

February 2022

DEFENSE ACQUISITIONS

Additional Actions Needed to Implement Proposed Improvements to Congressional Reporting

GAO Highlights

Highlights of GAO-22-104687, a report to congressional committees

Why GAO Did This Study

DOD spends billions of dollars annually to acquire systems critical to the nation's security, including new major weapon systems-such as aircraft, ships, and satellites-and business systems to manage DOD operations. DOD weapon and business systems acquisition has been on GAO's High-Risk List since the 1990s. Over the last several years, the department implemented significant reforms that introduced new considerations for tracking and reporting on acquisitions. However, the ability of congressional leadership to conduct timely oversight remains fundamental to ensuring the acquisition system responds to warfighter needs.

A House Report included a provision for GAO to review DOD's proposal for a new reporting methodology for its acquisition programs. This GAO report describes DOD's proposed methodology and assesses the extent to which the department is prepared to implement the proposed approach. GAO reviewed DOD's proposal, as well as policies and other relevant documentation, and compared DOD's planning efforts to its proposal and to leading reform practices from prior GAO work. GAO also interviewed DOD officials.

What GAO Recommends

GAO is making two recommendations that DOD fully implement leading practices for managing reform efforts, such as by developing an implementation plan to track progress. DOD concurred with both recommendations and described planned or ongoing actions to address them.

View GAO-22-104687. For more information, contact Shelby S. Oakley at (202) 512-4841 or OakleyS@gao.gov.

DEFENSE ACQUISITIONS

Additional Actions Needed to Implement Proposed Improvements to Congressional Reporting

What GAO Found

For decades, the Department of Defense (DOD) reported to Congress on its costliest weapon programs via Selected Acquisition Reports. However, in January 2020, DOD adopted an Adaptive Acquisition Framework (AAF) with multiple acquisition pathways that broadened the range of approaches that could be used for costly, complex acquisition efforts. The National Defense Authorization Act for Fiscal Year 2020 mandated that DOD propose a new method for reporting on acquisition programs, including for programs using alternative acquisition pathways.

DOD proposed a web-based reporting approach intended to improve efficiency and data transparency by providing real-time access to acquisition information for Congress and other stakeholders. This proposal builds on larger, ongoing initiatives within the department to make data more accessible to users. However, despite proposing to begin using this approach in fiscal year 2022, DOD's preparation for implementation has been limited and many open questions remain about how the approach would be implemented (see figure).

DOD Has Yet to Address Open Questions Related to Its Proposed Reporting Approach



Source: GAO analysis of Department of Defense (DOD) documentation and interviews with DOD officials. | GAO-22-104687

DOD has yet to determine key aspects of implementing its proposal, in part, because it has not fully adopted leading practices associated with successful reform efforts. For example, DOD has yet to develop an implementation plan with key milestones or identify resources necessary to enact its proposal, among other actions it could take.

The National Defense Authorization Act for Fiscal Year 2022, enacted in December 2021, requires DOD to develop plans and demonstrations related to the reporting system that will replace Selected Acquisition Report requirements. As DOD moves forward with addressing these new requirements, fully following leading reform practices would improve the department's preparation to effectively transform acquisition reporting in a timely manner. With programs already using the AAF, delays in DOD improving its reporting approach will ultimately affect Congress' access to complete information on acquisition efforts that it needs to perform its oversight role.

Contents

Letter		1
	Background DOD Proposed a Web-based Reporting Process DOD's Preparation to Implement Its Proposal Has Been Limited Conclusions Recommendations for Executive Action Agency Comments	3 11 14 25 26 26
Appendix I	The Department of Defense's October 2020 Proposal for Reports on Acquisition Programs and Activities	29
Appendix II	Objectives, Scope, and Methodology	33
Appendix III	Additional Information about Initiatives to Improve Acquisition Data Collection and Management	35
Appendix IV	Comments from the Department of Defense	38
Appendix V	GAO Contact and Staff Acknowledgments	40
Tables		
	Table 1: Statutory Requirements and DOD's Proposal for an Alternative Acquisition Reporting Approach Table 2: DOD Has Yet to Decide What Information to Include in	12
	Acquisition Reports to Congress Table 3: DOD Has Yet to Determine What Criteria to Use for	17
	Selecting Acquisition Efforts to Report Table 4: DOD Has Yet to Determine How to Improve Reporting	19
	Timeliness	20
	Table 5: DOD Has Yet to Determine How to Provide Congressional Access	21
	Table 6: The Department of Defense (DOD) Is Taking Action on Its Acquisition Data and Analytics Strategy	37

Figures

Figure 1: The Adaptive Acquisition Framework Uses Six Different Pathways	4
Figure 2: Notional Example of How Programs Can Use Multiple Efforts and Pathways in the Adaptive Acquisition	
Framework	5
Figure 3: Examples of Changes to Selected Acquisition Report (SAR) Statutory Requirements for the Department of Defense (DOD)	9
Figure 4: Examples of Data Points Presented in the Selected Acquisition Report	10
Figure 5: DOD Has Yet to Address Open Questions Related to Its Proposed Reporting Approach	15

Abbreviations

AAF	Adaptive Acquisition Framework
Advana	Advanced Analytics
CAPE	Cost Assessment and Program Evaluation
DAVE	Defense Acquisition Visibility Environment
DOD	Department of Defense
DODI	Department of Defense Instruction
MDAP	major defense acquisition program
MTA	middle tier of acquisition
NDAA	National Defense Authorization Act
OSD	Office of the Secretary of Defense
OUSD(A&S)	Office of the Under Secretary of Defense for Acquisition
	and Sustainment
PDF	portable document file
SAR	Selected Acquisition Report

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U.S. GOVERNMENT ACCOUNTABILITY OFFICE

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February 28, 2022

Congressional Committees

For nearly half a century, Congress has required the Department of Defense (DOD) to provide cost, schedule, and performance information for certain acquisition programs in reports known as Selected Acquisition Reports (SAR), which are used to support congressional oversight.¹ DOD spends billions of dollars annually to acquire systems critical to the nation's security, including new major weapon systems—such as aircraft, ships, and satellites—and business systems to manage departmental operations. DOD's acquisition of these systems has been on GAO's High-Risk List since the 1990s as many programs continue to fall short of cost, schedule, and performance goals.² The ability of Congress to oversee DOD's more than \$1.8 trillion acquisition portfolio is fundamental to ensuring the acquisition system is responsive to warfighter needs and taxpayer investments.

Over the last several years, DOD implemented significant organizational and policy reforms that are driving changes to the way it manages, tracks, and reports on acquisition programs. One key reform is the introduction of the Adaptive Acquisition Framework (AAF), which provides new pathways for executing acquisition programs in an effort to build a more lethal and effective force. We previously emphasized the importance of updating acquisition reporting to accurately measure the performance of programs

²GAO, *High-Risk Series: Dedicated Leadership Needed to Address Limited Progress in Most High-Risk Areas*, GAO-21-119SP (Washington, D.C. Mar. 2, 2021).

¹10 U.S.C. § 4351. The text of this statute was previously codified at title 10, section 2432 of the U.S. Code until it was transferred on January 1, 2022. The statute currently requires, among other things, the Secretary of Defense to submit to Congress at the end of each fiscal-year quarter a report on current major defense acquisition programs (MDAP) and any program that is estimated by the Secretary of Defense to exceed the cost thresholds for MDAP designation. See 10 U.S.C. § 4351(b)(1). MDAPs generally include programs that are not a highly sensitive classified program and that are either (1) designated by the Secretary of Defense as an MDAP; or that are (2) estimated to require an eventual total expenditure for research, development, test, and evaluation, including all planned increments or spirals, of more than \$525 million in fiscal year 2020 constant dollars. See 10 U.S.C. § 4201(a); Department of Defense Instruction 5000.85, *Major Capability Acquisition* (Aug. 6, 2020) (Change 1 Effective Nov. 4, 2021) (reflecting statutory MDAP cost thresholds in fiscal year 2020 constant dollars).

using AAF pathways.³ However, in April 2021, a senior DOD official testified that much work remained to mature a performance measurement process that would allow for an accurate understanding of the department's progress in improving acquisition outcomes.⁴ The National Defense Authorization Act (NDAA) for Fiscal Year 2020 required DOD to submit to the congressional defense committees a proposal for an alternative reporting methodology for all acquisition programs—which would encompass all pathways in the AAF—that, among other things, reflects changes to DOD's acquisition system and addresses SAR requirements.⁵

House Report 116-442 includes a provision for us to review DOD's proposal.⁶ Our report addresses (1) what the department proposed in response to the statutory mandate to provide an alternative methodology for acquisition program reporting, and (2) the extent to which DOD is prepared to implement its proposed approach.

To describe what the department proposed, we reviewed DOD's October 2020 proposal submitted to Congress in response to section 830 of the NDAA for Fiscal Year 2020 (subsequently referred to in this report as the proposal). Appendix I includes a copy of the proposal. We also interviewed officials to obtain additional information about efforts to develop the proposal.

To assess the extent to which DOD is prepared to implement its proposed approach, we examined DOD's available documentation and interviewed officials. We assessed DOD's planning efforts against the proposal and the details required to implement it. We also compared DOD's efforts to selected leading practices from our prior work associated with the

⁵Pub. L. No. 116-92, § 830(b) (2019).

⁶H.R. Rep. No. 116-442, at 169 (2020).

³GAO, Weapon Systems Annual Assessment: Updated Program Oversight Approach Needed, GAO-21-222 (Washington, D.C.: June 8, 2021).

⁴Defense Acquisition Programs and Acquisition Reform, Before the S. Committee on Armed Services, 117th Cong. (2021) (statement of Ms. Stacy Cummings, Performing the Duties of Under Secretary of Defense for Acquisition and Sustainment).

implementation of successful agency reforms.⁷ Appendix II provides additional information on our objectives, scope, and methodology.

We conducted this performance audit from December 2020 to February 2022 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Adaptive Acquisition Framework

In January 2020, DOD reissued Department of Defense Instruction (DODI) 5000.02, *Operation of the Adaptive Acquisition Framework*. In the updated guidance, DOD established the AAF, which includes six acquisition pathways. Each pathway has different requirements for milestones, cost and schedule goals, and reporting. Figure 1 shows the six AAF pathways.

⁷GAO, *Government Reorganization: Key Questions to Assess Agency Reform Efforts*, GAO-18-427 (Washington, D.C.: June 13, 2018). In that report, we defined the term "reforms" broadly, to include any organizational changes—such as major transformations, mergers, consolidations, and other reorganizations—and efforts to streamline and improve the efficiency and effectiveness of government operations. The leading practices the report presented were based on our previous work that found the success of agency reforms hinges on the agencies' adherence to key practices for organizational transformations. Such practices include establishing clear outcome-oriented goals and performance measures, as well as involving federal employees and other key stakeholders to develop the proposed reforms.



Figure 1: The Adaptive Acquisition Framework Uses Six Different Pathways

Source: GAO analysis of Department of Defense data. I GAO-22-104687

In a June 2021 report, we noted that the AAF introduces new considerations for program oversight.⁸ In addition to allowing program managers to use one or more of six acquisition pathways, program managers can tailor, combine, and transition between pathways based on program goals and risk associated with the weapon system being acquired. Figure 2 shows an example of how a program could use multiple efforts within a single pathway and multiple pathways to achieve operational capability.⁹

Figure 2: Notional Example of How Programs Can Use Multiple Efforts and Pathways in the Adaptive Acquisition Framework



MVCR = Minimum viable capability release

MVP = Minimum viable product

Source: GAO analysis of Department of Defense data. I GAO-22-104687

In the June 2021 report, we reported that DOD had trouble tracking cumulative cost, schedule, and performance data for programs transitioning between acquisition pathways or conducting multiple efforts

8GAO-21-222.

⁹For the purposes of this report, we use the word effort to refer specifically to the activities undertaken using a single AAF pathway or any of the paths provided by an AAF pathway (for example, the rapid prototyping path of the middle tier of acquisition pathway).

	using the same pathway and had yet to develop an overarching data collection and reporting strategy. We recommended that DOD, among other things, report overall cost and schedule information for capabilities developed using multiple pathways. DOD concurred with our recommendation but has yet to address it. In an additional report from June 2021, we noted the lack of data strategies for the software and business systems acquisition pathways and reported that DOD lacked a defined approach for automated data collection. ¹⁰ We recommended that, among other things, DOD automate data collection efforts for the software acquisition pathway to allow stakeholders to monitor and assess acquisition performance. DOD agreed with the recommendation and reported that it is developing plans for automation of data collection for AAF pathways.
Roles and Responsibilities for DOD Acquisition Oversight	Acquisition oversight responsibilities for weapon programs are shared between the Office of the Secretary of Defense (OSD) and the military departments, with specific roles and responsibilities varying to some extent based on pathway and program size. Over the last several years, the decision authority for many MDAPs has largely shifted from OSD to the military departments. ¹¹ Oversight roles for programs other than weapon programs vary depending on the pathway. ¹²
	 ¹⁰GAO, Software Development: DOD Faces Risks and Challenges in Implementing Modern Approaches and Addressing Cybersecurity Practices, GAO-21-351 (Washington, D.C.: June 23, 2021). ¹¹Section 825 of the National Defense Authorization Act for Fiscal Year 2016 required that
	the service acquisition executive of the military department managing an MDAP be designated as the milestone decision authority for MDAPs initiated after October 1, 2016, unless the Secretary of Defense designates an alternate milestone decision authority under certain circumstances outlined in statute, such as the program being critical to a major interagency requirement or technology development effort. See Pub. L. No. 114-92, § 825(a) (2015) (codified as amended at 10 U.S.C. § 4204).
	¹² For example, for acquisition of services, component senior service managers are responsible for planning, management, and oversight of services acquisitions by their component. For defense business systems, the Office of the Under Secretary of Defense (Comptroller), the Chief Information Officer, and the Director of Administration and Management, share responsibilities for oversight for planning and control of investments while the milestone decision authority oversees delivery for a specific system within approved cost, schedule, and performance parameters.

The Under Secretary of Defense for Acquisition and Sustainment is the Defense Acquisition Executive and has specific responsibilities for certain AAF pathways. For example, the Under Secretary:

- serves as the milestone decision authority for certain MDAPs,¹³
- approves the use of the middle tier of acquisition (MTA) pathway for programs that exceed the cost thresholds for designation as an MDAP,
- advises the decision authority on their MTA programs and maintains responsibility for prototyping activities within the MTA pathway, and
- serves as the decision authority for special interest programs in the software acquisition pathway on a by-exception basis.

The Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD(A&S)) is also responsible for establishing policies on and supervising all matters relating to:

- system design, development, and production;
- procurement of goods and services; and
- sustainment (including logistics, maintenance, and materiel readiness).

Several other entities also play a role in oversight, acquisition, and budgeting for DOD acquisition programs, efforts, and pathways. For example:

 The Director of the Office of Cost Assessment and Program Evaluation (CAPE) is responsible for conducting or approving independent cost analysis and issuing the policies for collection of cost data. At the direction of the Secretary of Defense, Deputy Secretary, or the CAPE Director, CAPE staff also conduct numerous special studies and offer advice in other areas, such as information technology and defense economics; and

¹³According to DOD Instruction 5000.02, the milestone decision authority is the program decision authority and specifies the decision points and procedures for assigned programs. Milestone decision authorities for MDAPs and major systems will approve, as appropriate, the acquisition strategy at all major decision points.

	 The Director, Operational Test and Evaluation, reports on operational and live fire tests and evaluations carried out on MDAPs, among other duties.
Selected Acquisition Reports	Before SARs were introduced, there were no summary recurring reports on DOD's major acquisitions that reported cost, schedule, and performance data for comparison with prior and subsequent estimates. In 1967, DOD began internally producing SARs to apprise the Assistant Secretary of Defense (Comptroller) of the progress of selected acquisitions. DOD's goal for these reports was to focus department leadership on programmatic performance and changes to acquisition plans. In 1969, DOD began providing these reports to Congress to help enable congressional oversight by providing summary level cost, schedule, and performance data on MDAPs, and more recently, other program types. The SAR became the key recurring summary report for Congress to obtain consistent, reliable data on MDAPs.
	The content and the scope of SAR reporting evolved over time to meet the oversight needs of DOD leadership and Congress. Recently, in 2019, Congress broadened the reporting requirement beyond programs designated as MDAPs; specifically, the NDAA for Fiscal Year 2020 amended the SAR requirement to include programs estimated to require eventual total costs greater than the threshold for designation as an MDAP. ¹⁴ In response, DOD submitted to Congress MTA program reports similar to MDAP reports. Also in 2019, Congress terminated the requirement for DOD to submit SARs after the final submission of reporting covering fiscal year 2021. ¹⁵ However, the NDAA for Fiscal Year 2022 subsequently extended the requirement for 2 years, through fiscal year 2023. ¹⁶ Figure 3 shows selected changes to SARs since the report was mandated by statute in 1975.
	¹⁴ Congress amended the reporting requirement to include both MDAPs and any program that is estimated by the Secretary of Defense to require an eventual total expenditure for research, development, test, and evaluation of more than \$300 million in fiscal year 1990 constant dollars, or an eventual total expenditure for procurement, including all planned increments or spirals, of more than \$1.8 billion in fiscal year 1990 constant dollars. See National Defense Authorization Act for Fiscal Year 2020, Pub. L. No. 116-92, § 830(a)(1) (2019).
	¹⁵ National Defense Authorization Act for Fiscal Year 2020, Pub. L. No. 116-92, § 830(a)(2) (2019).
	¹⁶ National Defense Authorization Act for Fiscal Year 2022, Pub. L. No. 117-81, § 805(a) (2021).





SARs generally include data on total program cost, schedule, and performance, as well as other information such as program unit cost and life-cycle cost analysis of the program and its subprograms that reflect the President's Budget submission. Figure 4 depicts types of information SARs typically include.

	Selected Acquisition Report	Performance Schedule Cost	Cost Provides a summary of program cost comparing the baseline and current estimates, funding summary from the prior year to the completion of the program, and annual funding Schedule Depicts schedule approved in original documentation, current estimate of program schedule to include milestones, and explanations of changes in schedule Performance Presents information on the baseline performance requirements compared to current estimates and allows explanations of changes
	between the military depart are responsible for entering programs in acquisition dat department certifies its acc	ng and ment g and a coll uisitic then	d submitting SARs to Congress is shared s and OUSD(A&S). Military departments approving data on their acquisition ection systems. After each military on data, data are submitted to verifies the submitted data, compiles
Acquisition Data Collection and Analysis Systems	 DOD uses multiple systems at the OSD and military department level to store, analyze, and report acquisition data of the type reported to Congress in SARs. In September 2021, DOD began using its Defense Acquisition Visibility Environment (DAVE) system as a collection point for selected acquisition program data.¹⁷ DOD intends for DAVE to eventually serve as a centralized hub that provides convenient access to acquisition data from several disparate data repositories. DAVE is envisioned to be the collection point for core data for all AAF pathways when fully functional. As of November 2021, DOD officials 		

Figure 4: Examples of Data Points Presented in the Selected Acquisition Report

¹⁷Until September 2021, military department officials submitted acquisition program data to OUSD(A&S) through the Defense Acquisition Managing Information Retrieval system.

	told us that DAVE has limited functionality and that the department's efforts to develop the system's full capability are ongoing.
	• Advana (derived from the term Advanced Analytics), the common enterprise data repository for DOD, is a centralized data and analytics platform that provides DOD users with common business data, decision support analytics, and data tools. ¹⁸ Advana was developed and is maintained by DOD's Comptroller.
	• The Air Force and Army use the Project Resource Management Tool to manage acquisition data, while the Navy uses its Research, Development and Acquisition Information System to maintain, report, and disseminate acquisition data. According to OUSD(A&S) and military department officials, the department plans to determine how each of the individual military department acquisition systems will interface with OSD-level systems, such as DAVE or Advana, in the future.
DOD Proposed a Web-based Reporting Process	DOD's proposed alternative approach to acquisition reporting focused on transitioning to web-based reporting on acquisition programs starting with the fiscal year 2022 reporting cycle, which began in October 2021. As envisioned by DOD, the proposed process would provide Congress and others with access to real-time cost, schedule, and performance data on DOD acquisition programs. The proposal includes the following key elements:
	• DOD plans to use Advana to allow Congress to extract cost, schedule, and performance data on all reporting programs, portfolios, and pathways within the AAF. This data extraction is an alternative to producing a separate, stand-alone report for each program, as has been done historically. The proposal notes that the use of Advana for congressional acquisition reporting is part of a long-standing partnership plan between OUSD(A&S) and the DOD Comptroller for data automation and extraction. The department has already used this approach to support financial audits and senior leadership meetings.
	 DOD plans for each AAF pathway to have its own data strategy and reporting metrics. The proposal notes that DOD is reviewing the feasibility of including expanded program risk data and that it plans to

¹⁸Title 10, section 240c of the U.S. Code requires the Under Secretary of Defense (Comptroller) to develop and maintain a centralized monitoring reporting process that captures and maintains certain up-to-date information.

continue to report unit cost data for MDAPs in the same way that it had previously reported the information in SARs.

 DOD plans to transition from a process that required manual data input by the military departments, to an automated process that extracts data from existing acquisition data collection systems from the military departments and populates the information into either DAVE or Advana.

Table 1 provides additional detail about statutory requirements for DOD's proposal on an alternative reporting approach and DOD's response.

Statutory requirements for proposal on alternative acquisition reporting	Summary of DOD's October 2020 proposal
Align acquisition reporting to Congress with recent acquisition policy changes ^a	 The Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD(A&S)) developed a plan that will provide overarching guidance on data reporting for all six acquisition pathways identified in the Adaptive Acquisition Framework (AAF). Each pathway will have its own data strategy and reporting metrics.
	• To improve the transparency of acquisition data, DOD will automate data transfer from existing acquisition data systems to a web-based platform that will allow Congress to extract cost, schedule, and performance data on all reporting programs, portfolios, and pathways.
Address reporting requirements related to Selected Acquisition Reports (SAR)	 OUSD(A&S) and the DOD Comptroller have a long-term plan for data automation and extraction through the Comptroller-managed Advanced Analytics (Advana) system, which DOD uses for data analytics.
	 OUSD(A&S) generally intends to report information on cost, schedule, and performance through Advana, similar to what was previously reported in SARs.
	 OUSD(A&S) is studying whether a classified risk assessment reporting portal in Advana would be beneficial to respond to congressional interest in receiving additional information on program risk.
Address reporting requirements related to unit cost ^b	 Unit cost reporting is collected through an existing internal reporting process and, according to the proposal, could easily be automated and reported to Congress through Advana.
	 DOD recommended no change to the statutory requirements for unit cost reporting.
Address reporting requirements for acquisition programs that use alternative acquisition	 DOD plans to provide automated acquisition data through Advana for all AAF pathways beginning with the fiscal year 2022 reporting cycle.
pathways or tailored acquisition approaches	• DOD expects Advana, when mature, will provide Congress on-demand, real-time information on thousands of acquisition programs across the AAF pathways. The proposal does not provide a date for when DOD anticipates that Advana will be mature.
Source: CAO englysic of Section 820(b) of the National Defense Author	ization Act for Fiscal Vear 2020 and Department of Defense (DOD) documentation 1 GAO-22-10/687

Table 1: Statutory Requirements and DOD's Proposal for an Alternative Acquisition Reporting Approach

Source: GAO analysis of Section 830(b) of the National Defense Authorization Act for Fiscal Year 2020 and Department of Defense (DOD) documentation. | GAO-22-104687

^aDepartment of Defense Directive (DODD) 5000.01, The *Defense Acquisition System* (Sept. 9, 2020); Department of Defense Instruction (DODI) 5000.02, *Operation of the Adaptive Acquisition Framework* (AAF) (Jan. 23, 2020).

^b10 U.S.C. §§ 4371-4377.

OUSD(A&S) officials cited a number of potential benefits expected to result from their proposed approach.

- Improved data transparency. The proposal states that automated data transfer through Advana is designed to improve data transparency and facilitate DOD-wide analysis and management of business operations. This effort to improve transparency of congressional acquisition reporting aligns with the department's overall priority to improve data transparency throughout the department. DOD expects that this greater data transparency will enable it to assess the progress of its recent acquisition policy changes, promote monitoring of the defense acquisition system, and inform program and portfolio decisions.¹⁹
- Delivery of timelier information. The proposal states that an automated data extraction process would provide Congress with more current information and would facilitate DOD's ability to adapt to changing reporting requirements. According to OUSD(A&S) and military department acquisition officials, the process of gathering data and preparing SARs has historically been cumbersome, sometimes taking months to complete. As a result, they stated that the approval process coupled with the manual data entry process resulted in out of date information being presented to Congress.
- Reduced DOD resources required to vet and release information. Once the military departments input their acquisition data, OUSD(A&S) officials manually check the data submitted by the programs to verify accuracy and completeness. According to OUSD(A&S) officials, this process of manual data entry and verification requires resources from an already small group of personnel. When using Advana, OUSD(A&S) officials anticipate less manual data entry and checking of data.

¹⁹A June 15, 2020, memorandum from OUSD(A&S) titled "Data Transparency to Enable Acquisition Pathways" addressed the importance of data transparency across DOD. The department's foundational acquisition guidance, Department of Defense Directive 5000.01, *The Defense Acquisition System* (Sept. 9, 2020), subsequently established the department's policy of data transparency.

DOD's Preparation to Implement Its Proposal Has Been Limited	Although the proposal states that DOD planned to begin using its proposed approach in the fiscal year 2022 reporting cycle, DOD's preparation to implement the proposed approach has been limited to date. Many open questions remain about how the approach would be implemented, including questions on fundamental issues such as which programs the department will report on and how it will provide Congress access to data. We found that DOD's initial planning for its proposed approach did not fully address the leading practices that our past work has shown support successful agency reforms, including practices associated with implementation planning. The NDAA for Fiscal Year 2022, enacted in December 2021, requires DOD to develop plans and demonstrations related to the reporting system that will replace SAR requirements. As DOD moves forward with addressing these new requirements, fully implementing leading practices would improve the department's preparation to effectively transform congressional acquisition reporting in a timely manner.
DOD Has Yet to Determine Fundamental Aspects of Implementation	DOD has made progress improving its management of the acquisition information that could be reported to Congress, but its preparation to implement its proposed reporting approach has been limited. Although the proposal states that DOD planned to begin implementing its proposed approach for the fiscal year 2022 reporting cycle, which began in October 2021, many questions remain about how and when DOD's proposed web-based reporting process will be implemented. Figure 5 shows key questions and decisions for implementing the proposal that DOD has yet to address.





Information sensitivity

Source: GAO analysis of Department of Defense (DOD) documentation and interviews with DOD officials. | GAO-22-104687

Determining What Information to Report

WHAT ARE DATA ELEMENTS?

Data elements include individual facts for analysis and information collected about a program, for example, a program's total cost and schedule estimates.

WHAT ARE PERFORMANCE METRICS?

Performance metrics are measures of program performance, for example, the extent to which a program is meeting its baseline cost and schedule estimates.

WHAT IS DATA GOVERNANCE?

Data governance includes creating and implementing the policies, processes, framework, tools, metrics, and oversight required to effectively manage data.

Source: GAO analysis of Department of Defense documentation. | GAO-22-104687

DOD has yet to finalize what information to provide to Congress in future reporting. The introduction of the AAF and its six accompanying pathways introduced new considerations for program oversight, including what data elements DOD should collect for acquisition efforts using each pathway and what performance metrics would allow it to best measure the performance of those efforts. These considerations are particularly significant for acquisition efforts in pathways—such as the MTA or software pathways—for which data elements and performance metrics collected and reported for MDAPs are not necessarily applicable. As part of the department's work to fully implement the AAF, OUSD(A&S) has been engaged in broader ongoing work to implement foundational data governance initiatives, including some ongoing prior to the AAF. DOD intends these data governance initiatives to improve its acquisition data management and to establish internal data needs and performance metrics for AAF pathways.

OUSD(A&S)'s data governance initiatives are directly related to DOD's ability to transform congressional acquisition reporting. OUSD(A&S) officials described these initiatives as a significant, multiyear undertaking (see appendix III for additional details about DOD's initiatives). They stated that they have already spent several years working to move the department forward in this area and years of work remain to fully implement effective data governance for acquisition data. In the meantime, we found that DOD has made progress in identifying data elements collected for the AAF pathways and improvements in the collection process for acquisition data. For example:

- Data standards for AAF pathways. Between October 2020 and August 2021, DOD established data standards for five of the six AAF pathways and is currently in the process of implementing them.²⁰ Data standards are intended to provide common data definitions to align military department and OSD acquisition data systems. OUSD(A&S) officials expect the data standards to enable consistent, departmentwide collection and analysis of data. In 2021, for example, at the direction of the Deputy Secretary of Defense, DOD began using its acquisition data to conduct analysis of acquisition portfolios.
- Acquisition Visibility Data Framework. In October 2020, OUSD(A&S) established the Acquisition Visibility Data Framework to be the common data framework for all AAF pathways in the future. The framework categorizes and defines acquisition data elements as

²⁰DOD has yet to establish data standards for the acquisition of services pathway.

well as trusted data sources, among other things. OUSD(A&S) plans for this framework to be the mechanism for documenting and providing department-wide data standards for the AAF pathways as they mature.

Despite this progress, OUSD(A&S) has yet to finalize performance metrics and decide what new information it will report to Congress for all pathways. Officials we spoke with in DOD told us that including certain additional information could improve the utility of reporting. For example, CAPE officials stated it would be useful to add data on sustainment; officials from DOD's Office of the Director, Operational Test and Evaluation stated it would be useful to add additional metrics not traditionally reported on testing and schedule. In August 2021, OUSD(A&S) officials told us that an initiative to identify additional available information to potentially include in acquisition reporting was postponed and would not be completed until after the Senate confirms a new Under Secretary of Defense for Acquisition and Sustainment. Table 2 provides additional detail about open questions related to what information DOD intends to report to Congress.

lssue	Explanation and examples	
Data elements for each Adaptive Acquisition Framework (AAF) pathway	 The Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD(A&S)), in coordination with the military departments, identified data elements to be collected for five of the six AAF pathways and is determining the data elements to be reported to Congress under its new acquisition reporting approach. OUSD(A&S) has yet to finalize data elements that will be collected for the acquisition of services pathway. 	
Performance metrics for each AAF pathway	 OUSD(A&S) officials stated they expect to report largely the same metrics as they have previously for major defense acquisition programs (MDAP). For example, they would continue to report on programs' progress in meeting specific schedule milestones for MDAPs. However, these performance metrics may not be applicable to all AAF pathways. For example, programs using DOD's software pathway track different metrics than those used for programs using other pathways. 	
	 OUSD(A&S) officials stated that DOD needs more time to fully implement the new AAF pathways before they know which performance metrics are most useful both internally for oversight and for reporting to Congress. 	
	 In March 2021, a Federally Funded Research and Development Center began a 15-month study to assist OUSD(A&S) with developing performance metrics for each AAF pathway and across pathways. 	

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1 2010 7' 11(11) H2C YO	t to Decide What Information	n to include in Acquiel	ion Reports to Condress
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Issue	Explana	ation and examples
New programmatic information to report	The Ass	SD(A&S) officials said they had yet to finalize new information to be included in reporting. A National Defense Authorization Act for Fiscal Year 2022 requires the Director of Cost sessment and Program Evaluation to include information on software development and ersecurity risks, among other data elements, in the plan they must submit to Congress.
	me tha	D also acknowledged in its October 2020 proposal for an alternative acquisition reporting thodology that there is a desire for the department to report additional information on risk t was not included in Selected Acquisition Reports (SAR). DOD noted, however, that risk ressments are sometimes classified. SARs are required by statute to be unclassified. ^a
Reporting for programs that use multiple AAF pathways or multiple acquisition efforts in a single pathway	pat mu	der the AAF, capabilities may be developed and fielded using a single pathway or multiple hways. In addition to using multiple pathways, a program manager can also undertake ltiple distinct efforts using the same pathway—such as two or more software efforts using software acquisition pathway.
	acr	SD(A&S) officials stated that they have yet to determine how information will be combined oss pathways or for multiple acquisition efforts within the same pathway to provide insight o the overall cost and schedule for achieving a capability.
		lune 2021, we recommended that DOD address this issue. DOD concurred with our ommendation but has yet to determine how to address it. ^b
Information sensitivity	web	SD(A&S) and military department officials stated that reporting to Congress in the proposed o-based format raises concerns about the sensitivity of acquisition program data that have to be resolved.
	dat pro	example, the officials stated that they have yet to determine the extent to which sharing a through Advana—potentially allowing users to aggregate performance data on multiple grams—creates information sensitivity concerns beyond those that would exist in creating a parate report for each program.
Source: GAO analysis of Denartment of Defense		entation, the National Defense Authorization Act for Fiscal Year 2022, and interviews with DOD officials. GAO-22-104687
	(202) doounie	^a 10 U.S.C. § 4351(i). A Selected Acquisition Report required under this section shall be submitted in unclassified form without any designation relating to dissemination control, but may contain a classified annex.
		^b GAO, Weapon Systems Annual Assessment: Updated Program Oversight Approach Needed, GAO-21-222 (Washington, D.C.: June 8, 2021).
Determining What Criteria to Use for Selecting Acquisition Efforts to Report		DOD has yet to determine which acquisition efforts it will include in congressional acquisition reporting. The proposal states that DOD plans to provide data to Congress through Advana for all pathways beginning in the fiscal year 2022 reporting cycle and that, when mature, Advana would provide information on thousands of programs. However, OUSD(A&S) and military department officials subsequently told us that they were not certain which AAF pathways or acquisition efforts would be included in reporting. The proposal does not address specific criteria that would define which acquisition efforts should be included in congressional acquisition reporting.
		In the short term, OUSD(A&S) officials said they expect to continue to use the same criteria they previously used for SARs—which requires DOD to report on MDAPs and other acquisition programs over the MDAP cost

thresholds—to identify acquisitions to include in reporting.²¹ These criteria also specify when during the acquisition process an MDAP is required to be included in congressional acquisition reporting.²² However, the same criteria may not be applicable for acquisition efforts using pathways other than the major capability acquisition pathway or for those acquisitions using a combination of AAF pathways. For example, for programs using the software pathway, cost estimating methodology and criteria related to acquisition phases are not the same as they are for MDAPs. Table 3 provides additional detail on open questions related to which acquisition efforts to include in reporting.

Issue	Explanation and examples
Cost thresholds	DOD's October 2020 proposal to Congress for an alternative acquisition reporting methodology did not specify a cost threshold for reporting.
	 Not all Adaptive Acquisition Framework (AAF) pathways use the same approach to cost estimating, so it may be challenging to apply the same cost threshold across each pathway. For example, the statutory reporting threshold for Selected Acquisition Reports (SAR) is based on eventual total expenditure. However, in most cases middle tier of acquisition (MTA) prototype estimates do not reflect any future investment that DOD will need, if it decides to further develop and field the capabilities being prototyped.
AAF pathways	• DOD has previously only provided SARs or similar reporting to Congress on major defense acquisition programs (MDAP) and programs using the MTA pathway.
	 Office of the Under Secretary of Defense for Acquisition and Sustainment officials told us they are primarily focused on reporting on these two pathways at this point and are not certain which, if any, additional pathways they will report on in the future.
Time frames to start and stop reporting	• SAR requirements for MDAPs generally apply from the time funds are appropriated for the program and the Secretary of Defense decides to proceed to system development and program demonstration,

set of criteria for determining when programs should report would work. For example, our past work has shown that key schedule events for programs using the MTA pathway can vary widely from program to program.

until a program delivers 90 percent of its items or made 90 percent of planned expenditures.^a

However, because each pathway in the AAF has different acquisition phases, it is unlikely that a single

Source: GAO analysis of Department of Defense (DOD) documentation, 10 U.S.C. § 4351, GAO-20-439, and interviews with DOD officials. | GAO-22-104687

^a10 U.S.C. § 4351(g), (h)(1).

²¹10 U.S.C. § 4351(b)(1). See also DODI 5000.85 (reflecting statutory MDAP cost thresholds in fiscal year 2020 constant dollars). Section 805 of the National Defense Authorization Act for Fiscal Year 2022 requires DOD to demonstrate capability improvements needed to achieve full operational capability of the reporting system that will replace SARs. It requires demonstrations to include a range of covered programs across acquisition categories and defines a covered program as a program required to be included in a SAR. Section 805 also directs the Director of CAPE to prepare a plan that includes the types of covered programs to be included in the reporting system, including the dollar value threshold for inclusion, and the acquisition methodologies and pathways that are to be included. See Pub. L. No 117-81, § 805 (2021).

2210 U.S.C. § 4351(g), (h)(1).

Determining How to Improve Reporting Timeliness

While one of the intended benefits of DOD's proposed approach is the ability to provide more timely information, the department has yet to determine the specific process improvements needed to achieve this benefit. DOD officials expressed dissatisfaction with the timeliness of SAR reporting, which is affected by several factors including the (1) frequency of reporting, (2) automation of data collection, and (3) approval process. For example, OUSD(A&S) officials told us that the certification of SAR data by the military departments, a part of the approval process, tended to cause the longest delays in reporting. For the fiscal year 2020 reporting period—the last time that annual SARs were submitted to Congress—program offices were required to submit data by February 2020. The SARs were scheduled to be provided to Congress in March 2020, but they were not released until May 26, 2020. However, OUSD(A&S) officials stated that they anticipate that the certification process would remain the same and that it would only change if associated statutory requirements also changed.²³ Table 4 includes additional information on open questions related to the timeliness of congressional acquisition reporting.

Table 4: DOD Has Yet to Determine How to Improve Reporting Timeliness

Issue	Explanation and examples
Reporting frequency	 Although DOD's October 2020 proposal for an alternative acquisition reporting methodology states that data eventually would be provided in real time, officials from the Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD(A&S)) told us that information will not be updated in Advanced Analytics (Advana) continuously. Rather, they expect to provide Congress the latest official information available, which differs by metric.
	 OUSD(A&S) officials told us that information on funding, for example, will be tied to the President's Budget, which is updated annually.
Automation of data reporting	 DOD plans for Advana to be used for automated reporting and analysis of acquisition data. The proposal states that automation would provide Congress with more current information. The source data in Advana is planned to come from the Defense Acquisition Visibility Environment (DAVE), military department-specific acquisition data systems, and other legacy systems. While OUSD(A&S) intends for DAVE to be a central source of acquisition data, officials stated that they are in the early stages of aligning several disparate data systems.
	 DOD officials stated that much work remains to implement data automation improvements. For example, programs using the software pathway manually submit data to OUSD(A&S) because DAVE does not yet capture the pathway's required data elements.

²³According to title 10, section 4204(d) of the U.S. Code, for each MDAP, the Secretary of the military department concerned and the Chief of the armed force concerned must, in each SAR required under 10 U.S.C. § 4351, certify that program requirements are stable and funding is adequate to meet cost, schedule, and performance objectives for the program and identify and report to the congressional defense committees on any increased risk to the program since the past report. In the recent past, military departments have taken months to certify SARs for approximately 90 MDAPs.

Issue	Explanation and examples
Certification and approval process	 The approval process for Selected Acquisition Reports includes certification by senior military department officials as well as reviews at lower levels in each military department.
	 While OUSD(A&S) officials stated that the certification process was one of the most time-consuming elements of the reporting process, they were not able to describe any planned changes that would result in providing Congress timelier information.

Source: GAO analysis of Department of Defense (DOD) documentation and interviews with DOD officials. | GAO-22-104687

Determining How to Provide Congressional Access DOD has yet to determine how to provide Congress access to acquisition data in Advana. To implement its proposed approach, DOD would need to provide access to acquisition data in Advana for users outside of DOD, including congressional staff. However, OUSD(A&S) and DOD Comptroller officials told us in November 2021 they have yet to put in place a plan to grant access to Advana to users outside of DOD. Officials said there are cost implications regarding the number of users since they must be provided an approved computer and access to the DOD network. Table 5 provides additional information on open questions related to access.

Table 5: DOD Has Yet to Determine How to Provide Congressional Access

Issue Explanation and examples	
Access to web-based system	 DOD cannot currently provide access to Advanced Analytics (Advana) for individuals outside of the DOD network due to information security concerns.
	• The Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD(A&S)) and DOD Comptroller officials stated that they discussed different options for providing access. They are considering providing DOD-furnished computers and credentials to those who need access to the system to allow them to get on the department's network. However, as of November 2021, a solution to provide access has yet to be determined.
How many users will need access	 OUSD(A&S) and DOD Comptroller officials said that they did not know how many users outside DOD would require access to Advana, which may affect their proposed solution for providing access.
Training and support for users	 OUSD(A&S) and DOD Comptroller officials stated they have technical support and office hours in place for Advana to help answer questions from the DOD user community, which could also support congressional users. However, they added that, at this point, they do not know the level of expertise of potential users or how much support they would require.

Source: GAO analysis of Department of Defense (DOD) documentation and interviews with DOD officials. | GAO-22-104687

DOD Has Not Fully Implemented Leading Agency Reform Practices in Preparing for Reporting Transformation

DOD's planning to date has been limited in part because it has yet to fully implement two leading practices associated with successful reforms. Specifically, our prior work has shown that following leading reform practices such as those related to (1) leadership focus and attention and (2) managing and monitoring the implementation of reforms, improves the likelihood of successful reforms.²⁴ In planning for the implementation of its proposed approach, DOD addressed some but not all elements of these practices.

Selected practices our prior work has shown are associated with effective reforms

Leadership focus and attention

- Has the agency designated a leader or leaders to be responsible for implementation of the proposed reforms?
- Has agency leadership defined and articulated a succinct and compelling reason for the reforms (i.e., a case for change)?
- Has the agency established a dedicated implementation team that has the capacity, including staffing, resources, and change management, to manage the reform process?

Managing and monitoring

- Has the agency developed an implementation plan with key milestones and deliverables to track implementation progress?
- How is the agency planning to measure customer satisfaction with the changes resulting from its reforms?
- How has the agency ensured continued delivery of services during reform implementation?

Source: GAO-18-427. | GAO-22-104687

Leadership focus and attention. DOD is following some aspects of this practice, but has yet to follow other aspects that could help address related challenges OUSD(A&S) officials identified. DOD's planning documentation broadly establishes ongoing leadership for the new reporting approach by OUSD(A&S) in partnership with the DOD Comptroller. Senior DOD leadership also defined and articulated a compelling reason for DOD's reform of how it collects and uses all data, including for acquisitions, in the department. However, DOD has yet to take other actions that would facilitate addressing certain aspects of this practice.

- Although leadership is broadly assigned, DOD's planning documentation does not address the specific responsibilities of offices with leadership roles, or of the military departments or other organizations that will need to provide the information necessary to enable effective congressional acquisition reporting. OUSD(A&S) officials told us that significant coordination is needed between their office, other OSD organizations, and the military departments to support efficient implementation of the proposal. For example, OUSD(A&S) officials stated that the DOD Comptroller-not OUSD(A&S)—determines the order of development priorities for Advana. Officials noted that the DOD Comptroller is currently focused on developing non-acquisition related capabilities in Advana to support departmental decision-making and leadership. Further, the military departments are responsible for providing data for congressional acquisition reporting, and their willingness to transparently share data about their acquisition programs is critical to DOD's proposed approach. We previously reported that they and OSD have had disagreements about the level of data that the military departments should be required to provide on some acquisitions, which, if not resolved, could hinder DOD's ability to implement the proposal.25
- DOD officials told us they have yet to determine the resources necessary to implement the proposal, such as the funding that will be

²⁴GAO-18-427.

²⁵GAO, DOD Acquisition Reform: Leadership Attention Needed to Effectively Implement Changes to Acquisition Oversight, GAO-19-439 (Washington, D.C.: June 5, 2019).

required or the number of government and contractor staff needed to help execute the approach. Our previous work has emphasized the importance of establishing a dedicated implementation team that has the capacity—including staffing and resources—to manage the reform process. Without determining needed resources, DOD is not well positioned to form an effective implementation team to ensure progress. OUSD(A&S) officials stated they have no dedicated funding for acquisition reporting initiatives, and that the OSD-level offices working on this effort are short-staffed and relied upon contractor support to make initial changes to Advana to support acquisition reporting. An OUSD(A&S) official noted that his office had a directed cut to staffing levels, so finding resources to get work done on Advana was a challenge. Military department officials also expressed concerns about resources. For example, Army acquisition officials said the Army may not have the resources to report on more programs than it currently does, as smaller programs are not typically staffed to support congressional acquisition reporting. Further, they said that staff would need training on a new methodology for congressional acquisition reporting, which could be significant if reporting requirements were extended to additional programs.

Managing and monitoring implementation. DOD has focused on continued delivery of services during reform implementation, but has yet to address other aspects of planning related to managing and monitoring implementation. Specifically, DOD officials indicated the department has an interim approach to ensure the continued delivery of SAR information while it is trying to implement a new form of acquisition reporting. OUSD(A&S) officials said they are preparing to use Advana to produce SARs for MDAPs. They noted that the acquisition reports produced with Advana will only include information currently required by statute and that some data previously included in SARs, but not statutorily required, will be removed. As of November 2021, officials said the department was on track to be ready to provide portable document format (PDF) reports for upcoming SAR submissions reflecting fiscal year 2021 as required.²⁶ OUSD(A&S) officials also told us they plan to continue to provide Congress with reports for programs using the MTA pathway that are similar to what they submitted to Congress for these programs in 2020. However, DOD officials have yet to develop an implementation plan with key milestones and deliverables to track implementation progress for the

²⁶The SAR for the quarter ending December 31 is the comprehensive annual SAR. DOD is required to submit the comprehensive annual SAR within 30 days after the President transmits the following fiscal year's budget to Congress. See 10 U.S.C. § 4351(c)(4), (f).

proposal. During our review, they told us that they had a notional, highlevel schedule and did not see the value in developing additional detailed planning. DOD officials also have yet to develop a plan to measure congressional satisfaction with changes resulting from implementing the proposed plan.

OUSD(A&S) officials also described a number of other factors that limited implementation planning to date. For example, they explained that developing the capabilities needed to implement the proposal is only one of a large number of priorities awaiting decisions once senior OUSD(A&S) leadership is in place following the 2021 change in presidential administration.²⁷ They stated that, as a result, they were not able to provide a more definitive time frame to complete the work. An OUSD(A&S) official also noted that given the substantial changes to the acquisition process related to the AAF, the office needs more time to determine how it would fully implement the proposal. Further, OUSD(A&S) officials added that for some of the implementation details, they were not certain how congressional staff and other stakeholders would prefer for them to be addressed and were waiting for further legislative direction.

Congress recently provided DOD with additional direction on acquisition reporting. The NDAA for Fiscal Year 2022, enacted in December 2021, requires DOD to develop plans and demonstrations concerning certain aspects of the reporting system that will replace the SAR requirements. Specifically, it requires:

 DOD to provide to the congressional defense committees a demonstration of the capability improvements needed to achieve full operational capability for its proposed reporting system on a recurring basis starting not later than March 1, 2022.

²⁷As of February 2022, a new nominee has yet to be confirmed for the Under Secretary of Defense for Acquisition and Sustainment position. An acting Under Secretary is performing the duties of the Under Secretary of Defense for Acquisition and Sustainment.

•	The Director of CAPE to prepare a plan for identifying and gathering
	the data required for effective decision-making not later than March 1,
	2022; ²⁸ and

• The Under Secretary of Defense for Acquisition and Sustainment to submit to the congressional defense committees, not later than July 1, 2022, a plan for the new reporting system that includes information related to some of the practices our past work has found can help government agencies improve the likelihood of effective reforms, such as the implementation schedule and milestones for DOD's proposed reporting system, among other things.²⁹

Following leading practices associated with effective reforms while addressing these new requirements will help DOD lay out steps, such as how it will answer outstanding questions, to make the transition to its proposed congressional acquisition reporting approach more achievable.

Conclusions

DOD outlined an ambitious yet high-level approach to modernize its congressional acquisition reporting to align with significant reforms in recent years, including the introduction of the AAF. The proposal will likely require sustained leadership commitment and take DOD many years and potentially significant resources to implement. Yet, DOD's planning to date leaves fundamental questions unanswered about how the proposed approach will work in practice, in part, because DOD has not fully followed leading reform practices in the areas of leadership focus and attention and managing and monitoring reforms.

Given that execution is well underway for programs using the AAF, aligning acquisition reporting with this new framework in a timely manner is essential to ensure that Congress has relevant information to assess whether DOD's acquisition programs meet warfighter needs and invest taxpayer dollars wisely. The new requirement in the NDAA for Fiscal Year

²⁸Section 805 of the National Defense Authorization Act for Fiscal Year 2022 directs the Director of CAPE to prepare a plan on data required for identifying and gathering the data required for effective decision making not later than March 1, 2022. The plan must identify, among other things, the specific data elements needed to assess covered program performance and associated risks, and the types of covered programs to be included, including the dollar value threshold for inclusion, and the acquisition methodologies and pathways that are to be included. See Pub. L. No. 117-81, § 805(c)(1) (2021).

²⁹Section 805 of the National Defense Authorization Act for Fiscal Year 2022 directs the Under Secretary of Defense for Acquisition and Sustainment to submit to the congressional defense committees, not later than July 1, 2022, a plan for the reporting system to report to the congressional defense committees and effectively share information related to covered programs. See Pub. L. No. 117-81, § 805(c)(2) (2021).

	2022 that DOD take certain steps towards developing a reporting system that will replace SAR requirements underscores the importance of DOD conducting effective planning for this effort. By taking actions associated with leading reform practices—such as ensuring that the agency has the staffing and resources it needs for implementation and developing an implementation plan with key milestones and deliverables—DOD can help ensure that Congress and other key stakeholders have a better understanding of how the open questions that remain will be addressed and assurance that this critical effort will be executed successfully in a timely fashion.
Recommendations for Executive Action	We are making the following two recommendations to the Department of Defense:
Executive Action	The Secretary of Defense should ensure the Under Secretary of Defense for Acquisition and Sustainment fully implements leading reform practices in the area of leadership focus and attention while developing the reporting system that will replace the Selected Acquisition Report requirements, such as by creating a dedicated implementation team that has the capacity, including staffing and resources, to manage the reform process. (Recommendation 1)
	The Secretary of Defense should ensure the Under Secretary of Defense for Acquisition and Sustainment fully implements leading reform practices in the area of managing and monitoring reforms while developing the reporting system that will replace the Selected Acquisition Report requirements, such as by developing an implementation plan with key milestones and deliverables. (Recommendation 2)
Agency Comments	We provided a draft of this product to DOD for comment. In its comments, reproduced in appendix IV, DOD concurred with both recommendations and described planned or ongoing actions to address them.
	We are sending copies of this report to the appropriate congressional committees and the Secretary of Defense. In addition, the report is available at no charge on our website at https://www.gao.gov.

If you or your staff have any questions about this report, please contact me at 202-512-4841 or OakleyS@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix V.

Shelly Oakley

Shelby S. Oakley Director, Contracting and National Security Acquisitions

List of Committees

The Honorable Jack Reed Chairman The Honorable James M. Inhofe Ranking Member Committee on Armed Services United States Senate

The Honorable Jon Tester Chairman The Honorable Richard C. Shelby Ranking Member Subcommittee on Defense Committee on Appropriations United States Senate

The Honorable Adam Smith Chairman The Honorable Mike Rogers Ranking Member Committee on Armed Services House of Representatives

The Honorable Betty McCollum Chair The Honorable Ken Calvert Ranking Member Subcommittee on Defense Committee on Appropriations House of Representatives

Appendix I: The Department of Defense's October 2020 Proposal for Reports on Acquisition Programs and Activities









Appendix II: Objectives, Scope, and Methodology

This report addresses (1) what the Department of Defense (DOD) proposed in response to a statutory mandate to provide an alternative methodology for acquisition program reporting, and (2) the extent to which DOD is prepared to implement its proposed approach.

To describe what the department proposed, we reviewed DOD's October 2020 proposal submitted to Congress in response to section 830 of the National Defense Authorization Act (NDAA) for Fiscal Year 2020.

To determine the extent to which DOD is prepared to implement its proposed approach, we analyzed available documentation from relevant offices within the Office of the Secretary of Defense and the military departments responsible for acquisition data collection and reporting to determine what actions had been taken. We assessed these actions against the proposal and the details required to implement it. Further, we examined the extent to which DOD has developed policies, data standards, and metrics associated with each of the Adaptive Acquisition Framework (AAF) pathways and reviewed DOD's ongoing data governance work.¹

We also compared DOD's planning efforts to our prior work on assessing agency reform efforts.² Specifically, we analyzed DOD's planning documents and interviewed agency officials to understand the extent to which DOD has or planned to address selected practices for agency reform efforts. We focused our assessment on two of the 12 leading reform practices—(1) leadership focus and attention and (2) managing and monitoring—and selected key questions for those practices that we determined were most relevant to implementing DOD's proposal to reform its congressional acquisition reporting.

To supplement information collected for both audit objectives, we conducted interviews with officials from the Office of the Under Secretary

²GAO, *Government Reorganization: Key Questions to Assess Agency Reform Efforts*, GAO-18-427 (Washington, D.C.: June 13, 2018). The report identified key questions for assessing federal agencies' reform efforts by reviewing prior GAO work on leading practices on organizational mergers and transformations, collaboration, government streamlining, and efficiency.

¹To provide additional context on DOD's data governance work for acquisition data, in appendix III, we compared this work with the lines of effort the Office of Acquisition Enablers within the Office of the Under Secretary of Defense for Acquisition and Sustainment included in its December 2020 Acquisition and Sustainment Data and Analytics Strategic Implementation Plan to understand DOD's progress in this area and the extent to which they have aligned planning with this work and the proposal.

of Defense for Acquisition and Sustainment; the Office of the Under Secretary of Defense (Comptroller); the Office of the Director of Cost Assessment and Program Evaluation; the Office of the Director, Operational Test and Evaluation; the Joint Staff; and the military departments. We conducted these interviews to understand DOD's time frames, resource needs, and the planning process related to the proposal, as well as to obtain information about the status of initiatives to improve DOD's acquisition data management and adapt acquisition reporting to the AAF.

We conducted this performance audit from December 2020 to February 2022 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix III: Additional Information about Initiatives to Improve Acquisition Data Collection and Management

The Department of Defense's (DOD) October 2020 proposal to update congressional acquisition reporting is dependent on implementing broader foundational data governance initiatives that are currently being undertaken by the department. The Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD(A&S)) made some progress under initiatives intended to improve acquisition data management and analysis, including establishing common data standards and definitions for most of the new acquisition pathways and updating acquisition data systems. OUSD(A&S)'s work to date supports DOD's internal purposes, and it makes up the building blocks for DOD to be able to provide Congress better acquisition performance data in the future. For example:

- In 2014, OUSD(A&S) created a working-level and an executive-level group for collaboration on data governance and analytics across the department. Then, in October 2020, OUSD(A&S) established the Acquisition Visibility Data Framework as the common data framework for defense acquisition performance measures for all Adaptive Acquisition Framework (AAF) pathways, although it has yet to be fully implemented. The framework categorizes and defines acquisition data elements and identifies authoritative sources, among other things.
- OUSD(A&S) issued instructions for each of the six AAF pathways between December 2019 and October 2020. Work is ongoing to fully implement and align the Acquisition Visibility Data Framework with all six AAF pathways in accordance with DOD Instruction 5000.02 and these acquisition pathway policies.
- In support of the OUSD(A&S) Data and Analytics Strategy established per the June 15, 2020, Under Secretary of Defense for Acquisition and Sustainment memorandum "Data Transparency to Enable Acquisition Pathways," the Enterprise Information group, under the direction of the Principal Deputy for Acquisition Data and Analytics, has worked with the military departments to define core strategic level program information.
- OUSD(A&S) also established and is in the process of implementing data standards for five of the six AAF pathways. Data standards provide common data definitions to align military department and the Office of the Secretary of Defense acquisition data systems. The most recent data standards established were for the software pathway in August 2021. These standards, once fully implemented, are intended to enable consistent data collection and analysis across the department of the individual data elements that are to be collected.

Appendix III: Additional Information about Initiatives to Improve Acquisition Data Collection and Management

To coordinate its work going forward, in December 2020, the Office of Acquisition Enablers within OUSD(A&S) issued the Acquisition and Sustainment Data and Analytics Strategic Implementation Plan.¹ The plan stated that it was intended to align with the overall DOD Data Strategy and address department-wide deficiencies identified by the DOD Chief Data Officer, including the following:

- DOD is not operating as a data-centric organization.
- DOD software and hardware systems are not designed, upgraded, and operated with interoperability as a key requirement.
- DOD faces critical skill gaps in data fields necessary for effective data management.²

In the plan, OUSD(A&S) outlined six broad lines of effort to improve acquisition data management and analysis for acquisition decisionmaking across DOD. OUSD(A&S) has initiatives under way to address these lines of effort and has made progress toward implementing them. Table 6 lists the lines of effort and the progress DOD has made toward implementing them.

¹DOD, Office of Acquisition Enablers, *Acquisition and Sustainment Data and Analytics Strategic Implementation Plan* (December 2020).

²DOD, *DOD Data Strategy: Unleashing Data to Advance the National Defense Strategy* (Sept. 30, 2020).

Table 6: The Department of Defense (DOD) Is Taking Action on Its Acquisition Data and Analytics Strategy

Description of effort	Implementation status and DOD actions by effort
Identify required data elements	In process. The Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD(A&S)), in coordination with the military departments, is in the process of determining the individual data elements to be collected for acquisition oversight. OUSD(A&S) finalized required data elements for five of the six Adaptive Acquisition Framework (AAF) pathways. As of November 2021, OUSD(A&S) identified almost 600 data elements it collects across these five pathways. OUSD(A&S) has yet to determine data elements that it will collect for the acquisition of services pathway.
Develop data standards for each AAF pathway	In process. DOD established and is in the process of implementing data standards—which are intended to provide common data definitions and other business rules to align military department and Office of the Secretary of Defense acquisition data systems—for five of the six AAF pathways. The data standards, once fully implemented, are intended to enable consistent data collection and analysis.
Manage and improve data quality	In process. OUSD(A&S) formed a Data Implementation Group, which focused on data management efforts, including reducing the number of data elements collected. For example, for the major capability acquisition pathway, the group eliminated data elements that were not required by statute, as well as contracting data elements that were duplicative because they are included in other databases such as the Federal Procurement Data System. OUSD(A&S) officials stated they work to address data quality issues on an ongoing basis as they arise. For instance, for programs in the middle tier of acquisition pathway, OUSD(A&S) officials stated that they identify data inaccuracies by comparing data submitted on a biannual basis by program officials to previously submitted data.
Update and improve the interface between systems and applications used to collect acquisition program data	In process. OUSD(A&S) is working to determine its data systems architecture. For example, in September 2021, DOD transitioned from a legacy acquisition system to the Defense Acquisition Visibility Environment (DAVE), which is intended to eventually be a central source of acquisition data for all of the AAF pathways. OUSD(A&S) is still in the process of adding functionality to DAVE so that it captures all the data and metrics that OUSD(A&S) plans to collect. Further, officials stated that they have yet to determine some of the specifics of how DAVE will interface with the military departments' existing systems, including how much data will need to be manually entered into DAVE versus automatically pulled from military department systems. DOD officials stated that they still have a significant amount of work to do in this area.
Develop metrics and produce periodic, standardized reports on AAF pathway performance	In process. In March 2021, a Federally Funded Research and Development Center began a 15-month study to assist OUSD(A&S) with developing metrics for each AAF pathway and across pathways. OUSD(A&S) officials stated that it will take time to identify which metrics are meaningful for each pathway and that they continue to evaluate data submitted by the military departments to determine how to measure and report on pathway performance.
Establish analytics to align with acquisition policy updates	In process. OUSD(A&S) is in the process of developing analytical tools, which will eventually include new pathways introduced by the AAF. Additionally, the ongoing Federally Funded Research and Development Center study is intended to help identify gaps that hinder a data-driven analysis of the acquisition system and provide suggestions to close those gaps.

Source: GAO analysis of DOD documentation and interviews with DOD officials. | GAO-22-104687

Appendix IV: Comments from the Department of Defense



	GAO DRAFT REPORT DATED JANUARY 12, 2022 GAO-22-104687 (GAO CODE 104687)
"DEFEN	SE ACQUISITIONS: Additional Actions Needed to Implement Proposed Improvements to Congressional Reporting"
	DEPARTMENT OF DEFENSE COMMENTS TO THE GAO RECOMMENDATIONS
Defense for Ac of leadership for Selected Acqui implementation	NDATION 1 : The Secretary of Defense should ensure that the Under Secretary of cquisition and Sustainment fully implements leading reform practices in the area ocus and attention while developing the reporting system that will replace the isition Report requirements, such as creating by creating a dedicated n team that has the capacity, including staffing and resources, to manage the s. (Recommendation 1)
leadership level establishing a l Evaluation (C4 that will yield data collection data analysts a milestones set	NSE : <u>Concur.</u> A&S has and will continue to prioritize the future SAR effort at the el. As directed by the Assistant Secretary of Defense (Acquisition), A&S is battle rhythm of engagement with the Office of Cost Assessment and Program APE) and OUSD Comptroller leaders to bring the required focus and coordination a consistent reporting framework delivered in a modern platform with streamlined. We currently have in place a dedicated matrixed implementation team of A&S nd Advana developers participating in weekly collaboration sessions to meet the forth in Section 805 of the Fiscal Year (FY) 2022 National Defense Authorization We will actively monitor progress and make staffing and resourcing adjustments
Secretary of D reform practice the reporting sy	NDATION 2 : The Secretary of Defense should ensure that Under efense for Acquisition and Sustainment fully implements leading es in the area of managing and monitoring reforms while developing ystem that will replace Selected Acquisition Report requirements, eloping an implementation plan with key milestones and deliverables. tion 2)
sharing plan fo Acquisition Pr deliverables w 2022 NDAA. data collection senior leader d	NSE : <u>Concur.</u> A&S and CAPE are working on an updated a data collection and or the new SAR that will support improved decision-making for Major Defense ograms (MDAPs) and covered non-MDAP programs. Updated milestones and ill be provided to Congress on July 1, 2022 as required by Section 805 of the FY In the interim, we will continue to work across the Department to find creative solutions to manage the flow of program risk and performance information to key lecision forums such as the Deputy Secretary's Management Action Group the Integrated Acquisition Portfolio Review (IAPR).

Appendix V: GAO Contact and Staff Acknowledgments

GAO Contact	Shelby S. Oakley at 202-512-4841 or OakleyS@gao.gov.
Staff Acknowledgments	In addition to the contact named above, the following staff members made key contributions to this report: Anne McDonough (Assistant Director), Patrick Breiding (Analyst in Charge), Vinayak K. Balasubramanian, Rose Brister, Lorraine Ettaro, Lori Fields, Heather B. Miller, and Tanya Waller.

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