

# GAO Highlights

Highlights of [GAO-23-105850](#), a report to the Committee on Armed Services, U.S. Senate

## Why GAO Did This Study

DOD has begun to pursue increasingly advanced AI capabilities. DOD has historically struggled to acquire weapon systems software, and AI acquisitions pose additional challenges. In February 2022, GAO described the status of DOD's efforts to develop and acquire AI for weapon systems.

Senate Report 116-236 accompanying the National Defense Authorization Act for Fiscal Year 2021 includes a provision for GAO to review DOD's AI acquisition efforts. This is the second report in response to that provision. This report examines (1) key factors that selected private companies reported considering when acquiring AI capabilities, and (2) the extent to which DOD has department-wide AI acquisition guidance and how, if at all, this guidance reflects key factors identified by private sector companies.

GAO analyzed information provided by 13 private companies with expertise in designing, developing, and deploying AI systems in various sectors to determine the key factors. GAO also analyzed DOD documentation and compared it with the key factors, and interviewed DOD officials.

## What GAO Recommends

GAO is making four recommendations for DOD and the three military departments to develop guidance on acquiring AI capabilities, leveraging private company factors as appropriate. DOD concurred with the recommendations.

View [GAO-23-105850](#). For more information, contact Jon Ludwigson at (202) 512-4841 or [ludwigsonj@gao.gov](mailto:ludwigsonj@gao.gov).

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## ARTIFICIAL INTELLIGENCE

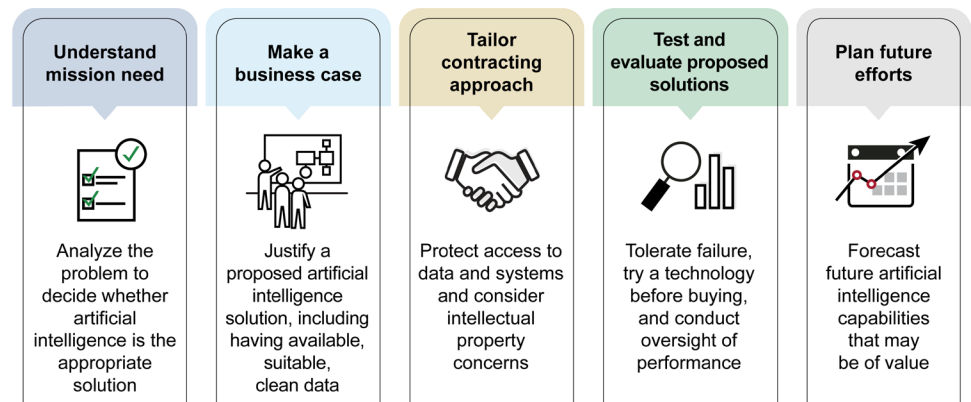
### DOD Needs Department-Wide Guidance to Inform Acquisitions

## What GAO Found

The Department of Defense (DOD) designated artificial intelligence (AI) a top modernization area and is allocating considerable spending to develop AI tools and capabilities. AI refers to computer systems designed to replicate a range of human functions and continually get better at their assigned tasks. DOD AI capabilities could be used in various ways, for example in identifying potential threats or targets on the battlefield.

GAO obtained information from 13 private sector companies about how they successfully acquire AI capabilities. Elements of these categories, shown below, are also reflected in GAO's June 2021 *AI Accountability Framework* report ([GAO-21-519SP](#)).

#### Categories of Factors Selected Companies Reported Considering When Acquiring Artificial Intelligence Capabilities



Source: GAO analysis of private sector information; GAO (icons). | GAO-23-105850

Although numerous entities across DOD are acquiring, developing, or already using AI, DOD has not issued department-wide guidance for how its components should approach acquiring AI. DOD is in the process of planning to develop such guidance, but it has not defined concrete plans and has no timeline to do so. The military services also lack AI acquisition-specific guidance, though military officials noted that such guidance would be helpful to navigate the AI acquisition process. Without department-wide and tailored service-level guidance, DOD is missing an opportunity to ensure that it is consistently acquiring AI capabilities in a manner that accounts for the unique challenges associated with AI.

Various DOD components and military services have individually developed or plan to develop their own informal AI acquisition resources. Some of these resources reflect key factors identified by private companies for AI acquisition. For example, DOD's Chief Digital and AI Officer oversees an AI marketplace known as Tradewind, which is designed to expedite the procurement of AI capabilities. Several Tradewind resources emphasize the need to consider intellectual property and data rights concerns when negotiating contracts for AI capabilities, a key factor identified by the companies GAO interviewed.