOD has yet to take certain steps recommended by GAO’s past work to position itself to effectively implement its planned reforms. For example, DOD has yet to finalize implementation plans for these efforts or conduct strategic planning for its software workforce to ensure it has the needed skillsets to implement reforms. Taking such steps would better position DOD to implement its planned reforms, which are aimed at helping achieve its goal of more rapidly delivering software to its users.